



STUDY ON THE SPECIAL KIDS SUFFERING FROM DYSLEXIA, DYSCALCULIA, ADHD, DYSGRAPHIA

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ABSTRACT

This is study on Study on The Special Kids Suffering from Dyslexia, Dyscalculia, Adhd, Dysgraphia, Dysgraphia is a learning disability that makes it difficult for children to organise and communicate their ideas and thoughts in written form. It has an effect on fundamental writing abilities such as handwriting, typing, and spelling This research has shown that assistive technology is a potentially helpful assistance to support the educational requirements of children.

Keywords: *Special Kids, learning.*

INTRODUCTION

In recent years, there has been a growing interest among academics in examining the use of electronic gadgets to improve the academic performance of children with specific learning difficulties who are enrolled in inclusive classes. This research has shown that assistive technology is a potentially helpful assistance to support the educational requirements of children with SLD. Additionally, the integration of technology is vital to boost the effectiveness of learning among children who have learning impairments. On the other hand, not a lot of information was gleaned from the educators on the ways in which the technology gadgets may be helpful to children who had certain learning impairments. Reading difficulties, sometimes known as dyslexia, affect the vast majority of children who have been diagnosed with a specific learning disability. It generally interferes with a child's capacity to understand and manipulate the sounds in language, as well as causing difficulties in decoding and recognising new words. It can also hinder a child's ability to communicate effectively. Children who are affected by this condition have difficulties learning to read in a way that is both accurate and fluent. The inability to write properly, often known as dysgraphia, is another challenging academic area for kids who have learning impairments. Dysgraphia is a learning disability that makes it difficult for children to organise and communicate their ideas and thoughts in written form. It has an effect on fundamental writing abilities such as handwriting, typing, and spelling. One other form of learning impairment is a peculiar difficulty in retaining and appropriately applying information.

Dyslexia

Dyslexia is a special form of learning difficulty that has its roots in the neurological system. It is characterized by difficulty with accurate and/or fluent word recognition, as well as poor spelling and decoding abilities. It is also characterised by poor spelling and decoding abilities. These challenges are often the result of a deficiency in the phonological component of language, which is frequently unanticipated in connection to other cognitive talents and the provision of efficient classroom education. Problems with reading comprehension and a decreased amount of reading experience, both of which can stifle the development of a person's vocabulary and general knowledge, are examples of secondary repercussions.

It is essential to be able to identify the signs and symptoms of dyslexia when they present themselves. The earlier a kid is examined, the sooner he or she will be able to acquire the suitable teaching and accommodations that are necessary for them to be successful in school.

General problems experienced by people with dyslexia include the following:

- Learning to speak
- Learning letters and their sounds
- Organizing written and spoken language
- Memorizing number facts
- Reading quickly enough to comprehend
- Keeping up with and comprehending longer reading assignments
- Spelling
- Learning a foreign language

It is essential to keep in mind that not all students who struggle with these abilities actually have dyslexia. The only method to confirm a diagnosis of probable dyslexia is to submit the individual to formal testing of their reading, language, and writing skills. It's possible for a single person to struggle in more than one area of learning or behaviour.

Dyscalculia

A unique and chronic learning impairment, dyscalculia, also known as "developmental dyscalculia," is a condition that hinders the growth and performance of arithmetic abilities. Another name for dyscalculia is "developmental dyscalculia" (Kucian & von Aster, 2015). People who have dyscalculia have trouble subitizing numbers and calculating simple sums; in addition, they have a poor sense of magnitude and restricted abilities when it comes to handling mathematical difficulties. It is believed that between 3.5 and 6.5% of school-aged children have dyscalculia, however this number might vary depending on the region of research and the diagnostic criteria used (Shalev & von Aster, 2008). It has been linked to worse life outcomes, especially in terms of health, accomplishments, and overall quality of life (e.g., due to an inability to manage finances, limited career opportunities). Despite having a prevalence that is equivalent to that of dyslexia and probably

having a more severe detrimental influence on an individual's life result, it is not as widely recognised or understood.

There is no universal agreement on a single, unambiguous definition of dyscalculia at this point in time. Dyscalculia is defined as a "domain-specific learning problem that appears at an early stage of development and that cannot be explained by unsuitable education or poor learning chances" in the 10th revision of the International Classification of Diseases (ICD). According to the Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-V), dyscalculia is defined as the inability to perform academically (in mathematics) at a level that is expected of an individual based on their age and intelligence. This definition places dyscalculia in the category of specific learning difficulties. There are several different ways to define dyscalculia, and each one corresponds to a different set of diagnostic criteria.

Diagnosis

There is not yet a diagnostic test that is recognised and utilised by all medical professionals for the condition known as dyscalculia. It is difficult to capture the 'one profile' associated with this illness due to the variability and complexity of this condition. This makes it tough to determine who has this condition. In addition to this, it is impossible to accurately evaluate its "severity" on a standardised linear scale.

The difficulty of diagnosing dyscalculia might be compared to the difficulties of tackling this obstacle. In addition, it can be difficult to differentiate people who have dyscalculia from those who are "slow learners" (have delayed acquisition) or who suffer from poor learning as a result of having a low cognitive capacity. In addition, other criteria are employed when making a diagnosis of dyscalculia. This topic was covered in the section under "Defining Dyscalculia," therefore refer back there for more information. Another issue that adds to the pervasive lack of knowledge regarding dyscalculia is the difficulties associated with making a diagnosis of the condition. The dyscalculia screener was one of the first tests that were developed to diagnose dyscalculia. This test is timed, takes into account the candidate's previous educational experience, and focuses on the fundamental numerical capacity of candidates between the ages of 6 and 14. New research suggests, however, that a more detailed evaluation tool that captures components beyond mathematical abilities, such as non-numerical cognitive abilities, socio-emotional factors, and neurophysiological data provides a more accurate picture of an individual's profile. It has been suggested that certain numerical precursor skills that are reliable predictors of later calculation abilities could be used for early diagnosis at the kindergarten stage to assess risk for developing dyscalculia. This would allow for early assessment of the potential for the development of dyscalculia. It is vitally important that adults be screened for dyscalculia, as it is believed that one in five people struggle with poor functional numeracy.

When absolute thresholds are used, it is important to keep in mind that the prevalence of dyscalculia is the same for both genders regardless of the criterion used to determine the cut-off point. Despite this, gender inequalities in reading performance were shown to exist when the variables were controlled. Note that some of the studies that examined children with and without dyscalculia did not discriminate between groups of people who had particular learning disabilities and those who had co-morbid learning disabilities.

Attention Deficit Hyperactivity Disorder (Adhd)

The neurobehavioral condition known as attention deficit hyperactivity disorder (ADHD) is characterised by three primary symptoms: inattention, impulsivity, and hyperactivity. These youngsters have an inappropriately low degree of attention; in addition, they have difficulties concentrating, give the impression that they are not listening, and are quickly distracted. The signs of their impulsivity include trouble in self-restraint, and the signs of their hyperactivity include fidgetiness or the inability to stay still for any length of time that is significant.

The symptoms often appear before the age of seven, last for at least six months, and have a substantial impact on both the academic and social spheres. The frequency of comorbid learning impairments is considerable and ranges altogether between 25% and 50%; the most noteworthy learning disabilities include dyslexia, dyscalculia, and disorders of spelling and written expression). The combination of difficulties in an individual's ability to compose written text that are manifested by illegible handwriting, letter shape distortions, dysfluent writing, spelling errors, and difficulty in written expression of ideas that cannot be attributed to disabilities in reading or oral expression is what is meant by the term "disorders of written expression." Disorders of written expression are defined as a combination of difficulties in an individual's ability to compose written text. In the context of the more general concept of disorders of written expression, illegible handwriting and spelling mistakes are referred to collectively under the term dysgraphia. Handwriting is one of the fundamental academic skills that children with ADHD struggle with, and spelling mistakes are also common in these children (Little is known about the underlying mechanisms of dysgraphia in ADHD and the neuropsychological processes that contribute to this deficit, although these two conditions are thought to have a shared genetic aetiology. Handwriting is one of the fundamental academic skills that children with ADHD struggle with, and spelling errors are also common in these children. Learning to write by hand is a difficult task that requires practise over a lengthy period of time since it involves both physical and linguistic components.

According to certain neuropsychological theories, the language component of handwriting is responsible for matching words to their graphemic representations, whereas the non-linguistic, motor component is responsible for translating orthographic representations into writing. In alphabetic writing systems, the succession of symbols that are written is meant to represent words, and the graphemes that are written stand in for phonemes that are pronounced. In order for children to convert a spoken word into its corresponding graphemic representation, which is known as orthographic representation, they use a sublexical sound-to-spell conversion process. This process employs the phoneme-grapheme relationship, and it is this relationship that is used. As children become aware of the structure of the words in their language, specifically, they learn the morphological units, and as children become proficient at writing, they enter the orthographic phase.

At this point, children have memorised a lexicon of ready-to-use orthographic representations of frequent words (see also: morphological units, morphological units, and morphological units). During the act of writing, orthographic representations are redirected along a pathway that is not linguistic, consisting of motor programming and motor-kinematic components. The motor programming component is made up of a few different subunits: the graphemic buffer, which is the short-term working memory necessary for attention to and retention of the correct orthographic representation; the allographic mechanisms necessary for case selection and differentiation among similarly shaped letters; the graphemic motor patterns related to letter production; and the spatial representations required to write on a horizontal line. The graphemic buffer is the memory that is necessary for attention to and retention of the correct orthographic representation.

The succeeding kinematic component is in charge of regulating the overall force level, as well as the pace, the size, and the uniformity of the printed letters. In the beginning, preschoolers will draw letters, but as they get more experience throughout their first years of school, the graphic motor patterns, which are first visually directed, will eventually become established. At the beginning of adolescence, students' writing skills transition from being visually led to being written automatically. Mastering reading and writing at the same time leads to the creation of connections among word orthography and word phonology, handwriting and spelling skills, with subsequent linkage of linguistics and motor components of writing developmental dysgraphia can result from deficits in the domains involved, such as dyslexic (linguistic) dysgraphia and dysgraphia due to motor clumsiness, as well as from a defect in understanding of space.

Requirements For Specific Learning-Disabled Students

The Rights of People with Disabilities Act, 2016 was ultimately approved by both chambers of Parliament following a number of consultation sessions and a lengthy writing process. After the presidential assent was obtained, it was communicated with on December 28th, 2016. The list was extended, and it now includes SLDs along with the other additions. On March 24, 2017, a measure named "The Children with Specific Learning Disabilities (Identification and Support in Education)" was presented to the Rajya Sabha. It brought to light the necessity of specialised facilities in educational institutions, the establishment of centres for identification and remediation, rules for the certification of children with specific learning disabilities, and other similar matters. The Department of Empowerment of Persons with Disabilities of the Ministry of Social Justice and Empowerment published a notification on January 15, 2018, detailing the protocol that should be followed while certifying individuals with disabilities. This notification was released on January 15. The screening, diagnosis, and certification of SLD were highlighted repeatedly throughout the Gazette.

OBJECTIVE

1. To study on attention deficit hyperactivity disorder.
2. To study on Specific Learning-Disabled Students.

RESEARCH METHODOLOGY

the research method on the present study of Haryana district special children in learning technique and design and well-organized research project will always follow a solid methodology and procedures, which includes the proper approach in step-by-step execution of the inquiry, which further assists in discovery of the study and generalization of facts. As a result, developing a strategy for the study that will allow for the delivery of answers to research questions is desired. In this study an effort has been made to offer a short theoretical explanation of sample and processes of data collecting.

DATA ANALYSIS

Identification of learning-disabled children:

Through the use of questionnaires, the investigators in this section will identify the students in class III who have learning disabilities.

Table 1: School-wise identification of learning-disabled children

District	No. of School	Q1		Q2	
		No. of children	%	No. of children	%
Karnal	A	15	50	12	40
	B	26	65	14	35
	C	19	76	15	60
	D	16	55.1	15	60
Gurgaon	A	32	78.04	20	48.7
	B	20	66.6	17	51.5
	C	17	80.9	11	52.3
	D	12	52.1	10	43.4
Ambala	A	18	60	11	56.6
	B	21	60	17	48.5
	C	21	80.7	13	50
	D	20	80	14	56

Table.1 presents the percentage of students enrolled in class III who were determined to have a learning disability using the Q1 and Q2 scales. These scales measure the proportion of students who were found to have deficiencies in each of the aforementioned learning abilities (reading, writing and arithmetic). In class III of school A in the Karnal district, 50 percent of the students had learning disabilities, and 40 percent of them

were identified as specifically learning disabled. On the other hand, 65 percent of the students in class III of school B had learning disabilities, and 35 percent of them had specific learning disabilities. Children with learning disabilities made up 76% of the total population, with 60% of those children falling into the category of particular learning disabilities in class III for schools C and D. In the Gurgaon district, class III of school A had 78.04% of learning disabled children and 48.7% of specific learning disabled children; class III of school B had 66.6% learning disabled children and 51.5% were specific learning disabled children; class III of school C reveals to have 80.9% learning disabled children and 52.3% specifically learning disabled children; class III of school D had 52.1% identified as Learning disabled children and 43.4% as specific learning disabled children; and class III of school E In the Ambala district, class III of school A had 60% of its students identified as having a learning disability and 56.6% of its students identified as having a specific learning disability. Class III of school B had 60% of its students identified as having a learning disability and 48.5% of its students identified as having a specific learning disability. Class III of school C revealed to have 80.7% learning disabled children and 50% as specific learning-disabled children. Class III level students at school D had 80% of their students identified as.

CONCLUSION

teaching children with learning disabilities deliberately can help them become more academically proficient. The field of special education has recognised learning disability as a new, growing issue. Learning disability is one of the impaired categories recognized by IDEA (2014). Children with learning disabilities are in a dire situation and require assistance, according to studies. If a learning problem is not treated early, it might last a lifetime. Their identification and remediation programmes are aided by teachers, parents, school administrators, community members, resource persons, and special educators with effective modules and techniques, taking into consideration the children's strength and weakness. The findings showed that the investigator's methods might, to a certain extent, be utilised to teach learning-disabled primary school students in order to assist them develop their reading, writing, and math skills.

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