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**Accessibility and Support for Dyslexic Individuals in
Indian Family Settings: An Overview**

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Abstract. The paper presents the multifaceted repercussions of Dyslexia on children's daily lives, highlighting the crucial importance of parental, societal, and educational contexts. The research, which was carried out across various tiers in India, emphasizes the variety of services and support systems accessible to parents of Dyslexic children. The importance of parental responses and support in moulding Dyslexic children's self-esteem and psychological well-being is emphasized. In the realm of Dyslexia, 30 people were interviewed, including parents, professors, doctors, and children. Furthermore, the study highlights differences in the perception and management of Dyslexia among Tier 1, 2, and 3 cities in India. Tier 1 parents are more proactive in obtaining support for their children, while Tier 2 and 3 parents frequently struggle with insufficient knowledge and financial constraints, limiting their ability to effectively address their child's needs. This paper proposes a holistic view of India's Dyslexia ecosystem, emphasizing the interdependence of stakeholders such as parents, researchers, educational institutions, and politicians.

Keywords: Dyslexia • learning disorders • Indian households • parenting • neuroatypical.

1 Introduction

When one considers global statistics, 1 in 5 has Dyslexia. Dyslexia, which was discovered over a century ago, is a neurological condition marked by difficulties with

reading, writing, and spelling. Dyslexia is characterized by challenges to recognize the sounds spoken, confusion between similar-looking letters, and complex spellings. The brain finds it exceedingly challenging for children with Dyslexia to link alphabets to their respective sounds. They also find it challenging to synthesize words from the sounds. The left temporal lobe, which governs language, is affected by Dyslexia, resulting in confusing signals being sent to the brain. For example, the word 'STOP' will be interpreted as 'SPOT' or the letter 'b' will look like 'd'. Thus, creating confusion and making simple tasks more complicated.

Living with Dyslexia impacts many crucial elements of one's life. When one thinks about Dyslexia, it's natural to think of challenges at school, but it affects much more. It affects an individual's lifestyle, the immediate environment, and the people around them. Dyslexia also adversely affects family members in multiple ways and many have reported frustration with the state of the social infrastructure (Boas, 2020). Dyslexic children are frequently mocked for behaviours such as mixing up opposite words, being unable to read aloud, or appearing forgetful. If adults struggle to grasp Dyslexia, children will struggle as well, and the impacted child's self-esteem will continue to suffer. Many adolescents are discriminated against by teachers in private schools who regard them as "slow learners," "weak," or "unteachable" since they come from economically and socially disadvantaged communities.

Disabilities caused by Dyslexic conditions do not reflect the state of an individual's intelligence. However, it does pose a challenge to realize human potential. They already struggle to complete routine tasks like brushing their teeth, setting an alarm for the morning, or turning off the oven; they do not need any more mental stress on their plate.

1.1 Research Objective

This study attempts to understand how staying in Tier 1, 2, and 3 cities in India affects a Dyslexic child's lifestyle in terms of various factors such as peer-to-peer support, social support, government assistance, and financial support. The objectives of this study are –

1. To investigate disparities in attitudes and responses to Dyslexia among parents in the Tier 1, 2, and 3 cities in India, with an emphasis on the influence of education, financial resources, and knowledge on Dyslexia management.
2. To identify common patterns and key elements that contribute to the effective assistance and wellness of Dyslexic children
3. To investigate the broader impact of Dyslexia beyond scholastic obstacles, including its impact on an individual's way of life, self-esteem, and social interactions in various tiers of Indian cities.

2 Literature Review

Talking, listening, writing, and reading are the four ways that children learn language. The first steps in a child's language development take place at home, when their parents and other family members converse with them, read to them frequently, listen to them,

and play with them. When children are taught following conventional methods in schools, Dyslexic youngsters will typically take longer to develop these language abilities. Symptoms of Dyslexia can be seen as early as 5 years old. (Mountstephen, 2010). Without a diagnosis and an IEP, there is no formal means for parents to monitor their children's progress at the early stages because according to the current curriculum, it is not necessary for that progress to be documented. (Boas, 2020) When teachers and parents stay in constant contact, they can build a conducive environment for kids and in turn, catch the early signs of Dyslexia. The ecosystem a child grows up in contributes to their mental health and their confidence.

Children's self-concept is impacted by Dyslexia, and good parenting and environmental influences can help them feel better about themselves and have better well-being.

2.1 Bronfenbrenner's Ecological Theory

Child development is an intricate web of relationships that are shaped by a multitude of external factors, from close-knit families and educational environments to general cultural norms, laws, and values (Bronfenbrenner, 1995). A nurturing relationship with the parents has a constructive impact on children. It has also been reported that distant and unaffectionate parents impact the children negatively. Bronfenbrenner's ecological model (Fig. 1) provides a comprehensive understanding of interpersonal relations and the effect imposed by numerous environmental elements. The model precisely illustrates how the Dyslexic child's environment impacts him. (Bronfenbrenner, 1979)

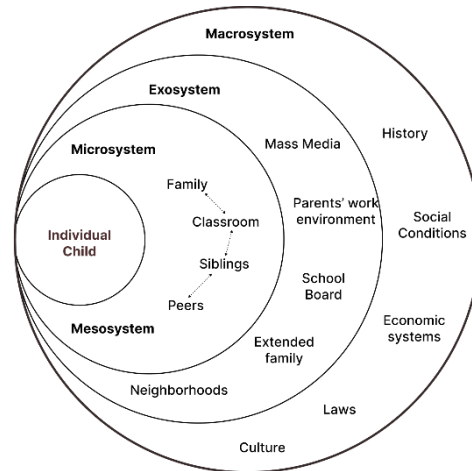


Fig. 1 Ecological Model by Bronfenbrenner.

2.2 Dyslexia and its Influence on the Environment

In comparison with parents of non-dyslexic kids, parents of Dyslexic children have been reported to experience higher anxiety levels. They are especially troubled by delayed academic development, which is an ill consequence of Dyslexia. In this

context, Bowen's family systems theory assumes importance as it stresses seeing the family as a social system instead of a focus on the parent-child relationship. This social system constitutes a never-ending cycle of actions and reactions. (Bronfenbrenner, 1979) This means that a family is a unit, and no single member can be researched independently without taking into account the other members. The family is impacted by Dyslexia in many different ways. Mothers, in particular, experience higher levels of stress and depression, which has a significant detrimental impact on their families. (Delany, 2017). Sibling rivalry is among the most blatant. As their Dyslexic sibling receives more parental time, money, and attention, children who are not Dyslexic typically feel resentful of them. Interestingly enough, the Dyslexic child has no interest in it at all.

As a result, he or she is more likely to act inappropriately toward the family's academically successful children. Challenges faced by the ward in reading and writing could often result in greater dissatisfaction among the parents of Dyslexic children (fig 2). When children feel accepted for who they are at home, they are more prepared to cope with outside stressors.

Parents and instructors should value both "the product" and "the effort." Grades don't matter as much to Dyslexics as their growth does. Parents need to support the school's objectives, but they also have a right to participate in their child's unique educational plan. (Delany, 2017). Constructive communication is required for an effective outcome. This is an especially challenging scenario for parents. Communication can take the shape of a home/school notebook that includes the assignments completed at school that day or the previous week and advises parents on how to continue the work at home. If communication between the child's home and school breaks down, the child may receive contradicting and unclear messages regarding his or her Dyslexia, which can be harmful in both the short and long term. (Abd Rauf et al., 2021) The influence of a child's family can be profound and substantial.

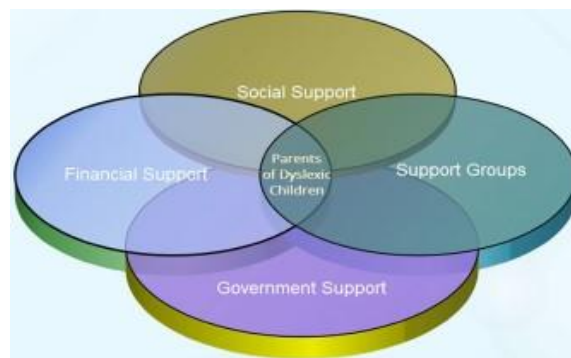


Fig. 2 Concerns of significance for the parents of Dyslexic children.

3 Impact of Tier 1, 2, and 3 on the Lifestyle of a Dyslexic Child

India typically divides its cities into several tiers according to various criteria, including population, economic growth, infrastructure, and amenities. Various sources and criteria may be employed to divide cities into different tiers, but in general, the following is a typical approach to do so;

Tier 1 cities:

These are often the largest and most modern cities in India. They serve as important economic and cultural hubs and offer state-of-the-art infrastructure, amenities, and opportunities. e.g. Mumbai, Delhi, etc. They are also known as Metropolitan Cities.

Tier 2 cities:

In comparison to Tier 1 cities, significantly less developed infrastructure is associated with Tier 2 cities. Yet these places are substantial in terms of size and economic activity. They continue to provide a high standard of living and a range of options, e.g. Pune.

Tier 3 Cities:

In terms of population and economic development, these cities are less developed than Tier 1 and Tier 2 cities. Despite having fewer possibilities and amenities, they are still significant regional hubs. Examples of Tier 3 cities include Kanpur, Gwalior, etc.

Parents whose first language is not English assume that their children's academic difficulties are the result of learning a new language rather than learning challenges. Dyslexia affects many people, but how it is treated and how people cope with it differs depending on the resources available, literacy rate, financial conditions, and other such factors. Parents from Tier 3 cities have reported heightened anxiety and stress as well which adversely influences the family dynamics. (Abd Rauf et al., 2021)

Tier 1 cities, which are the most sophisticated and resource-rich, have a strong support system that includes specialized examinations, well-equipped equipment, and intensive teacher training programs. This raises educators' and parents' knowledge and comprehension of Dyslexia, resulting in quick intervention and active participation in support networks. Dyslexic children in Tier 1 cities typically have superior self-esteem and academic success. Tier 2 cities, on the other hand, provide considerable but unequal assistance, owing to budget constraints and different levels of awareness among parents and educators. Finally, Tier 3 cities confront significant obstacles due to a shortage of facilities, insufficient teacher preparation, and a shortage of Dyslexia awareness. Many Dyslexic children in these locations go misdiagnosed and untreated, affecting their self-esteem and general family relationships.

To address these gaps, concerted initiatives in Tier 2 and 3 cities are needed to raise awareness, improve teacher training

Parents may exhibit less positive behaviour toward their children, such as showing physical affection, giving compliments, or words of encouragement.

Table 1

Comparative analysis of facilities in Indian cities.

Parameters	Tier 1 cities	Tier 2 & 3 cities
Understanding and acceptance	Well, Educated Ready to Accept	Less Educated Parents Cannot be accepted easily
Societal support	Strong sense of community Multiple support groups for kids and parents	Conscious 'what will people say' Lack of awareness
Financial support	Average family income approx. Rs. 10-30 Lakh P.a.	Average family income approx. Rs. 2-4.5 Lakh p.a.
Government support	Government-mandated counsellors Government programs are widely available	Government outreach is inefficient Limited to non-existent facilities available

4 Methodology

Utilizing a phenomenological approach, the study deliberately selected 13 children diagnosed with Dyslexia from various regions of India, representing diverse socio-economic backgrounds. The participant pool included 9 parents of Dyslexic children residing in areas characterized by restricted access to resources and educational facilities. Additionally, eight parents from the more privileged socio-economic backgrounds of the Tier 1 sector were part of the research. To delve into the intricacies of the subject, 7 teachers and counsellors from the BM Institute of Mental Health (Ahmedabad, Gujarat, established in 1951) and professors from the School for the Mentally Disabled participated in interviews.

Semi-structured interviews were conducted to facilitate in-depth explorations of the participants' experiences with Dyslexia. This approach revealed recurring patterns in the narratives provided by the participants, shedding light on the lived experiences of Dyslexic children and their families. The interviews were carried out in Hindi, English, Marathi, and Gujarati. The questionnaire for children delved into the issues faced by Dyslexic children, parental expectations, and the desires of the children facing Dyslexia. Conversely, the questionnaire for parents in Tier 1, Tier 2, and Tier 3 focused on their initial thoughts upon discovering their child's Dyslexia, their awareness of Dyslexia, and how frequently they reprimanded their children for not studying.

The research scrutinized the challenges faced by children with Dyslexia, their circumstances, and variations in treatment. A discernible pattern emerged in the perceptions of Dyslexia among Tier 1, Tier 2, and Tier 3 parents, along with their attitudes toward their child's academic performance and the obstacles they encountered.

The findings highlighted a lack of awareness and limited access to appropriate diagnosis and treatment. Importantly, the paper refrains from providing solutions to the challenges faced by children with Dyslexia. Instead, its focus is on drawing attention to individuals with lower incomes who may be unfamiliar with these issues.

5 Results and Discussions

The health and support for Dyslexic children in India are influenced by the city's tier. Tier 1 cities have robust support systems, but Tier 2 cities have little financial resources. There are major gaps in resources, awareness, government aid, and funds in Tier 3 cities, resulting in greater isolation and limited options for Dyslexic youngsters.

5.1 Analysis of cause and effect

After understanding the fundamentals of Dyslexia, ‘the ecosystem’ of the Dyslexic child was observed. It must be noted that parents' teaching strategies and responses tend to vary depending on the culture in which they reside (table 2).

Table 1

Analysis of cause and effect.

Cause	Problem	Effect
Lack of school funding	Limited resources	Teachers cannot avail of specialized training programs
Absence of research-backed policies	Policy and funding gaps	Schools and institutions struggle to prioritize Dyslexia-related initiatives
Lack of funds distributed, minimal support from the government	Lack of cohesive research on Dyslexia in the Indian context	Limited understanding of Dyslexia and a dearth of evidence-based interventions
Government initiatives and policies are not effectively implemented	No centralized infrastructure	Limited financial support and awareness among Tier 2 and 3 families
Inadequate screening and assessment tools	Late diagnosis	Delayed intervention, underutilization of resources

Absence of standardized and culturally appropriate screening tools	Inadequate screening and assessment tools for Dyslexia	Inequity in diagnosis, misdiagnosis
Illiteracy and lack of awareness campaigns	Awareness gap	Misinformation and social stigmas

After conducting interviews and observing the common pattern in different tiers most common thing concerning all three was,

1. The sooner one is tested for Dyslexia, the better.
2. The self-confidence a child has depends on his ability to cope with his peers in class.
3. Patience and support from the parents and peers are essential, as the environment they are in is conducive to their success in life.
4. A child's learning approach is determined by his or her abilities and strengths.
5. Primary teachers play a critical role in detecting early indicators of learning difficulties (LD).
6. Awareness must be spread to normalize Dyslexia.

There is no centralized assessment system, thus creating a huge gap in teacher training and communication skills across all tiers. Due to this, it has become difficult to diagnose Dyslexia in the early stages. This study advocates for a comprehensive perspective on India's Dyslexia ecosystem, stressing the interconnectedness of stakeholders such as parents, researchers, schools, and policymakers.

5.2 Disparities in Dyslexia Support: The Impact of Social, Government, and Financial Factors in Different Tiers of Indian Cities

Tier 1

People in Tier 1 are highly educated and are more supportive of their children, ensuring that they have all opportunities for good mental health as well as academic success. Dyslexic children in these cities generally have a sound support system. As soon as parents learn of a change in their child's study pattern or mental health, they rush to investigate the whys and try to remedy the problem by seeking counsellors or therapies. Tier 1 parents come from good financial standing, which is why they ensure that their child receives all amenities and can afford all health assessments. Since they are in contact with various institutes and people from similar circumstances, they are more conscious of any government incentives in the market that assist them more than Tier 3 people.

This ensures that parents and teachers are well versed with knowledge about Dyslexia and are equipped to cater to all his socio-economic needs. Their open-minded approach helps the child to become confident and ensures he taps his full potential. There tend to be a few exceptional cases where parents are neglectful.

Tier 2 and 3

Parents in Tier 2 and 3 have difficulty embracing their child's Dyslexia, owing to a lack of awareness and, in some circumstances, a lack of knowledge. They then prefer to act as though their child is not having any problems. Many parents admit that their child is uninterested in school or is indolent. One of the most crucial aspects is the financial situation, which makes parents think twice before giving their child medication or supplements, even if they know something is seriously wrong. They refuse to interact with others who are dealing with similar challenges because they are worried about what others will say if they discover the condition their child is in. This impacts the mental health of children as well as the dynamics of the family negatively. Self-esteem issues might be experienced and the children can feel depressed. There is inadequate knowledge of government initiatives. Because Dyslexia is sometimes undetectable, two-thirds of children with learning difficulties are never identified, let alone provided the resources they require to thrive. In addition, the teachers lack specific expertise in the science of reading.

During the interview session, it was observed that parents were not ready to admit that their child has Dyslexia, as they associated all learning problems meaning that the child is “dumb” or “stupid”. They responded that the child does not have an aptitude for academics but will learn to study later on and to “let kids be kids”, and “If not now when will the kids play?” This mentality results in the children not getting professional help and the family just assuming that they are not interested in academic activities.

6 Conclusion

For Dyslexic children in India, support varies greatly. Early diagnosis, self-confidence, and supportive environments are crucial regardless of income. This study urges a systemic approach with infrastructure, awareness, and teacher training. Currently, fragmented efforts leave parents, researchers, and schools struggling. Viewing Dyslexia as an interconnected ecosystem could lead to impactful "win-win" solutions for all the stakeholders.

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