



RESEARCH PAPER

Socio-Cultural Barriers and Diagnostic Challenges of Dyslexia in Pakistan

¹Muhammad Maahin, ²Dr. Kiran Ikram and ³Dr. Inam Ul Haq

1. Graduate, International School Lahore, Punjab, Pakistan
2. Lecturer, Department of Sociology, Lahore College for Women University, Lahore, Punjab, Pakistan
3. Senior Lecturer, School of Economics and Business, Universal College, Lahore Punjab, Pakistan

Corresponding Author kkiranmalikk@gmail.com

ABSTRACT

This study aims to explore the socio-cultural barriers to dyslexia diagnosis and treatment in Pakistan. Dyslexia, a common learning difficulty that affects reading, writing, and language processing, impacts approximately 5–10% of the global population. While early diagnosis and intervention are common in developed countries, Pakistan lacks awareness, screening protocols, and support for affected children. Using purposive sampling, 10 doctors from various medical fields were interviewed. Findings revealed a lack of recognition of dyslexia as a medical issue, strong stigma around learning difficulties, and a tendency to label affected children as lazy or undisciplined. Doctors often miss the chance to intervene not due to lack of expertise, but because families rarely raise the concern. The study recommends community-level awareness campaigns, medical training focused on culturally sensitive communication, and creating safe spaces for families to seek help. Bridging these gaps can lead to timely support for children with dyslexia and improved educational outcomes.

Keywords: Dyslexia, Learning Difficulties, Socio-Cultural Barriers, Stigma, Challenges

Introduction

Dyslexia is one of the most common learning disorders globally, affecting an estimated one in five children (Aldakhil, 2024; Wagner et al., 2021; Wajuihain & Naidoo, 2011). Around 80 to 90 percent of children with learning disabilities have dyslexia, making it the leading cause of academic struggles in school-age populations (Asdaq, 2025; Yang et al., 2022). International research, particularly from countries like the United States and the United Kingdom, has extensively documented its causes, impacts, and interventions (Exworthy et al., 2006). Early screening, specialized teaching strategies, and inclusive educational policies have enabled significant progress in these regions, reducing stigma and improving learning outcomes for affected children. In contrast, in countries such as Pakistan, dyslexia remains a largely invisible issue (Mufti et al., 2025). Mostly in underdeveloped countries, awareness is minimal, diagnosis is rare, and structured interventions are almost non-existent. Learning difficulties are often misunderstood, misattributed to laziness or lack of discipline, and shrouded in stigma (Zaini et al., 2024; Panicker, 2022; Kohli, Sharma & Padhy, 2018). Teachers and parents may recognise a child's struggles but hesitate to address them due to cultural attitudes, lack of training, and fear of social judgment (Haft et al., 2022). As a result, many children with dyslexia are left undiagnosed, unsupported, and excluded from opportunities for academic success (Qureshi et al., 2024). This neglect not only affects educational outcomes but also impacts mental health, self-esteem, and long-term well-being. The significance of this research lies in its attempt to address a major gap in both educational and healthcare systems in Pakistan. Unlike in high-income countries, where dyslexia research has informed effective policy, Pakistan lacks comprehensive studies exploring why this condition remains undetected and

untreated. Understanding the cultural, social, and systemic barriers is essential for creating interventions that are both effective and contextually appropriate.

Literature Review

Dyslexia is a specific learning disability of neurological origin, and it affects a child's ability to recognize and manipulate the sounds of language, independent of race, gender and intelligence (Snowling, Hulme & Nation, 2020; Kunwar & Sapkota, 2016; Chisom, 2016; Shidani & Arora, 2012). It is estimated that one in five children has dyslexia, and 80 to 90 per cent of children with learning disabilities suffer from dyslexia. The existing status quo of Dyslexia in Pakistan and obstacles faced by specialists in treating diagnosed or potential patients. According to a study (Qureshi et al., 2024) 48 students from Young Muslim Inclusive Education System were part of a sample pool for a research regarding dyslexia. 37 students who appeared physically healthy were diagnosed with dyslexia by a screening test, 7 were found to have even more profound learning disabilities. This study also shows that after treatment by the IEP, 83.8% students had shown progress over 50%. This study is a very accurate representation of the current status of dyslexia in Pakistan. It is very prevalent but highly overlooked by the country and authorities existing in every institution. Doctors and researchers of social, natural and especially medical sciences have spent plenty of time figuring out reasons and solutions to this disparity. Our study has come to the conclusion that at the core of the issue, two major reasons have resulted in this neglect in Pakistan. Firstly, the lack of coordination and communication in Pakistan between educational institutions and guardians, and doctors. There still seems to be a communication channel between the two parties, this leads to children suffering due to lack of attention to their disorder and a widespread obliviousness to symptoms and proceedings of dyslexia. Secondly, the lack of acceptance in the nation upon observing symptoms and consequential hesitation in treatment due to pressure created by societal norms.

The acquisition of reading comprehension, a major challenge in child development, is a critical component of educational success in elementary school (Kunwar et al., 2024). Children with dyslexia have difficulties recognizing, spelling, and decoding words, despite having typical intelligence and no obvious neurological or sensory deficits. For them, the process of learning to read and write is fraught with conflicts and setbacks, and this unexplained and unsubstantiated failure harms their later life (Snowling, Hulme, & Nation, 2020). A study by Wang and colleagues from China and Taiwan showed that children with dyslexia had higher rates of anxiety and depression symptoms. Furthermore, a community study of twins by Wilcutt and Pennington found that people with reading disabilities were significantly more likely to suffer from internalising and externalising disorders than people without reading disabilities (Wang et al., 2023; Xiao et al., 2023).

The diagnosis of developmental dyslexia is usually made after the child begins structured schooling. Elementary school is therefore a critical point where early literacy assessment and intervention can help identify potential reading difficulties and address risk factors. Therefore, this study focused on developmental dyslexia in elementary school students. The variation in prevalence may be related to several factors. First, different operational definitions may lead to different prevalence rates. The normal threshold for reading comprehension is 1 or 1.5 standard deviations (SD) below the average for the same age group. Second, environmental variables such as region, socio-economic status, class and other factors such as dyslexia may also influence each child's risk of dyslexia. A particularly interesting question is whether and how orthographic depth influences the prevalence of dyslexia (Yang et al., 2022).

Certain theories take birth as the definition of Dyslexia formulates itself into a debate. Phonological deficit theory has become the most developed and widely accepted theory of dyslexia. This has been extensively studied in the UK and the US and has led to a surprising consensus about the causal role of phonological skills in young children's reading

progress. Children with good phonological skills or good "phonological awareness" are better readers and spellers. Conversely, children with poor phonological skills will have poorer progress. In particular, people with certain phonological disorders are more likely to be classified as dyslexic by age 9 or 10 (du Plessis, 2023). The double-deficit hypothesis of developmental dyslexia proposes that deficits in phonological processing and naming speed are independent causes of dysfunction in dyslexia. Research in this area is characterised by a variety of methodologies, including how dyslexia is defined and identified, and how dyslexia subtypes are classified. This variability limits the range of conclusions that can be drawn regarding the double-deficit hypothesis (Vukovic & Siegel, 2006). The magnocellular deficit theory postulates that the core defect in DD is a disturbance in the magnocellular signalling pathway. The magnocellular pathway begins in the magnocellular ganglion cells of the retina. Visual information is then conveyed to the magnocellular layer of the dorsal lateral geniculate body (LGN) of the thalamus (Qian & Bi, 2015). Most of the evidence cited to support this claim comes from contrast sensitivity studies, and support for the giant cell defect theory is equivocal. In the case of spatial contrast sensitivity, we obtain results that are clearly consistent with the cellular giant defect theory. However, these results are surpassed by both studies that found no loss of sensitivity and studies that found decreased contrast sensitivity that is not consistent with giant cell defects (Skottun, 2000). An alternative view is represented by the automaticity/cerebellar theory of dyslexia (hereafter referred to as the cerebellar theory). The biological argument here is that the cerebellum in dyslexics is slightly impaired, and this causes many of the cognitive deficits. The cerebellar theory is supported by evidence that dyslexic patients perform poorly on a number of motor tasks, dual tasks indicative of balance automatization deficits, and on time estimation, a non-motor cerebellar task (Ramus et al., 2003).

The manner in which educators position themselves in relation to students with dyslexia is crucial for the educational and behavioural development of these children. When teachers negatively portray dyslexic learners, it can have detrimental effects on their future. Research has consistently shown that teacher attitudes and expectations can have long-lasting consequences, especially when a classroom teacher holds a less than positive attitude towards students with disabilities (Wahsheh, 2024; Boyle, 2020). It is widely documented that if dyslexia is not adequately addressed, it can result in feelings of isolation and exclusion, putting young individuals at risk and potentially contributing to depression and antisocial behavior (Elias, 2014). Certain methods that have been advocated for by medical experts for teachers to adopt in order to cater to the student with this disorder are very minor in practicality but their effect is much profound (Manzoor, rashid& Khalid, 2024). By providing additional time, specialised equipment, or reading instructions aloud to students with dyslexia, they can be ensured equal opportunities in the classroom. However, it is important to note that this accommodation does not imply that their assignments should be simplified or shortened (Greenwood, 2019). The diagnosis itself can be recommended by the educator through observation in class of a specific individual. The teacher in the classroom should possess an understanding of the challenges that students face in reading and writing. It is crucial for the teacher to assess the specific difficulties encountered by each student. By doing so, the teacher can identify any symptoms that may arise. In such cases, it becomes the responsibility of the teachers and the pedagogical coordinator to assess the child and, if deemed necessary, advise the parents to seek assistance from specialists. It is crucial to recognize the educator's role in literacy activities in order to identify challenges that surpass the typical and anticipated difficulties during the process. This is particularly significant as these challenges may indicate a potential case of dyslexia. Dyslexia, characterised by difficulties in decoding and handwriting, is the prevailing learning difficulty observed in classrooms. Failure to detect dyslexia during the early stages of learning can result in severe and lasting consequences for the teaching-learning process (Campos & Faber, 2022).

Mothers of dyslexic children often experience significant emotional adjustments, particularly in the early stages of diagnosis (Wilmot et al., 2023). These adjustments can lead to feelings of guilt, self-doubt, frustration, and helplessness, causing mothers to perceive themselves as bad parents. Parents of dyslexic children must have personal coping abilities and necessary support from schools to assist their child fully (Ibrahem, Ali & Ibrahim, 20224). Without these factors, parents and their children may be at increased risk for negative psychological distress and wellbeing (Finardi, Palari & Fincham, 2022).

Dyslexia, although an educational construct, is associated with a range of adverse psychological outcomes, including negative mental health and lack of support. Parental well being can be negatively affected if their child is unhappy, and dyslexia can place elevated stress and worry on parents. Studies have shown that mothers of dyslexic children often grieve the loss of normal and feel hopeless when they do not entirely understand what dyslexia means. Homework can result in constant conflict and frustration, causing a strain on the mother-child relationship. Therefore, it is essential to provide necessary support to parents of dyslexic children to ensure their mental wellbeing and their child's academic success (Cosgrave, 2022). There are also certain practical methods in ensuring the child with developmental dyslexia can utilise his reading and writing skills to the extent of his capabilities. New brain imaging technology reveals the significant impact of practice on the formation of neural circuits associated with the development of expertise in a particular skill. The brain learns through repeated practice. Sight words, also known as irregular words, do not follow a consistent pattern and cannot be sounded out. These words, including "a," "is," "are," "one," "two," "said," "again," "been," "could," "the," and "once," occur frequently in books and must be memorised for instant recognition. Once children are able to write letters, regardless of their proficiency, they can participate in various writing exercises that enhance their awareness of the sounds that compose words and the corresponding letter representations. Writing their own name and other common words like "cat," "mom," and "dad" reinforces this awareness. Engaging in activities such as listening to stories, discussing characters and events, and playing with blocks or puppets, whether at school or at home, aids in the development of a child's thinking skills, imagination, vocabulary, and overall awareness of the world around them (Rade, 2021).

Different tests give confirmation whether dyslexia is present or not, some universally recognized methods are the serial reaction time paradigm. The SRT task is a paradigm used to measure visuo-motoric sequence learning. Participants are exposed to a single visual stimulus that appears repeatedly in different locations on a computer screen. Throughout the exposure, participants must make motor responses that correspond to the locations of the stimuli on the screen. The SRT task has been commonly employed to assess statistical learning and investigate group differences between individuals with and without dyslexia, in both adult and child populations (Remien & Marwaha, 2023). Visual statistical learning is a paradigm that evaluates the ability to learn through exposure to a continuous stream of visual stimuli, such as abstract shapes or cartoon-like figures. Without the participants' knowledge, the stimuli in a visual statistical learning task are organized into groups of two or three that consistently appear together (Van Witteloostuijn et al., 2019). In both infant and adult research, the assessment of learners' ability to jointly acquire words and language structure has been conducted using artificial languages that consist of non-adjacent dependencies. These dependencies refer to statistically reliable relationships between two items that are separated in speech. Non-adjacent relationships are prevalent in language and can be observed at various levels of language structure, including syntax (such as the relationship between the auxiliary verb and the present participle verb form in the phrase "the sun is shining"), morphosyntax (which involves co-occurring prefixes and suffixes, for example, "uncovered" and "independently"), and number agreement (as seen in phrases like "the lion at the zoo roars" and "the penguins at the zoo swim") (Graf Estes et al., 2020).

Despite the growing interest in learning disabilities in Pakistan, significant research gaps exist in context of socio-cultural barriers in identifying and diagnosing the dyslexia among kids, which has been related as poor and less intelligence, slow and lazy. It is needed to understand this by assessing the knowledge and awareness among parents, teachers, school administrators and another stakeholder of this phenomenon clinical practitioners.

Material and Methods

The current study is qualitative in nature by opting the interpretive paradigm. For this purpose, 10 specialist doctors were employed by using purposive sampling. These doctors serve patients diagnosed with learning disabilities such as dyslexia, among others. They have fulfilled the needs of several children nationwide who potentially suffered from relevant disorders. The Inclusion Criteria of the research participants was based on following characteristics.

- 1) The medical specialists had at least 5 years of experience in the profession, dealing with patients
- 2) These doctors were situated in Pakistan and only worked with patients of the country
- 3) The doctors had the consent to disclose generic information asked but no personal information regarding any specific patient is given to the interviewer to maintain confidentiality
- 4) The patients of these doctors were from the age group of 3-8 as this was relevant to the subject of the study
- 5) The total pool of interviewees was representative of both male and female doctors. The interviews were conducted in Lahore from February 2024 till July 2024.

The researchers conducted semi-structured interviews to collect qualitative data, each interview lasting around 40-50 minutes. These questions were aimed at the specific symptoms felt by the parents that led to them distinguishing their child to be different than others which eventually led to them consulting a professional despite common belief in the country that these problems, relating to mental, intellectual and academic disorders do not exist due to stigma associated with it and further questions revealed how the parents were able to react and digest the diagnosis itself, different cases revealed different tiers of progressiveness towards the news.

The interviews further educated us on behavioral patterns of students in schools and the response of teachers to it as well as these patterns across ages and educational grades, further emphasis was placed on means to remove the social stigma attached to it as well as progression already made and the change in attitudes of the guardians of the patients which differed from past generations.

The 10 interviews, where the doctors were chosen under the set criteria, were taken in Lahore, and the doctors were taken from "Johor town", "DHA (Defence housing authority)", "Gulberg" and "Iqbal town". The sampling methods used were stratified sampling to maintain a 1:1 ratio of male and female doctors, and purposive sampling to ensure participants had the required expertise. Additionally, snowball sampling was applied to recruit 3 doctors via referrals from an initial contact. The doctors were reached out to by LinkedIn, email, telephone calls, and two doctors were selected from a specific clinic's website, while others were found via an online doctor directory. These approaches ensured that only relevant specialists meeting the study criteria were included. The doctors did not receive any payment, nor did any method of transaction take place between the interviewers and the interviewees. The doctors were consenting adults and verbal consent

was made sure before any information was given. Due to a lack of consent from parents the confidentiality of clients was made sure to be taken care of before and during any exchange of data from the interviewees, No specific name or case was given away.

4 interviews were taken at the offices of the specialists and their workplaces, mobile audio recording software were used as a microphone to collect data in audio form, and 2 interviews were conducted at the interviewer's workplace, the comfort of the interviewee was ensured. Other interviews were conducted via "Google Meet," and the recordings were preserved via a screen and audio recording software. The interviews were taken in a bilingual manner with Urdu taken care of by us to maintain the effects of the Hawthorne effect to a minimal and the attitude of the interviewer was observed to make sure no aspect of their body language results in an interviewer and English to make the interviewees most comfortable, answers were in a semi structured interviews format where the interviewees were minimally interrupted.

The analytical approach was based on the reflexive thematic analysis, which is a systematic, flexible and thematic analysis that takes the researcher's objectivity in account as well which is a very important part of sociological research. This method was used to extrapolate and understand data on a deeper level and discern meaning from it. The audios were listened to several times by different researchers and the data was transcribed in written form, from the native language, Urdu to English. After this practice, the data transcribed by different researchers was compared and contrasted and themes were extracted that were relevant to the answers and the questions. Repetitive concepts brought up by specialists were separated and further themes were decided by the importance of those consistently mentioned topics. To filter the remaining theme concepts, they were judged in regard to the significance they held for the research objectives.

Results and Discussion

Table 1
Socio-Demographic

Participant ID	Specialization	Years of experience	Sector	City	Interview mode	Major Takeaways
D1	Child therapy	6	Private	Lahore	In-person	Social stigma
D2	Speech therapy	8	Private	Lahore	In-person	Behavioral patterns
D3	Speech therapy	17	Private	Lahore	Online	Parental attitude
D4	Education therapy	10	Private	Lahore	Online	Role of educational institutes
D5	Child Psychiatry	21	Public	Lahore	In-person	Long term effects
D6	Child Psychiatry	14	Public	Lahore	Online	Parental attitude
D7	Child Therapy	9	NGO	Lahore	In-person	Lack of a Communication Channel in the country
D8	General Practitioner	11	Public	Lahore	In-person	State of diagnosis in the country
D9	Education Therapy	12	NGO	Lahore	In-person	Role of better communication
D10	Child Psychology	9	Private	Lahore	In-person	Effects across wealth classes

Identified Behavior Patterns and Symptoms before Diagnosis By a Doctor in Patients

According to medical professionals before the diagnoses the doctors had to be reached out to by the teachers or parents due to the supervisors recognizing abnormalities in early age when compared to a general standard, this includes but not limited to, delayed milestone such as walking, talking etc, early academic failure, such as failing to comprehend different aspects of early language altogether such as alphabetic visual memory, phonics etc, and disruptive behavioural pattern with no external cause. Now these observations can be made by parents and/or guardians and teachers and at two occasions, school and at home. All the patients were brought by or informed by the professionals by either the child's

academic school faculty or their parents. According to this study's respondents the symptoms though vary from different cases they can at the end be classified under the same root cause, these behavioral issues stem from frustration, the doctors state that the children usually feel incapable of performing a task they are assigned, the tasks are usually centred around students with a higher reception to language excessive pressure to perform the task and the expectation of completion results in the child responding violently.

Observations at home

The issues identified at home were more in regard to behaviour and early age milestones rather than any sort of academic failure, parents often belonged to the community labelled as "bourgeoisie", these parents were from wealthy upper-class families and hence much more cautious about these symptoms. Though inversely, some parents became insecure due to their children as in their society, judgment regarding the children given was given high priority to uphold prestige and reputation.

"Some parents have even openly claimed to be embarrassed of young children aged no more than 4 or 5 due to their inability to differentiate between the letter "b" and "d" to them this competition starts much earlier than others (Child therapist aged 34)"

The findings of our study show that most children had similar frustration at home, the doctors claim these children at a point stopped trying to use their academic prowess altogether after repeated tries of failures demonstrated during homeworks, the root cause of this is found to be the method that elementary and middle school teachers employ that suits better suited individuals rather than children suffering from dyslexia, similarly the parents often expect their dyslexic child to learn the same way at the same pace as better equipped students which fails. A 36-year-old speech therapist shared, *"If a child who is not dyslexic can read some number of words a minute, the dyslexic child is likely to take longer. When this patience is missing the child's behavior tends to become much more disruptive at home."*

Doctors conclude that other prevalent symptoms involve inability to follow directions, lack of multifunctionality and multitasking and less receptive to storing information, these specialist narrated incidences where young children often could not process 2 pieces of information at once (e.g "go left then go right" children usually could follow only the first part or in some cases some could not detect left and right even at an older age). Our studies conclude that dyslexia is a disorder that slows and weakens the ability of the brain to process information, this includes visual, auditory and literary information, all symptoms aforementioned fall under the ambit of what we mentioned. This aligned with the observed aggression and frustration shown by the child as several pieces of information to the children seemed like random noises or words which left them in a state of confusion and distress. *"I have seen parents trying to teach their children poems that often end up with the child either crying or going completely silent (speech therapist 45)"* another respondent also shared that *"More often than not this lack of reception by children would lead to violence against them which fed the aggression and deeply rooted it even more (speech therapist 37)"*

These findings indicate that less information and awareness regarding the dyslexia among parents make these children prone to other social and behavioral complications.

Observations at School

The behaviour noticed by the teachers and peers at their respective educational institutes according to our study varied from their behaviour at home, while at home there was a certain disruption and rebellion in the nature of the child, as well as a delay in milestones pertaining to general child progression not limited to academic prowess, this

showed a more aggressive side of the child, however at their institutions the children were victimised, they were expected to keep up with children naturally more adept than them.

“Children started strong, very foundational language came easy to them but their have been repeated cases of abrupt falls, what made this worse were attitudes of teachers who often let out their frustration on students due to early mistakes (speech therapist 45)”

The contrast of young students at home and at school is seen through the conclusions that where at home they were the ones letting out frustration, at school they were the ones who were a victim to it. This affected their performance from the root due to the eventual setting and streaming in classes where they were placed academically behind others at a very young age, which led to, according to our findings, instigated negative self-fulfilling prophecies and encouraged laddish attitudes in young students from a very young age, rebelling against education and despising it from the foundation becomes common due to this particular course of events, the lack of support from the teachers added to the frustration of students and formed a mental blockade from academics further hindering their already slow progress making treatment much more difficult.

“We have had cases where the teachers frustration had been seen turning into physical punishment, a particular case where a 6 year old was hit on his face with the back of a notebook for incorrectly writing the urdu alphabet ”ا“ , (educational therapist 36)”

Another finding that was shocking to researchers was a trend noticed by the doctors when they further investigated the progress of said students. The students suffered more in languages, something of focus in primary classes, but, dyslexic students catered early in their school life usually ended up showcasing great prowess in STEM subjects, (Science, Technology, Engineering and Mathematics). Doctors claim that this observation may have stemmed from their heightened spatial reasoning and visual thinking as well as a strong ability to recognise patterns. According to doctors we consulted, this can be attributed to a heightened ability to solve problems as dyslexics, due to facing more obstacles day to day, are usually more creative in their approach to academics. The lack of reliance on strong language in natural science subjects make them less intimidating for dyslexic students as well. All of these abilities are seen common in the dyslexic students that are diagnosed and treated early by doctors but missing in dyslexics who are treated obliviously despite their disorder. This shows correlation between early treatment and latent academic success

“I have had patients who have worked with me for years, children who achieved basic milestones late but when they visit me now i get to hear them excelling at maths and physics and other such subjects, at times much better than students with no such disorder (Child Psychiatrist 51)”

Lack of communication and coordination in Pakistan

According to our studies the leading reason why this prevalence exists is due to a lack of a communication channel between the specialists that cater to this disorder and the guardians or teachers that oversee the children. According to our doctors, schools in Pakistan do not keep the care of such students as priority, there are no active efforts being made or have been made to make sure there is constant dialogue between the medical experts and the relevant supervisors. This makes taking the initial step towards the betterment of the students much more difficult due to uncertainty and a lack of guidance on what the guardians should exactly do. As a result, due to the lack of a channel which provides a convenient and procedural method for an educational institute to contact the relevant experts for dyslexic children, the issue still remains without a change for years.

"I mean the current status of how far we have come in catering to these needs, when I look at it I am not surprised by how regressive our system is. I have seen teachers knowing that a student is not like the others but pretend nothing is wrong while simultaneously blaming the child for his grades. This lack of accountability in the system will never allow them to change" (educational therapist 36)

Our experts concluded that the absence of this channel leads to a greater required effort needed to cater to these children. Hence, to rid themselves of guilt or accountability most of these guardians blame the children so their sense of themselves or other people's sense of them is not compromised. Consequently, the children suffer due to the neglect by the guardians which occurs due to the lack of a designated communication channel between caretakers, teachers, parents etc and professionals who treat these. Another way parents choose to deal with this is through blatant obliviousness, they choose to believe that there is nothing concerning about the mental health of their children hence nothing that should be done in order to fix it. The reality though, in most cases the parents cannot think of a solution or find one due to complications of finding a doctor suited for dyslexic children. Pakistan's regressive society also contributes to a lack of awareness and information which makes researching not only a hassle but in some cases almost impossible.

"Where in this city do we get pushed around now for this. Something that did not happen to me or my father or to his father. We have never heard of such a disease which makes the child stupid? Have some mercy on us doctor, tell us something viable" (translated from urdu to english, a statement by the father of a dyslexic child to a child therapist, 34)

Parents hesitate to provide the further treatment required because the procedure is not feasible enough for the uneducated population to understand and go through, as a result it is easier for them to rely on the child's ability to fix their shortcomings themselves without external help.

Taboos and Social Stigma associated with individuals with learning disabilities

But why does the gap exist? Why is a channel to facilitate feasible communication between all relevant parties not a priority to neither the government nor to private entities and most importantly parents and guardians. This can be attributed to the extent of certain factors that are the components to the mental wellbeing aspect of Pakistani society.

According to our studies, because learning disabilities such as dyslexia do not show physical attributes, as other illnesses would, it is much harder to prove the problems and limitations that come along with these illnesses. The symptoms are abstract hence people do not consider them to be as agonising as something visual would be. This leads to people suffering from learning disabilities to be associated with being weak as their mental issue is categorised how we explained. So to not be labelled as weak in society people do not consider being vocal or consider acknowledging intellectual disabilities. In addition to that, as we mention the role of visual pain and distress in determining the seriousness of the medical problem, for an intellectual disability to be considered serious people need to be able to consider the problem as mental insanity. This creates stigma around mental illnesses as they are either not acknowledged or labelled as mental insanity, in both cases relevant aid is not provided or made a priority. Furthermore, this categorisation of learning disabilities can be attributed to a lack of awareness among the people of Pakistan who are not educated on the matter.

"We live in a country where" mental "and" crazy " are interchangeable terms. Mental hospitals are described in the way you would describe asylums as.(Child Psychiatrist 48)"

There have also been significant findings that suggest this idea of "taboo" exists across class. The upper class exists in a state of constant competitions which the children

have become a part of as potential trophies. People in the upper class fail to prioritise mental health over the desire to compare their children which usually results in ignorance towards their special needs. Also known as denial.

"You won't believe me when I say this but I have had parents try to teach me what they think is right about a diagnosed patient. You would assume they would be more susceptible to learn, but that is not the case (Child Psychiatrist 48)"

Discussion

This research set out to understand why so many children with dyslexia in Pakistan remain undiagnosed and unsupported. Bringing out the reality of the said phenomenon the current study employed ten doctors and on the basis of their observation and experience the common themes that emerged were a lack of awareness, cultural stigma, hesitation from parents, and the absence of proper screening systems. Many families avoid talking about learning difficulties because of shame or fear, so doctors rarely get the chance to help. When families do seek advice, the conversations are often unclear and guarded. As a result, dyslexia is usually mistaken for laziness or bad behavior. Doctors admitted that even their own training offers little guidance on identifying or supporting children with learning difficulties. This means the silence continues on all sides.

These findings show that the problem is not only medical but also deeply cultural. In many families, a child's academic success is tied to family honor. When a child struggles, parents often see it as a personal failure rather than a neurological difference. This makes them reluctant to seek help. Previous studies in other developing countries also show that stigma and lack of awareness are major barriers, which matches what this research found. What is new here is the insight that even when parents do speak up, their fear and discomfort make the conversations incomplete, leaving doctors unsure how to respond. This means fixing the issue is not just about better medical knowledge, it is about building trust and changing how these conversations happen.

Globally, research says that early screening, teacher training, and structured programs are key for supporting dyslexic children. But in Pakistan, very few studies go beyond numbers and actually look at why children stay undiagnosed. Similar challenges have been noted in India and Bangladesh, where cultural beliefs strongly influence whether parents seek help. In contrast, Western countries have strong advocacy groups and policies that make dyslexia part of public conversation. This study adds to the discussion by focusing on real experiences in Pakistan and showing how cultural attitudes, family fears, and gaps in medical training all come together to keep dyslexia hidden. There are clear steps that can make a difference. Communities need awareness programs to break the myths that link dyslexia with laziness or low intelligence. Medical schools and training programs should teach doctors how to speak about learning differences in ways that are sensitive and supportive. Schools and clinics should work together to create screening tools in local languages that fit the Pakistani education system. Media campaigns and policy changes can also help by normalizing learning differences and making sure families feel safe asking for help.

This study had some limits. The interviews were only with ten doctors, so the findings cannot represent everyone. All participants worked in cities, so we do not know how things might look in rural areas where awareness could be even lower. Also, parents were not part of this research, which means we only heard from doctors and not from the families themselves. Future studies should include parents and teachers to get a fuller picture. Future research should look more closely at how cultural attitudes shape whether families seek help for learning problems. Larger studies with parents, teachers, and doctors would give a more complete understanding. Programs such as teacher training, parent workshops, and awareness campaigns should be tested to see what works best. In the end, tackling dyslexia in Pakistan will require action from many sides, schools, doctors,

communities, and policy makers, so that children are not left behind simply because no one speaks about their struggles.

Conclusion

At the heart of this research was a simple yet troubling question: why are so many children in Pakistan with dyslexia slipping through the cracks? Through conversations with ten medical professionals, it became clear that the problem isn't just medical or educational; it's deeply social. A pattern emerged across every interview: families don't talk about learning differences, doctors rarely see cases brought to them, and stigma continues to loom large over any discussion around learning disabilities.

One of the most consistent insights from the doctors was how rarely parents came to them with concerns about dyslexia. Even when children struggled with reading or writing, many families either didn't know what to make of it, or were too scared to seek help. For some, it was fear of what others might say. For others, it was the hope that the child would just "grow out of it." Either way, the result was the same, children kept struggling, unnoticed and unsupported.

This silence isn't due to a lack of care. Parents love their children. But they're working within a system, and a culture, that often doesn't give them the language or space to express those concerns. Doctors aren't always trained to spot learning disorders in the few minutes they spend with each patient, especially when the families themselves hesitate to raise the issue. The consequence? Dyslexia often remains unspoken, misunderstood, and sadly, untreated.

What's clear is that change has to happen at multiple levels. We need to talk more, openly, honestly, and publicly, about dyslexia. Campaigns, school programs, and workshops can help bring the conversation into the mainstream. Doctors should receive training not just in recognising symptoms, but in creating safe spaces where families feel comfortable sharing their worries. And schools and hospitals must stop working in silos — the earlier we connect the dots between a child's behaviour in class and their underlying challenges, the better we can support them.

There are also big structural gaps that need fixing. Right now, there are very few systems in place that allow teachers and doctors to work together. A child might be struggling in class, but unless someone connects that information to a medical professional, the root cause, dyslexia, may never be identified. Building that bridge is essential.

Recommendations and Practical Application

One of the most urgent needs is early diagnosis. Most children with dyslexia in Pakistan go undiagnosed, especially in government schools, where teacher-student ratios are overwhelming and awareness is minimal. We need screening tools in both English and Urdu that can be used by regular teachers, not just specialists. These tools should be introduced in primary schools so that children aren't mislabelled as "slow" or "lazy" for years before anyone realises what's actually going on.

Another recommendation, and perhaps the most important, is teacher training. If educators aren't aware of what dyslexia is, how can they support students with it? The government and teacher training institutes should work together to make learning disabilities a standard part of the training curriculum, not an optional extra. Teachers should know the signs, but also know how to adapt: things like allowing oral assessments, giving extra time, or offering printed notes can make a world of difference.

Beyond the classroom, we also need a cultural shift. In many families, academic success is seen as the only measure of a child's worth. Dyslexia challenges that mindset. I'd recommend nationwide awareness campaigns, using TV, social media, and schools to help parents, students, and even policymakers understand that learning differently isn't a defect, it's just different. Having successful people with dyslexia share their stories in Urdu or regional languages could be powerful.

We also need spaces of support. Whether through NGOs, local schools, or government initiatives, creating resource centers or support groups for parents and children dealing with dyslexia can reduce isolation. It's one thing to struggle; it's another to struggle alone.

To address the systemic neglect of dyslexia in Pakistan, it is essential that legislation formally recognizes dyslexia as a specific learning disability. This recognition should come with enforceable mandates for screening in early education, teacher training requirements, and accommodations in exams under education boards. A national dyslexia policy, shaped in consultation with psychologists, educators, and parents, can provide a framework to ensure equity and support for affected students. Laws without implementation are empty. The legislation must be backed by funding, oversight, and accountability mechanisms.

Finally, we need to back all of this with real data. The lack of local research makes it easy for authorities to say, "It's not a big issue." But it is. More localized studies, particularly in rural areas, are needed to push policy forward and show that this isn't just an "urban elite problem."

References

- Abdel-Azem, D. I. M., Ahmed, L. A. E., Mansy, A. M. A., & Ali, M. I. E. B. (2024). Parents' Knowledge and Attitude Regarding Dyslexia: Cross-Sectional Survey. *International Egyptian Journal of Nursing Sciences and Research*, 4(2), 484-503.
- Aldakhil, A. F. (2024). Prevalence of developmental dyslexia among primary school children in Arab countries: a systematic review and meta-analysis. *Research in Developmental Disabilities*, 152, 104812.
- Asdaq, S. M. B., Alhowail, A. H., Rabbani, S. I., Nayeem, N., Asdaq, S. M. E., & Nausheen, F. (2025). Learning Disabilities in the 21st Century: Integrating Neuroscience, Education, and Technology for Better Outcomes. *SAGE Open*, 15(3), 21582440251365483.
- Ashraf, F., & Najam, N. (2020). An epidemiological study of prevalence and comorbidity of non-clinical Dyslexia, Dysgraphia and Dyscalculia symptoms in Public and Private Schools of Pakistan. *Pakistan Journal of Medical Sciences*, 36(7), 1659.
- Boyle, C., Anderson, J., & Allen, K. A. (2020). The importance of teacher attitudes to inclusive education. In *Inclusive education: Global issues and controversies* (pp. 127-146). Brill.
- Campos, C. P., & Faber, M. A. (2022). The teacher's role in the early diagnosis of dyslexic children. *Revista Científica Multidisciplinar Núcleo do Conhecimento*, 7(7), 5-18.
- Cosgrave, S. (2022). *The experience of parenting a child with dyslexia: An Irish perspective* (Bachelor's thesis, National College of Ireland). National College of Ireland Institutional Repository.
- Cunningham, M. (2021). Barriers to the Diagnosis of Dyslexia in Children. *The Yale Undergraduate Research Journal*, 2(1), 15.
- du Plessis, S. (2023, January 2). *Dyslexia: More than a phonological deficit*. Edublox Online Tutor.
- Elias, R. (2014). *Dyslexic learners: An investigation into the attitudes and knowledge of secondary school teachers in New Zealand* (Master's dissertation). University of Auckland, New Zealand.
- Exworthy, M., Bindman, A., Davies, H. U. W., & Washington, A. E. (2006). Evidence into policy and practice? Measuring the progress of US and UK policies to tackle disparities and inequalities in US and UK health and health care. *The Milbank Quarterly*, 84(1), 75-109.
- Finardi, G., Paleari, F. G., & Fincham, F. D. (2022). Parenting a child with learning disabilities: Mothers' self-forgiveness, well-being, and parental behaviors. *Journal of Child and Family Studies*, 31(9), 2454-2471.
- Gowramma, I. P., Gangmei, E., & Behera, L. (2018). Research in education of children with disabilities. *Indian Educational Review*, 56(2), 7-93.
- Graf Estes, K., Evans, J. L., Ordan, T., & Saffran, J. R. (2020). Non-adjacent dependency learning in infancy and its link to later language impairments: An ERP study. *Journal of Experimental Child Psychology*, 196, 104868.
- Greenwood, B. (2019, October 9). *How can teachers support pupils with dyslexia?* Satchel.

- Haft, S. L., Greiner de Magalhães, C., & Hoeft, F. (2023). A systematic review of the consequences of stigma and stereotype threat for individuals with specific learning disabilities. *Journal of learning disabilities*, 56(3), 193-209.
- Kohli, A., Sharma, S., & Padhy, S. K. (2018). Specific learning disabilities: Issues that remain unanswered. *Indian journal of psychological medicine*, 40(5), 399-405.
- Kunwar, R., Laxmi, G. C., Dahal, P. P., & Thapa, K. B. (2024). Unveiling the silent struggle: Exploring the influence of dyslexia on elementary students' mathematics learning in Nepal. *EURASIA Journal of Mathematics, Science and Technology Education*, 20(7), em2474.
- Manzoor, A., Rashid, A., & Khalid, M. U. (2024). Impact of Teachers Attitude on the Inclusion and Academic Progress of the Student with Intellectual and Developmental Disabilities: A Case Study. *Journal of Asian Development Studies*, 13(4), 703-714.
- Martinelli, K. (n.d.). Understanding dyslexia: Signs of dyslexia in kids. *Child Mind Institute*.
- Mufti, S., Shahzadi, N., Arshad, M., & Zafar, H. (2025). Screening of Children at Risk of Dyslexia in Primary Schools of Gujrat. *ACADEMIA International Journal for Social Sciences*, 4(3), 3233-3245.
- Qian, Y., & Bi, H.-Y. (2015). The effect of magnocellular-based visual-motor intervention on Chinese children with developmental dyslexia. *Frontiers in Psychology*, 6, Article 1529.
- Qureshi, M. A., Anwar, F., Nisar, M. A., Qureshi, M. A., & Anwar, M. (2024). Managing dyslexia in Pakistan. *Annals of Pakistan Institute of Medical Sciences*, 20(3), 351-355.
- Qureshi, M. A., Anwar, F., Nisar, M. A., Qureshi, M. A., & Anwar, M. (2024). Managing Dyslexia in Pakistan. *Annals of PIMS-Shaheed Zulfiqar Ali Bhutto Medical University*, 20(3), 351-355.
- Råde, A. (2021). Theories supporting the use of puppets as pedagogical tool with young children. *Universal Journal of Educational Research*, 9(7), 1359-1368.
- Ramus, F., Rosen, S., Dakin, S. C., Day, B. L., Castellote, J. M., White, S., & Frith, U. (2003). Theories of developmental dyslexia: Insights from a multiple case study of dyslexic adults. *Brain*, 126(4), 841-865.
- Remien, K., & Marwaha, R. (2023, May 1). Dyslexia. In *StatPearls*. StatPearls Publishing.
- Skottun, B. C. (2000). The magnocellular deficit theory of dyslexia: The evidence from contrast sensitivity. *Vision Research*, 40(1), 111-127.
- Snowling, M. J., Hulme, C., & Nation, K. (2020). Defining and understanding dyslexia: past, present and future. *Oxford review of education*, 46(4), 501-513.
- van Witteloostuijn, M., Boersma, P., Wijnen, F., & Rispen, J. (2019). Statistical learning abilities of children with dyslexia across three experimental paradigms. *PLOS ONE*, 14(8), Article e0220041.
- Vukovic, R. K., & Siegel, L. S. (2006). The double-deficit hypothesis: A comprehensive analysis of the evidence. *Journal of Learning Disabilities*, 39(1), 25-47.
- Wahsheh, N. (2024). The inclusion of students with disabilities: Teachers' attitudes. *Multidisciplinary Science Journal*, 6(12), 2024258-2024258.

- Wajuihian, S. O., & Naidoo, K. S. (2011). Dyslexia: an overview. *African Vision and Eye Health*, 70(2), 89-98.
- Wilmot, A., Pizzey, H., Leitaio, S., Hasking, P., & Boyes, M. (2023). "I struggle at times to see her struggle": Mothers' perspectives on dyslexia-related school struggles and the interconnected nature of mother and child well-being. *Dyslexia*, 29(2), 136-150.
- Xiao, K. P., Zhu, K., Feng, Y., Jiang, Q., Xiang, Z., Zhang, Q., Wu, X., Fan, Y., Zou, L., Xiao, H., & Song, R. (2023). Associations between dyslexia and children's mental health: Findings from a follow-up study in China. *Psychiatry Research*, 324, Article 115188.
- Yale Center for Dyslexia & Creativity. (n.d.). *The A-to-Z of teaching beginning reading*. Yale University.
- Yang, L., Li, C., Li, X., Zhai, M., An, Q., Zhang, Y., Zhao, J., & Weng, X. (2022). Prevalence of developmental dyslexia in primary school children: A systematic review and meta-analysis. *Brain Sciences*, 12(2), Article 240
- Zaini, N., Azhar, S. B. H. J., Atan, M. A., Norwahi, N. A., Hamid, A. A. A., & Mazlan, N. A. Social Stigma Against Dyslexics: Exploring Public's Knowledge and Belief.