ORIGINAL ARTICLE

SOCIO-EMOTIONAL AND BEHAVIORAL CHARACTERISTICS OF DYSLEXIC STUDENTS IN SRI LANKA: A STUDY BASED ON MULTIPLE CASE STUDY METHOD

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Abstract

According to the World Declaration of "Education for All," children, including those with dyslexia, have a right to education. In alignment with this, studies offering different perspectives on the education of dyslexic students have been carried out in many countries. However, it is rare to identify research conducted in this area. Therefore, the aim of this study is to investigate the socio-emotional, health states and behavioral characteristics of dyslexic students in Sri Lanka. The study followed a qualitative research paradigm, adopting a multiple case study method and selecting 10 participants from a hospital for children in Colombo. In-depth interviews, observations, and medical reports of the dyslexic students were used as data collection methods. The generated data and information were analyzed and interpreted thematically using a qualitative comparative analysis. The findings revealed that the general appearance and physical fitness of the dyslexic students were at a considerable level. They carried out daily routine activities independently; however, they did not maintain good relationships with teachers and peers. Conversely, they had strong relationships with family members. Other findings included bedwetting, differences in walking styles, difficulties in managing fine motor skills, and the use of various defense mechanisms to hide failures and carelessness. These findings were informative in identifying the basic health conditions and behavioral characteristics among dyslexic students in Sri Lanka. They also provide insight into relevant intervention methods to address behavioral challenges and enhance the socio-emotional relationships of dyslexic students.

Keywords: Dyslexia, socio-emotional, behavioral characteristics, multiple case study method, thematically

Introduction

As a key topic in educational psychology, dyslexia remain surrounded by confusion and misunderstandings. One prevalent misconception is that dyslexia involves letter or word reversals (e.g., "b/d" or "was/saw") or that letters, words, or sentences appear to "dance around" on the page (Rayner, Foorman, Perfetti, Pesetsky, & Seidenberg, 2001). However, such reversals are common during the early stages of learning to read and write among both dyslexic and non-dyslexic children, and their presence does not necessarily indicate a reading problem (Roxanne, Hudson, Leslie, & Stephanie, 2007).

According to the 11th edition of the *International Statistical Classification of Diseases and Related Health Problems* (ICD-11) by the World Health Organization (WHO, 2022), dyslexia is described as a specific developmental disorder of scholastic skills. It is characterized by significant impairments in reading development that cannot be attributed solely to mental age, visual acuity issues, or inadequate schooling. Dyslexia affects various reading-related skills, including reading comprehension, word recognition, oral reading abilities, and task performance involving reading. Spelling difficulties are frequently associated with a specific reading disorder and often remain into adolescence even after some progress in reading has been made. Specific developmental disorders are commonly preceded by a history of disorders in speech and language development, associated emotional and behavioural disturbances are common during the school-age period.

Modern studies indicate that assessing dyslexia requires more than measuring intelligence quotient (IQ). It is essential to consider cognitive processing skills to accurately identify dyslexic individuals (Wang, Li, Georgiou, & Das, 2012). The prevalence of dyslexia varies globally, with rates reported as low as 1% in Scandinavian countries and 3%–5% in Germany (Witruk, 2010). Despite numerous international studies exploring dyslexia from diverse perspectives, research on this topic in Sri Lanka is limited.

Dyslexia is recognized as a lifelong and persistent condition. Early diagnosis is essential to help individuals overcome the associated challenges. This enables all parties working with dyslexic individuals to provide the necessary support and training to manage the condition effectively. Unfortunately, in Sri Lanka, there is insufficient research on dyslexia, and a proper mechanism to diagnose its symptoms has not been established. Consequently, the school dropout rate has increased, limiting opportunities for higher education (Kadanarachchi & Abeykoon, 2021).

Hence, in Sri Lankan context, few research studies have been conducted on this topic. As emphasized by Senarath (2019), this area is novel to teachers and officers in the education system. Furthermore, she has mentioned that, as a result, teachers have limited knowledge, misconceptions, and minimal experience. This situation has negatively affected the education of dyslexic students. This means that teachers' attention to these students is low and a lack of time to interact with students with dyslexia-along with being overloaded with daily school routines and responsibilities-prevents them from helping these children (2016). Hence, she has emphasized through her study that there is a lack of sufficient research on the secondary symptoms of children with dyslexia.

As mentioned by Safeek, Hock, and Nachiappan (2022), reading is the most important skill in an individual's life, as it enriches their abilities, fosters development, and plays a crucial role in academic achievement. Although their research study was not directly focused on dyslexia, they

highlighted common reading disabilities among children in the Puttalam district in Sri Lanka, which might include children with dyslexia as well. According to their research findings, 94% of primary teachers engaged in developing students' reading skills for only 1–2 periods per week at the beginning of the year, after which they resumed their usual classroom teaching. Moreover, this study found that the identification and instructional practices for children with reading difficulties in the Puttalam district are inadequate. Additionally, school principals were unaware of classroom activities, and no school-level plans were implemented for literacy or reading development.

In summary, it is evident that teachers and other education-related personnel are not sufficiently aware of children with dyslexia. Furthermore, while the Sri Lankan education system has focused on the development of general education to some extent, attention to children with learning disabilities remains insufficient. However, Sri Lanka has adopted the global declaration on "Education for All," emphasizing the importance of providing basic education to all individuals (The World Bank Group, 2000). Despite this commitment, the lack of local studies on dyslexia underscores the need for targeted research in this field. Addressing this gap, the present study aims to explore the socio-emotional, health, and behavioral characteristics of dyslexic students in Sri Lanka.

Review of Literature

The review of literature for this study can be classified into two main categories: theoretical aspects and empirical research related to dyslexia. Several key themes have been developed within these categories, including definitions of dyslexia, causes of dyslexia, general of characteristics of dyslexic students.

Define Dyslexia

Considering dyslexia, the term does not have a universally accepted definition or description. Despite the various aspects of dyslexia, an attempt must be made to present a few widely recognized definitions provided by researchers, institutions, and associations to enhance awareness of the term 'dyslexia.'

According to the International Dyslexia Association (2002):

> "Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede the growth of vocabulary and background knowledge."

Hence, dyslexia is classified under the umbrella of specific learning difficulties in the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (DSM-5) by the American Psychiatric Association (APA, 2013), which was later revised as DSM-5-TR in 2022. 'Reading' difficulty is considered a part of specific learning disorders and is grouped with learning issues

related to writing (dysgraphia) and math (dyscalculia). Specific learning disorders are categorized as neurodevelopmental disorders with a biological origin.

Contemporary research provides more precise definitions of dyslexia, often based on empirical studies. Witruk (2010) defined dyslexia as a restricted developmental disorder affecting the acquisition of reading, often associated with difficulties in acquiring writing skills. Based on these definitions, dyslexia can be identified as a specific reading disability that also includes secondary characteristics.

Causes of Dyslexia

There can be identified what are the cases for being dyslexia. The cause/causes of dyslexia are yet to be identified. However, most of studies have confirmed that dyslexia is hereditary. Therefore, if a member of a family is suffering from dyslexia or any reading difficulty it is most likely to be the child/ children processes similar characteristics. There can be identified a few theories and investigations with regard to presented this. Two of them are causal model and multilevel model.

Causes of dyslexia can be identified based on the causal model (Morton, 2004) and multilevel model (Witruk, 1993) of dyslexia. Both models reveal that biological risk factors, i.e., genes preliminary cause of dyslexia. The left hemisphere of the brain of a dyslexic does not function properly as a result of distorted genes. This affects to make the phonological processing deficits in cognitive level and can be gradually seen from the behavioural characteristics such as poor phonological awareness, inaccurate reading and spelling, and poor reading fluency. According to the multilevel model presented by Witruk (1993), reading and writing disabilities can emerge as primary symptoms of dyslexia, whereas partial performance deficits in perception, attention, memory, motor skills and integration works can be seen as secondary symptoms.

As states the weekly epidemiological report presented by the ministry of health in Sri Lanka (2017) the exact cause of dyslexia is unknown, but it is seen more commonly in families. Six genes have been identified that may be responsible for the condition, four of which affect the way the brain is formed early life. Specialist brain scans (functional magnetic resonance imaging (MRI) scans) also show there is reduced function of one area towards the back of the brain, called the occipito-temporal cortex.

General Characteristics of Dyslexic Students

As mentioned above general indication of dyslexia is based on language disability, especially in reading. Rispens (2004) highlighted the process of syntactic and phonological processing in developmental dyslexia. Moreover, this study revealed the different aspects related to reading acquisition: the phonological defect theory, vocabulary development, and grammatical development.

Despite especially in dyslexia the Inclusion of learners with specific learning differences in teaching English as a foreign language: A teacher training project for Sri Lanka (2017) states, slow reading, can't identify word boundaries, mixing up letters/words, can't map spelling with pronunciation, can't identify subtle differences between sounds, can't differentiate between long/short vowel sounds, mixing up letters/words, incorrect letter patterns, difficulties in comprehending what others mean, difficulties in remembering/following long instructions.

As states Kadanaarachchi & Abekoon (2021) other general characteristics of dyslexics are difficulty in recognizing letters, word/letter reversals, inconsistent handwriting, unusual pencil grip, low attention span, difficulty in memorizing letters, struggle with puzzles, isolate themselves like that.

Methodology

Under the qualitative research paradigm an exploratory multiple case study design was employed, based on the following diagram presented by Yin (2009).

Figure 1.
Case Study Method (Yin, 2009)
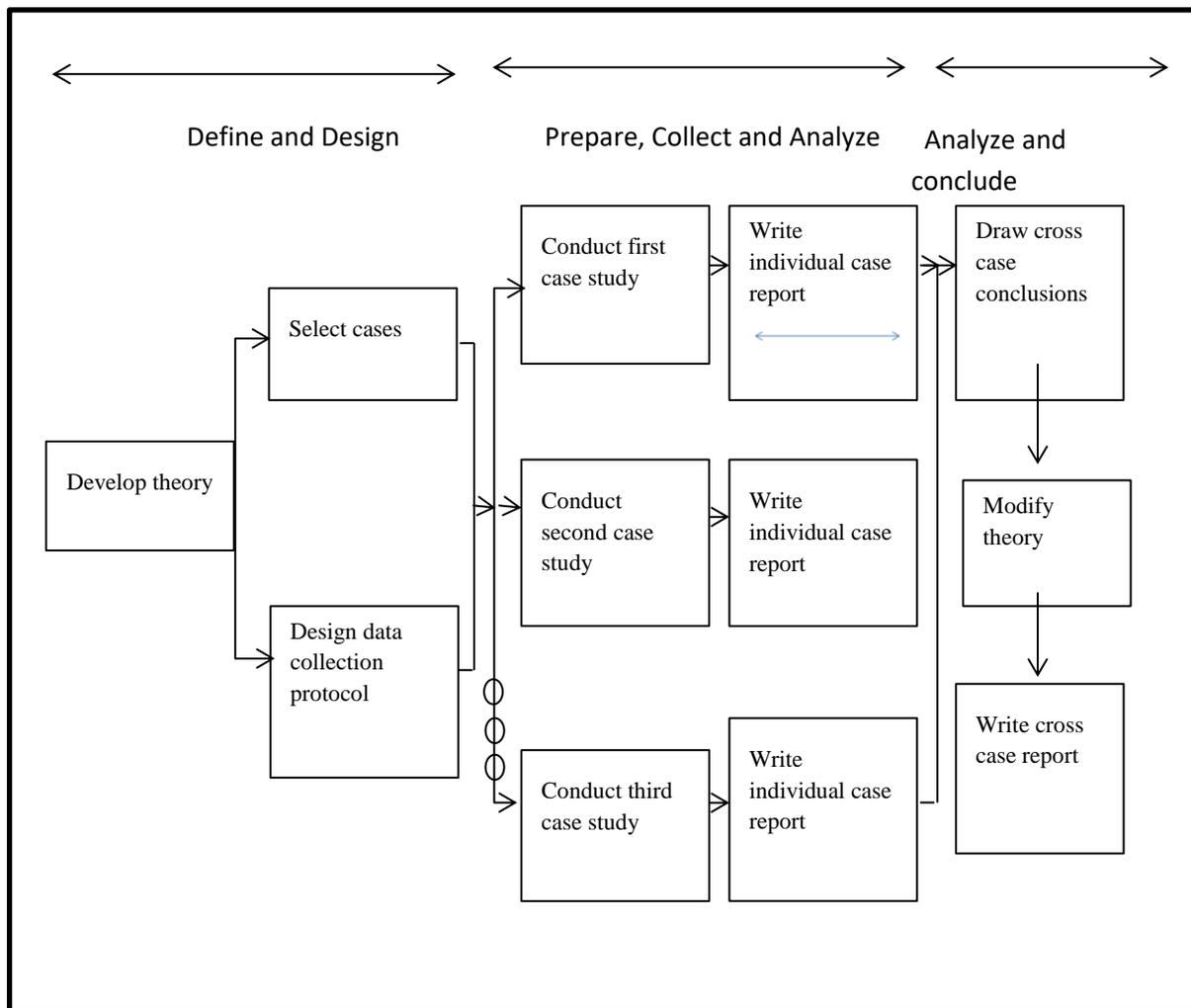
The exploratory multiple case study method was used to select students with dyslexia. According to Yin, as mentioned in Figure I, this method should involve only a few participants to obtain in-depth information about students with dyslexia from different perspectives. Therefore, the study was limited to eight to ten students, purposively selected as participants for this multiple

case study. The sample included eight boys and two girls, all studying in Grades 4 (age 9) and 5 (age 10).

Furthermore, Yin, a prominent expert in the case study method, has clearly stated in his book that case studies should focus on a small sample rather than a large-scale one. Based on this, the study was limited to only ten students. These ten students were purposively selected from a teaching hospital in Colombo, which specializes in children's healthcare. This hospital also operates a special clinic dedicated to diagnosing students with learning difficulties. Under this unit, students with dyslexia are diagnosed by medical officers using a well-reputed diagnostic tool.

A specific procedure was followed to select students from this hospital for research purposes. First, the researcher needed to complete a form to schedule a preliminary discussion with the hospital's medical director. After successfully completing this discussion on the given date, the researcher was granted an appointment to submit the necessary documents, along with seven copies of each. These documents included the project proposal in three languages (Sinhala, English, and Tamil), a consent letter prepared by the researcher to obtain parental permission for dyslexic students' participation, a language tool designed to assess language difficulties in dyslexic students, and other relevant data collection instruments such as interview protocols, observation schedules, checklists, and the supervisor's recommendation letter.

Next, the researcher was assigned a date to conduct a presentation before the hospital's ethical review committee, which comprised seven members: the medical director, a school principal, the chief matron, a consultant pediatric surgeon, a consultant pediatrician, a consultant anesthetist, a consultant microbiologist, and a consultant community physician. During the presentation, the committee members asked questions to seek clarifications on specific points. Subsequently, the review panel conducted a discussion without the researcher. Following this discussion, the ethical clearance for the study was granted.

To maintain anonymity, a labeling system was used to identify the participants: students were labeled as A, B, C, D... through J; their parents as Ai, Bi, Ci... through Ji; and their respective teachers as Aii, Bii, Cii... through Jii and teachers who worked with dyslectics in the field as: K, L, M, N, and O. These five teachers had more than five years of experience working with dyslexic students in the field of learning disabilities. The majority of them were knowledgeable and highly skilled professionals in this field. Additionally, they had gained experience and knowledge from foreign countries. Three of the teachers were selected from the Colombo region, while the other two were selected from outside Colombo. Among these teachers, two worked in the special needs units of schools, two worked in student support units, and the remaining one was a teacher instructor for special needs children.

The data and information collected were analyzed and interpreted thematically, incorporating both within-case and cross-case analysis methods. The main study consisted of two main objectives. The first objective was to identify the language difficulties of dyslexic students, especially in reading. This included discussions on pronunciation difficulties, syntax development barriers, comprehensive reading difficulties, and cognitive domain functioning related to reading difficulties.

The second objective was to investigate the secondary characteristics of dyslexic students, focusing mainly on the socio-emotional aspects and behavioral characteristics of dyslexic students in Sri Lanka. This article focuses on investigating the second objective.

To achieve this objective, a range of data collection and analysis methods were employed. The data collection methods included in-depth interviews conducted with parents, classroom teachers of dyslexic students, and teachers working with dyslexic students. Observations were carried out in classrooms while dyslexic students were engaging with their studies, as well as in their homes. Additional data sources included medical reports of dyslexic students and voice recordings of participants. Data collection ceased upon reaching the structuration level.

The researcher followed several steps to analyze the collected data and information. Firstly, participants were labeled as mentioned above. Next, the thematic analysis method (Braun & Clarke, 2006) was employed to analyze manually the large volume of qualitative data. The analysis followed several steps, including familiarization with the data, generating initial codes, identifying initial themes, reviewing themes, defining and naming the themes, and finally, the writing-up stage. These steps were conducted sequentially for each single case study.

Using the multiple case study method mentioned above, individual case study reports were written under different themes, developed based on the collection of one or a few codes. Finally, based on these single case studies, a qualitative research report was compiled using cross-case analysis. Through this process, a few themes emerged—both expected and unexpected. The themes generated related to the socio-emotional and behavioral characteristics of dyslexic students are as follows:

Results

This research intended to investigate the Socio–Emotional and behavioural characteristics of dyslexic students under a few sub themes. Namely; general appearance and mental/physical fitness of dyslexics', daily routine activities were carried out by the dyslexics, maintaining the interpersonal relationships, maladapted behaviors of dyslexics, states of managing their fine motor skills, usage of defense mechanisms.

General appearance

Participants' general appearance identified based on gathered data from medical reports of dyslexics' and observations of the researcher. Following table 1 shows the general appearance relation data of the participants.

Table 1
General appearance of the dyslexic students

General Appearance	A	B	C	D	E	F	G	H	I	J
Body type	AA	AA	N	*	AA	AA	*	AA	AA	AA
Weight	N	N	U	*	N	N	*	N	N	N
Hygiene	WG	WG	UW	*	WG	WG	*	WG	WG	WG

Eye contact	G	G	G	*	G	G	*	G	G	G
Movements	N	N	N	*	N	N	*	N	N	N
Speech	N	N	N	*	E	E	*	S	E	E
Mood component	E	E	HM	*	E	E	*	E	E	E
Visual and hearing	G	G	G	*	G	G	*	G	G	G

Note: * - Not respond   HM - Happy mood
        AA - Age appropriate   WG - Well groomed
        N - Normal   G - Good
        UW - Underweight   E - Euthymic
        A - Abnormal   S - Slow

The above table 1 shows the general appearance of the dyslexic students' in different aspects. According to that all aspects which considered under the general appearance of dyslexics are clearly indicates in considerably high. Thus observations conducted by the researcher revealed that, even though highest amount of participants were actively participated for the language activities, putting eye contact properly, energetically and gestures and postures in normal situation, few of them were stressed.

Physical fitness of the dyslexic students

The ability to carry out the daily routine of Dyslexic students independently is presented based on gathered data from medical reports of dyslexics', observations conducted by the researcher and parents' verbal statements. Following table 2 shows the how did carry out daily routine by the participants.

Table 2
Daily Routine Activities of Dyslexic Students

	A		B		C		D		E		F		G		H		I		J	
	NS	I	NS	I	NS	I	NS	I	NS	I	NS	I	NS	I	NS	I	NS	I	NS	I
Feeding		✓		✓	✓		*	*		✓		✓		✓		✓		✓		✓
Bathing		✓		✓	✓		*	*		✓		✓		✓		✓		✓		✓
Mobility		✓		✓	✓		*	*		✓		✓		✓		✓		✓		✓
Dressing		✓		✓	✓		*	*		✓		✓		✓		✓		✓	✓	

Note: *- Not respond   NS- Need Support   I- Independence

Table 2 illustrates that even though most of them carried out their daily routine activities independently, two of them was unable to do only dressing. Apart from that parents' interviews revealed all the dyslexics were not suffering from any huge health problems except headache/ panting. They were engaged with the most of their daily routine activities independently. One mother said that she was her second child and she was well-ordered. Due to that she had expressed to her elder daughter to follow her. Further her expressed when just came back to the home after the school her lunch box is cleaned by her, kept her books into the school bag in order and rest of her duties were done along except ironing the uniform.

The nature of presenting emotions

Functioning of emotions of dyslexics was discussed mainly based on gathered information by the interviews with parents, teachers and the teachers who worked with dyslexics in the field. Table 3 and 4 illustrates the statements presented by parents and teachers.

Table 3
The Nature of Presenting Emotions – Parents' Statements

Codes	Parents' statements
A[i]	Very sensitive. There is a girl in the next - door in the same age. One day my daughter fletched about her because she was wearing a torn dress. My daughter gave some cloths to her. When we go for shopping always requesting to buy clothes or anything to his siblings. Father is in abroad. Every day says to come here; others (other two kids) are thinking only what the get. This daughter loves for grandparents too. But sometimes she is anger. It became severe. She doesn't like to say any fault of herself. Even though some people who are living this area are used unnecessary words, even grandfather, but she is never expressed that bad words.
B[i]	I have three sons. More than others this son is sharing anything at all.
C[i]	This son is caring about others, one day there was received a bag and pair of shoes for him as a donation from his school, and along with it my eldest son had selected to other school, but I didn't have enough money to spend him to buy a pair of shoes. Then I asked could you give your new shoes to ayya. (brother) At ones he agreed, without any arguments.
D[i]	He is very justified. Sometimes I beat him when he fights with his brother, he gets angry, asking who did wrong.
E[i]	Sometimes very sensitive. There was a wound in my leg. Almost He is concerned about that. He always tells, "mom, pay your attention at your injury". If his brother hits him, in the first time bear up. Again and again it will happened, no chances. Also he is helped me cookery. When he goes to school, he asks me "mam, please give me some extra rice and curry to share with my friends".
Fi	His answer scripts of the monthly test were hiding from me. When I asked he replied "Mam, you will be feel sad, therefore I hide." Even though he shares everything with his sister. Sometime he feeds me also.
I[i]	Sometimes I am angered with his nonsense. Then I scold him saying "you are a foolish man". One day he had pest a notice on the refrigerator "Mam, I came from your stomach. Don't scold me, I do school works. Sister and my father as well as aunty say as I can learn.

Table 4
Functioning of Emotions of Dyslexic Students

Codes	Teachers' statements
A[ii]	No need to say lice, he is very sensitive. One day one student was vomiting. Then other children didn't come near him, saying bad smell... Bad smell. I was just observing, only this boy was I was surprised that only this child approached and then threw sand there. and I was surprised by that.
B[ii]	Sometimes he is very innocent. Sometimes his behave looks like as a Hitlar that mean, when it happened an injustice from others he gets angrier. Obeying teachers as well.
C[ii]	I have kept him in near a bright student, but he is pencilling her and tries to getting fight and later on he speaks as he is right.
D[ii]	He is not jealous. He doesn't destroy other students' stuff. There is a one kid in my class who is going to try to destroy the others creative works but he never does.
H[ii]	Very silent, but made a mistake from others, then straight forward. One day I was delivering target question papers for scholarship exam without him. Then he asked "why didn't you give me?" Then I expressed I think you are unable to do that. Then he was angry and said "give me, I can"

As considered parents and teachers statements, it can be seen, presenting positive as well as negative emotions by the dyslexics. Even though there can be seen negative emotions, like as: getting angry, trying to fight with peers. Majority of them are been with positive emotions, like as: sensitivity, jealousness, caring about others, proper understanding the situations. Also interviews conducted with field workers who worked with dyslexic students revealed that even though majority of dyslexics are very sensitive and being with excellent qualities, unfortunately parents as well as teachers are been unable to understand them correctly. Therefor dyslexics have been stressed and finally express the maladaptive behaviours.

The Maintaining of Interpersonal Relationship with Others

Next, it is revealed how dyslexics formed relationships with teachers, peers, and family members. Considering the parents' statements, the majority of them indicated that there is no meaningful relationship with teachers or peers. Furthermore, it was revealed that most class teachers labeled these children as "polished," "dumb," or "lazy." Negative feedback, such as "You can't learn, don't waste my time," was also given. Some teachers even punished them by making them kneel down.

One mother (C[i]) expressed that, due to being labeled by his class teacher, her son told her, "I hate going to school because the teacher labeled me." In one instance, a teacher even gave a dyslexic boy an inappropriate nickname, referring to him as a "Tamil guy," implying he struggled to read the Sinhala language properly. This labeling caused further emotional distress.

Although the majority of class teachers disregarded dyslexic students, a few understood them well. One mother shared: "Recently, a new teacher was appointed to my son's class. I think

she is good because now my son likes going to school more than before. Furthermore, she told me, "Step by step, I will help him move forward".

The majority of teachers also acknowledged this situation, admitting that they did not have a close relationship with dyslexic students. One teacher stated, "Compared to other students, there is no strong connection with me." However, a few teachers (G[ii], H[ii]) revealed that dyslexic students longed for care, love, and encouragement, emphasizing the importance of giving positive reinforcement, such as saying, "You are excellent."

Dyslexics were also labeled by their peers. One mother (G[i]) shared that her son said, "My friends joke about me, calling me a lazy guy." Teachers agreed with the parents' observations and further revealed that dyslexic students are often seen sitting alone or forming small groups in the classroom, typically consisting of three or four members.

Even though they didn't have strong relationships with friends and teachers, dyslexic students had broad and supportive relationships with family members, relatives, and neighbors, as revealed in the parents' interviews. The majority of dyslexic children shared their school experiences—both positive and negatively with their family members, especially their mothers. This information shows that dyslexic children tend to form strong and meaningful relationships within their comfort zones, where they feel more relaxed and supported.

Behavioural patterns of the dyslexic students.

Table 5 and 6 are revealed the behavioural characteristics of dyslexic students.

Table 5
Behavioural Patterns of Dyslexic Students (Teachers' Responses)

Behavioural Patterns	Teachers' Responses		
	Yes (%)	**No (%)**	**Occasionally (%)**
There is an undisciplined nature	00	70	30
These students are silent in the classroom	20	30	50
There are walking variations	40	60	00
Careless behaviour	20	40	40
Use different strategies to overcome their own weaknesses	20	20	60

Table 6
Behavioural Patterns of Dyslexic Students (Parents' Responses)

Behavioural Patterns	Parents' Responses		
	Yes (%)	**No (%)**	**Sometimes (%)**
Can be seen in variations on walking	50	50	00
Bed wetting	30	40	30
Scissors can be handled easily	50	50	00

The stair case can be claimed up and down properly	70	30	00
Can play properly sports like as cycling and catching balls	100	00	00
Behaves carelessly	50	20	30

Source: Medical Reports

Table 7
Parents' Statement Regarding the Behavioral Patterns of Dyslexics

Codes	Parents' statements
A[i]	My son can manage scissors properly. However, he most probably eats his nails.
B[i]	There is a noticeable difference in the way he walks. After school, I can recognize my son among the other students due to his walking style, as he tends to walk awkwardly. He climbs stairs with difficulty, bending over as if it's hard for him to go up and down. When I tell him to cut leaves for homework, I end up cutting them myself because it's very difficult for him.
C[i]	He always stays hunched over, which is clearly visible when he walks. It's very difficult for him to cut a piece of paper along a line. He also struggles with bedwetting at night.
D[i]	He walks with his limbs outstretched and always likes to play with fire.
E[i]	He can do any housework well and use scissors without difficulty.
F[i]	He is very agile and not afraid of anything. There is a well near our home, and when he goes to bathe, he jumps into the well without hesitation. He can make kites very well but also struggles with bedwetting.
G[i]	My son loves making kites, but it is difficult for him to cut leaves.
H[i]	He often bites his nails.
I[i]	It's hard for him to stay in one position on a chair. He says bad words and likes to make kites, but he can't manage it on his own. So, he asks a nearby friend to help him. He often cries loudly, but it's not genuine.
J[i]	He likes to be cuddled.

According to the above Table 5, 6 and 7, it illustrates that some behavioural issues can be seen in Dyslexics. Particularly bet wetting, difficult to do some activities using fine motor skills and shown careless behaviours.

Defence Mechanisms used by the Dyslexics when learning

Following table 8 and 9 illustrate different defence mechanisms that they used to overcome the obstacles when they doing learning language.

Table 8
Defence Mechanisms used by the Dyslexics when learning   (Parents' Statements)

Codes	Parents' statements
A[i]	My son scores marks less than 30 for some subjects. At that time, in the presence of other mothers, he shouts loudly and says, "Mom, I got thirty marks." Because then there is nothing else I can do, I can't even scold him.

B^i	His class teacher is really bothering him to get more than 100 marks in the scholarship exam. But it is very difficult for him. So, when the scholarship exam is approaching, he was pouring ink to his nose and ears. I saw, bleeding from his nose and ears. Then I admitted him to the emergency unit of the hospital. The consultant doctor said that this is not blood and then he was referred to the psychiatric unit. Then he told the doctor that it is difficult for me to work for the scholarship exam that is why I done this. Then don't need to sit the exam know?
C^i	I always tell my daughter to help him for studing. Because I tell this skid also need to go ahead, is not it? When my daughter when going to help him, my son tries to apply saliva on sister's body. He knows she don't like it. That's why he tries to avoid studying by doing that.
D^i	When I tell him to study books, he says he is suffering from headache.
F^i	When I ask him to do studies, he says, that his head hurts and his stomach hurts. Asking for water
G^i	Recently, he has been complaining of other problems while working school work. He says he has a headache and is vomiting. He also lies and hides question papers with low marks.
H^i	He is trying to avoid schoolwork by lying about something. Most of what he does is going to the toilet. When I saw the other day, he took the shampoo bottle and put it in the sink to make soap balls. He does all that to avoid the homework.
I^i	He doesn't like to sit and work all the time, He tries to avoid home work. He get stressed out. He often makes strange noises when I'm asked about schoolwork. Otherwise, he gets angry and getting into a fight.
J^i	Sometimes when asking to do schoolwork he avoids by telling lies, he doesn't try do it properly. He scratches his noses. He says his is suffering from pounding headache or thirsty.

Table 09
Defence Mechanisms used by the Dyslexics when Learning (Teachers' Statements)

Codes	Teachers' statements
B^{ii}	When some words are difficult to pronounce, he acts like a scapegoat. Some children ask what this word means, but he acts like he will not submit to anyone.
C^{ii}	One day I gave some maths for homework. I asked why you didn't do it.he told me that the book was missing at home. I called his mother and asked why the book sent by the school was not there. Then she said that the book was lost in the school. However when I looked later, the book was hidden under the clothes of an al-marie at home.
E^{ii}	He always tries to sit next to a child who can work and tries to do the right thing by watching him. Even when he puts him somewhere else, he asks if I can go there.
F^{ii}	He shouts and raises his hands at things he knows, trying to copy from his friends.
H^{ii}	When any child goes to the toilet, he also needs to go, especially to get away from studying.
I^{ii}	There is a talented kid named Thisara. This boy sits next to him because he looks up to him and copy from him but he most probably tries his best not to work
J^{ii}	Most probably he is trying to do his studies by copying next to him. One day he had copied the name of the kid next to him.

According to the responses of parents and teachers, it is clear that students with dyslexia have used various strategies to overcome their academic challenges. The defense mechanisms they employed were both positive and negative. In some cases, it is also possible to identify activities that could be life-threatening as a means of avoidance.

These findings were informative to identify the socio- emotional, health conditions and behavioral characteristics amongst the dyslexics in Sri Lanka and use relevant intervention methods to overcome failures of behavioral characteristics of dyslexics.

Conclusion

The first theme investigated the general appearance of dyslexic students. Based on the participants' medical reports, parents' responses, and observations conducted by the researcher, it was found that their general appearance was at an average level. Except for one participant, the others demonstrated good hygiene, were well-groomed or maintained a normal appearance, and had body types appropriate for their age. Their movements, as well as their visual and hearing abilities, were normal, and their mood was euthymic. Furthermore, 90% of the participants were able to perform their daily activities (feeding, bathing, mobility, and dressing) independently. Overall, all aspects considered under the general appearance of dyslexic students were found to be at a considerably high level.

The second theme investigated how dyslexic students expressed their emotions, both positively and negatively. According to the findings, the majority displayed more positive emotions when compared to other students in regular classrooms. However, interviews with field workers who interacted with dyslexic students revealed that although these children possess excellent qualities, both parents and teachers often fail to understand them properly. Consequently, dyslexic students experience stress and are frequently labeled as careless, lazy, or the "class clown." These findings align with the research conducted by Bryant, O'Connor, and Huston (2014), which also highlighted that dyslexic students are more likely to drop out of school before completing their education.

According to the third theme, while dyslexic students did not form strong relationships with friends and teachers, they maintained broad and supportive relationships with family members, relatives, and neighbors, as revealed in parents' interviews. The majority of dyslexic children shared their school experiences—both positive and negative—primarily with their family members, especially their mothers. This finding suggests that dyslexic children tend to form strong and meaningful relationships within their comfort zones, where they feel more relaxed and supported. In conclusion, these close familial bonds play a crucial role in providing emotional stability and encouragement for dyslexic children, enabling them to navigate academic and social challenges more effectively. Charoo et al. (2011) also highlighted that dyslexic students often prefer isolation due to others making them feel inferior or giving them unkind nicknames.

The next theme illustrated some behavioral issues commonly observed in dyslexic students. This included bedwetting, difficulty with fine motor skills, challenges in climbing up and down stairs, an inability to handle scissors properly, and careless behaviors. Charoo et al. (2011) also noted that in addition to reading disabilities, some dyslexic students exhibit behavioral

challenges related to activities requiring fine motor skills, eye-hand coordination, and left-right brain coordination.

Wijerathna et al. (2003) done a research based on Child Psychiatry and the Guidance Clinic of Lady Ridgeway Hospital further supported these findings. Their study, which focused on assessing learning disabilities in children, revealed that students often face issues with communication skills and motor skills. But these findings also similar to this situation.

The final theme demonstrated that students with dyslexia employ various strategies to overcome their academic challenges. The defense mechanisms they use can be both positive and negative, and in some cases, their avoidance behaviors may even include life-threatening activities.

In summary, dyslexic students in Sri Lanka face a range of socio-emotional and behavioral challenges. It is crucial for parents and teachers to develop a deeper understanding of how to interact with dyslexic children in ways that nurture their cognitive abilities rather than undermine them. Teachers should design both short-term and long-term strategies to address these socio-emotional difficulties, ensuring a supportive learning environment for these students.

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