

*Full Length Research Paper*

# **Involvement of parents in the education of children with reading and writing difficulties - Impact of an intervention**

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**To know the impact of intervention on the parents' participation in the education of children with reading and writing difficulties was studied in schools of Dharwad city. Children studying in 6<sup>th</sup> standard were drawn from 14 schools. Total samples of 418 children were screened based on the child's previous academic performance of the class tests and teacher's rating. They were further tested and identified as difficult children (180 in reading and 114 in writing) using Kannada reading and writing tests. Normal children (165 in reading and 114 in writing) were also selected for comparison purpose. Findings of the study revealed that, at home, majority of children with reading difficulties (80%) studied on their own without any support from the family members. Only 39% of parents take care of their children's studies as against 60% in case of normal children. Similar trend was observed in writing also. During intervention programme, parents were sensitized regarding the importance of their participation and encouragement in their child's education. Results showed that parent's involvement significantly improved experimental children to achieve better in schools than children of control parents.**

**Key words:** Reading difficult, writing difficult, intervention programme, parents involvement.

## **INTRODUCTION**

Reading and writing serves as the major foundational skills for all school based learning. Learning is essential to success in our society. Learning to read and to write is an important skill for a child. Reading problems can range from difficulties in identifying letters and words, difficulties in sounding out words and difficulties in comprehending sentence and paragraphs. Difficulties in decoding and word recognition are the most reading difficulties. Poor readers also have difficulty in understanding that sounds in words are linked to certain letters and letter patterns due to non development of phonemic awareness and non awareness that words are made up of speech sounds (Lyon, 2000).

Writing problems of school children includes additions, deletions, substitutions, grammatical and punctuation errors. Many research studies have indicated that the family is a more effective teacher than the school. The impor-

tance of parental involvement is that child's learning has never been in doubt. The curriculum that includes parents in children's academic achievement can critically enhance their performance (Collins et al. 1982). Research regarding parental involvement suggests that higher levels of parental involvement may positively affect student achievement.

Parental involvement might influence children's acquisition of reading and writing, and is of potentially great importance. Parents serve as paid classroom aides, parents working as volunteers, home-school communications, phone contacts, home visits, parent-teacher conferences, homework assistance, home tutoring and home educational environment can help in enhancing their children's learning skills.

It is essential to recognize reading and writing difficulties and related problems as early as possible. Without recognition and help, children may become increasingly frustrated and distressed as they persistently fail. By the time they reach high school, they may give up their interest in studies. On the other hand, children whose special

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needs are recognized early and treated appropriately can overcome or learn to compensate for their disabilities (Royer, 2002). In such cases, the additional instruction to children as well as for parents is likely to help. Providing extra instructions to parents in education of these children will enable them to be successful in their school careers.

Early intervention is the key to prevent or minimize the majority of school-age children's reading problems, regardless of the underlying cause for the problems and it is designed to enhance the academic functioning of a child (Parikh, 2004).

In India, not many studies have been conducted on these lines; hence, the present study was carried out to know the impact of intervention on parental involvement in the education of children with reading and writing difficulties.

## MATERIALS AND METHOD

### Selection of schools

The study was conducted in an urban area of Dharwad city which is located in the north-east region of Karnataka. A list of primary schools was obtained from the block education office. In Dharwad city 23 were Government schools, 16 were aided schools and 17 were private schools. Out of these total 56 schools, 14 schools (25% of each type of schools) were selected randomly for the study purpose.

### Selection of subjects

Children studying in 6<sup>th</sup> standard from 14 selected schools based on their previous academic performance of the class tests and the teacher's rating (toppers 25% and lowest 25%) 298 academically low and 289 academically high children were selected as subjects for the study. In the course of study few children were not regular for school and few were not responded to questionnaires. Such children dropped from the study was considered as samples for the study. Parents of these selected children were also considered for the study.

### Selection of Research Tools

Standardized questionnaires and tools were selected based on the objectives specified for the study and used to collect the data from school children, parents and teachers.

These tools were found to be most reliable and suitable for selected region of the study. Details of the research tools selected for the study are discussed below.

Tools for screening and assessment of children for reading and writing abilities

**Jaya Bai's reading test (Kannada):** Jaya Bai's (1958) Kannada oral reading test was administered to each subject individually. This test consists of 150 Kannada words in a sheet of paper arranged in an order of increasing difficulty. The subjects were instructed to hold the paper in their hands and read the words as clearly and quickly as possible within a given time of one minute. The number of correct words read in one-minute was noted and one mark investigator. For this test the child should get a maximum score of 150 and minimum of 0. For sixth standard children, a score of < 43 (norm for fourth grade) out of 150 was taken as cut off point for det-

ermining children with reading difficulty and a score of > 65 (norm for sixth grade) out of 150 was taken as cut off point for determining normal readers. Children who scored between 43-65 were considered as average in reading.

**Kannada writing test:** This test consists of a list of 30 words selected from Jaya Bai's reading test (as suggested by Prakash, 1999). These words were dictated to the group of selected children from each school. An empty paper was distributed to each subject and they were instructed to write the words on a paper as the investigator dictated the words. One mark was given for each correctly written word. For sixth standard children, a score of < 9 (norm for fourth standard) out of 30 was taken as cut off point for selecting children with writing difficulties for categorizing normal writers a score of > 13 (norm for sixth grade) out of 30 was taken as cut off point. Children who scored between 9 - 13 were considered as average in writing.

### Conduct of the study

Prior permission from the school authorities was taken. Reading and writing tests were administered to children during their convenient time within a stipulated period. The study will be conducted in three phases.

The first phase of the study consists of screening and assessment of children for their reading and writing abilities for which Jaya Bai's reading test and words writing tests were used.

The second phase of the study consists of identifying disabled children among selected difficult children. Tools used were;

- MySES for assessing educational and literacy environment at home.
- Grade level passages for assessing reading and oral comprehension
- Raven's Standard Progressive Matrices (RSPM) for assessing intelligence
- Rutter's scale (A and B) for assessing behavior of the children

Children having RPM score > 50<sup>th</sup> percentile, reading score < 43, writing score < 9 and score of < 9 for Rutter's 'B' are considered as disabled children. Out of total 418 children (excluding average children) in reading, 165 were good, 180 were difficult and 37 were found to be reading disabled children. In writing, 240 are good, 114 are difficult and 14 are found to be writing disabled children. The disabled and average children were not included for further study.

The third phase of the study consists of conducting intervention programme for children with reading and writing difficulties and for their parents.

### Intervention programme for selected children

Third phase of the study consists of intervention programme which was conducted based on the findings of the second phase. Most of the children with reading and writing difficulties had problems in identifying letters (vowels and consonants), stress words, speed and correct pronunciation. Sixteen children with such problems were selected as experimental group for intervention programme. Another group of 16 children with similar background were selected as control group. Selected children were given with an intervention for 80 h (five days/week at the rate of two hours/day, spread over two months). An intervention programme consists of four educational modules which were formulated for learning and recognizing vowels, consonants and stress words and also to improve the speed and pronunciation while reading and writing. These 'modules' consist of simple to complex learning materials. Details of the developed intervention modules are given below.

**Table 1.** Classification of children by reading and writing scores.

Variables	Academically low (n=203)			Academically high (n=215)		
	Difficult	Average	Normal	Normal	Average	Difficult
Reading	189 (93)	14 (7)	--	165 (77)	22 (10)	28 (13)
Writing	118 (58)	37 (18)	48 (24)	192 (87)	13 (8)	10 (5)

Figures in parenthesis indicate percentage

**Improve the skills of learning and recognition of vowels:** This module include tasks like, identification of vowels, correct pronunciation of the individual vowel, identifying vowels and writing, formation of simple words using vowels of two letter words and three letter words, writing words using vowels, improvement in speed of writing and at the end it consists of assessment of learning.

**Improve the ability of learning and recognition of consonants:** Education in this module includes identification of consonants, formation of words using consonants of two letter words and three letter words, correct pronunciation of the individual consonant, identifying letters of bellies and writing, writing words with consonants, improving speed of writing and finally assessment of learning.

**Improve the ability of learning and recognition of stress letters and words:** Stress words of the same consonants, stress words like consonants, stress words with different consonants, writing of stress letters, formation of stress words, reading and writing of stress words and assessment of learning.

**Acquisition of speed in reading and writing:** The children are made to learn, to read and write the letters, words and sentences with required speed, reading and writing paragraphs and assessment of learning.

#### Intervention for the parents of selected children

Parents of experimental and control group children were also included in the intervention. Parents were interacted for four sessions. They were provided with a developed checklist which consists of filling information regarding their involvement in their child's education. The checklist consists of items consisting of sub items. For each correct sub item a score of one was given. The maximum attainable score for this checklist is 40 and minimum is one. During the interactive sessions, they were sensitized regarding the importance of their participation and encouragement in their child's education.

#### Evaluation of Intervention programme

Evaluation of an intervention programme was carried out at three levels. Before starting an intervention programme, the reading and writing tests were administered to selected experimental and control children to have the 'Before intervention scores' (BI scores) data. After completion of one month of an intervention and at the end of intervention, these tests were administered again to have the 'During intervention scores' (DI scores) data and 'After intervention scores' (AI scores) data.

#### Evaluation of involvement of parents in child's education

The interactive sessions with parents were also evaluated to know the impact of intervention. Before and after the intervention, the checklist given to parents was assessed and scores were considered as BI scores and AI scores.

#### Analysis of the data

The collected data was subjected to two different types of analysis with the help of a statistician. In first analysis, the scores of all children were subjected to 2x3 fisher exact tests to find out the effect of intervention on selected variables. In the second analysis, the overall mean scores of two groups of children were analyzed using analysis of variance (ANOVA) and 't' tests.

## RESULTS AND DISCUSSION

### Screening of children for reading and writing abilities

Among children of 6<sup>th</sup> standard studying in 14 schools, 203 academically low achieving and 215 academically high achieving children were selected as subjects, based on their previous academic performance of the class tests and the teacher's rating. Further these children were classified as difficult, average and normal with reference to reading and writing abilities by using scores of Jaya Bai's Kannada reading and writing tests. The results of screening tests showed that, (Table.1) in academically low children, 189 (93%) children found to have difficulties in reading and 7% of them were found to be average. Where as in writing ability 118 (58%) were difficult, 48 (24%) were normal and 18% were found to be average. It is interesting to note that, among academically high children, 13% and 5% of children showed problems in reading writing respectively. It is noteworthy to observe that majority of the academically low children had more problems with reading (93%) than writing (58%).

Out of total 418 children (excluding average children), in reading, 165 were good, 180 were difficult and 37 were found to be reading disabled children. In writing, 240 are normal, 114 are difficult and 14 are found to be writing disabled children. The disabled and average children were not included for further study.

### Educational support extended by parents and other family members

The educational support extended from parents, siblings and other family members like uncle and grand fathers in the children's education was studied to know its Impact on reading and writing abilities of the children. Results revealed in the Table 2, it showed that majority of children with reading and writing difficulties (80.2% and 67.1%) were self studied, none of the family members helped

**Table 2.** Association between educational support extended by family members and reading and writing difficulties.

Educational support	Children with reading difficulties (n=180)	Normal Children (n=165)	Total	X <sup>2</sup> value
No support-Self study	81 (80.2)	20 (19.8)	101 (100.)	45.65**
Parents	48 (39.3)	74 (60.7)	122 (100.)	
Siblings	8 (34.8)	15 (65.2)	23 (100.0)	
Others	43 (43.4)	56 (56.6)	99 (100.0)	
Educational support extended by family members	Children with writing difficulties (n=114)	Normal children (n=240)	Total	X <sup>2</sup> value
No support-Self study	55 (67.1)	27 (32.9)	82 (100.0)	61.05**
Parents	30 (21.1)	112 (78.9)	142 (100.)	
Siblings	9 (32.1)	19 (67.9)	28 (100.0)	
Others	37 (36.3)	65 (63.7)	102 (100.)	

Figures in parenthesis indicate percentages \*\* Significant at 0.01 level

**Table 3.** Impact of intervention on involvement of parents in child's education.

Tests	BI scores	AI scores
Experimental(n=16)	25.1 <sup>a</sup>	31.4 <sup>b</sup>
Control (n=16)	22.3 <sup>a</sup>	23.1 <sup>a</sup>

Different superscripts indicate significant difference in the mean values.

Results of ANOVA.

Variable	F Value	CD value	' P ' value
Test (A)	16.3	0.9	0.000**
Group (B)	0.3	0.9	0.86*
Test *Group (A x B)	6.7	1.4	0.01*

\*\* Significant at 0.01 level \* Significant at 0.05 level

them in their studies. In reading, 43% of children with difficulties took the help of other family members. Only 39% of parents take care of their children's studies as against 60% in case of normal children. Among normal children, highest percentage of children received help from their siblings. Only 20% of children study on their own. Similar trend was observed in writing also. In both cases, the chi square results found to be highly significant indicate that, the children need some sort of help from elders in their studies in order to cope with their difficulties.

Children who can not pick up speed of teaching in the class room they need the help from somebody who teaches and make them to learn whatever is taught in the classes.

Similar results were also reported by, Paulson et al. (1998). In their study results, it revealed that, low parental involvement had the lowest achievement outcomes in children. Singh (1983) conducted a study on parental support and scholastic achievement and concluded that parental support compensates for certain loss of intelligence and offsets adverse effects of low socio-economic

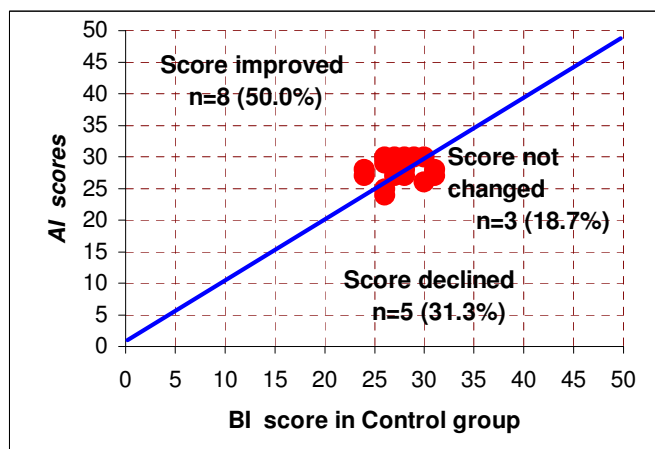
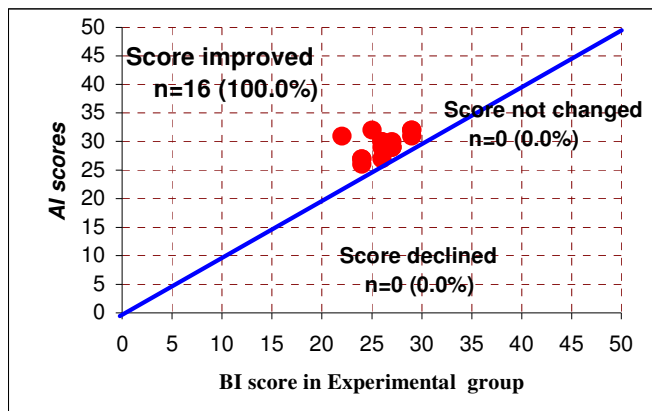
status and encourages scholastic achievements. A study presented by Naorosho (2008) reveals that, parents had significant influence on children's ability in reading, writing and poor parental support showed, low achievement among students. Schecter (2007) finds that, parents role played a positive influence on children's success. Thus, parental support is a more powerful correlate of scholastic achievement.

## IMPACT OF INTERVENTION

### Involvement of parents in child's education

Findings on the mean scores between BI and AI are presented in Table 3 along with ANOVA results showed that before intervention, the scores of involvement of parents of control group were found to be 22.3 (56%) and for parents of experimental children it was 25.1(62%). After the intervention, parents of experimental children scored better (79%) than parents of control group (58%). Analysis of variance indicate the significant relation between tests and groups showed, with the education, knowledge regarding importance of involving in children's studies parents may improve over their responsibilities and show interest in the children's education.

Some of the studies conducted on this line reveal that, when parents were trained, the effect was more in performance of children (Lonigan and Whitehurst, 1998). Bass et al. (1996) reported that, school-aged children whose parents are involved in study activities as helping with homework and assisting in the classroom tend to do better academically. Olivia (1997) assessed the relation between family's involvement and children's literacy development and indicated significantly higher scores in achievement of children. Jennifer and Donald (1998) and Leslie and Allen (1999) reported that reading accuracy, comprehension and attitude were promoted through involving parents and other family members. Bhise and Desetty (2004) clearly showed that parent's involvement



**Figure 1.** Comparison of parents' involvement scores before and after intervention.

Significantly improved experimental children to achieve better in schools than children of control parents.

Results on individual assessment of parent's involvement are presented in figure 1. In experimental group, all children (100%) had parental interaction. However, only 50% of children had parental interaction in control group. Out of all improved children among experimental children, two of them showed 15% of increase and four children showed 9% of increase in their parent involvement scores and rest of the children showed lower improvements.

## Conclusion

Based on the above results, it can be clearly said that, intervention programs provided for difficult children at appropriate time can definitely help the children to improve over their difficulties and were able to attain the scores of grade at appropriate level. It is noted worthy to

mention here that, an attempt should be made to train the parents in improving reading and writing attributes, improving their involvement and with the help of teachers may increase the learning skills in children.

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