



## Dyslexia: Relativity with Reference to children's Understanding

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### ABSTRACT

*The present paper deals with child psychology and their mental health. This paper reflects the research and thoughts of a teacher who is author of such study. Author took up a child neurobehavioral disorder named dyslexia. Author experimented on the 40-40 kids in 5 groups of K.G. classes from different schools for investigation in the year 2010-2011 at Agra (U.P). The children undertaken for study were 5 to 7 years of age. Author found out that out of 40 students in class under study 15-20 were found doing mistakes while writing the basic alphabets. For instance B, C, D, E, F, G, J, K, L, P, R, S, Y, 2, 3, 4, 5, 6, 7, 9 etc.. Were written in reverse way (Mirror images of real letters). This paper includes different findings of different workers involved in such similar task as done by author. Different diagnosis and identification methods are discussed here. In the paper it is enumerated about causes, neurobiology, and author findings with critical discussion and treatments with interventions for dyslexia in children. Finally extract of whole paper is magnificently probed in conclusion. Author is concerned very first research on such a burning problem so he could complete some aspects of problem. Rests of issues related with this research are still left for further investigation.*

**KEY WORDS:** neurobehavioral, diagnosis, interventions, probed

### INTRODUCTION

Remember your childhood. Now imagine just sitting in school and fearing that one moment when your school teacher asked you to read aloud before the class. Imagine that you fright this moment so dearly because you constantly trip over simple words and are made to feel let down. Further silly full movement, which you tried harder but still have report cards that mentioned your impotentialness and need to start making an effort in school. These are just some of the thoughts and emotions that a child with dyslexia faces every day.

Dyslexia is a language based learning disorder that is grounded in the neurobiology of the brain. The disorder interferes with the processing and comprehension of both spoken and written language. Often there are other associated symptoms such as ill conversation, dull syllabic language, poor spelling, writing, handwriting faced by children and people. Early signs are difficulties in phonological perception by children and moreover, problems of phonological learning, processing sound speech into statements [1, 2]. Nor is it a disorder of laziness or lack of intelligence. Current National Institutes of Health (NIH) studies estimate the prevalence of this disorder at 20% of school age children. This means that one in five children have the fears and emotions expressed above. It is by far the most common form of learning disability.

composite dyslexia shows various types of behavioral and learning abnormalities including difficulties with reading and writing of letters and words, learning to talk, pronouncing longer words, Rhyming, learning the alphabet sequence, days of the week, colors, shapes, and numbers, learning letter names and sounds, learning to read and write his or her name, learning to identify syllables (cow-boy in cowboy) and speech sounds (phonemes: c-a-t in cat) in words, sounding out simple words, reading and spelling words with the correct letter sequences etc. as studied by scientists, researchers etc.

Children with the disorder often feel stupid as a result of their constant struggle in school. Kids who have difficulty often avoid reading and writing because it's hard or stressful. As a result, they end up missing out on valuable reading practice and lag behind their classmates. And their confidence and morale let be down. However, there is no correlation between intelligence and dyslexia. In fact, very intelligent people are dyslexic. For example, Einstein, undoubtedly the one of the most intelligent people ever, was known to be dyslexic. The famous film star Abhishek Bacchan is known to be dyslexic in his childhood. People with dyslexia can go on to higher education and become professionals. Often, these people succeed in areas that do not require a significant number of language based tasks on a daily basis. According to Science Daily (Sep. 28, 2011) — about 5 to 10 percent of American children are diagnosed as dyslexic. Historically, the label has been assigned to kids who are bright, even verbally articulate, but who struggle with reading -- in short, who's high IQs mismatch their low reading scores. When children are not as bright, however, their reading troubles have been chalked up to their general intellectual limitations.

## MATERIAL AND METHODS

Author inspired for such work by seeing copies of his child of K.G. class in which child had written alphabets in reverse way. Author shocked and went to school at parents' teacher meeting; there he saw many of kids had done same mistakes. However teacher made circled or cut the respective reverse written letters. Author twinkled his brain to the Hindi movie "TAARE ZAMEEN PAR" and thought about dyslexia?

He started co-ordination some schools of Agra and saw copies of different children and found many of them had written letters in reverse way. He thought is it a disease? Can it produce any hurdle in our child education? He had taken 40-40 kids in 5 groups of K.G. Classes from different schools for investigation on monthly basis in the year 2010-2011. He gone through the note books/copies of elementary subjects' viz. English, Math, Hindi from different beginning classes. The children undertaken for study were 5 to 7 years of age. Apart from this different groups of children were formed (each group had 10 students) in each school. Author started communicated and coordinated with them for 15 minute individually. Their performances were noted down and analysed and assessed them later.

## RESULTS AND DISCUSSION

Although different researchers had worked on upto adolescence age of individuals suffering from composite dyslexia. In this investigation it was found that out of 40 students in class under study 15-20 were found doing mistakes while writing the basic alphabets. For instance B, C, D, E, F, G, J, K, L, P, R, S, Y, 2, 3, 4, 5, 6, 7, 9 etc., were written in reverse way (Mirror images of real letters). How this reverse image formed in the brains, author could not find out. Author co-ordinated and negotiated with related class teachers and parents of kids. He found that their kids were put on almost sufficient diet so no nutritional deficient factor was responsible for reverse letter writing disorder in investigated children. As well playfull, sports and other activities including however oral presentation in some of them, conversation in some of them, etiquettes were found almost normal in children at school and outsides. Nevertheless, When author talked to them he observed that children with poor comprehension had also weaknesses in native language speakings. These findings gained support from the works of [3,4]. Who also recorded impairment in vocabulary knowledge, grammar and syntax in experimented children.

comprehensionless children also experienced higher language difficulties, including problems with reading and figuring as well as in text-related processes including comprehension monitoring and knowledge of story structure and telling.[5]. However other studied done by other researchers as [6, 7], from a large sample (1553) of children aged 6–16 who were attending 50 state-funded primary and secondary schools in England. In short, dyslexia is not a clear-cut diagnostic category.

Rather, in keeping with other neurodevelopmental disorders that affect learning, it can be thought of as the behavioural outcome of a multiple risk factors, both genetic and environmental [8]. It was observed in present study that dyslexia coupled with other relative analogies as seen in many children with dyslexia who also had language impairments, inattentiveness in classroom [9, 10]. However **II** found that this was due to problems of motor coordination.

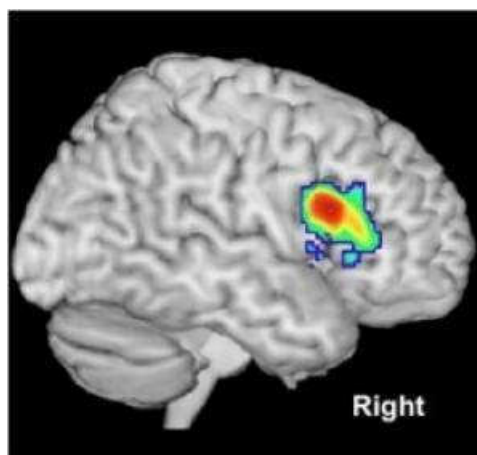
**Causes of dyslexia:** Dyslexia is a genetic disorder. Recently scientists located a gene on the short arm of chromosome 6 for dyslexia. Because the gene is dominant the disorder is highly heritable.

Furthermore, studies have found that in children who are newly diagnosed, nearly 80% have a history of learning difficulties in their families. This provides strong evidence for the genetic heritability of dyslexia.

**Neurobiology of dyslexia:** Recent research by the NIH has focused on the differences in the brains of people with dyslexia and normal controls. Researchers have found that people with dyslexia use different parts of the brain when reading than controls use.

While control subjects show activation in the angular gyrus area of the brain, subjects with dyslexia show little activation in this area or none at all. Furthermore, subjects with dyslexia show activation in the inferior frontal gyrus.

This is an area in the front of the brain that is associated with spoken language. So perhaps the reason that people with dyslexia do better with spoken rather than written exams is that they are using the part of the brain that is efficient at processing spoken language.



Activity in the highlighted brain area, located in the right inferior frontal gyrus region, showed significant positive correlation with reading gains 2.5 years after they were initially examined in a group of youth with dyslexia. (Credit: Image courtesy of Bruce McCandliss, Vanderbilt University)

### REMEDY AND TREATMENT

In the case of dyslexia, it becomes important for interventional psychologists to critically review the content of available programmes as interventional remedy to ensure their suitability. Beyond the early years, there are now many evidence-based interventions for children with reading difficulties/dyslexia [12]. **Interventions** that focus on phonemic awareness have been shown to be some of the most effective treatments. While a child or person with dyslexia has a significant disability in school early diagnosis can lead to positive outcomes. Early detection and intervention can help the child learn to cope with his/her disability. For dyslexia, effective interventions should include training in letter sounds, phonemic reflexes, and linking letters and phonemes through writing and reading from texts at optimum safeguards inculcates skills. In contrast, poor comprehenders require a different 'diet' adjusted to their needs and can benefit from training in oral language skills particularly vocabulary training [13]. Fortunately, with the proper assistance and help, most kids with dyslexia are able to learn to read and develop strategies that allow them to stay in the regular classroom. They usually work with a specially-trained teacher, tutor, or reading specialist to learn how to read and spell, and manage the condition. Dyslexia is not an educational life sentence. With proper interventions a child with dyslexia can achieve his/her educational aims. Your child's teacher, psychologist, or pediatrician may recommend an academic therapist — also called an education therapist.

### CONCLUSION

This paper is an attempt to identify dyslexic children at early ages without swirling in diagnostic them scientifically. The emphasis has been on dyslexia as a dimensional disorder rather than a discrete diagnostic category. Finally, evidence showing that children with dyslexia can be ameliorated by specific interventions. In his piece of research work author confined his study up to letters reading and writing skill vis a vis comprehensiveness and speaking abnormalities in some schools in Agra. Author concluded that it was learning instinct time bound disorder found in growing age kids which ends up with proper help, assistance and communication and making correct letters writing with correct words formation and correct spelling with correct pronunciation practised them by teachers, parents and instructors.

Also problem ends up with growing time in future. Intelligence and behavioral patterns were not correlated to more extent in reverse letter writing dyslexia. Thus he ultimately concluded that no hurdle or intervention was observed from dyslexia in child education. It was merely a short time breakdown in child learning psychology. Even with appropriate intervention, kids with dyslexia may find school a struggle. It's important to support your child's efforts by encouraging and assisting in reading at home. Also try to give your child opportunities to build confidence and have success in other areas, such as sports, hobbies, art, and drama and painting. Dyslexia doesn't have to be a hurdle to success. It doesn't mean that you or your child's teachers should lower your expectations for the child. Artists, athletes, scientists, and statesmen all have been able to achieve great things despite trouble with reading and writing.

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