# Knowledge of government and private school teachers on learning disabilities in children 

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#### Abstract

The study was intended to compare the knowledge of government and private school teachers on learning disabilities in children. The sample consisted of 80 primary school teachers in the city of Bengaluru. The sampling technique used was convenient sampling. A self-developed questionnaire on knowledge related to learning disabilities among children was used as the tool. The results of the study revealed that; both the groups of teachers had only moderate levels of knowledge on learning disabilities. Further the findings revealed significant association between demographic variables like monthly income, place of residence and present school experience and selected features related to learning disabilities. Significant association was observed with teachers' gender, having special training on how to handle children with learning disabilities and having children with learning disabilities in the classroom and the knowledge level of the teacher respondents towards learning disabilities. Significant association was also found between schools offering regular training programs for teachers on teaching, awareness of the concept of learning disability, types of learning disabilities and special training on handling children with learning disabilities. The findings suggest regular trainings to be provided for teachers in handling children with learning disabilities in a regular classroom.


Keywords: Knowledge, learning disability, primary education, schools, teacher training.

## Introduction

Primary levels are the most important part of a person's educational background, as it lays a strong foundation for life. Children learn about the basic skills, such as reading and writing, as well as the concepts of language, math, science and culture, among other subjects. The quality of teaching affects both children's social behaviour and intellectual development. Going to a highly academically effective primary school gives a particular boost to the very disadvantaged children. The disadvantaged children can be anyone from low socio-economic status, juvenile delinquents to children with special needs.

But the question is, is our education system effective to give a particular boost to very disadvantaged children, like that of children with learning disabilities? According to the Individuals with Disabilities Education Act (IDEA), Specific Learning Disability (SPLD) is "a disorder
in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, where the disorder may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. Such term includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. Such term does not include a learning problem that is primarily the result of visual, hearing, or motor disabilities, or mental retardation (now known as intellectual disability), or emotional disturbance, or of environmental, cultural, or economic disadvantage."

Sawhney and Bansal (2014), owing to the lack of awareness among teachers, parents and school authorities, children with learning disabilities are usually labelled as slow, behind, incapable and failure, some are beaten, punished and abused too. Studies have brought to light evidences such as, repeated failures resulting in
low self-esteem and these children slowly stop learning and eventually drop out of school. It is saddening to come across children being labelled as failures by the society we live in. Identifying learning disabilities early can pave the way for children to get the support they need to experience successful futures both in and out of school.

When the term 'teacher' is used, there are generally two distinct categories or types of teachers. Teachers who teach at government schools and those teachers who teach at private schools. By and large, teachers in a private school are at an advantage where, the school infrastructure, condition and learning atmosphere are good, children are from well-off families and their socioeconomic status and nutritional status is good, which makes them affordable to pay their own fees and also privileged to commute to school by their own vehicles or avail the school's transport. Teachers are also generally able to communicate well in English and the quality of education is generally good, which is supported with visual aids. The teachers get equally distributed workload in terms of teaching or administration work and there are several teachers to teach each class. The parents are also well involved with the happenings of the child, teacher and the school.

Whereas, the government schools have different challenges with respect to the school infrastructure, learning atmosphere, student category, socio economic status, proximity of schools to learners, availability of trained teachers and various other. Here the children are from a lower socio-economic status and come from an appalling family background. In some cases, children go to school in the morning and to work in the evenings and their nutritional status is meagre which makes their learning poor. In addition to this, some children have to walk to their schools regardless of how far they are which renders them less active during the learning hours. The tough jobs done by the parents and their illiteracy levels leave them unaware of the undertakings of the child teacher and the school. Along with these challenges are the government schools with only one teacher for the entire primary section who has to teach as well as carry out the administration work.

Other problems of the teachers in both types of schools are: vast portions to be completed in stipulated time period, besides handling the extra workload in the administration section. They also have to deal with the schools pressurizing them to make the children perform better and help them get better scores in the exam and in turn assist the school to get a good name and fame. This in turn make the teachers follow the routine chalk and talk method which is easy and a convenient method of teaching technique and which does not require much of the effort.

Hence, with these everyday challenges, the teacher misses out on identifying those children with learning disabilities and the problem does not get addressed in the right perspective.

Educationists and teachers conducting research in this field are still in the infancy levels and perhaps this situation prevails because of the inadequate knowledge in the area and also 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).

As teachers are accountable for identifying the learning disabilities manifested in children; assessing the knowledge of teachers become highly relevant. Hence the focus of this particular study was to assess knowledge levels of government and private school teachers' (Grades I to IV) on learning disabilities in children.

## Aim

The aim of the study is to assess the knowledge of government and private school teachers related to learning disabilities in children.

## Objectives

1. To assess the level of knowledge prevailing among government and private school teachers on learning disabilities in children.
2. To study the differences in knowledge of government and private school teachers with respect to learning disabilities among children.
3. To study the influence of Socio-demographic factors of teachers on the level of their knowledge of learning disabilities in children.

## Hypotheses

$\mathbf{H}_{1}$ : Government and private school teachers have adequate knowledge about learning disabilities among children.
$\mathrm{H}_{2}$ : Government and private school teachers do not differ in their knowledge related to learning disabilities among children.
$\mathrm{H}_{3}$ : Socio-demographic factors of the teachers influence the knowledge of learning disabilities among children.

## Operational Definition

In the present study, "Learning disability refers to the disorder arising due to genetics, neurobiological and environmental causes, which is manifested in children generally at the age of six and above. It leads to difficulties in one or more psychological areas of reading, writing, calculating, performing motor tasks, controlling behavior, paying attention thinking, remembering, learning and understanding what is said, seen and heard."

## Limitations of the present study

- The study is limited to the assessment of knowledge of government and private primary
school teachers towards learning disabilities in children.


## Methodology

## Variables in the present study

- Independent Variables - Age, gender, experience, educational qualification of the teachers, marital status and number of children, subject knowledge and medium of instruction.
- Dependent Variables - Knowledge of teachers on learning disabilities in children.


## Questionnaire Development

The present study consisted of a self-developed tool (appendix) by the researcher, to assess the classroom practices of the teachers towards learning disabilities in
children. The developed tool was subjected to expert validation.
The constructed tool comprised of two parts:

- Part-A consisted of the basic data with 22 questions.
- Part-B assessed the knowledge of teachers with respect to learning disabilities.

Knowledge component comprised of 35 statements with 'Yes' and 'No' response, with 18 positive statements and 17 negative statements. For the positive statements; a score of ' 1 ' for option 'yes' and score ' 0 ' for option 'no' and the reverse order for negative statements was given. The total score obtained was 35 , the minimum score obtained was ' 0 ' and the maximum score was ' 35 '. Higher scores indicated higher level of knowledge and lower scores indicated lower levels of knowledge. The knowledge scores were categorized into three levels as follows.

| Knowledge Level | Score Ranges |
| :--- | :--- |
| Inadequate | $\leq 50 \%$ |
| Moderate | $51-75 \%$ |
| Adequate | $>75 \%$ |

## Pilot study

Ten percent of the total sample size was considered for the pilot study, to know the feasibility, reliability and validity of the developed tool. The classroom practice component of the tool was assessed for reliability quotient using

Brown Prophecy's Split Half Method. The reliability quotient for practice component was 0.9561 . The obtained values showed more than 0.70 hence the tool was standardized and applicable for the main study.

## Results and Discussion

Table 1: Classification of Respondents by Personal Characteristics
$\mathrm{N}=80$

| Characteristics | Category | Respondents |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Government ( $\mathrm{n}=40$ ) |  | $\begin{aligned} & \text { Private } \\ & (\mathrm{n}=40) \end{aligned}$ |  | Combined ( $\mathrm{n}=80$ ) |  |
|  |  | N | \% | N | \% | N | \% |
| Gender | Male | 16 | 40.0 | 0 | 0.0 | 16 | 20.0 |
|  | Female | 24 | 60.0 | 40 | 100.0 | 64 | 80.0 |
| Age group (years) | 21-35 | 9 | 22.5 | 17 | 42.5 | 26 | 32.5 |
|  | 36-45 | 14 | 35.0 | 11 | 27.5 | 25 | 31.3 |
|  | 46+ | 17 | 42.5 | 12 | 30.0 | 29 | 36.3 |
| Marital status | Unmarried | 3 | 7.5 | 7 | 17.5 | 10 | 12.5 |
|  | Married | 36 | 90.0 | 29 | 72.5 | 65 | 81.3 |
|  | Widow(er) | 1 | 2.5 | 4 | 10.0 | 5 | 6.3 |
|  | Divorced/Separated | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Number of children | None | 6 | 15.0 | 13 | 32.5 | 19 | 23.8 |
|  | One | 7 | 17.5 | 12 | 30.0 | 19 | 23.8 |
|  | Two | 23 | 57.5 | 15 | 37.5 | 38 | 47.5 |
|  | Three | 4 | 10.0 | 0 | 0.0 | 4 | 5.0 |
|  | Four and above | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Total |  | 40 | 100.0 | 40 | 100.0 | 80 | 100.0 |

From the table 1 it can be inferred that, all the respondents from private schools are females (100\%) while majority (60\%) of the respondents from government schools are
females and the remaining being male respondents. Further with respect to age, it is seen that majority of the respondents from government schools are in the higher
age category of $46+$ years ( $42.5 \%$ respondents) as against an equal percentage of the respondents from private schools in the younger age category of 21-35 years. The table further reveals that a majority ( $90 \%$ and $72.5 \%$ ) of respondents from the government schools and private
schools are married. With regard to the number of children, majority of respondents from the government schools and private schools have two children ( $57.5 \%$ and $37.5 \%$ respectively) supporting the small family norm.

Table 2: Classification of Respondents by Related Characteristics
$\mathrm{N}=80$

| Characteristics | Category | Respondents |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Government |  | Private |  | Combined |  |
|  |  | N | \% | N | \% | N | \% |
| Monthly income (Rs.) | < Rs.15,000 | 4 | 10.0 | 37 | 92.5 | 41 | 51.3 |
|  | Rs.15,000-25,000 | 16 | 40.0 | 3 | 7.5 | 19 | 23.8 |
|  | Rs.26,000-35,000 | 20 | 50.0 | 0 | 0.0 | 20 | 25.0 |
| Place of Residence | Rural | 22 | 55.0 | 8 | 20.0 | 30 | 37.5 |
|  | Urban | 18 | 45.0 | 32 | 80.0 | 50 | 62.5 |
| Educational qualification | SSLC | 8 | 20.0 | 8 | 20.0 | 16 | 20.0 |
|  | PUC | 9 | 22.5 | 6 | 15.0 | 15 | 18.8 |
|  | Degree | 17 | 42.5 | 23 | 57.5 | 40 | 50.0 |
|  | PG | 6 | 15.0 | 3 | 7.5 | 9 | 11.3 |
| Total experience (years) | < 10 | 7 | 17.5 | 18 | 45.0 | 25 | 31.3 |
|  | 10-20 | 22 | 55.0 | 12 | 30.0 | 34 | 42.5 |
|  | 21+ | 11 | 27.5 | 10 | 25.0 | 21 | 26.3 |
| Present school experience (years) | 1-5 | 14 | 35.0 | 18 | 45.0 | 32 | 40.0 |
|  | 6-15 | 17 | 42.5 | 13 | 32.5 | 30 | 37.5 |
|  | 16+ | 9 | 22.5 | 9 | 22.5 | 18 | 22.5 |
| Total |  | 40 | 100.0 | 40 | 100.0 | 80 | 100.0 |

From table 2 it can be deduced that majority of both government and private schools' respondents are residing in urban localities, with higher percentage ( $80 \%$ ) of private school teachers falling in this category as against $45 \%$ of their government school counter parts. Further with respect to educational qualification of the respondents it is seen that, majority of government school and private school teacher respondents (42.5\% and 57.5\% respectively) have studied up to degree level. Twenty percent of both categories of respondents have studied up to SSLC while least percentage ( $15 \%$ and $7.5 \%$ respectively) of respondents in government school and private school have studied upto PG level. Further, with respect to the number of years of experience of the respondents. It is seen that at the combined level, majority of the respondents (42.5\%) have between 10-20 years of teaching experience with higher percentage of government school teachers (55\%) as against $30 \%$ of private school teachers falling in this category. With regard to the experience in present school; majority (42.5\%) of government school respondents have 6-15 years of teaching experience in their current schools and $45 \%$ of private school's respondents have 1-5 years of experience in their current schools. At the combined level majority of the respondents ( $40 \%$ ) are found to be having 1-5 years of teaching experience in their present work place.

Table 3: Classification of Respondents by Related Characteristics

| Characteristics | Category | Respondents |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Government | Private |  | Combined |  |  |
|  |  | N | $\%$ | N | $\%$ | N | $\%$ |
| Subjects taught | Kannada | 20 | 50.0 | 7 | 17.5 | 27 | 33.8 |
|  | English | 9 | 22.5 | 21 | 52.5 | 30 | 37.5 |
|  | Hindi | 3 | 7.5 | 8 | 20.0 | 11 | 13.8 |
|  | General science | 5 | 12.5 | 11 | 27.5 | 16 | 20.0 |
|  | Social studies | 10 | 25.0 | 22 | 55.0 | 32 | 40.0 |
|  | Mathematics | 10 | 25.0 | 20 | 50.0 | 30 | 37.5 |
|  | Others | 4 | 10.0 | 2 | 5.0 | 6 | 7.5 |
|  | All subjects | 6 | 15.0 | 6 | 15.0 | 12 | 15.0 |
| Class taken | Std-I | 17 | 42.5 | 13 | 32.5 | 30 | 37.5 |
|  | Std-II | 18 | 45.0 | 13 | 32.5 | 31 | 38.8 |
|  | Std-III | 21 | 52.5 | 10 | 25.0 | 31 | 38.8 |
|  | Std-IV | 26 | 65.0 | 15 | 37.5 | 41 | 51.3 |
| Total |  | 40 | 100.0 | 40 | 100.0 | 80 | 100.0 |

At the combined level in table 3, it is seen that majority of the respondents teach social studies (40\%) and mathematics (37.5\%). However, majority of the respondents of government school category (50\%) teach Kannada followed by (25\%) teach social studies and mathematics and closely followed by $22.5 \%$ teaching English while a least percentage teaching general science, other subjects and Hindi (12.5\%, 10\% and 7.5\% respectively). In contrast majority of the private schools' respondents (55\%) teach social studies closely followed by $52.5 \%$ who teach English and Mathematics (50\%).

Equal percentage of respondents of both categories taught all the subjects (15\%). Further it is seen that majority of both government school and private school respondents taught standard IV (51.3\%) and an equal percentage of respondents from both the groups taught standard II and III (38.8\% each). At the individual level, it is found that majority of the respondents from government schools taught class IV and III (65.0\% and 52.5\% respectively), while the teachers of private schools were more distributed across different classes.

Table 4: Classification of Respondents by Related Characteristics
$\mathrm{N}=80$

| Aspects | Category | Respondents |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Government ( $\mathrm{n}=40$ ) |  | $\begin{aligned} & \hline \text { Private } \\ & (\mathrm{n}=40) \end{aligned}$ |  | Combined ( $\mathrm{n}=80$ ) |  |
|  |  | N | \% | N | \% | N | \% |
| Type of training received | Classroom management | 10 | 25.0 | 17 | 42.5 | 27 | 33.8 |
|  | Teaching skills | 32 | 80.0 | 26 | 65.0 | 58 | 72.5 |
|  | Counselling | 6 | 15.0 | 18 | 45.0 | 24 | 30.0 |
|  | Special education | 13 | 32.5 | 5 | 12.5 | 18 | 22.5 |
| Frequency | Once a year | 21 | 52.5 | 15 | 37.5 | 36 | 45.0 |
|  | Twice a year | 7 | 17.5 | 13 | 32.5 | 20 | 25.0 |
|  | Thrice a year | 3 | 7.5 | 0 | 0.0 | 3 | 3.8 |
|  | >Thrice a year | 6 | 15.0 | 0 | 0.0 | 6 | 7.5 |
| Duration of training (days) | One | 2 | 5.0 | 13 | 32.5 | 15 | 18.8 |
|  | Two | 2 | 5.0 | 10 | 25.0 | 12 | 15.0 |
|  | Three | 2 | 5.0 | 4 | 10.0 | 6 | 7.5 |
|  | Four | 3 | 7.5 | 0 | 0.0 | 3 | 3.8 |
|  | More than four | 28 | 70.0 | 1 | 2.5 | 29 | 36.3 |
| Total |  | 40 | 100.0 | 40 | 100.0 | 80 | 100.0 |

From the table 4 it can be comprehended that, $80 \%$ of government school respondents received training in teaching skills, $32.5 \%$ obtained training in special education and $25 \%$ and $15 \%$ obtained training in classroom management and counselling. With respect to private school, $65 \%$ respondents received training in teaching skills, $45 \%$ and $42.5 \%$ in counselling and classroom management and a least percentage (12.5\%)
received training in special education. At the combined level majority of the respondents (72.5\%) obtained training in teaching skills. The findings of the study by Agnes (2010) revealed that only $29 \%$ of the teachers receive inservice training to handle pupils with LD supports the findings of the present study where less percentage of the respondent teachers received training in special education. Concerning the frequency of trainings received
$52.5 \%$ of government school respondents received training once a year. Percentage of respondents receiving training twice or more number of times in a year is less as seen in the table. Among the private school respondents, it is seen that majority ( $37.5 \%$ ) receive trainings once a year, which is closely followed by 32.5\% receiving training twice a year. At the combined level it is seen that 45.0\%
of the respondents receive training once a year. With respect to the duration of training days, it is seen that $70.0 \%$ of government school respondents as against $2.5 \%$ of private school respondents receive training for more than four days. However, among the private school respondents most of the training programs are of one- or two-days duration ( $32.5 \%$ and $25 \%$ respectively)

Table 5: Classification of Respondents by Related Characteristics
$\mathrm{N}=80$

| Characteristics | Category | Respondents |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Government |  | Private |  | Combined |  |
|  |  | N | \% | N | \% | N | \% |
| Aware of concept of learning disabilities | Yes | 26 | 65.0 | 29 | 72.5 | 55 | 68.8 |
|  | No | 14 | 35.0 | 11 | 27.5 | 25 | 31.3 |
| Aware of types of learning disabilities | Yes | 18 | 45.0 | 21 | 52.5 | 39 | 48.8 |
|  | No | 22 | 55.0 | 19 | 47.5 | 41 | 51.3 |
| Special training on how to handle children with learning disabilities | Yes | 9 | 22.5 | 7 | 17.5 | 16 | 20.0 |
|  | No | 31 | 77.5 | 33 | 82.5 | 64 | 80.0 |
| Like to be trained to teach children with learning disabilities | Yes | 21 | 52.5 | 13 | 32.5 | 34 | 42.5 |
|  | No | 10 | 25.0 | 20 | 50.0 | 30 | 37.5 |
| Children with learning disability present in classroom | Yes | 27 | 67.5 | 16 | 40.0 | 43 | 53.8 |
|  | No | 13 | 32.5 | 24 | 60.0 | 37 | 46.3 |
| Total |  | 40 | 100.0 | 40 | 100.0 | 80 | 100.0 |

From table 5 it can be inferred that, $65 \%$ of the respondents from government schools are aware of the concept of LD as against $72.5 \%$ of respondents from private schools. Further higher percentage of respondents from private schools and government schools said they are aware of different types of LD (52.5\% and 45.0\% respectively). With respect to having special training in handling Children with learning disability in classroom, majority of the respondents from private schools and government schools (82.5\% and 77.5\% respectively) did not have training, however higher percentage of respondents from government schools (52.5\%) as against $32.5 \%$ of their counterparts in private schools preferred to
be trained in handling children with LD. With respect to the presence of children with LD in classroom, majority (67.5\%) of the respondents from government schools expressed that they had learning disabled children in their classes, while majority ( $60 \%$ ) of the respondents from private school expressed that they did not have children with LD in their classroom. Research indicates 3-10\% prevalence of LD is seen among school children (Arun, Chavan, Bhargava, Sharma and Kaur (2013)). Majority of the private school respondents not acknowledging the presence of learning-disabled children in their classrooms could be attributed to their lack of knowledge in identifying them.

Table 6: Classification of respondent on knowledge level

| Knowledge Level | Category | Respondents |  |  |  |  |  | $\begin{aligned} & \mathrm{x}^{2} \\ & \text { Test } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Government |  | Private |  | Combined |  |  |
|  |  | N | \% | N | \% | N | \% |  |
| Inadequate | $\leq 50$ \% Score | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |  |
| Moderate | 51-75 \% Score | 31 | 77.5 | 35 | 87.5 | 66 | 82.5 | 1.39 |
| Adequate | > 75 \% Score | 9 | 22.5 | 5 | 12.5 | 14 | 17.5 | NS |
| Total |  | 40 | 100.0 | 40 | 100.0 | 80 | 100.0 |  |

Table 6 portrays the classification of respondents on knowledge level of LD. From the table it is seen that, majority of government school respondents (77.5\%) and $87.5 \%$ of private school respondents possess only moderate level of knowledge about LD. A non-significant association is found between knowledge levels of both the groups. The findings of the present study are in contrast to the findings of the study conducted by Pawar and Mohite (2012) which revealed that primary school teachers had adequate knowledge regarding learning
disorders among children, and is in support of the study by Poorna Shukla and Gaurav Agrawal (2015) revealing lower levels of knowledge and awareness about LD among teachers of primary school. It was hypothesized that government and private school teachers have adequate knowledge about learning disabilities among children. However, majority of the respondents obtained 'moderate' scores for the knowledge component. The nonsignificant $x^{2}$ test results show that there is no association between the respondents' category and their knowledge
levels. Hence the hypothesis $\left(\mathrm{H}_{1}\right)$ government and private school teachers have adequate knowledge about LD is rejected.

Table 7: Overall mean knowledge scores of respondents $\mathrm{N}=80$

| Aspects | Sample <br> $(\mathbf{n})$ | Statements | Max. <br> Score |  | Knowledge Scores |  |  | ' $\mathbf{t}$ ' |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | Mean | SD | Mean (\%) | SD (\%) | Test |  |
| Government | 40 | 35 | 35 | 23.20 | 4.6 | 66.3 | 13.1 | 1.27 NS |
| Private | 40 | 35 | 35 | 21.97 | 4.0 | 62.8 | 11.5 |  |
| Combined | 80 | 35 | 35 | 22.63 | 4.3 | 64.6 | 12.4 |  |
| NS: Non-Significant, $(0.05,78 \mathrm{df})=1.96$ |  |  |  |  |  |  |  |  |

Table 7 reveals the overall mean percentage knowledge scores of respondents. It is seen that the combined mean percentage knowledge score is $64.6 \%$, with respondents from government schools having slightly higher (66.3\%) mean knowledge scores as against their counterparts in private schools (62.8\%). However, no significant difference is found between the two groups with respect to their mean percentage knowledge levels. The knowledge level of the respondents of both government and private
schools were found to be moderate and no significant association was found between knowledge levels and the type of schools of the respondents. Further, it depicts a non-significant difference between mean knowledge percentage score of the government and private school teachers. The above two findings show that the formulated hypothesis $\left(\mathrm{H}_{2}\right)$ - government and private school teachers do not differ in the knowledge related to LD among children is accepted for the knowledge component.

Table 8: Association between demographic variables and knowledge level of respondents $\mathrm{n}=80$

| Demographic Variables | Category | Sample | Knowledge Level |  |  |  | $\mathrm{X}^{2}$ Value | P <br> Value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Moderate |  | Adequat e |  |  |  |
|  |  |  | N | \% | N | \% |  |  |
| Gender | Male | 16 | 13 | 18.2 | 3 | 18.8 | 0.02 NS | $\mathrm{P}>0.05$ (3.841) |
|  | Female | 64 | 53 | 82.8 | 11 | 17.1 |  |  |
| Age group (years) | 21-35 | 26 | 21 | 80.8 | 5 | 19.2 | 0.44 NS | $\mathrm{P}>0.05$ (5.991) |
|  | 36-45 | 25 | 20 | 80.0 | 5 | 20.0 |  |  |
|  | 46+ | 29 | 25 | 86.2 | 4 | 13.8 |  |  |
| Number of children | None | 19 | 17 | 89.5 | 2 | 10.5 | 1.13 NS | $\mathrm{P}>0.05$ (5.991) |
|  | One | 19 | 16 | 84.2 | 3 | 15.8 |  |  |
|  | Two+ | 42 | 33 | 78.5 | 9 | 21.4 |  |  |
| Monthly income (Rs) | <Rs.15,000 | 41 | 38 | 92.7 | 3 | 7.3 | 9.99* | $\mathrm{P}<0.05$ (5.991) |
|  | Rs.15,000-25,000 | 19 | 16 | 84.2 | 3 | 15.8 |  |  |
|  | Rs.26,000-35,000 | 20 | 16 | 60.0 | 8 | 40.0 |  |  |
| Place of Residence | Rural | 30 | 20 | 66.7 | 10 | 33.3 | 8.33* | $\mathrm{P}<0.05$ (3.841) |
|  | Urban | 50 | 46 | 92.0 | 4 | 8.0 |  |  |
| Educational qualification | SSLC+ | 16 | 15 | 93.8 | 1 | 6.2 | 3.03 NS | $\mathrm{P}<0.05$ (7.815) |
|  | PUC+ | 15 | 12 | 80.0 | 3 | 20.0 |  |  |
|  | Degree+ | 40 | 33 | 82.5 | 7 | 17.5 |  |  |
|  | PG+ | 9 | 6 | 66.7 | 3 | 33.3 |  |  |
| Total experience (years) | <10 | 25 | 20 | 80.0 | 5 | 20.0 | 0.26 NS | $\mathrm{P}>0.05$ (7.815) |
|  | 10-20 | 34 | 28 | 82.3 | 6 | 17.7 |  |  |
|  | 21+ | 21 | 18 | 85.7 | 3 | 14.3 |  |  |
| Present school experience (years) | 1-5 | 32 | 26 | 81.2 | 6 | 18.8 | 6.60* | $\mathrm{P}<0.05$ (7.815) |
|  | 6-15 | 30 | 22 | 73.3 | 8 | 26.7 |  |  |
|  | 16+ | 18 | 18 | 100.0 | 0 | 0.0 |  |  |
| Combined |  | 80 | 66 | 82.5 | 14 | 17.5 |  |  |

* Significant at 5\% Level, NS: Non-significant

Note: Figures in the parenthesis indicate table value

From table 8 it can be inferred that, a non-significant association is found between the gender and the level of knowledge of the respondents, however it is found that a
higher percentage of female teacher respondents (82.8\%) have moderate level of knowledge in contrast to $18.2 \%$ of male respondents. With respect to the age group of
respondents and knowledge level a non-significant association has been found with a majority of respondents in all the three age groups having moderate level of knowledge. Concerning the number of children and knowledge level again a non-significant association has been found with majority of the respondents irrespective of the number of children have a moderate level of knowledge.

Significant association is found between monthly income and the level of knowledge of the respondents with high percentage of respondents from higher income category of Rs. 26,000-35,000/- having adequate level of knowledge ( $x^{2}=9.99^{*}$ ). Further a significant association between place of residence of respondents and their knowledge level, is seen with a significant $x^{2}$ value of 8.33* between with higher percentage (33.3\%) of respondents from rural having adequate level of knowledge. A nonsignificant association is found between educational qualification and knowledge level of the respondents. With higher percentage of respondents across different groupings having moderate level of knowledge only.

Pertaining to the association of total years of teaching experience of respondents and their knowledge level, a non-significant association is observed, with knowledge level regarding LD being unaffected by number of years of teaching experience as observed through the knowledge level scores obtained. Further a significant association is seen between the knowledge levels of the teachers from the two school types and their level of knowledge ( $\mathrm{X}^{2}=$ 6.60*).

The above findings can be supported with a study conducted by Bhavya, Bhavya, Chinnu, Joseph, Thomas, Prasad, and Jacob (2015) which revealed that majority of teachers (64\%) had average knowledge regarding specific learning disability. Furthermore, there was no significant association between knowledge score and selected demographic variables such as age, gender, educational qualification, years of experience, marital status, child psychology in curriculum, in service education, family history of learning disabilities. And in contradiction another
study conducted by Moothedath and Vranda (2015) in the city of Bangalore, revealed statistically significant differences in overall knowledge and various domains across gender, type of school, education, class being taught and years of experience. The need to improve the knowledge of primary school teachers for the identification of children with LD was highlighted.

Further, few Indian studies have revealed that the teachers had an average level of knowledge about disabilities, irrespective of their gender and teaching experience (Kamala and Ramganesh, 2003; Lingeswaran, 2013). 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).

It was hypothesized that the Socio-demographic factors of the teachers influence the Knowledge of Learning disabilities among children. The $\mathrm{X}^{2}$ test results show a non-significant association between gender of the respondents, age, number of children, educational qualification and total experience. However statistically significant association is found between monthly income of respondents, place of residence - urban and rural and number of years of experience in the present school.

Hence the formulated hypothesis $\left(\mathrm{H}_{3}\right)$ with respect to the influence of socio-demographic variables of teachers on knowledge of LD among children is rejected for the variable - gender, age group, number of children, educational qualification and total years of experience and accepted for monthly income, place of residence and number of years of experience in present school.

Steady monthly income, continuous and long service probably provides better jobs satisfaction, thereby improving the involvement of teachers and their quality of teaching and learning. Teachers with higher income levels and more number of service in the present work place having better knowledge levels could be attributed to this.

Table 9: Association between selected features related to learning disabilities and knowledge level of respondents $\mathrm{n}=80$

| Selected Features | Category | Sample | Knowledge Level |  |  |  | $\begin{aligned} & X^{2} \\ & \text { Value } \end{aligned}$ | $\begin{array}{\|l\|} \hline P \\ \text { Value } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Moderate |  | Adequate |  |  |  |
|  |  |  | N | \% | N | \% |  |  |
| School offers regular training programs for teachers on teaching | Yes | 65 | 54 | 83.1 | 11 | 16.9 | $\begin{aligned} & 0.08 \\ & \text { NS } \end{aligned}$ | $\begin{array}{\|l} \hline P>0.05 \\ (3.841) \end{array}$ |
|  | No | 15 | 12 | 80.0 | 3 | 20.0 |  |  |
| Aware of concept of learning disabilities | Yes | 55 | 45 | 81.8 | 10 | 18.2 | $\begin{aligned} & 0.06 \\ & \text { NS } \end{aligned}$ | $\begin{aligned} & \hline P>0.05 \\ & (3.841) \end{aligned}$ |
|  | No | 25 | 21 | 84.0 | 41 | 6 |  |  |
| Aware of types of learning disabilities | Yes | 39 | 32 | 82.0 | 7 | 17.0 | $\begin{aligned} & 0.01 \\ & \text { NS } \end{aligned}$ | $\begin{aligned} & \hline P>0.05 \\ & (3.841) \\ & \hline \end{aligned}$ |
|  | No | 41 | 34 | 82.9 | 7 | 17.0 |  |  |
| Special training on how to handle children with learning disabilities | Yes | 16 | 12 | 75.0 | 4 | 25.0 | $\begin{aligned} & 0.78 \\ & \text { NS } \end{aligned}$ | $\begin{aligned} & P>0.05 \\ & (3.841) \end{aligned}$ |
|  | No | 64 | 54 | 84.4 | 10 | 15.6 |  |  |
| Children with learning disability present in classroom | Yes | 43 | 32 | 74.4 | 11 | 25.6 | 4.21* | $\begin{aligned} & \mathrm{P}<0.05 \\ & (3.841) \\ & \hline \end{aligned}$ |
|  | No | 37 | 34 | 91.9 | 3 | 3.11 |  |  |
| Combined |  | 80 | 66 | 82.5 | 14 | 17.5 |  |  |

* Significant at 5\% level,

NS: Non-significant
Note: Figures in the parenthesis indicate table value

Table 9 shows the association between selected features related to LD and knowledge level of respondents. With respect to the association, between regular training programs for teachers and their knowledge level, the data shows a non-significant association with $83.1 \%$ having moderate level of knowledge. Regarding the association of awareness of the concept of LD and the knowledge level, a non-significant association is observed and also a non-significant association is seen with awareness of the types of LD and the knowledge level of the teacher respondents.

Further, the association of teachers having special training on how to handle children with LD and the knowledge level is found to be non-significant, however $75 \%$ respondents are observed to have moderate level of knowledge. And a significant association with a $x^{2}$ value of $4.21^{*}$ is found between teachers having children with LD in their classroom and the knowledge level. However, $25.6 \%$ respondents are identified having adequate level of knowledge.

These findings can be supported with a study conducted by Gonçalves and Crenitte (2012) which revealed that, separating the teachers by type of school (public or private) and prior knowledge of the subject, there was no statistically significant difference in most of the answers. Hence teachers lack knowledge about learning disorders and therefore need orientation to effectively work with the students.

## Conclusion

The comparative study on knowledge of government and private school primary teachers on Learning Disabilities among children revealed that both the groups of teachers had moderate levels of knowledge with respect to learning disabilities among children.

The present research suggests that there is a need to offer teachers from both the groups, regular trainings on understanding learning disabilities among children. Trainings can be provided in the areas of teaching skills, inclusive education, intervention measures/managing children with LD in the classroom, special education, counselling, classroom habits of a teacher, etc. This will ensure that teachers are empowered thus becoming powerful, operative and competent in teaching children with different needs and handling the uniqueness of each and every child. This study recommends that there is a need for improving the knowledge of teachers on learning disabilities among children, in order to help children, benefit and get equal opportunities as their non-disabled peers.

## Implications of the study

The researcher on the based on the findings of the study suggests that, trainings/workshops/intervention measure for teachers are much needed in order to help them in identifying and handling children with LD in a regular classroom especially at the primary level.

## References

Agnes, G.W., (2010). Teacher's awareness and intervention for primary school pupils with learning disabilities in inclusive education in Makadara Division Kenya. https://irlibrary.ku.ac.ke/handle/123456789/954
Arun, P., Chavan, B.S., Bhargava, R., Sharma, S., and Kaur, J., (2013). Prevalence of specific developmental disorder of scholastic skill in school students in Chandigarh, India. The Indian Journal of Medical Research, 138(1), 89-98. https://pubmed.ncbi.nlm.nih.gov/24056561/
Bhavya, Bhavya, S., Chinnu C.M., Joseph, C.E., Thomas D., Prasad, C.V., and Jacob V. (2015). The knowledge and attitude of teachers regarding specific learning disabilities among children: A descriptive approach. International Journal of Recent Scientific Research, 6, 2536-2541. http://www.recentscientific.com/knowledge-and-attitude-teachers-regarding-specific-learning-disabilities-among-children-descriptive
Crawford, S. G., (2007). Specific learning disabilities and attention-deficit hyperactivity disorder: Under-recognized in India. Indian Journal of Medical Sciences, 61 (12), 169. http://www.bioline.org.br/pdf?ms07103
Dharmaraj, 2000 as cited in Moothedath and Vranda 2015, p. 69
Kamala, R., and Ramganesh, E., (2013). Knowledge of specific learning disabilities among teacher educators in Puducherry, Union Territory in India. International Review of Social Sciences and Humanities, 6, 168-175. https://www.academia.edu/21913097/International_Review_ of_Social_Sciences_and_Humanities_Knowledge_of_Speci fic_Learning_Disabilities_among_Teacher_Educators_in_P uducherry_Union_Territory_in_India
Kamala, Ramganesh and Lingeswaran, as cited in Shari and Narasimha, 2015, p. 69
Karande, S., Sholapurwals, R., and Kulkarni M., (2011). Managing specific learning disability in schools in India. Indian Pediatrics, 48(7), 515-520. doi: 10.1007/s13312-011-0090-1
Moothedath, S., and Vranda, M.N., (2015). Knowledge of primary school teachers in identifying children with learning disabilities. Disability, CBR and Inclusive Development, 26 (3). https://doi.org/10.5463/dcid.v26i3.443

NCLD [National Centre for Learning Disabilities] (2014). The State of Learning Disabilities. https://www.ncld.org/wp-content/uploads/2014/11/2014-State-of-LD.pdf
Pawar, S.H., and Mohite V.R., (2014). Effectiveness of selfinstructional module on knowledge of primary school teachers regarding learning disorders among children in selected schools at Karad city. International Journal of Science and Research, 3(7), 2382-2386. https://www.ijsr.net/get_abstract.php?paper_id=20141030
Sarojini, Gandhimathi and Eljo, as cited in Shari and Narasimha, 2015, p. 69
Sawhney, N., and Bansal, S., (2014). Study of awareness of learning disabilities among elementary school teachers. International Education Confer 'Education as a right across the levels: Challenges, Opportunities and Strategies', New Delhi, India: Jamia Milia Islamia.
Shukla, P., and Agrawal, G., (2015). Awareness of learning disabilities among teachers of primary schools. Association for Indian Psychology, 1(1), 33-38.
Thaís dos Santos Gonçalves., and Patrícia Abreu Pinheiro Crenitte (2014). Conception of elementary school teachers about learning disorders. Speech, Language, Hearing Sciences and Education Journal 16(3). doi: 10.1590/1982-021620142731

