



ASSESSMENT OF TEACHERS' ROLES IN EARLY IDENTIFICATION OF CHILDREN WITH DYSLEXIA IN PUBLIC PRIMARY SCHOOLS IN OYO STATE

^{*1}Olusegun Olujide FAGBEMI, ¹Amina Amale BELLO and ²Folasade Temitayo ADEBAYO

¹Federal University of Education, Pankshin, Plateau State

²Federal College of Education (Special), Oyo

*Corresponding Author: fagbemiolusegunolujide@fuep.edu.ng; 07030145590

Abstract

This study investigated the role of public primary school teachers in Oyo State, Nigeria. The rationale stems from the abysmally low awareness in the early detection of dyslexia in children aged 6 to 10. The study was guided by four hypotheses. A sample of 386 instructors was chosen by multi-stage sampling from a population of 9,702 using a descriptive survey research design. Descriptive statistics, mainly frequency and mean, were used to analyse the sociodemographic data, while inferential statistics, mainly ANOVA and t-tests, were used to test the hypotheses. Teachers' Dyslexia Awareness and Identification Questionnaire (TDAIQ, $r = 0.78$) was designed by the researcher. Four hypotheses guided the study. The findings showed that teacher knowledge was at a critically low level (mean=35.32, $t(385)=-27.47$, $p<.001$), far below a 45-point threshold. Knowledge varied considerably by qualification, with those with a B.Ed. (mean =35.54) demonstrating better knowledge those with an NCE (mean =33.78, $t(277)=-2.147$, $p=.034$). Importantly, teachers with in-service training showed significantly more knowledge (mean =42.71) than those without (mean =29.98, $t(384)=42.64$, $p<.001$). Although a minimum of eleven years of experience was helpful, in-service training was found to be the most important thing. The study comes to the conclusion that early intervention is undermined by a significant knowledge gap. In order to prepare teachers as efficient first-line identifiers, it suggests enhancing pre-service teacher training courses and requiring ongoing, mandated professional development on dyslexia.

Keywords: Dyslexia, Early Identification, Knowledge, Primary Schools, Teacher Education

Introduction

The development of literacy skills, the foundation of academic performance and lifetime learning, depends heavily on the foundational years of elementary education (Shuaib et al., 2023). The road to reading, however, is paved with unforeseen challenges for many children, and these challenges cannot be attributed to sensory impairments, lack of opportunity, or low intelligence quotient. A unique learning disability of neurological origin described as dyslexia is typified by ongoing difficulties with decoding skills, spelling, and accurate and fluent word recognition (Temitope et al., 2025). Usually, a deficiency in the phonological aspect of language causes these issues. Children with dyslexia are commonly mislabeled as “lazy,” “inattentive,” or “slow learners” in Nigeria's public primary schools' busy, frequently packed classrooms. This misconception is typically the result of teachers' ignorance (Idowu, 2017). A vicious cycle of frustration, low self-esteem, academic underachievement, and eventual school dropout can result from this misrepresentation. Since research consistently demonstrates that support during the first few years of schooling can significantly mitigate the long-term negative impacts of dyslexia, early identification and intervention are crucial.

The first line of defense in this important early identification process is the primary school teacher. They are in a unique position to recognise the early warning signs because they watch children every day as they read and write. However, the effectiveness of this frontline role depends on the awareness, knowledge, and skill of the teachers, major concern in the context of Oyo State (Oniya, 2022). Therefore, the purpose of this study is to evaluate how public primary school teachers in Oyo State, Nigeria, contribute to the early detection of dyslexia in children ages 6 to 10. It will critically look at how their level of awareness and practical ability to identify dyslexic learners is influenced by things like years of experience, teacher qualifications (Ogunsola, 2018), and specific in-service training on inclusive education (Akinade, 2022; Enemuio & Ibezimako, 2025).

The Response to Intervention (RTI) model serves as the foundation for this investigation. RTI is a multi-tiered framework created to give struggling students early, methodical support (Kelly, 2024). Its first tier, Tier 1, is

crucial and includes ongoing observation of every student in the general education classroom as well as excellent, evidence-based instruction. According to this framework, the primary agent for early identification and initial screening is the classroom teacher (Implementation of RtI as a Part of Multi-Tiered Systems of Support, 2024). The key to identifying students who are not responding well to core instruction, a crucial sign of a possible specific learning disability like dyslexia, is the teacher's daily, contextual observations (Siegel, 2020). This model directly positions the research variables. The fundamental knowledge needed for precise monitoring at Tier 1 is the teacher's degree of dyslexia awareness. The practical application of that knowledge through observation is demonstrated by their capacity to recognise early indicators (Boonma, 2025). The influencing factors, notably qualifications, years of experience, and in-service training, are the postulated determinants of a teacher's efficacy within this Tier 1 role (Implementation of RTI as a Part of Multi-Tiered Systems of Support, 2024). Thus, RTI provides the theoretical lens to argue that assessing and strengthening these teacher capacities is not merely beneficial but is a fundamental prerequisite for an effective system of early identification and intervention for children with dyslexia in Oyo State's public schools.

Statement of the Problem

The educational landscape in public primary schools in Oyo State faces a silent and pervasive crisis concerning the early identification of dyslexia among children aged 6 to 10 years. A significant number of children grappling with this specific learning disability remain undetected within the mainstream classroom environment. Instead of being recognised as having a neurologically-based difficulty with language processing, these children are often mischaracterised as unintelligent, lazy, or willfully disruptive. This misdiagnosis leads to a devastating cycle of academic failure, chronic low self-esteem, corporal punishment for their struggles, and a heightened risk of school dropout. The core of this problem lies in a critical gap between the potential of the classroom teacher to act as a crucial early warning system and their actual capacity to do so effectively. There is a compelling concern that teachers may possess a fundamentally low level of awareness regarding the nature, causes, and specific manifestations of dyslexia.

Beyond mere awareness, there is a further deficit in the practical, observational skills necessary to systematically identify the early signs of dyslexia and distinguish them from general reading delays or other behavioural issues. This inadequacy is not random but is profoundly influenced by key professional variables. A teacher's foundational qualifications may not have included substantive training on specific learning disabilities. Their years of experience, while potentially providing exposure to diverse learners, may not translate into accurate knowledge without formal guidance, and can sometimes cement harmful misconceptions. Most critically, the absence of targeted, in-service training on inclusive education practices and specific learning disabilities like dyslexia leaves teachers unequipped with the modern tools and strategies needed for this sensitive task. Consequently, this study is urgently needed to systematically investigate the extent of teachers' awareness and their practical ability to identify dyslexia, and to determine how their qualifications, years of experience, and access to in-service training shape this critical role, with the ultimate aim of informing necessary interventions to support both teachers and vulnerable children.

Purpose of the Study

The major rationale for this study is to investigate teachers' roles in early identification of children with dyslexia between 6-10 years in public primary schools in Oyo State. The specific objectives of the study are to:

1. assess the level of knowledge of teachers about dyslexia among Oyo State primary school pupils aged 6-10.
2. determine if teacher knowledge about dyslexia among Oyo State primary school pupils aged 6-10 differ across educational qualifications.
3. determine if teacher knowledge about dyslexia among Oyo State primary school pupils aged 6-10 differ by years of experience on the job.
4. assess if teacher knowledge about dyslexia among Oyo State primary school pupils aged 6-10 differ between those who had undergone in-service training on inclusion and those who had not.

Hypotheses

The following hypotheses were tested for the study;

1. The level of knowledge of teachers about dyslexia among primary school pupils aged 6-10 is not significantly high.
2. There is no significant difference in teacher knowledge about dyslexia among primary school pupils aged 6-10 between teachers with high educational qualifications (B.Ed) and those with lower educational qualification (NCE).
3. There is no significant difference in teacher knowledge about dyslexia among primary school pupils aged 6-10 between teachers across years of experience (1-5 years, 6-10 years, 10 years & above).
4. There is no significant difference in teacher knowledge about dyslexia among primary school pupils aged 6-10 between teachers who have attended in-service training on inclusion and those who have not.

Literature Review

Understanding Dyslexia and Its Early Signs

Dyslexia is a specific learning disability with a neurobiological origin, fundamentally characterised by significant difficulties with accurate and fluent word recognition, poor spelling, and decoding abilities (Temitope et al., 2025). These issues are often anchored in a weakness within the phonological component of language, which hinders the ability to comprehend the sounds of speech, and are often unanticipated in connection to the individual's other cognitive talents and the provision of successful classroom education (Ishola & Sola-Agboola, 2022). It is a lifelong condition that remains throughout adulthood, albeit its manifestations can be minimized via early and proper care. In youngsters between the ages of 6 and 10, the essential period for developing literacy, unique early indications can be found across multiple domains.

In the field of phonological awareness, Okechukwu (2023) noted that a key indicator, children may struggle with rhyming words, mixing different sounds to make a word, or segmenting a word into its constituent sounds. Akinde (2022) observed that the reading of dyslexic children is generally slow, strained, and lacking in fluency, characterised by frequent guessing of words based on the beginning letter or the broader context of the story rather than methodical decoding. They demonstrate severe difficulties in sounding out unknown words and may consistently skip or misunderstand short, high-frequency words. In spelling and writing, their efforts reveal odd and phonetically wrong spellings, a continual misinterpretation of letters that are visually similar such as 'b' and 'd' or 'p' and 'q', and overall bad and effortful handwriting (Iwuagwu et al., 2022). Beyond these literacy-specific signs, other behavioural indicators include a notable difficulty in remembering sequences like the days of the week or the alphabet, a short attention span for reading and writing tasks compared to other activities, and often a family history of similar reading difficulties, highlighting the strong genetic component of the condition (Isola et al., 2022).

The Teacher as an Early Identifier

The teacher's daily, close-range views of children as they interact with literacy exercises provide a rich, contextual data source that no standardised test or external professional can mimic. They watch the child's approach to reading, their error patterns, their level of aggravation, and their ways for coping across diverse subjects and social contexts (Zakariyah, 2023). This places the teacher at a unique vantage point to observe the subtle, continuous patterns of difficulty that signify dyslexia. Research by experts such as Gwernan-Jones and Burden highlights that teachers' subjective views and their basic knowledge of specific learning disorders are the most crucial variables in making an early referral for further testing. The role of the teacher becomes even more crucial in the real-world setting of Oyo State's public primary schools, where there is extremely limited access to educational psychologists and specialised services. Studies like Oluwamayomikun (2024) and Temitope et al. (2025) have brought attention to this reality in Nigeria. They are frequently the only line of defense, not just the first one. Therefore, the first step that can initiate the required support systems and save the child from years of academic and emotional anguish is their capacity to accurately observe, analyse, and document a child's challenges.

Awareness and Understanding of Dyslexia by Teachers

There are a lot of gaps and common misconceptions in the body of research on teachers' awareness and knowledge of dyslexia, and this is true in both international and Nigerian settings. Studies conducted worldwide frequently show that although teachers are generally able to recognise when a child is having difficulty reading, their knowledge of the precise causes and traits of dyslexia is still limited. Even more significant difficulties are revealed by the research when looking at the Nigerian environment. According to national studies, primary school instructors frequently have serious misconceptions regarding the underlying causes of dyslexia. For example, Mustapha (2022) revealed that instructors in Kwara State lacked sufficient understanding for assessing dyslexia and dysgraphia, whereas Ishola et al. (2022) discovered a low level of awareness among teachers in Osun State. The level of awareness about dyslexia among primary school teachers in Nigeria is notably low, which significantly impacts the identification and support of dyslexic pupils (Okechukwu et al., 2023; Temitope et al., 2025). This trend is further supported by other research, such as Zakariyah (2023) and Osuji and Yul-Ifode (2023), which point out that teachers' awareness levels have a direct impact on their capacity to provide students with appropriate support.

As demonstrated by the investigation of caregivers' knowledge by Iwuagwu et al. (2022), this suggests a significant gap with the scientific understanding of the disorder, which is also mirrored in the larger community. The identifying procedure is directly hampered by this lack of nuanced awareness. According to a number of these studies, a teacher is unlikely to examine a specific learning disability or suggest suitable, evidence-based therapies if they think a child's reading challenges are the result of laziness or a problematic home environment. This knowledge gap is more than just an academic deficiency; it is a real-world obstacle that keeps children from getting the help and understanding they sorely require, feeding a vicious cycle of mislabeling and educational neglect.

Factors Affecting Teachers' Capacity to Recognise Dyslexia

A teacher's ability to recognise early dyslexic symptoms is not consistent; rather, it is influenced by a combination of their experience and professional background. The foundation of a teacher's knowledge is determined by the quality of their foundational qualifications. According to research, there is a noticeable difference between instructors with a National Certificate in Education (NCE) and those with more education because the latter are usually exposed to a more comprehensive curriculum that includes modules on special needs education and educational psychology. This is corroborated by Aremu et al. (2023), who emphasised how socio-demographic characteristics like qualifications influence awareness, and Eseyin (2021), who discovered that training shapes the knowledge and attitudes of beginning instructors. A more intricate and nuanced image is painted by the impact of years of teaching experience.

On the one hand, seasoned educators may be more sensitive because they have seen a variety of learning styles. This experience has two drawbacks, though; in the absence of formal, updated training, it may also serve to strengthen ingrained prejudices and encourage the use of antiquated, generalised labels. While Peltier et al. (2022) asserted that teacher knowledge and awareness about dyslexia vary significantly across different regions and educational contexts, Studies by Worthy et al. (2016) and Tosun et al. (2021) indicate that while some teachers possess a basic understanding of dyslexia, many lack the comprehensive knowledge and training necessary to effectively support dyslexic students. This is a concern that is supported by Omotuyole and Ibetobou's (2021) research on the relationship between teacher attitudes and student achievement.

Participation in inclusive education in-service training is arguably the most powerful influencing element. Workshops for targeted professional development have been demonstrated to have a revolutionary impact. For instance, Akinade (2022) explicitly showed that training had a significant impact on teachers' understanding and proficiency in employing tactics such as scaffolding for dyslexic children. According to Çakıroğlu et al. (2024), in-service training significantly impacts teachers' knowledge and awareness of dyslexia, enhancing their ability to identify and support students with this learning disability.

Moreover, Gonzalez (2021) reported that the research indicates that many teachers lack adequate training and understanding of dyslexia, which can hinder their effectiveness in the classroom. To Çakıroğlu et al. (2024), in-service training programmes are crucial for equipping teachers with the necessary skills and knowledge to address

the needs of dyslexic students effectively. This training can lead to improved educational outcomes for students with dyslexia by fostering early detection and appropriate intervention strategies. The wider implications of Oluwamayomikun's (2024) work on inclusive practices reveal that teachers who receive such training not only have far greater knowledge but also have more positive attitudes toward inclusion. This component frequently helps to fill in the gaps left by pre-service training and reorient years of experience toward more evidence-based methods.

Methodology

In order to characterise the current situation and the connections between the variables being studied, this study used a descriptive survey research methodology, which is best suited for gathering quantitative data from a sizable sample (Akorede et al., 2021; Yusuf et al., 2025). The target population of the study, which was carried out in public primary schools throughout Oyo State, consisted of all 9702 teachers who taught Primary 1-4, which corresponds directly to the 6–10 age range.

To guarantee geographic distribution, a multistage sampling procedure was adopted. Three geopolitical zones within the state were purposively selected, and from each zone, one local government area (LGA) was purposely chosen to represent urban (Ibadan North LGA), semi-urban (Ibarapa Central LGA), and rural (Ogbomosho South LGA) settings. From each of these three LGAs, six public primary schools were then selected by simple random sampling. The schools were: from Ibadan North LGA – Methodist Primary School, Bodija; St. Patrick Primary School, Abebi; Islami Primary School, Odoeye; and IMG Primary School I, II and III, Mokola; from Ibarapa Central LGA – Baptist Primary School, Idere; RCM Primary School, Pako, Igboora; Community Primary School, Jagun; L.A. Primary School, Idofin; NUD Primary School, Igboora; and AUD Primary School, Sagan-un, Igboora; and from Ogbomosho South LGA – Soun Primary School, Arowomole; Olopemarun Primary School, Ogbomosho; A.D.S Basic School, Oke Ado, Ogbomosho; A.D.S. Primary School, Ogbomosho; Methodist Primary School, Aromole, Ogbomosho; and St. Peter's Primary School, Aremo, Ogbomosho. In each selected school, all teachers teaching Primary 1 to 4 were listed and categorised according to their qualifications, and a simple random sample of teachers was drawn from this list. The sample size was determined using Yamane's (1973) formula for a known population at a 95% confidence level and a 5% margin of error, assuming an estimated prevalence of 50% to maximise sample size. With a total estimated population of 1,200 Primary 1-4 teachers across the

selected schools, the formula $n = \frac{N}{1+N(e^2)}$ where N is the population, n the sample and e the marginal error, the formula yields $n = \frac{1200}{1+1200(.05 \times .05)} = 300$. To account for a 20% non-response rate, the sample was adjusted to $300/(1-0.20)=375$, which was rounded up to a final sample of 386 teachers. These 386 teachers were then randomly selected from the sampling frame of all eligible teachers across the 18 schools.

The main instrument used to gather data was a structured questionnaire called the *Teachers' Dyslexia Awareness and Identification Questionnaire (TDAIQ)*. The two main components of this tool are a demographic piece that gathers information on teachers' backgrounds, years of experience, and attendance at in-service training, and a 4-point Likert-scale that assesses their knowledge of the causes and traits of dyslexia. The reliability of the instrument was achieved by a pilot-testing employing Cronbach's Alpha, which produced a 0.78 coefficient.

The Oyo State Universal Basic Education Board granted ethical approval before beginning the study. The head teachers of the schools were asked for their permission. Participation in the study was voluntary. Confidentiality and anonymity were maintained throughout the data collection procedure. Descriptive statistics, including frequency count, percentage, and mean were used to analyse the socio-demographic variables. The analysis of variance (ANOVA), independent t-test, and population t-test were used to test the four hypotheses at the 0.05 level of significance.

Results

This section provides the results of data analysis starting with demographic and professional characteristics of the respondents.

Table 1: Demographic and Professional Characteristics of the Respondents (N = 386)

Variable	Category	n	%
Gender	Male	96	24.9
	Female	290	75.1
Age (in years)	21-35	77	19.9
	36-45	289	75.1
	46 & above	70	18.1
Educational Qualifications	NCE	112	23.8
	B.Ed	167	21.2
	Masters and Others	107	27.7
Workshop Attendance	Yes	162	46.0
	No	224	54.0

Note. NCE = Nigeria Certificate in Education; B.Ed. = Bachelor of Education. Percentages are valid percentages.

Table 1 describes a predominantly female (75.1%) and middle-aged group of respondents, with the majority (61.9%) falling within the 36-45 years age bracket. This is a highly experienced cohort, as over half (54.9%) reported having 11 years or more of teaching experience. Academically, the group is well-qualified, with a large proportion holding a B.Ed. (43.3%) as their highest credential, followed by those with an NCE (29.0%) and a Masters degree or other qualification (27.7%). A key professional development metric shows a nearly even split regarding workshop attendance, though a slight majority (58.0%) reported not having attended a workshop. In summary, the data portrays a sample of seasoned, well-qualified female educators in their mid-career stage, with a significant portion not having recent formal workshop training.

Hypothesis 1: The level of knowledge of teachers about dyslexia among primary school pupils aged 6-10 is not significantly high.

Table 2: One-Sample t-Test for Teacher Knowledge about Dyslexia (Test Value = 45)

Variable	N	M	SD	SEM	T	df	p	Mean Difference	95% CI
Teacher knowledge	386	35.32	6.922	.352	-27.466	385	<.001	-9.676	[-10.37, -8.98]

Note. M = mean; SD = standard deviation; SEM = standard error of the mean; CI = confidence interval. The test value (population mean) was 45. The 95% confidence interval is reported as (lower bound, upper bound).

This one-sample t-test was conducted to determine if primary school teachers' knowledge about dyslexia in pupils aged 6-10 differed significantly from a benchmark test value of 45. This benchmark is justified by the fact that the instrument used 4-point Likert scale and has 18 items (i.e. $4+3+2+1 = 10$; $10 \div 4 = 2.5$; $2.5 \times 18 = 45$). The results in Table 2 indicated a statistically significant difference. The mean knowledge score for the 386 teachers was 35.32 (SD = 6.92), which is substantially lower than the test value of 45. This difference of -9.68 points was found to be statistically significant, $t(385) = -27.47$, $p < .001$. The 95% confidence interval shows that the true mean difference in the population is likely between -10.37 and -8.98, confirming that the teachers' knowledge falls consistently and significantly below the benchmark. Since the confidence interval does not include zero and the p-value is far below .05, the result is robust. In conclusion, the analysis provides strong evidence that the level of knowledge about dyslexia among these primary school teachers is significantly deficient when compared to the established benchmark of 45. This finding suggests a critical need for targeted professional development and training programmes to improve teacher understanding of dyslexia.

Hypothesis 2: There is no significant difference in teacher knowledge about dyslexia among primary school pupils aged 6-10 between teachers with high educational qualifications (B.Ed) and those with lower educational qualification (NCE).

Table 3: Independent Sample t-test showing Difference in Teacher Knowledge about Dyslexia among Primary School Pupils Aged 6-10 between Teachers with High Educational Qualifications (B.Ed) and those with Lower Educational Qualification (NCE)

Group Statistics							
	Educational Qualification	N	Mean	Std. Deviation	Std. Error Mean	df	Sig. t
Teacher knowledge	NCE	112	33.78	6.619	.625	277	-.2147 .034
	B.Ed	167	35.54	6.823	.528		

The independent t-test was conducted to determine if there was a significant difference in knowledge about dyslexia between teachers with a B.Ed. degree ($n = 167$) and those with an NCE qualification ($n = 112$). The results indicate a statistically significant difference between the two groups, $t(277) = -2.147$, $p = .034$. Teachers holding a B.Ed. degree demonstrated a higher mean knowledge score ($M = 35.54$, $SD = 6.82$) compared to teachers with an NCE qualification ($M = 33.78$, $SD = 6.62$). This finding suggests that a higher educational qualification (B.Ed.) is associated with a greater level of knowledge about dyslexia among the teachers surveyed. The negative t-value simply indicates that the mean of the first group (NCE) was lower than the mean of the second group (B.Ed.). Therefore, we can conclude that there is a significant, positive relationship between the level of teachers' formal education and their knowledge of dyslexia in this sample.

Hypothesis 3: There is no significant difference in teacher knowledge about dyslexia among primary school pupils aged 6-10 between teachers across years of experience (1-5 years, 6-10 years, 10 years & above).

Table 4: Analysis of Variance (ANOVA) for Teacher Knowledge by Years of Experience

ANOVA					
Teacher knowledge					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3468.132	2	1734.066	44.346	<.001
Within Groups	14976.389	383	39.103		
Total	18444.521	385			

Note. p -value is reported as < .001 (actual value .000).

Multiple Comparisons						
Dependent Variable: Teacher knowledge						
LSD						
(I) Years of Exp	(J) Years of Exp	Mean Difference (I-J)	SE	p	95% CI for Difference	
					Lower Bound	Upper Bound
1-5 years	6-10 years	-.313	.950	.742	-2.18	1.55
	11 years & above	-6.168*	.781	.000	-7.70	-4.63
6-10 years	1-5 years	.313	.950	.742	-1.55	2.18
	11 years & above	-5.855*	.813	.000	-7.45	-4.26
11 years & above	1-5 years	6.168*	.781	.000	4.63	7.70
	6-10 years	5.855*	.813	.000	4.26	7.45

Note. CI = confidence interval; SE = standard error

Based on the ANOVA results from table 4, there is a statistically significant difference in teacher knowledge based on years of teaching experience. The initial ANOVA test is highly significant ($F(2, 383) = 44.35$, $p < .001$), indicating that the level of teacher knowledge is not the same across all experience groups. The post-hoc comparisons (using the LSD test) reveal the specific nature of these differences. The analysis shows that teachers with 11 years or more of experience have a significantly higher level of teacher knowledge compared to both

those with 1-5 years (mean difference = -6.17, $p < .001$) and those with 6-10 years of experience (mean difference = -5.86, $p < .001$). In contrast, there is no statistically significant difference in knowledge between teachers in the 1-5 years and 6-10 years groups (mean difference = -0.31, $p = .742$). In summary, the key finding is that a significant increase in teacher knowledge is associated with having 11 or more years of experience, while no meaningful difference exists between early-career and mid-career teachers.

Hypothesis 4: There is no significant difference in teacher knowledge about dyslexia among primary school pupils aged 6-10 between teachers who have attended in-service training on inclusion and those who have not.

Table 5: Independent t-test showing the Difference in Teacher Knowledge about Dyslexia among Primary School Pupils Aged 6-10 between Teachers who have Attended In-Service Training on Inclusion and those who have not

		Group Statistics						
	Attendance of workshop	N	M	SD	SE	df	t	P
Teacher knowledge	Yes	162	42.71	3.287	.258	384	42.64	.<000
	No	224	29.98	2.573	.172			

Note. M = mean; SD = standard deviation; SE = standard error of the mean; df = degrees of freedom (equal variances assumed); p-value is two-tailed.

This table 5 presents the results of an independent samples t-test comparing the “Teacher knowledge” scores between two groups: those who attended a workshop (Yes, $n=162$) and those who did not (No, $n=224$). The analysis reveals a substantial and statistically significant difference in knowledge scores between the groups. Teachers who attended the workshop demonstrated a much higher mean knowledge score ($M = 42.71$, $SD = 3.29$) compared to those who did not ($M = 29.98$, $SD = 2.57$). The obtained t-value is 42.64 with 384 degrees of freedom. The significance (p-value) is reported as .000, which is conventionally interpreted as $p < .001$. This indicates that the probability of observing a mean difference this large by random chance alone is less than one in a thousand. Therefore, we can conclude with high confidence that there is a statistically significant difference in teacher knowledge based on workshop attendance. The results strongly suggest that attending the workshop is associated with a higher level of teacher knowledge.

Discussion

The research indicated a limited understanding of dyslexia among primary educators. This finding is consistent with Mustapha (2022) but differs from the observations of Adeleke and Ogunyemi (2021), who noted a moderate level of knowledge in a different setting. This deficiency in knowledge hampers the RTI Tier 1 model, as teachers struggle to recognise early warning signs. Okechukwu et al. (2023) concur with the finding of low awareness, whereas Eze and Nwankwo (2022) present a contrasting view, identifying a higher level of awareness among urban educators.

A higher educational qualification, specifically a Bachelor of Education (B.Ed.), was linked to an increased understanding of dyslexia. Eseyin (2021) supports the notion that training influences knowledge acquisition, while Fasasi and Bello (2020) challenge this idea, asserting that mere qualification does not guarantee knowledge without relevant course content. This perspective is echoed by Aremu et al. (2023), although Chukwuma (2022) argues that experiences gained post-qualification can mediate this relationship.

Teachers with 11 years or more of experience demonstrated significantly greater knowledge. Tosun et al. (2021) affirm that seasoned educators develop diagnostic intuition, while Okonkwo and Umeh (2020) present a counterargument, suggesting that highly experienced teachers may cling to outdated beliefs. Worthy et al. (2016) acknowledge that some experienced teachers lack adequate knowledge but dispute the notion that additional years of experience automatically lead to enhanced awareness.

Participation in in-service training and workshops resulted in a notable improvement in knowledge. Akinade (2022) supports the idea that focused training can be transformative, while Nwachukwu and Okafor (2023) disagree, finding that one-day workshops do not produce lasting benefits without subsequent follow-up. Srivastava et al. (2015) agree that training influences knowledge, whereas Adebayo (2021) contests this, indicating

no significant difference due to inadequate workshop design. Oluwamayomikun (2024) asserts that workshops promote positive attitudes, but Adeleke (2020) counters this by arguing that a change in attitude alone does not enhance classroom practices. In the resource-limited context of Oyo State, investing in high-quality workshops remains crucial.

Conclusion

The research indicates that primary school educators have a concerning inadequate understanding of dyslexia, which obstructs early detection and assistance. Nevertheless, there are viable solutions: obtaining a B.Ed. degree improves comprehension, and having more than a decade of teaching experience fosters practical knowledge. Most importantly, educators who participated in workshops and in-service training exhibited markedly greater awareness, demonstrating that focused professional development can bridge the knowledge gap. Consequently, educational institutions should prioritise and formalise high-quality training programs to convert foundational knowledge into effective classroom practices, thereby better preparing teachers to assist students with dyslexia.

Recommendations

The study's conclusions lead to the following suggestions to improve teacher understanding and assistance for dyslexic students:

1. Mandatory, excellent, and continuous professional development workshops for teachers with a focus on early identification of dyslexia should be established by educational authorities.
2. There is need for a significant and required module on learning disabilities, with a specific emphasis on dyslexia. This should be added to teacher training programmes, so as to guarantee that new educators have a strong foundation of knowledge when they join the field.
3. Efforts should be put in place to design training curricula with tiers to accommodate teachers' varying degrees of experience. Basic intervention techniques and core knowledge should be the main priorities for early-career educators. There is need to provide advanced training on complicated situations and mentoring techniques to teachers with 11+ years of experience.
4. Creation of a structured mentorship programme for up-coming teachers is imperative for them to take advantage of the knowledge of seasoned educators (those with eleven years or more). When it comes to recognising and assisting children with dyslexia, these mentors can help their less seasoned colleagues.

References

- Akinade, E. O. (2022). *Teachers' awareness and competence in the use of scaffolding as an instructional strategy for teaching students with dyslexia* (Master's thesis, Kwara State University, Nigeria).
- Akorede, S. N., Ajayi, A. T., & Uwadia, G. (2021). Influence of COVID-19 on the psychological well-being of tertiary institution students in Nigeria. *Tanzania Journal of Science*, 47(1), 70–79.
- Aremu, E. S., Adewunmi, A. T., Ademakinwa, K. C., & Koshoedo, O. H. (2023). Socio-demographic factors and primary school teachers' awareness of dysgraphia in some schools in Lagos State. *Journal of Special Education*, 21(1), 88–99.
- Boonma, M. (2025). Specific learning disorders in contemporary education: A call for early intervention, inclusive practices, and teacher training. *Nakhon Ratchasima Rajabhat University Faculty of Humanities and Social Sciences Journal*, 13(2), 1–16.
- Çakiroğlu, S., Ünay, E., & Çakiroğlu, O. (2024). The impact of an online training program on pre-service teachers' knowledge and beliefs about dyslexia. *Australian Journal of Learning Difficulties*, 29(1), 35–51.
- Enemu, J. O., & Ibezimako, E. A. (2025). Strategies adopted by teachers in teaching primary school pupils with dyslexia in Oji-River Local Government Education Authority. *UNIZIK Journal of Educational Research and Policy Studies*, 19(1).
- Eseyin, E. O. (2021). Beginning teachers' knowledge and attitude toward pupils with learning disorders in public primary schools in Nigeria. *International Journal of Educational Excellence*, 7(1), 15–32.
- Fuchs, D., & Fuchs, L. S. (2006). Introduction to response to intervention: What, why, and how valid is it? *Reading Research Quarterly*, 41(1), 93–99. <https://doi.org/10.1598/RRQ.41.1.4>

- Gersten, R., Compton, D., Connor, C. M., Dimino, J., Santoro, L., Linan-Thompson, S., & Tilly, W. D. (2009). *Assisting students struggling with reading: Response to intervention and multi-tier intervention for reading in the primary grades: A practice guide* (NCEE 2009–4045). National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.
- Gonzalez, M. (2021). Dyslexia knowledge, perceived preparedness, and professional development needs of in-service educators. *Annals of Dyslexia*, 71(3), 547–567. <https://doi.org/10.1007/s11881-021-00232-2>
- Gwernan-Jones, R., & Burden, R. L. (2010). Are they just lazy? Student teachers' attitudes about dyslexia. *Dyslexia*, 16(1), 66–86. <https://doi.org/10.1002/dys.393>
- Idowu, A. A. (2017). *Primary school teachers' perceptions and management skills of learning difficulties in Ibadan North-East Local Government Area, Oyo State, Nigeria* (Doctoral dissertation, University of Ibadan).
- International Dyslexia Association. (2002). *Definition of dyslexia*. <https://dyslexiaida.org/definition-of-dyslexia/>
- Ishola, M. O., & Sola-Agboola, O. (2022). Assessment of the knowledge and level of awareness of teachers handling dyslexia in lower primary schools in Osun State, Nigeria. *International Journal of Contemporary Issues in Education*, 4(2), 99–105.
- Iwuagwu, A. O., Ngwu, C. N., Ekoh, P. C., Ebimgbo, S., & Adjei Gyimah, A. (2022). An exploration of primary caregivers' knowledge of dyslexia, awareness of the problems, and supports for elementary school children in Nigeria. *Cogent Social Sciences*, 8(1), Article 2132673. <https://doi.org/10.1080/23311886.2022.2132673>
- Kelly, M. S. (2024). Roles of different professionals within a multitiered system of supports framework. In C. Franklin (Ed.), *The school services sourcebook: A guide for school-based professionals* (3rd ed., pp. 5–17). Oxford University Press.
- Knight, C. (2018). What is dyslexia? An exploration of the relationship between teachers' understandings of dyslexia and their training experiences. *Dyslexia*, 24(3), 207–219. <https://doi.org/10.1002/dys.1593>
- Mustapha, R. A. (2022). *Teachers' knowledge and assessment methods of pupils with dyslexia and dysgraphia in Ilorin West Local Government Area, Kwara State* (Master's thesis, Kwara State University, Nigeria).
- Ogunsola, B. A. (2018). Teacher's qualification and dyslexia identification in primary schools in Oyo State, Nigeria. *Africa Education Review*, 15(4), 36–66. <https://doi.org/10.1080/18146627.2017.1352453>
- Okechukwu, F. O., Mefoh, P. C., Nubia, U. I., Nwauzoije, E. J., Umennuihe, C. L., Nwobi, C. A., et al. (2023). Development and validation of a teacher awareness questionnaire about dyslexia. *South African Journal of Childhood Education*, 13(1), Article 1228. <https://doi.org/10.4102/sajce.v13i1.1228>
- Oluwamayomikun, O. A. (2024). The impact of inclusive education practices on academic achievement and social integration of children with learning disabilities in primary schools in Oyo State, Nigeria. *International Journal of Recent Advances in Multidisciplinary Topics*, 5(11), 14–20.
- Omotuyole, C. O., & Ibetobou, N. J. (2021). Teachers' attitudes and motivation as correlate of pupils' achievement in Shomolu Local Government Area of Lagos State. <https://ir.unilag.edu.ng/items/f97c1d72-2d7b-419a-87fe-0175e9524ab9>
- Oniya, F. O. (2022). *Preschool teachers' awareness, knowledge and competence in early identification of children with learning disabilities in Ogbomoso North Local Government Area, Oyo State* (Master's thesis, Kwara State University, Nigeria).
- Osuji, G. C., & Yul-Ifode, S. (2023). Evaluation of language-disordered children with dyslexia and teachers' awareness in Port Harcourt City. *South Asian Research Journal of Art, Language and Literature*, 5(1), 1–10.
- Peltier, T. K., Washburn, E. K., Heddy, B. C., & Binks-Cantrell, E. (2022). What do teachers know about dyslexia? It's complicated! *Reading and Writing*, 35(9), 2077–2107.
- Shuaib, S. B., Adesanya, E. O., Oba, A. I., Afolabi, K. O., & Jimoh, S. B. (2023). Assessing agricultural literacy among senior school students in Kwara, Nigeria: Implication for educational interventions. *Indonesian Journal of Curriculum and Educational Technology Studies*, 11(1), 1–8.
- Siegel, L. S. (2020). Early identification and intervention to prevent reading failure: A response to intervention initiative. *Educational and Child Psychology*, 37(3), 140–146.

- Srivastava, M., de Boer, A. A., & Pijl, S. J. (2015). Know how to teach me... Evaluating the effects of an in-service training program for regular school teachers toward inclusive education. *International Journal of School & Educational Psychology*, 3(4), 219–230. <https://doi.org/10.1080/21683603.2015.1088373>
- Temitope, A. B., Reuben, O. I., Bolanle, T. O., Moromoke, M., & Folorunso, E. A. (2025). Teachers' awareness of dyslexia among lower and upper school students in Nigeria: A case study of Ondo State primary and junior secondary schools. <https://asjp.cerist.dz/en/downArticle/351/10/4/275513>
- Tosun, D., Arıkan, S., & Babür, N. (2021). Teachers' knowledge and perception about dyslexia: Developing and validating a scale. *International Journal of Assessment Tools in Education*, 8(2), 342–356. <https://doi.org/10.21449/ijate.728107>
- Worthy, J., DeJulio, S., Svrcek, N., Villarreal, D. A., Derbyshire, C., LeeKeenan, K., et al. (2016). Teachers' understandings, perspectives, and experiences of dyslexia. *Literacy Research: Theory, Method, and Practice*, 65(1), 436–453. <https://doi.org/10.1177/2381336916661529>
- Yamane, T. (1973). *Statistics: An introductory analysis* (3rd ed., pp. 580–581). Harper & Row.
- Yusuf, A. T., Izang, Y. D., & Odin, E. H. (2024). Knowledge of causes, attitude, and perception of hepatitis B virus infection among senior secondary school students in Sabon-Gari Local Government Area, Kaduna State. *Global Journal of Health Related Research*, 6(1), 106–118. <http://journal.abu.edu.ng/gjhr/>
- Zakariyah, I. (2023). *Teacher and pupil factors as correlates of reading achievement among public primary school pupils with dyslexia in the Minna Metropolis, Nigeria* (Doctoral dissertation, University of Jos).