



IMPACT OF REMEDIAL PROGRAMME ON IMPROVING READING COMPREHENSION SKILLS AMONG DYSLEXIC CHILDREN

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ABSTRACT

Reading disabilities are commonplace in the general education classroom. Studies show that inexperienced teachers are generally lacking in knowledge of basic language constructs, a key component to effective reading disability intervention. Substantial research shows that certain intervention strategies are effective in mitigating the negative effects of reading disabilities. An attempt has been made to find out the solution for improving reading comprehension skills among dyslexic children. the objectives of the study are concerned to identify the difference between boys and girls children in their reading abilities. The study followed a single-group experimental design. The findings of the study show that there is no significant difference between boys and girls children in their reading comprehension skills after undergoing a remedial programme.

INTRODUCTION

The classroom is a miniature society wherein we find students coming from different socio-economic backgrounds. Thus, it is obvious that, in every classroom, there are some children with learning problems. They need a little extra help from their teachers to excel in learning.

There are a substantial number of children who have problems learning specific subjects. Usually learning problems may occur due to any one or a combination of these factors

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namely, low level of intelligence, mental ill-health, visual impairment, motor handicaps, economic difficulties, cultural disadvantage, poor instruction etc. Reading disability is the most frequently reported subtype of learning disability. The incidence of reading problems ranges as high as 2/3 of all learning-disabled children.

Meaning and Characteristics of Dyslexia

The term 'dyslexia' was first coined and put into written language by a neurologist Berlin (1872) who used, as was the medical custom then, Greek etymology. Thus, 'dys' means difficulty and 'lexis' means the written word. Initially, the concept of dyslexia was used by medical professionals who saw it primarily as a neurological dysfunction.

Myklebust and Johnson (1962) considered dyslexia as – a complex syndrome of associated psycho-neurological dysfunctions such as disturbances in orientation, time, written language, spelling, memory, auditory and visual perception, motor skills and related sensory abilities. The characteristics of dyslexic children are as follows;

- Mention lists the critical errors that are most often made by dyslexics.
- Defective visual discrimination of graphemes (printed letters).
- Faulty oral reading of vowels and consonants.
- Reveals in the reading of letters such as n for u, p for q, d for b and also monosyllabic word reversals such as no for on, was for saw.
- Omissions and additions of words in oral sentence reading, excessive slowness in reading.
- Poor retention of material that has been read.

Development of Reading and Writing Skills

In the learning of language, the different skills are listening, speaking, reading and writing. Reading comes after listening and speaking. These skills are interrelated. Good reading definitely depends upon a lot of practice in listening and speaking. If a person has learnt spoken language carefully, he will not face any problems while reading. A good speaker is always a good reader.

Review of related literature

Pui-sze Yeung (2013)'s study shows that reading comprehension is directly affected by skills related to syntactic, discourse and active verbal memory whereas it is indirectly affected by rapid naming and morphological awareness through word reading. Noordenbos et.al (2012) identified the parental cause as one of the causative factors for dyslexia in children and there

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is a need to make concentration on phonological properties to avoid difficulties in reading at subsequent stages. Laasonen (2010) in his study found that dyslexic students showed difficulties of general nature in language learning and whereas those with ADHD were affected to a little extent and had no significant relation with language processing skills. Ramaa (1984) conducted a study on the diagnosis and remediation of dyslexia. The findings suggest that, the remedial programme on improving the effectiveness of the accuracy of letters and word recognition to a considerable extent among dyslexics in the Kannada language. In almost all the dyslexics the level of reading comprehension improved after remediation.

Significance of the study

The process of integration, mainstreaming or normalization of the disabled emphasizes the interaction of the handicapped with their normal peers in educational settings. The main objective of the programme is to encourage natural contact and communication among the same age group children, whether handicapped or otherwise. Integration aims at overall integration in terms of academic and social development.

The existence of children with learning disabilities is not uncommon in any school. The disability in any child of any kind irrespective of its congenital or acquired nature could also turn into a most difficult disability in any social context, unless positive efforts to ensure otherwise are made by members of the concerned families and society, these children remain isolated. Such kinds of studies will help to understand the difficulties faced while reading and develop appropriate remedial measures to overcome the reading difficulties of these children.

Statement of the Problem:

The present study is entitled: **“Impact of Remedial Programme on Improving Reading Comprehension Skills among Dyslexic Children”**.

Objectives:

- To find out the difference between boys’ and girls’ children with respect to pre-test and post-test scores of performance of children in reading comprehension.
- To find out the difference between boys and girls children with respect to pre-test and post-test scores of performance of children in the component of reading comprehension that is background knowledge.
- To find out the difference between boys and girls children with respect to pre-test and post-test scores of components of the performance of children in reading comprehension that is vocabulary.



- To find out the difference between boys and girls children with respect to pre-test and post-test scores of components of the performance of children in reading comprehension that is language structures.
- To find out the difference between boys and girls children with respect to pre-test and post-test scores of components of the performance of children in reading comprehension that is verbal reasoning.
- To find out the difference between boys and girls children with respect to pre-test and post-test scores of components of the performance of children in reading comprehension that is literacy knowledge.

Hypothesis:

There is no significant difference between: -

- Boys and girls children with respect to pre-test and post-test scores of performance of children in reading comprehension.
- Boys and girls children with respect to pre-test and post-test scores of performance of children in the component of reading comprehension that is background knowledge.
- Boys and girls children with respect to pre-test and post-test scores of component of the performance of children in reading comprehension that is vocabulary.
- Boys and girls children with respect to pre-test and post-test scores of component of the performance of children in reading comprehension that is language structures.
- Boys and girls children with respect to pre-test and post-test scores of component of the performance of children in reading comprehension that is verbal reasoning.
- Boys and girls children with respect to pre-test and post-test scores of component of the performance of children in reading comprehension that is literacy knowledge.

Design of Study

The researcher adopted a single-group experimental design technique for attaining the objectives and hypotheses.

Variables

The details of variables considered in the present study are shown in the following table:

Independent Variable	Remedial programme
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Dependent Variables	Performance on reading skills i.e., Reading comprehension
Moderate Variable	Gender (Boys/Girls)

Population, Sample and Sampling Technique

For the present study, the students with dyslexia studying in V standard of Government Higher Primary Schools of Belagavi were considered as the population of the study. A purposive sampling technique was employed in the present study. Fifty students studying in V standard of five Government Higher Primary Schools of Belagavi were selected as the sample. Among them, 25 students were boys and the remaining 25 students were girls, constituting a single-group experimental design based on the preliminary information collected.

Tools Employed for Data Collection

The tools which were employed in the present study are:

- Rutter's Proforma-B (1967): for identification of children with dyslexia.
- Test on Reading Skills (Word Recognition and Reading Comprehension) to measure and re-measure the Dependent Variable.
- Remedial Programme consisting of the components of Reading Comprehension was prepared and used for the treatment which is used as an intervention for the study

Statistical Techniques Used in the Study

To fulfil the objectives, hypotheses and purposes, the paired t-test was applied to find out the significant difference between pre-test and post-test scores of total performances and their dimensions. To assess the difference between boys and girls by using SPSS 20.0 version software and the results obtained thereby have been interpreted.

Analysis and Interpretation of the Data:

Hypothesis 1: There is no significant difference between Boy and Girl children with dyslexia in their overall Pre-test and Post-test performance in Reading Comprehension.

Table 1: Results of t-test between boy and girl children with Pre-test and Post-test scores of performance of children with dyslexia in Reading Comprehension.

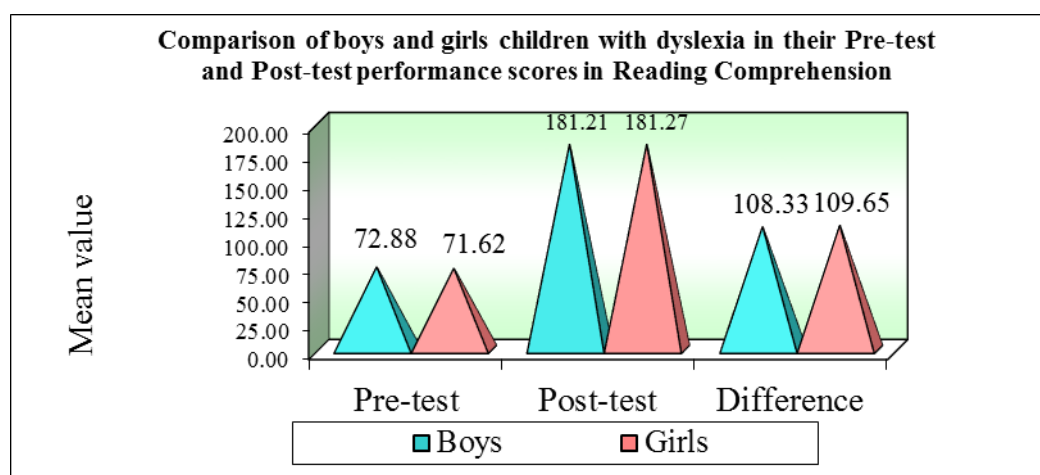
Variable	Gender	Mean	S.D.	SE	't' value	p-value	Signi.
Pre-test	Boys	72.88	9.44	1.93	0.5411	0.5910	>0.05, NS

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	Girls	71.62	6.92	1.36			
Post-test	Boys	181.21	12.51	2.55	-0.0193	0.9847	>0.05, NS
	Girls	181.27	9.70	1.90			
Difference	Boys	108.33	13.42	2.74	-0.3827	0.7037	>0.05, NS
	Girls	109.65	10.94	2.15			

From the results of the above table, it can be seen that the remedial programme on Reading Comprehension is having a similar effect on the performance of boy and girl dyslexic children. The following figure presents the details of the above table:



Hypothesis 2: There is no significant difference between Boy and Girl children with dyslexia in their Pre-test and Post-test performance in the component of Reading Comprehension i.e., Background Knowledge.

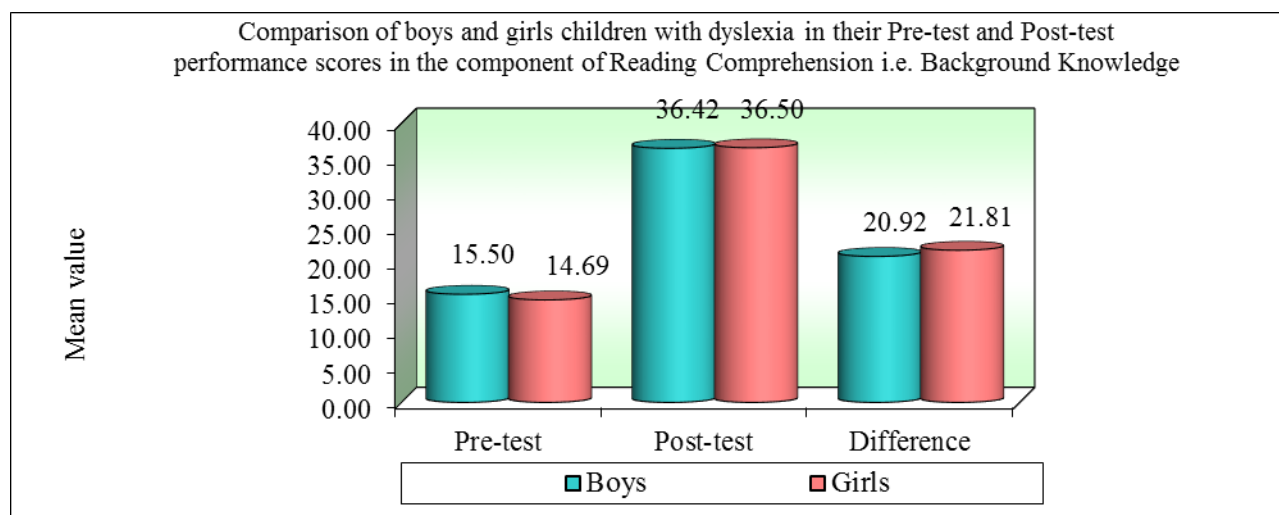
Independent 't' test was applied to test this hypothesis and the results obtained there from are tabulated as herein below;

Table 2: Results of 't' test between boy and girl children with Pre-test and Post-test scores of performance of children with dyslexia in the component of Reading Comprehension i.e., Background Knowledge.

Variable	Gender	Mean	S.D.	SE	't' value	p-value	Signi.
Pre-test	Boys	15.50	3.16	0.65	1.0312	0.3076	>0.05, NS
	Girls	14.69	2.35	0.46			

Post-test	Boys	36.42	2.69	0.55	-0.1310	0.8963	>0.05, NS
	Girls	36.50	1.75	0.34			
Difference	Boys	20.92	3.76	0.77	-0.9368	0.3535	>0.05, NS
	Girls	21.81	2.94	0.58			

From the results of the above table, it can be seen that the remedial programme on the component of Reading Comprehension i.e., Background Knowledge is having a similar effect on the performance of boy and girl dyslexic children. The following figure presents the details of the above table:



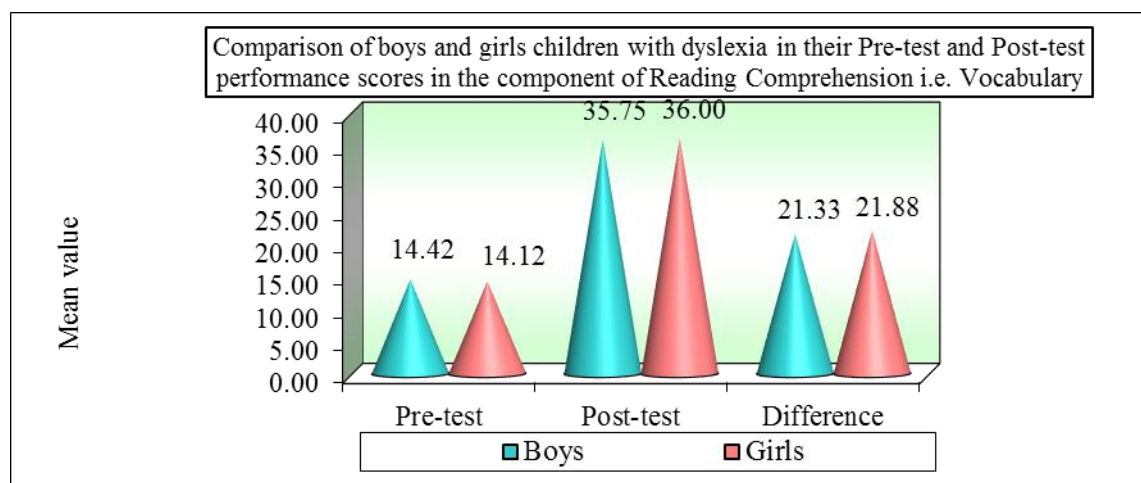
Hypothesis 3: There is no significant difference between Boy and Girl children with dyslexia in their Pre-test and Post-test performance in the component of Reading Comprehension i.e., Vocabulary.

Independent 't-test was applied to test this hypothesis and the results obtained are tabulated as herein below: -

Table 3: Results of 't' test between boy and girl children with dyslexia in their Pre-test and Post-test performance scores in the component of Reading Comprehension i.e., Vocabulary.

Variable	Gender	Mean	S.D.	SE	't' value	p-value	Signi
Pre-test	Boys	14.42	2.17	0.44	0.5933	0.5558	>0.05, NS
	Girls	14.12	1.37	0.27			
Post-test	Boys	35.75	2.69	0.55	-0.3929	0.6961	>0.05, NS
	Girls	36.00	1.74	0.34			
Difference	Boys	21.33	3.32	0.68	-0.6832	0.4977	>0.05, NS
	Girls	21.88	2.34	0.46			

From the results of the above table, it can be seen that, the remedial programme on the component of Reading Comprehension i.e., Vocabulary is having the similar effect on the performance of boy and girl dyslexic children. The following figure presents the details of the above table:



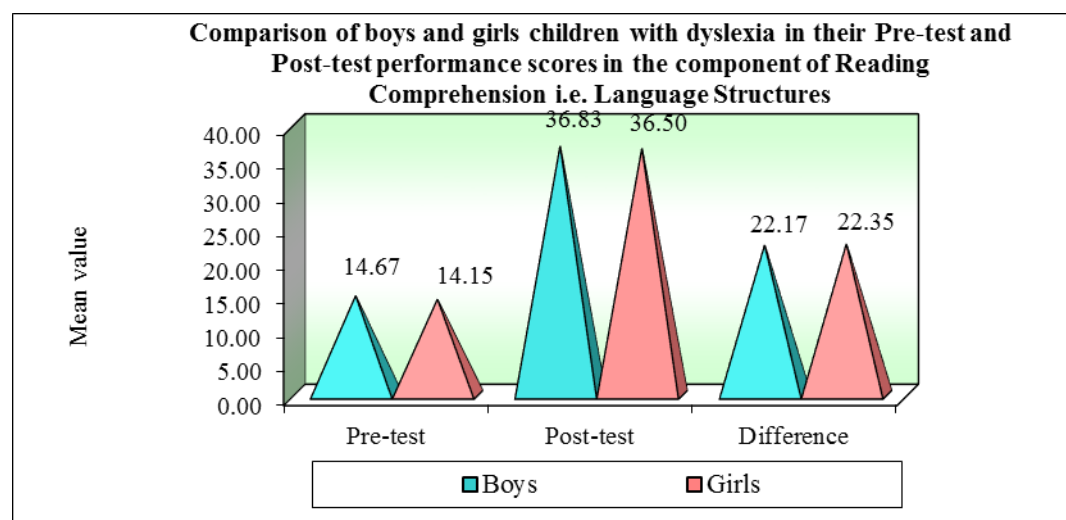
Hypothesis 4: There is significant difference between Boy and Girl children with dyslexia in their Pre-test and Post-test performance in the component of Reading Comprehension i.e., Language Structures.

Independent 't' test was applied to test this hypothesis and the results obtained there from are tabulated as herein below: -

Table 4: Results of ‘t’ test between boy and girl children with dyslexia in their Pre-test and Post-test performance scores in the component of Reading Comprehension i.e., Language Structures.

Variable	Gender	Mean	S.D.	SE	‘t’ value	p-value	Signi.
Pre-test	Boys	14.67	2.10	0.43	0.9442	0.3498	>0.05, NS
	Girls	14.15	1.74	0.34			
Post-test	Boys	36.83	3.31	0.67	0.3732	0.7106	>0.05, NS
	Girls	36.50	3.01	0.59			
Difference	Boys	22.17	3.55	0.72	-0.1899	0.8502	>0.05, NS
	Girls	22.35	3.14	0.62			

From the results of the above table, it can be seen that, the remedial programme on the component of Reading Comprehension i.e., Language Structure is having the similar effect on the performance of boy and girl dyslexic children. The following figure presents the details of the above table:



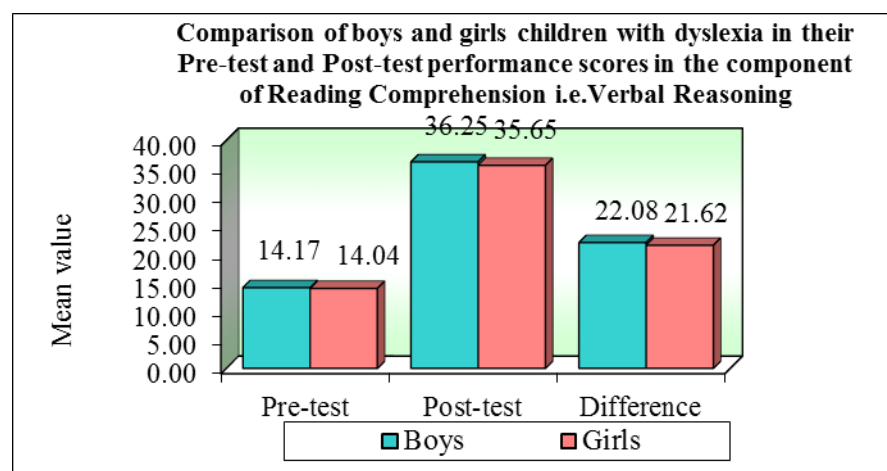
Hypothesis 5: There is no significant difference between Boy and Girl children with dyslexia in their Pre-test and Post-test performance in the component of Reading Comprehension i.e., Verbal Reasoning.

Independent ‘t’ test was applied to test this hypothesis and the results obtained there from are tabulated as herein below: -

Table 5: Results of ‘t’ test between boy and girl children with dyslexia in their Pre-test and Post-test performance scores in the component of Reading Comprehension i.e., Verbal Reasoning.

Variable	Gender	Mean	S.D.	SE	‘t’ value	p-value	Signi
Pre-test	Boys	14.17	1.81	0.37	0.2815	0.7796	>0.05, NS
	Girls	14.04	1.40	0.27			
Post-test	Boys	36.25	3.40	0.69	0.6815	0.4988	>0.05, NS
	Girls	35.65	2.77	0.54			
Difference	Boys	22.08	3.37	0.69	0.5283	0.5997	>0.05, NS
	Girls	21.62	2.89	0.57			

From the results of the above table, it can be seen that, the remedial programme on the component of Reading Comprehension i.e., Verbal Reasoning is having the similar effect on the performance of boy and girl dyslexic children. The following figure presents the details of the above table:



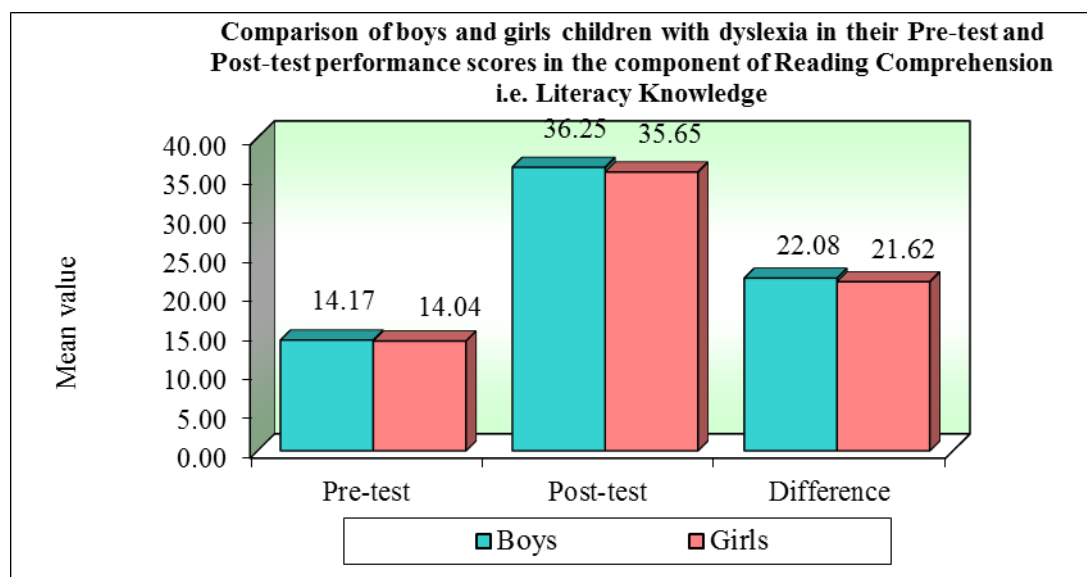
Hypothesis 6: There is no significant difference between Boy and Girl children with dyslexia in their Pre-test and Post-test performance in the component of Reading Comprehension i.e., Literacy Knowledge.

Independent ‘t’ test was applied to test this hypothesis and the results obtained there from are tabulated as herein below:-

Table 6: Results of ‘t’ test between boy and girl children with dyslexia in their Pre-test and Post-test performance scores in the component of Reading Comprehension i.e., Literacy Knowledge.

Variable	Gender	Mean	S.D	SE	t-value	p-value	Signi
Pre-test	Boys	14.13	1.65	0.34	-1.1203	0.2682	>0.05, NS
	Girls	14.62	1.44	0.28			
Post-test	Boys	35.96	3.16	0.64	-0.7657	0.4476	>0.05, NS
	Girls	36.62	2.91	0.57			
Difference	Boys	21.83	2.88	0.59	-0.2006	0.8418	>0.05, NS
	Girls	22.00	2.98	0.58			

From the results of the above table, it can be seen that, the remedial programme on the component of Reading Comprehension i.e., Literacy Knowledge is having the similar effect on the performance of boy and girl dyslexic children. The following figure presents the details of the above table:



Findings:



1. The remedial programme on reading comprehension shows the similar effect on the performance of boy and girl dyslexic children
2. The remedial programme on the component of reading comprehension i.e., Background Knowledge shows the similar effect on the performance of boy and girl dyslexic children.
3. The remedial programme on the component of reading comprehension i.e., Vocabulary shows the similar effect on the performance of boy and girl dyslexic children.
4. The remedial programme on the component of reading comprehension i.e., Language Structure shows the similar effect on the performance of boy and girl dyslexic children.
5. The remedial programme on the component of reading comprehension i.e., Verbal Reasoning shows the similar effect on the performance of boy and girl dyslexic children.
6. The remedial programme on the component of reading comprehension i.e., Literacy Knowledge shows the similar effect on the performance of boy and girl dyslexic children.

Discussion and Conclusion

It is imperative for a general education classroom teacher, especially at the primary school level, to be familiar with the existence of, manifestations of, and interventions for students with disabilities, including, but not limited to dyslexia. Reading disabilities are commonplace in the general education classroom. Studies show that inexperienced teachers are generally lacking in knowledge of basic language constructs, a key component to effective reading disability intervention. Substantial research shows that certain intervention strategies are effective in mitigating the negative effects of reading disabilities. Experienced educators agree that many of these effective interventions can be carried out in a general education classroom setting and with noticeable effects. In short, conscientious educators should endeavor to make knowledge of reading disabilities a part of their educational repertoire.

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Disclosures

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