



REMEDIAL INTERVENTION FOR THE CHILD WITH READING AND WRITING DISABILITIES: A CASE STUDY

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Abstract

Specific Learning Disability in children has become a personal and public concern where the inability to read, write and comprehend is the major obstacle to learning. The concern of the family members and teachers for the welfare of children has led to a proliferation of diagnostic and remedial treatment procedures. The objectives were to identify the reading and writing difficulties of the child and to intervene with the cluster method for the 10 year old child. He had problems with phonemic awareness, inability to decode words, lack of reading fluency and writing with spelling errors. The current intervention focused on decoding words into units and clusters which comprise (a) vowel – in initial, medial and final positions (b) vowel – vowel,(c)vowel– consonant, and (d) consonant – consonant. He was trained in these basic clusters that included inter-combinations of clusters. The intervention was administered for 2 days in a week for a period of 5 months and follow up was done after 2 months. At the end of the intervention the child was able to slowly recode the word as a whole and to write without spelling errors remarkably. The information from the teacher and the family members and the trainer's assessments revealed improvement in reading and writing with academic performance at follow-up.

Key Words: *Specific Learning Disability, Remedial Intervention.*

INTRODUCTION

Children with specific learning disabilities (SLD) have severe troubles in one or more academic areas of reading skill, reading comprehension, written expression, mathematical calculation and mathematical reasoning. Specific learning disability is often classified into subgroups that consist of general language abnormalities, visuo-spatial abnormalities, and abnormalities of synthesis, mixed deficits and specific disability without dyslexia (Cole and Kraft, 1964). The term SLD does not include learning problems that are primarily the result of visual, hearing-motor disabilities, cognitive disabilities, emotional disturbance, cultural factors, and environmental or economic disadvantage. These children often do well in some school subjects and they usually have extreme difficulty with certain skills such as decoding (reading) words, getting their thoughts into writing or calculating mathematical facts (Helene 2012). They find difficulty in understanding the relationship between sounds, letters and words (Calhoon, 2005). Children with SLD are often found to have deficits in auditory and/or visual memory making recall difficult thereby decreasing their academic performance (Stephen et al, 1980).

Reading disorder is a combination of developmental phonological dyslexia and developmental surface dyslexia, which is characterized by difficulties in reading phonetic and irregular words (Nelson et al, 2012). Besides, children have reading comprehension problems when there is an inability to grasp the meaning of words, phrases, and paragraphs. The signs of reading difficulty include letter and word recognition- reading speed and fluency, general vocabulary skills, and understanding words and ideas (Castles et al, 1999).

Writing disorder refers to physical difficulty forming words and letters. It is often a part of a condition known as developmental co-ordination disorder (American Psychiatric Association, 2000), where there is a movement skill syndrome involving physical awkwardness. They are slow to finish written work and their work is illegible (Missiuna et al, 2004). The problems of such children revolve around the act of writing consistency, accurate copying of letters and words, spelling consistency, writing organization and coherence. Various studies have found different levels of learning disability among children. For example, it has been reported that 50% of all children with learning disabilities were slow in rapid naming, 37% of them showed poor symbol awareness and visual processing and 15% were poor in phonological processing (Ho et al, 2002).



It is clear from the above findings that a comprehensive remedial intervention is required to overcome the problems with learning. Most remedial curriculum (Guzel-Ozmen & Ruya 2011; Nicolson & Fawcett 1993) uses reading exercises, word lists and spelling exercise to remediate children who have learning difficulties, where the child is unable to progress being confounded by newer and more complex words (Silliman et al, 2000). An effort has been made to overcome the pitfalls of the current remedial education and an innovative remedial method is being used to remediate the child with learning difficulties.

The current case study aims at resolving the reading and writing difficulties of the child through an innovative remedial intervention.

OBJECTIVES

The objective were

- I. To measure the clinical features of the child with reading and writing difficulties by using Language Processing Disability Checklist and the Clusters and
- II. To find out the efficacy of the intervention of the child with reading and writing difficulties at before, after, and follow-up.

METHOD

Research Design

Pre and post Research design was used for the child to measure the efficacy of the intervention. His IQ was assessed through Binet-Kamat intelligence test and he was found to be of 'Average Intelligence' (IQ=100). He was then administered the Language processing disability checklist and the cluster (Suchitra, 2012)

Sample

A 10 year old boy has problems in reading and writing. He is a Class V student of a leading CBSE school in Salem, Tamilnadu. He has been an underperformer in school exams and has not been able to cope with the regular mainstream syllabus.

His consistent spelling difficulties and lack of reading fluencies made him extremely incompetent in learning most subjects. Although the child did not have dyscalculia, the sentences and phrases that were used to explain mathematical problems and calculations were incomprehensible. Hence, he was unable to perform in any of the school subjects. Reading difficulties also prevented him from participating in group activities that involved reading story books and writing letters. He had difficulty understanding the relationship between sounds, letters and words. He had problems with reading comprehension as he had inability to grasp the meaning of words, phrases, and paragraphs. He had reading difficulties in the form of letter and word recognition, understanding words and ideas, reading speed and fluency, and general vocabulary skills. The writing difficulties were limited to lack of neatness and inconsistency of writing, inaccurately copying letters and words, spelling difficulties, lack of writing organization and coherence. He often got punishment like repetition of homework and verbal threat from the teachers and parents. He got tensed while repeating the work that he did already.

Measures

1. Language processing disability checklist consisted of 40 items covering Speech and Language Comprehension, Reading, Writing, Mathematics and related problems (Milestones1994)
2. Standardized Clusters (Suchitra,& Kannappan, 2010) consist of (a) vowel – in initial, medial and final positions (b) vowel – vowel, (c) vowel – consonant, and (d) consonant – consonant were used in the present study. He was reassessed after the intervention and at follow-up.

Procedure

Innovative Remedial Intervention:- The current intervention focused on decoding words into units and clusters which comprised (a) vowel – in initial, medial and final positions E.g.: a + t = at ; a + t + e = ate ;, (b) vowel –



vowel. E.g.: a + i = ai (as in jail, bail), ai + r = air (as in hair, air fair), o + e = oe (as in does or in goes), (c) vowel – consonant. E.g.: a + b = ab (as in cab, tablet), i + l = il (as in milk, till, bit), b + a = ba (as in band, bag), f + a = fa (as in fat, fan) and (d) consonant – consonant E.g.: s + h = sh (as in shoe), c + l = cl (as in class), p + h = ph (as in phone, photo).

The child was trained in the in these basic clusters that included inter-combinations of clusters. The above combinations cover 268 commonly used clusters. The entire remedial training involved the following steps. He was made to relax and instructed to read the 268 clusters formulated by the researcher. The researcher noticed his difficulties in reading and writing and made a record of them for taking remedial measures.

Step 1: The student was made comfortable and the researcher read out the words from the clusters selected for the present study. After listening to the words, he read out 50 items in the cluster and the error was noticed and recorded in the first session. He was asked to write the words of the same cluster and noticed the mistakes of the writing. Then the researchers planned remedial measures for both reading and writing. In the next session, he was asked to read out the clusters from 51 to 100, and then he was asked to write the same. The above mentioned method was followed for the rest till he completed the entire clusters.

Step 2: Remedial measures for first 50 clusters were done and exercises were given to practice the same at home with his mother. The same thing was followed for the other clusters.

Step 3: Parental education and training was provided periodically as parental support was extremely vital to the entire remedial program (Brock & Shuter, 2001; Bull 2003). Parental education helped him to learn reading and writing without mistakes (Hishinuma & Nishimura 2001). Training was given to the mother where she observed the session and repeated the same at home for correct learning. Her doubts and difficulties were discussed with the researcher for handling her son in reading and writing. She continued the same for 5 days in a week.

Step 4: A maximum of 15 to 20 words was selected for training the boy at school and at home.

Step 5: Motivation and persistent encouragement for every attempt to read the selected items of reading difficulties were done to improve his performance. Adequate encouragement was given in the form of verbal reinforcements, tokens, and awards.

Step 6: Evaluation was an integral part of the therapy as the entire training program ensured that he learnt the strategies right. The researcher asked him to write randomly whatever words asked to read and write.

The intervention was administered to him for 2 days in a week for a period of 5 months. At the end of the intervention, he was able to slowly recode a word as a whole. The reading fluency and spelling difficulties improved gradually. He was reassessed after the intervention and at follow-up.

Table - 1, shows the scores of Language Processing Disability Checklist

S.No	Scale	SLD	Before Assessment	After Assessment	Follow-up Assessment
1	Language Processing Disability Checklist	Reading	8	2	1
2		Writing	6	3	2
3		Speech and Language Comprehension	6	3	3
4		Mathematics	1	0	0
5		Related problems	2	2	2

The table shows that the Language Processing Disability Checklist had 9 symptoms in the area of reading and 6 symptoms in the area of writing. Before the intervention he had been positive for 8 out of 9 symptoms in the area of reading and had all 6 symptoms of writing difficulty. After the administration of intervention, the symptoms for reading disability had come down from 8 to 1. The writing difficulty score had come down from 6 to 3.



Table – 2, shows the difficulties in the different Clusters

S.No	Clusters	Before Assessment	After Assessment	Follow- up Assessment
1	Vowel(s) -Consonants(s) in initial, medial and final positions	52	2	2
2	Vowel-vowel	14	4	5
3	Vowel-consonant	105	14	12
4	Consonant-consonant	12	5	4

According to the cluster method, he was asked to read and write the clusters that were formulated by the researcher. He had problems in reading and writing in a total of 183 clusters. After the intervention, the score had come down from 183 to 25. At follow up, the child had slight difficulty in a total of 23 clusters.

The results of the current study shows that his reading and writing skills had improved significantly after the remedial intervention and at follow up. The improved reading and writing skills had enhanced the reading fluency and resolved the difficulties in spelling to a great extent. His academic performance could be gradually improved if adequate support and encouragement are given to the child for the regular practice of the learning strategies.

DISCUSSION

Most of the children have reading and writing difficulties in English as they have different mother tongues. Besides, some children have problems in mathematics due to word based problems and also have difficulties in comprehension of English language which prevent them from obtaining good marks in the tests and examinations. Parents and teachers make several attempts to rectify these difficulties. But some children have persistent problems in reading and writing and they too lack good hand writing. The present study makes an attempt to measure these difficulties by using Language Processing Disability Checklist which shows remarkable improvement after the remedial intervention. The improvement has been maintained at the follow-up indicating that the intervention is more suitable for students with reading and writing difficulties. Besides, the clusters helped the student and the researcher to carry out the corrections easily. He has been able to do almost all the clusters gradually. This shows that individual and school based cluster intervention is appropriate to modify the students' difficulties in reading and writing. Earlier findings also show that reading and writing could be modified through various interventions. Much research has been conducted on building reading fluency (Chard et al, 2003; Torgesen & Joseph 1997), reading comprehension, strategies to improve reading (Mathes et al, 1999; Morris et al, 2012) and the use of computers to help children with learning disabilities (Hall et al 2000). The current study conforms to the findings of the previously conducted studies.

Report of the Student

The boy was able to read and write effectively without mistakes. He was more confident in copying his class work neatly and doing his homework independently. He also showed an increased interest in reading short stories and comics. He enjoyed reading and doing homework.

Report of the Family Member

The boy was able to sit and complete the school work without much difficulty and showed remarkable improvement in reading and writing. The mother reports that she spent less time in helping his homework and study.

Report of the Teachers

They did not find any difficulty in handling the boy. He showed an increase in participation in group activities. There was a gradual improvement in doing class work and homework.



CONCLUSION

The classification of the clusters helped the student to remediate his problems in reading and writing easily by moving from one cluster to another. The remedial intervention for him with Specific Learning disability along with family support and care was effective in managing the reading and writing problems of him in order to cope with class room situations effectively.

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