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Awareness and Perception of Dyslexia Among Primary School Teachers in Selected Schools in India

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Abstract: Writing, reading, and spelling are greatly affected by dyslexia. Phonological processing issues make it hard to read, understand, and recognize common sight words. This study used descriptive research. Purposive sampling was used to choose 60 primary school teachers from the chosen Haridwar schools to test their Awareness and Perception. A sociodemographic profile, dyslexia questionnaire, and self-structured 3-point Likert scale were used to collect data. The study findings revealed that 36.7% of teachers exhibited a below-average level of awareness, with a mean score of 15.93±5.97. However, it is noteworthy that a significant majority, accounting for 56.7% of teachers, display a negative perception towards dyslexia. The mean attitude score was 38.98±9.67. The study revealed significant associations between perception and the following sociodemographic variables: sex (p-value < 0.004), teaching experience (p-value < 0.031), source of information regarding dyslexia (p-value < 0.047), and professional qualification (p-value < 0.001). This study reveals that a substantial proportion of primary school teachers in the selected schools possess an average level of awareness about dyslexia. This suggests room for improvement in equipping teachers with a deeper understanding of dyslexia, its characteristics, and effective teaching strategies tailored to the needs of students with dyslexia.

Keywords: Awareness and Dyslexia; Primary School Teachers; Chronic Illnesses; Learning Disorders; Psychosocial Challenges; Sociodemographic Variables; Support Services; Quality of Education.

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1. Introduction

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The World Health Organization (WHO) indicates that globally, 20% of children have disabilities, impacting their development. In developed nations like the USA, about 10% of children face chronic illnesses or disabilities. Research specific to India shows a 20-33% prevalence of psychiatric disorders among school-aged children, with developmental disorders constituting 7% of these cases. Learning disorders, a type of developmental disorder, affect approximately 10% of children. In Indian schools, it's estimated that 15-25% of students in each class struggle academically. Dyslexia is a specific type of learning disability that affects an individual's fluency, automaticity, and ability to learn effectively. The research aimed to determine the level of awareness among elementary school educators regarding the identification and provision of support services for children with dyslexia [7].

Learning disorders are described as a neurodevelopmental condition with a biological basis, leading to learning difficulties and challenges in acquiring academic skills. Consequently, they manifest in academic struggles specific to different areas: reading difficulties (dyslexia), mathematical challenges (dyscalculia), and writing issues. Dyslexia represents a specific learning disorder that significantly affects an individual's proficiency in reading, spelling, and writing. While dyslexia does not currently have a known cure, timely identification and tailored interventions can significantly help individuals improve their reading and writing skills, ultimately facilitating their academic achievements. In the context of India, statistics indicate that around 13-14% of children grapple with specific learning disabilities, among which dyslexia is a notable concern. Dyslexia affects individuals of all intellectual levels, and it is often accompanied by other cognitive and learning disabilities, such as dyscalculia, dysgraphia, and Attention-Deficit Hyperactivity Disorder [1].

According to the National Centre for Learning Disability, educators play a pivotal role in connecting children with learning disabilities to interventions that can be beneficial for them. A teacher equipped with comprehensive knowledge about learning disabilities, along with the necessary skills and competencies, can offer more effective support to these children compared to a teacher with a general educational background. Teachers require specific abilities to not only recognize various types of learning disorders but also address the emotional and psychosocial challenges that children with these disabilities may encounter. The results revealed that 48.1% of the surveyed teachers possessed a satisfactory level of knowledge concerning learning disabilities. In comparison, the majority (93.9%) exhibited a positive attitude towards this important issue [1].

Educators play a pivotal role in connecting children with learning disabilities to interventions that can be beneficial for them. A teacher, equipped with comprehensive knowledge about learning disabilities, along with the necessary skills and competencies, can offer more effective support to these children compared to a teacher with a general educational background. Teachers require specific abilities to not only recognize various types of learning disorders but also address the emotional and psychosocial challenges that children with these disabilities may encounter. A study report revealed that 48.1% of the surveyed teachers possessed satisfactory knowledge concerning learning disabilities, while the majority (93.9%) exhibited a positive attitude towards this important issue [12]. Another study indicated that merely 5% of these educators possessed an adequate level of knowledge about learning disabilities. In a distinct study conducted in Mangalore, contrasting findings emerged, with a noteworthy 94% of the participants displaying a remarkably positive attitude regarding learning disabilities.

A recent study revealed varying levels of knowledge among teachers regarding learning disabilities, with 73.3% displaying a moderate level, 20.0% having sufficient knowledge, and only 6.7% exhibiting an adequate understanding. Remarkably, the majority (93.3%) of teachers demonstrated highly favourable attitudes towards children with learning disabilities, while 6.7% had a positive disposition, and none held a negative perception. Additionally, the study revealed a significant correlation between teachers' awareness of learning disabilities and their attitudes toward such children, emphasising the importance of promoting awareness and education to foster more supportive and inclusive learning environments [5]. Another study stated that the majority of elementary school teachers, specifically 80% in urban areas and 79.39% in rural areas, exhibited an average level of awareness on the subject. A small percentage of teachers, comprising 2.69% from urban areas and 1.82% from rural areas, displayed poor awareness levels. Interestingly, the study did not detect any significant correlations between levels of awareness and the sociodemographic variables examined, suggesting that awareness regarding the topic was relatively consistent across various demographic groups among the surveyed teachers [4]. Although individuals with dyslexia may not naturally improve their reading abilities over time, early identification and intervention can help these children learn alternative reading methods at a young age. For this reason, teachers must recognize the early signs of dyslexia. This can facilitate the development of specialised teaching techniques and planned strategies to support the successful integration of dyslexic students into the classroom environment [3].

The study of dyslexia Awareness and Perception among primary teachers is necessary for several reasons. First, dyslexia is a prevalent learning disability that affects a significant percentage of students in primary schools. Secondly, primary teachers play a critical role in identifying, assessing, and providing appropriate support services to students with dyslexia. Thirdly, studies have shown that early identification and intervention can have a positive impact on the academic and social outcomes of students with dyslexia. Fourth, there is a need to evaluate primary teachers' level of knowledge and attitude towards dyslexia to identify gaps in their understanding and to improve teacher education programs, thereby better preparing educators to support

students with dyslexia. Therefore, the study aimed to assess knowledge regarding dyslexia and to examine the perception of primary school teachers on dyslexia; furthermore, it sought to enhance the quality of education for students with dyslexia and ensure that they receive the support they need to succeed in academic performance. For this study, we apply the health belief model as our conceptual framework. This model is widely utilised to explain individuals' decisions to engage in preventive health actions or not. Hochbaum initially developed it in the 1950s and was later adapted by Becker and Rosenstock in the 1970s to include motivational factors.

This model comprises three main components. Individual perception has three components: A) Perceived Susceptibility, which refers to an individual's estimation of the likelihood of encountering a specific issue. This study pertains to teachers' awareness of dyslexia and how their attitudes may influence their behaviour towards dyslexic children. B) Perceived Seriousness represents the level of concern arising from thoughts about the problems associated with a particular condition. In this study, it relates to inadequate knowledge about dyslexia, including its definition, signs, symptoms, diagnosis, treatment, and classroom strategies, as well as negative attitudes towards dyslexia and dyslexic individuals and C) Perceived Threat reflects the combined impact of perceived susceptibility and seriousness within the study's subjects, namely primary teachers. It aims to assess teachers' knowledge and attitudes concerning dyslexia. Regarding the Modifying Factors, the sub-categories are A) demographic variables such as teachers' age, gender, marital status, place of residence, religion, teaching experience, sources of information, educational qualifications, and professional qualifications related to dyslexia. B) Perceived Benefit, which encompasses the belief in the advantages of recommended methods for reducing the risk or severity of a disease or negative state resulting from a particular behaviour (Figure 1).

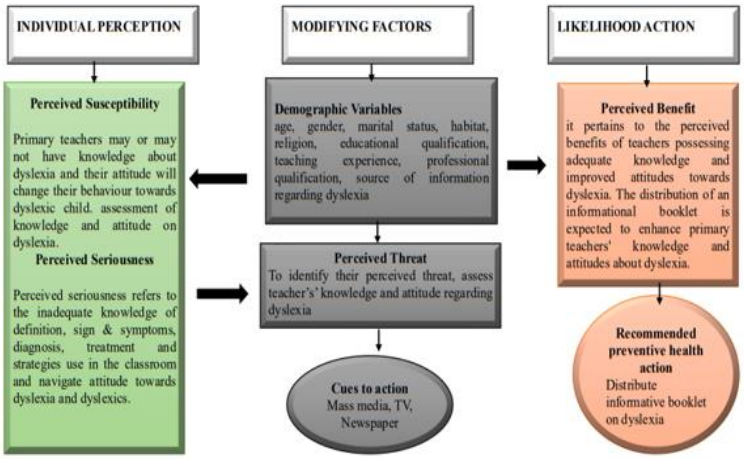

Figure 1: Conceptual framework based on the health belief model

This study pertains to the perceived benefits of teachers possessing adequate knowledge and improved attitudes towards dyslexia. The distribution of an informational booklet is expected to enhance primary teachers' knowledge and attitudes about dyslexia. The C) Perceived Barriers represents individuals' perceptions of obstacles to performing recommended actions. In this context, perceived barriers refer to inadequate knowledge and negative attitudes concerning dyslexia. The Likelihood Action is the positive difference between perceived benefits and perceived barriers. In this study, the improvement in knowledge among primary teachers regarding dyslexia is perceived as a benefit. In contrast, inadequate knowledge and negative attitudes towards dyslexia among primary teachers are perceived as barriers. Feedback: This phase involves ongoing monitoring and evaluation activities within the study.

2. Review of Literature

Geertsema et al. [10] conducted a comprehensive investigation to elucidate the perspectives of educators within two private educational institutions in the Tshwane South District, Gauteng, South Africa, regarding their understanding of, disposition towards, and strategies for accommodating learners with developmental disabilities (DD). Employing a quantitative descriptive cross-sectional survey research methodology, the study facilitated the distribution of self-administered questionnaires following purposive sampling techniques. The study's outcomes unveiled that irrespective of their qualifications, gender, or years of teaching experience, the surveyed educators exhibited limited comprehension of DD. Nevertheless, they demonstrated a generally favourable disposition towards the concept of inclusive education and the management of these particular learners. Moreover, it was observed that educators had a degree of familiarity with the terminology associated with accommodations provided to learners with DD by the education department. However, uncertainty shrouded their understanding of the specifics

and the underlying nature of these accommodations. The study explored the intricacies of these findings, yielding valuable insights and recommendations for future consideration.

Saadu and Mustapha [15] undertook a research endeavour aimed at addressing the educational challenges faced by students. Their investigation, situated within the Ilorin West Local Government Area of Kwara State, Nigeria, aimed to explore the extent of educators' understanding of dyslexia and their methods for assessing students with this learning disability. Employing a descriptive survey methodology, the researchers administered the Teachers' Knowledge for Dyslexia Test (TKDT) to educators, a test validated by teachers specialising in students with special needs. The reliability of the 10 tests, assessed using the Pearson Product-Moment Correlation (PPMC), yielded a commendable coefficient of 0.81. The amassed data underwent rigorous analysis through descriptive statistics, encompassing measures such as mean, standard deviation, percentage, frequency count, and ANOVA, all scrutinised at a significance level of 0.05. Several noteworthy findings emerged, including the absence of a statistically significant disparity in teachers' comprehension of Dyslexia based on their educational level ($F(2, 287) = 0.120$; $p > 0.05$). The results underscored a rather limited grasp of educators when it came to understanding students grappling with Dyslexia, prompting the imperative recommendation for educators to engage in continuous professional development endeavours.

Goel [14] conducted a quantitative, exploratory research study employing a survey design to investigate the prevalence of specific learning disabilities (LDs) among primary school children in selected schools in Delhi. The study involved a sample of 100 primary school teachers and utilised sociodemographic data sheets along with structured questionnaires. Following the evaluation of responses from these 100 teachers, the study revealed that 784 students, constituting 26% of the total 2934 children assessed, were deemed to be at risk of developing LDs. Within this group of at-risk primary school children, the findings indicated that 54.9% were identified as having dyslexia, 23.9% were identified as having dysgraphia, and 21.1% were identified as having dyscalculia.

Tosun et al. [6] conducted a study aimed at assessing teachers' knowledge and perceptions of dyslexia. Recognising the absence of an existing instrument capable of simultaneously measuring both aspects, this research project aimed to develop a scale specifically designed to measure the knowledge and perceptions of dyslexia among primary school teachers. A total of 201 primary school teachers participated actively in the study. Through exploratory factor analysis, the dimensions of the scale were identified, and relevant scale items were selected. Furthermore, the study successfully established configural, metric, and scalar invariance across gender groups. Additionally, the investigation explored whether teachers' backgrounds affected their knowledge and perception of dyslexia. The results indicated that teaching experience did not exhibit a significant relationship with primary school teachers' knowledge of dyslexia, and their knowledge levels remained consistent across various study variables. Conversely, a positive yet relatively weak correlation was observed between teaching experience and teachers' negative perceptions of dyslexia. Notably, those primary school teachers who had completed a dyslexia-related course during their college education tended to hold more favourable perceptions of dyslexia compared to their counterparts who had not. Interestingly, perceptions did not significantly differ among teachers who had participated in in-service seminars, engaged in reading relevant literature, or had experience teaching students with dyslexia. The development of a dedicated scale for measuring teachers' knowledge and perceptions of dyslexia in this study is poised to make a valuable contribution to the field of dyslexia research.

Kalsoom et al. [13] undertook a study to investigate the perceptions and practices of teachers in the context of dyslexia, recognising the unique challenges faced by dyslexic students due to a lack of appropriate learning environments. These challenges often exacerbate learning difficulties for students with dyslexia, particularly in the realm of reading skills, which can result in a limited vocabulary. The study employed a quantitative approach and was conducted in secondary schools within Lahore city. The sample selection process was convenient, and data analysis involved the application of T-tests and ANOVA. The study's findings revealed that a majority of teachers were aware of the term “dyslexia.” It was also observed that students with dyslexia required more time compared to their peers to grasp and complete tasks. Teachers encountered challenges when teaching dyslexic students alongside their peers, as these students often struggled to complete tasks in a single setting. However, teachers played a pivotal role in nurturing the confidence and self-esteem of these students, providing them with valuable support and guidance.

Bhavya et al. [12] conducted a cross-cultural investigation aimed at examining the perceptions, knowledge, and attitudes of teachers from Ghana, Germany, and Spain regarding the inclusion of special-education students in classrooms. The study involved a total of 363 participating teachers, comprising 156 males (43%) and 207 females (57%), from three distinct countries: Ghana, Germany, and Spain. The teacher distribution was as follows: 150 (41.3%) from Ghana, 62 (17.1%) from Germany, and 151 (41.6%) from Spain. The research findings unveiled noteworthy disparities in teachers' self-assurance levels and the extent of support, both personal and material, provided by their respective administrators and educational institutions. Specifically, the Spanish teachers generally reported lower levels in these 12 aspects. However, all the teachers exhibited commendable levels of knowledge concerning instructional strategies and students' characteristics, with teachers from Ghana

displaying notably superior knowledge regarding students' characteristics when compared to their counterparts. Furthermore, variations based on nationality were observed in teachers' attitudes towards inclusion, with teachers from Spain and Germany demonstrating slightly more favourable attitudes. Importantly, there was a unanimous consensus among all the teachers on the necessity for additional training in this domain, highlighting its pivotal role in fostering inclusion.

Ramli et al. [11] conducted a study focused on the development of an educational module utilising the ADDIE model (A-Analysis, D-Design, D-Develop, I-Implement, E-Evaluate). This module, known as DHEM (Dyslexia Awareness and Early Intervention Module), was designed to provide comprehensive information to preschool teachers about dyslexia, encompassing topics such as an overview of dyslexia, methods for identifying and intervening with dyslexic children, as well as its potential mental health implications. The newly created module underwent evaluation by a panel of eight experts from relevant fields, and it demonstrated good content validity, receiving a score of 0.7. The reliability test, as measured by Cronbach's alpha, yielded a value of 0.90, indicating strong internal consistency. These results affirm the quality, reliability, and practicality of the DHEM module. The study's overarching aim is to enhance teachers' understanding of dyslexia among children in Malaysia, particularly in identifying children at risk and facilitating early intervention to address the issue. Furthermore, the study advocates for future longitudinal research to assess the module's long-term effectiveness.

Ngwu and Nuhu [2] conducted a comprehensive investigation to assess the awareness and knowledge of dyslexia within the Ilorin metropolis, focusing on both parents and primary school teachers. Employing a descriptive survey questionnaire, the study targeted participants residing in the three local government areas of Ilorin, namely Ilorin South, East, and West, all situated in Kwara State, Nigeria. The survey was meticulously designed to capture the perspectives and opinions of individuals carefully selected to represent the broader population under study. A total of 200 respondents were purposefully selected, and 200 questionnaires were administered, subsequently completed, and collected. The study's specific objectives centred on gauging the extent of dyslexia awareness among parents and primary school teachers in Ilorin metropolis, as well as exploring the impact of dyslexia on children's academic performance.

The study's outcomes revealed the significance of education and occupation as determinants of dyslexia awareness among both parents and teachers in the region. Moreover, the study underscored the pivotal role of the environment in shaping awareness levels. As a pertinent recommendation, the research suggests that parents and teachers should invest more time in supporting children with dyslexia to enhance their academic performance. Israel and Op [8] conducted a study to investigate how students' dyscalculia and dyslexia impact the teaching and learning of science and mathematics among secondary school students. The study employed a descriptive research survey methodology. Researchers utilised a structured questionnaire (SQ) to collect responses from 200 students selected randomly from various schools. The study's findings indicated that the relationship between teachers and students significantly affects the prevalence of dyslexia and dyscalculia among secondary school students.

3. Research Methodology

A quantitative approach was adopted to assess the Awareness and Perception of teachers regarding dyslexia among primary school teachers. In the context of the study at hand, a descriptive research framework has been deployed to fulfil the stated investigative objectives. The present study was conducted at selected schools in Haridwar, India. The accessible population consisted of primary school teachers at selected schools in Haridwar. In the present study, 60 Primary school teachers were selected from schools using a non-probability, purposive sampling technique. The sampling criteria included primary school teachers willing to participate in the study and teach children from nursery to standard V. Data were collected using a researcher-developed Sociodemographic Profile, a Self-administered questionnaire to assess awareness regarding dyslexia, and a perception rating scale to assess the perception of dyslexia among primary school teachers.

The accuracy of the instruments' content was evaluated by presenting them to specialists in nursing and medicine. These experts were asked to review the tools for their relevance, clarity, and effectiveness in meeting the research goals. Following their feedback, modifications were made to the instruments following the advice of these domain experts. The reliability of the tool was assessed by the Cronbach’s alpha method (r=0.72) for the awareness questionnaire and perception scale (r=0.77). The tool was found to be reliable. Before data collection, Permission was obtained from the concerned institutional ethics committee of the Combined Postgraduate (PG) program. Institute of Medical Sciences and Research, Dehradun, Uttarakhand. Permission was obtained from the higher authorities of selected schools in Haridwar, Uttarakhand. Anonymity and confidentiality of subjects were maintained. Informed consent was obtained from the subjects. The data were analysed using both descriptive and inferential statistical methods (Figure 2).

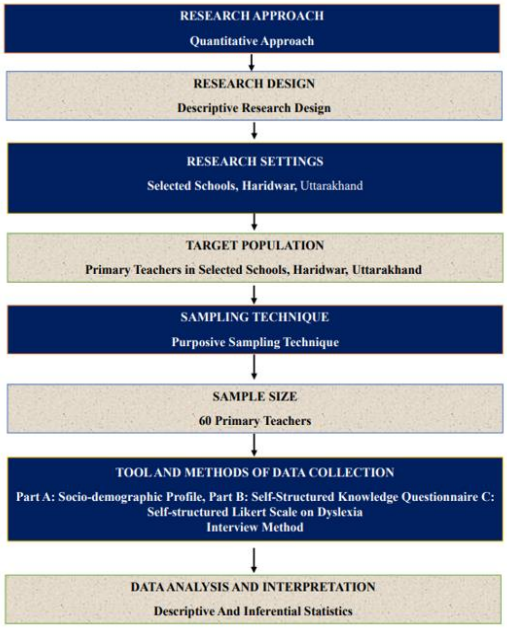

Figure 2: Schematic representation of methodology

4. Result

4.1. Despite the Primary School Teachers' Sociodemographic Characteristics

Table 1 reveals a comprehensive overview of the sociodemographic profile of primary school teachers. Regarding the age of primary school teachers. The distribution reveals that most teachers fall within the 26-30 age group, accounting for 48.3% of the participants. Regarding the gender distribution, the majority, 81.7% of the teachers, are female, while only 18.3% are male. This finding reflects the broader trend of more women opting for careers in primary education. The marital status of primary school teachers indicates that the majority, at 58.3%, are married, while 41.7% remain unmarried. In terms of habitat, the majority of teachers, at 71.7%, reside in rural areas.

Religious affiliation among the teachers is also included in Table 1; the overwhelming majority, at 83.3%, identify as Sikh, while only 16.7% are Hindu. Regarding teaching experience, it is categorised into four groups based on the number of years. Half of the teachers (50.0%) have less than or equal to 5 years of teaching experience, while 20.0% have 6-10 years, 13.3% have 11-15 years, and 16.7% have more than 15 years of teaching experience. Regarding the source of information about dyslexia, Table 1 shows that 45.0% of teachers acquired their knowledge from the mass media, followed by 31.7% who did not have a specific source of information. A smaller proportion, 15.0%, obtained information from newspapers, while 8.3% attended seminars. Lastly, educational and professional qualifications, the vast majority, at 91.7%, have a graduate or higher degree, while only 8.3% have undergraduate qualifications. In terms of professional qualifications, 68.3% hold a Bachelor of Education (B.Ed.) or higher degree, 16.7% have a Junior Basic Training (JBT) qualification, and 15.0% have an Elementary Teacher Training (ETT) qualification.

Table 1: Sociodemographic variables of primary school teachers (N=60)

Patient information	Frequency	Percentage
Age (in years)		
≤25	13	21.7
26-30	29	48.3
31-35	3	5.0
36-40	4	6.7
>40	11	18.3
Sex		
Male	11	18.3
Female	49	81.7

Marital status		
Married	35	58.3
Unmarried	25	41.7
Habitat		
Urban	17	28.3
Rural	43	71.7
Religion		
Hindu	10	16.7
Sikh	50	83.3
Teaching. Experience(years)		
≤5	30	50.0
6-10	12	20.0
11-15	8	13.3
>15	10	16.7
Source of information regarding dyslexia		
Newspaper	9	15.0
Seminar	5	8.3
Mass media	27	45.0
None	19	31.7
Educational qualification		
Undergraduate	5	8.3
Graduate or above	55	91.7
Professional qualification		
ETT	9	15.0
JBT	10	16.7
B.Ed. or above	41	68.3

4.2. Awareness of Dyslexia Among Primary School Teachers

Table 2 and Figure 3 present the percentage distribution of awareness regarding dyslexia among primary school teachers. The data reveal a distribution where 36.7% of teachers exhibit a below-average level of awareness about dyslexia, while 30.0% possess an average level of awareness. Encouragingly, 33.3% of teachers demonstrate a good level of awareness about dyslexia. The mean score for awareness was 15.93 ± 5.97.

Table 2: Level of awareness regarding dyslexia among primary school teachers (N-60)

Awareness regarding Dyslexia	Frequency	Percentage	Mean±SD
Below average	22	36.7	15.93±5.97
Average	18	30.0	
Good	20	33.3	

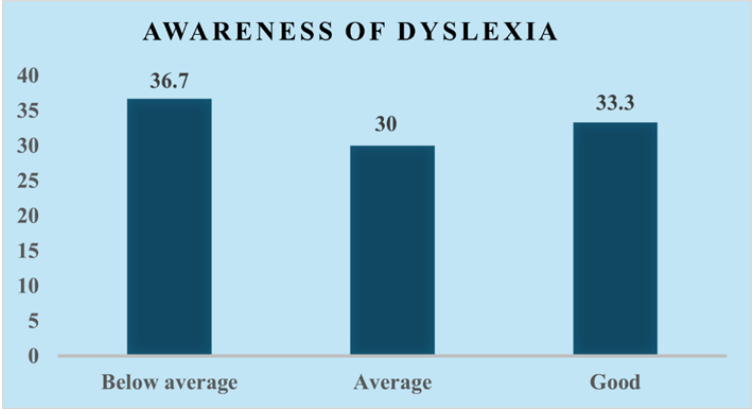

Figure 3: Distribution of awareness regarding dyslexia among primary school teachers

4.3. Perception of Dyslexia Among Primary School Teachers

Table 3 and Figure 4 depict the percentage distribution of perception regarding dyslexia among primary school teachers in the study, comprising 60 participants. The data reveal that 20.0% of teachers exhibit a positive perception towards dyslexia, while 23.3% maintain a neutral stance. However, it is noteworthy that a significant majority, accounting for 56.7% of teachers, display a negative perception towards dyslexia. The mean perception score was 38.98±9.67.

Table 3: Perception of dyslexia among primary school teachers (N=60)

Perception regarding Dyslexia	Frequency	Percentage	Mean±SD
Positive	12	20.0	38.98±9.67
Neutral	14	23.3	
Negative	34	56.7	

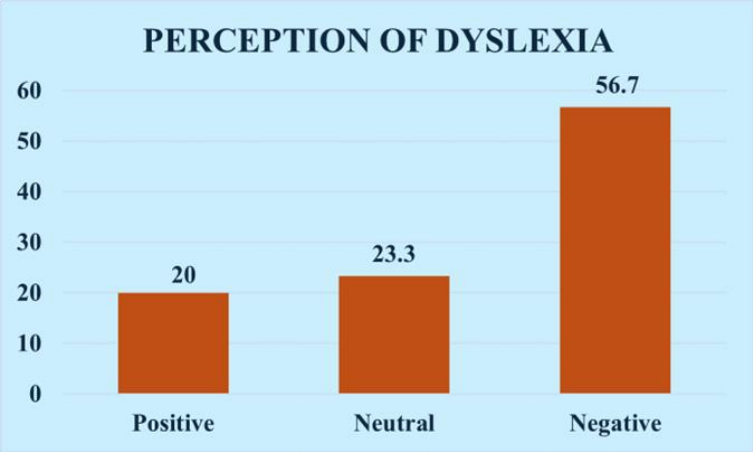

Figure 4: Distribution of perception of dyslexia among primary school teachers

4.4. Correlation Between Awareness and Perception Regarding Dyslexia Among Primary School Teachers

Figure 5 illustrates the relationship between Awareness and Perception of dyslexia among primary school teachers. Spearman's correlation coefficient (r-value) between Awareness and Perception is found to be 0.233, with a corresponding p-value of 0.074, indicating that the relationship between these two variables is statistically non-significant at the 0.05 significance level. This suggests that there is no strong linear association between teachers' awareness about dyslexia and their perception towards it within the study sample.

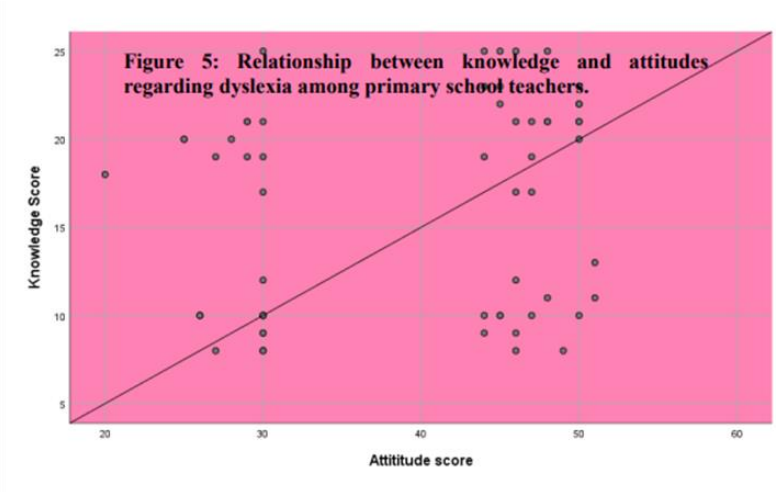

Figure 5: Relationship between awareness and perception of dyslexia

4.5. Association between the Awareness of Dyslexia and Sociodemographic Variables

Table 4 presents the association between awareness of dyslexia and sociodemographic variables among primary school teachers. The results reveal that there are no significant associations between the awareness and the following sociodemographic variables: age (p-value=0.515), sex (p-value=0.412), marital status (p-value=0.926), habitat (p-value=0.842), teaching experience (p-value=0.301), source of information regarding dyslexia (p-value=0.346), educational qualification (p-value=0.214), and professional qualification (p-value=0.359). These findings suggest that teachers' awareness of dyslexia does not vary significantly based on these sociodemographic factors within the study sample.

Table 4: Association between awareness scores with sociodemographic variables (N-60)

	Awareness of Dyslexia				
Variables	**Below average**	**Average**	**Good**	**χ^2 value**	**p value**
Age (in years)					
≤25	6	4	3	8.103	0.515^{NS†}
26-30	11	8	10		
31-35	0	1	2		
36-40	1	3	0		
>40	4	2	5		
Sex					
Male	4	5	2	2.00	0.412^{NS†}
Female	18	13	18		
Marital status					
Married	13	11	11	0.154	0.926^{NS†}
Unmarried	9	7	9		
Habitat					
Urban	6	6	5	0.343	0.842^{NS†}
Rural	16	12	15		
Religion					
Hindu	1	6	3	5.967	0.057^{NS†}
Sikh	21	12	17		
Teaching. Experience(years)					
≤5	10	8	12	7.251	0.301^{NS†}
6-10	7	4	1		
11-15	2	4	2		
>15	3	2	5		
Source of information regarding dyslexia					
Newspaper	2	4	3	7.176	0.346^{NS†}
Seminar	1	3	1		
Mass media	9	6	12		
None	10	5	4		
Educational qualification					
Undergraduate	2	3	0	3.471	0.214^{NS†}
Graduate or above	20	15	20		
Professional qualification					
ETT	4	3	2	4.192	0.359^{NS†}
JBT	5	4	1		
B.Ed. or above	13	11	17		

NB: †= Fisher exact p value, NS= Non-significant, S= Significant at 0.05 level

4.6. Association between the Perception of Dyslexia and the Selected Sociodemographic Variables

Table 5 illustrates the associations between the perception of dyslexia and sociodemographic variables of primary school teachers. The results revealed a significant association between perception and the following sociodemographic variables: sex (p-value < 0.004), teaching experience (p-value < 0.031), source of information regarding dyslexia (p-value < 0.047), and professional qualification (p-value < 0.001). Specifically, male teachers are more likely to exhibit a positive perception towards

dyslexia. At the same time, those with teaching experience of ≤5 years and those who gained information from seminars or newspapers are also more likely to have a positive perception. Additionally, teachers holding additional qualifications are more likely to have a positive perception of their profession.

Table 5: Association between perception and the selected sociodemographic variables (N-60)

	Perception of Dyslexia				
Variables	**Below average**	**Average**	**Good**	**χ^2 value**	**p value**
Age (in years)					
≤25	2	5	6	9.294	$0.298^{NS\dagger}$
26-30	8	5	16		
31-35	0	1	2		
36-40	2	0	2		
>40	0	3	8		
Sex					
Male	6	0	5	11.479	$0.004^{S\dagger}$
Female	6	14	29		
Marital status					
Married	8	8	19	0.435	$0.805^{NS\dagger}$
Unmarried	4	6	15		
Habitat					
Urban	4	3	10	0.496	$0.858^{NS\dagger}$
Rural	8	11	24		
Religion					
Hindu	5	1	4	6.903	$0.037^{NS\dagger}$
Sikh	7	13	30		
Teaching. Experience(years)					
≤5	4	7	19	14.157	$0.031^{S\dagger}$
6-10	3	3	6		
11-15	5	2	1		
>15	0	2	8		
Source of information regarding dyslexia					
Newspaper	2	3	4	10.787	$0.047^{S\dagger}$
Seminar	2	1	2		
Mass media	7	2	18		
None	1	8	10		
Educational qualification					
Undergraduate	0	3	2	4.501	$0.165^{NS\dagger}$
Graduate or above	12	11	32		
Professional qualification					
ETT	6	3	0	37.247	$0.001^{S\dagger}$
JBT	6	2	2		
B.Ed. or above	0	9	32		

NB: †= Fisher exact p value, NS= Non-significant, S= Significant at 0.05 level

5. Discussion

The discussion of the study revolves around the sociodemographic factors, Awareness, and Perception held by primary teachers concerning dyslexia.

5.1. Awareness and Perception of Dyslexia Among Primary School Teachers

The findings showed that more than one-third (36.7%) of teachers had a below-average level of awareness about dyslexia, while 30.0% possessed an average level of awareness. Encouragingly, 33.3% of teachers demonstrate a good level of awareness about dyslexia. The mean score for awareness was 15.93 ± 5.97. Regarding the perception, it is noteworthy that a significant majority, accounting for 56.7% of teachers, display a negative perception towards dyslexia. The mean perception score was

38.98±9.67. A similar study conducted by Hallahan et al. [5] in Saudi Arabia, focusing on primary school teachers, observed that the majority (64.52%) of primary teachers had an average level of knowledge about specific learning disabilities. Another study, conducted in Punjab by Tosun et al. [6], examined the knowledge and attitudes of primary teachers regarding dyslexia.

A significant association was found between the levels of knowledge about dyslexia and selected demographic variables, including age, qualification, teaching experience, marital status, areas of residence, religion, and the source of information, with p-values below 0.05. Nearly one-third (29.2%) had below-average knowledge. The study also noted that attitudes towards dyslexia varied between negative and positive perspectives. Acheampong et al. [7] conducted a descriptive study to assess the knowledge of dyslexia among basic school teachers teaching children from Primary One to Junior High School level in the Asokwa Sub-Metropolitan area of the Ashanti Region, Ghana. The study found that 62% of teachers had average knowledge about dyslexia, 60.5% had average knowledge about dyslexia identification, and 65% had average knowledge about support services. Notably, the study revealed a significant relationship between knowledge scores and special education training.

5.2. Relationship between Awareness and Perception Regarding Dyslexia Among Primary School Teachers

The present study reveals a correlation coefficient of 0.233 between knowledge and attitudes, with a corresponding p-value of 0.074. This indicates that the relationship between these two variables is statistically non-significant at the 0.05 significance level. A comparable study conducted by Elias [9] found a positive and significant correlation between the knowledge and attitudes of secondary school teachers. Based on the findings of this study, the researcher concludes that there is a pressing need to incorporate suitable training or structured teacher programs that encompass concepts related to learning disabilities at the diploma level of education. Additionally, it is recommended that the government initiate national-level awareness programs to foster positive attitudes toward children with learning disabilities. These awareness programs should be designed to disseminate information about disabilities, their causes, and the potential impact on improving the quality of life.

5.3. Association between Awareness and Perception with Selected Sociodemographic Variables

The results reveal that there is no significant association between awareness and sociodemographic variables, including age, sex, marital status, habitat, religion, teaching experience, source of information regarding dyslexia, educational qualification, and professional qualification. These findings suggest that teachers' knowledge about dyslexia does not vary significantly based on these sociodemographic factors within the study sample. Regarding the perception, the results revealed a significant association between perception and sociodemographic variables, including sex, teaching experience, source of information regarding dyslexia, and professional qualification. A study conducted in Saudi Arabia by Saadu and Mustapha [15] assessed the knowledge and awareness of elementary school teachers. Interestingly, the study revealed a statistically significant correlation between the participants' age and their level of knowledge. These findings align with the results of another study conducted by Mirela et al. [4], which indicated that elementary school teachers generally held positive attitudes toward dyslexia but had a low level of awareness about it.

6. Conclusion

The findings shed light on the current state of awareness and perceptions among primary school teachers regarding dyslexia, which is essential in enhancing the support and education provided to children with dyslexia. First and foremost, the study revealed that a significant proportion of primary school teachers in the selected schools have an average level of awareness about dyslexia. Furthermore, the study found varying perceptions towards dyslexia among primary school teachers, with a mixture of positive and negative perspectives. This underscores the importance of promoting a more empathetic and inclusive environment within educational institutions, where dyslexic students can thrive without experiencing stigmatisation or discrimination. Teacher training programs and professional development opportunities must be designed to include comprehensive modules on dyslexia and related learning disabilities. These programs should equip teachers with the necessary knowledge and skills to identify students with dyslexia early on and provide them with appropriate support.

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