The Effect of Dyslexia Prevalence and Academic Achievement of Pupils in Primary Schools in Sapele LGA of Delta State

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Abstract

This study examined the effect of dyslexia prevalence on the academic achievement of pupils in primary schools in Sapele. The formulation of three objectives, research questions, and hypotheses served as the study's guiding principles. Descriptive and ex-post-facto research designs were used for the study. The study's population was 11,584 pupils from 42 public primary schools in Sapele Local Government Area of Delta State. The sample size of 375 pupils, comprising both 176 dyslexic and 199 non-dyslexic pupils, was selected using stratified random sampling techniques. The study adopted the Screener for Reading and Writing (SRW) to identify individuals with dyslexia based on their reading and writing abilities. Mean and standard deviation were used, while the hypotheses were tested using ttests at the 0.05 level of significance. The study's results indicated, among other things, that 47.73% of the pupils who participated in the study were dyslexic; pupils with dyslexia had more difficulty with reading (M = 23.19, SD = 5.54) than writing (M = 22.90, SD = 5.62); and non-dyslexic pupils had better academic achievement (M = 69.33, SD = 18.32) than dyslexic pupils (M = 38.94, SD = 3.92), with a mean difference in favour of non-dyslexic pupils. The study concluded that there is a need for early identification and intervention strategies to support dyslexic pupils in improving their reading and language processing skills. The study recommended, among others, that there should be increased awareness and understanding of dyslexia among teachers and school administrators to reduce the prevalence of dyslexia in primary schools in Sapele, Nigeria.

Keywords: Dyslexia, Prevalence, Academic, Achievement, Pupils.

Introduction

Teaching and learning activities have been an integral part of human society, from the earliest civilizations to the present day. Today, academic achievement serves as a yardstick for measuring individuals' success and potential. It not only opens doors to various opportunities but also plays a crucial role in shaping one's personal growth and development. Additionally, academic achievement often serves as a means for social mobility, allowing individuals to break free from socio-economic constraints and improve their quality of life (Armstrong, 2014). The author defined academic achievement as the level of success a person has attained in their educational pursuits, including grades, test scores, and overall academic performance. It encompasses both the acquisition of knowledge and skills as well as the ability to apply them effectively in real-world situations. However, pupils who have

difficulties with reading, writing, or spelling may struggle to adapt to the formal education system because it is often designed with the assumption that all pupils will naturally acquire these basic skills. Academic accomplishment pertains to the academic results that demonstrate the extent to which a student has achieved his educational goals. Academic accomplishment pertains to the knowledge and skills acquired by a student, which are commonly evaluated through various assessments like standardised tests, performance evaluations, and portfolio reviews.

The term "dyslexia" has been a controversial word to define, considering that there is no universally agreed-upon definition. Some experts argue that dyslexia is a specific learning disability that affects a person's ability to read, while others believe it is a broader term that encompasses difficulties in reading, writing, and spelling. Nevertheless, the origin of the term 'dyslexia' reveals its deep connection to Ancient Greek, signifying a challenge with language. The term initially emerged in the realm of education in 1896, with its utilisation credited to Pringle-Morgan (Regan & Woods as cited in Altamimi, 2016). However, in the context of this paper, According to Rose (2009), dyslexia is a condition that primarily impacts the abilities related to precise and smooth reading and spelling of words. This definition effectively encapsulates the core of dyslexia. This definition highlights the specific challenges individuals with dyslexia face regarding reading and spelling, emphasising their struggle with accuracy and fluency. Dyslexia is not related to intelligence or lack of effort but rather a neurological condition that affects language processing.

In Nigeria, an expert, Dr. Adrienne Tikolo, reported in 2019 that about 20% of the population, or 36 million Nigerians, suffer from dyslexia. Furthermore, according to Idowu, individuals with learning disabilities face a higher risk of incarceration or educational disengagement (Lawal, 2019). This report is not only alarming but also highlights the urgent need for awareness and support for individuals with dyslexia in Nigeria. The foregoing statistics emphasise the potential long-term consequences of untreated dyslexia, such as limited educational opportunities and an increased risk of involvement in the criminal justice system. The difficulties pupils with dyslexia suffer include reading, writing, and spelling difficulties. There is little or no evidence to show which of the difficulties pupils with dyslexia face is the most prevalent or impactful. However, among them, Altamimi (2016) reported that reading difficulties are the most common and significant challenge faced by pupils with dyslexia. These difficulties can greatly hinder their academic progress and overall educational experience. Research has shown that early intervention and appropriate support can significantly improve the outcomes for pupils with dyslexia, highlighting the importance of identifying and addressing this learning difference as early as possible (Wellington, 2015; Kaluyu & Ooko, 2016).

Prevalence of Dyslexia

Dyslexia is a prevalent form of learning disability, impacting around 80% of individuals categorised as having learning disabilities. Dyslexia, being one of the most common learning disabilities, exhibits varying prevalence rates across different countries. According to Wajuihian and Naidoo (2011), the prevalence of the condition among children in the United States ranges from 5% to 17%, whereas in the United Kingdom, it is estimated

to be between 3% and 6%. According to the European Dyslexia Association (2022), the occurrence of dyslexia or comparable learning disorders in Europe reached a staggering 15% of the populace. In contrast, the occurrence of dyslexia was notably reduced in countries where English is not the primary language, such as China and Japan, with reported rates as low as 1% (Wajuihian & Naidoo, 2011). In Africa, there is limited data on the prevalence of dyslexia, but some studies suggest that it may be similar to or slightly higher than the rates in the United States and the United Kingdom (Wajuihian & Naidoo, 2011). Corroborating the foregoing, Ozernov-Palchik and Gaab (2016) and Wagner et al. (2021) found that the prevalence of dyslexia is between 5% and 17% globally. According to the International Classification of Disease (ICD-10) released by the World Health Organisation (2016), the occurrence of dyslexia among primary school children is estimated to be between 2% and 4%.

Lawal (2019) reported that the prevalence of dyslexia in Nigeria was 20% as of 2019. However, with no current data available to show the recent prevalence of dyslexia in Nigeria, it is expected that the prevalence rate may have changed since 2019. This assertion is hinged on the fact that if the prevalence rate is pegged at 17%, then Nigeria, with all its diverse population and educational challenges, would have a significantly higher number of dyslexic individuals compared to other countries with lower prevalence rates. Therefore, it is crucial for further research to be conducted to obtain updated data on the prevalence of dyslexia in Nigeria.

According to certain experts, the occurrence of dyslexia in school-aged children is estimated to range from 5% to 10%, with a higher likelihood among boys compared to girls (Arnett et al., 2017; Knight, 2018). Dyslexia, a condition that impacts individuals of various ages, genders, and ethnicities, is a persistent disability with symptoms that differ from one person to another (Snowling, 2013). Nevertheless, the management of dyslexia symptoms and their resulting effects can be effectively addressed through the provision of suitable support and interventions by parents and teachers who serve as the primary carers and identifiers (Noddings, 2012; Skiada et al., 2014). Primary carers, also known as carers, are the parents and teachers responsible for children with dyslexia (hereinafter referred to as carers) (Wanders et al., 2020). This occurs because, as the main influencers of socialisation, they are the initial ones to recognise indications of dyslexia and other learning impairments in a child (Wanders et al., 2020).

Effects of dyslexia

a) **Difficulties learning**: Engaging in reading plays a crucial role in acquiring a significant portion of the academic content taught in schools. A student with dyslexia faces challenges in many subjects, and those who find it difficult to acquire literacy skills may go through significant distress and emotional turmoil if they perceive mistreatment from their classmates (Siegel, 2006). This has a ripple effect on their overall academic achievement and self-esteem of pupils. Additionally, dyslexia can also impact a person's ability to comprehend and process information, making it challenging for them to follow instructions or understand complex concepts. This can lead to frustration and feelings of inadequacy, further hindering their educational progress.

b) **Social issues:** Dyslexic children might exhibit physical and social immaturity when compared to their peers. This can lead to a range of consequences, including diminished self-confidence, problematic behaviour, heightened stress, increased hostility, and social isolation from peers, family members, and educators. Individuals with difficulty interpreting social cues may struggle to recognise the appropriate level of personal space needed during social interactions or may not be attuned to the nonverbal signals conveyed by others (Ryan, 2004). c) **Issue in adulthood**: The lack of reading and comprehension skills in a child can hinder their ability to reach their maximum potential as they mature. According to Villines (2017), it results in challenges with reading later in life, such as struggling to read aloud, reading and writing at a slower pace, experiencing spelling difficulties, avoiding activities that involve reading, mispronouncing words or names, and encountering problems with word recall.

Theoretical Framework

The research was conducted based on Bandura's Social Cognitive Theory (SCT), which was introduced in 1986. As per Bandura mentioned in Luszczynska and Schwarzer (2015), the Social Cognitive Theory (SCT) suggests that the actions of individuals are shaped by a dynamic interplay among personal factors, environmental factors, and the behaviour itself. Observational learning, self-efficacy beliefs, and outcome expectations play a significant role in influencing behaviour. According to Fleig et al. (2011), the connection between personal thoughts influences how individuals behave. Expectations, beliefs, self-perceptions, goals, and intentions play a crucial role in shaping and guiding behaviour. The perceptions and behaviours of individuals are influenced by their thoughts, beliefs, and emotions. Below is a presented framework that describes the correlation between the prevalence of dyslexia, the thoughts and beliefs of students, and their academic performance:

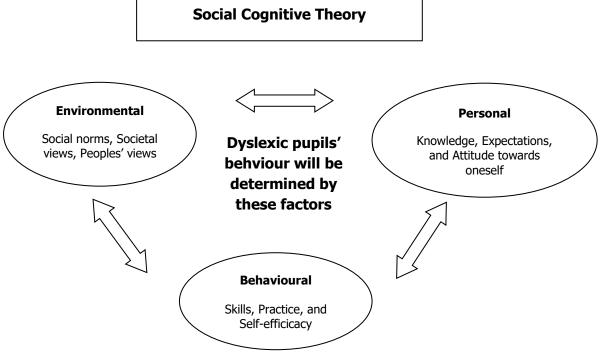


Figure 1: Theoretical Framework of the Study

Source: Giulioni (2010).

The study aimed to investigate the effect of dyslexia prevalence on the academic achievement of pupils in primary schools in Sapele Local Government Area of Delta State. The theory is relevant to this study as it can be applied to generate the determinants of pupils' academic achievement, including their thoughts, beliefs, and expectations about their abilities. According to the theory, dyslexia prevalence may influence pupils' thoughts, beliefs, and expectations about their academic abilities. This could potentially lead to lower self-esteem and motivation among pupils with dyslexia, which may in turn affect their academic achievement.

Conceptual Framework

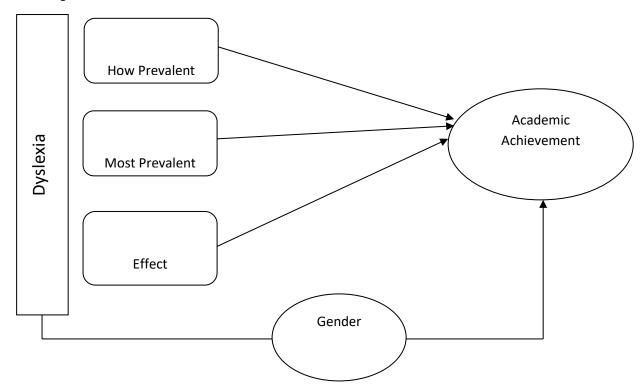


Figure 2: Conceptual framework of the study

Source: Researcher's Design, 2023.

Dyslexia and Academic Achievement

Dyslexia is a condition that affects a person's reading, writing, and spelling abilities, making it a learning disability. People who have dyslexia often face challenges when it comes to activities like understanding written text, composing written assignments, and completing assessments, all of which can greatly affect their academic performance. Nevertheless, it is crucial to acknowledge that dyslexia does not hinder intellectual abilities, and people with dyslexia can attain academic triumph with appropriate assistance and adjustments. Dyslexia impacts individuals in various manners, with one of the most apparent being their aptitude for reading and writing. According to Al-Lamki (2012), children who have dyslexia often struggle to understand abstract ideas and may have a slower word recall ability. When individuals engage in reading, they might tend to invert letters and perceive words in a reverse manner, thereby rendering the process of comprehension more arduous.

The challenges hinder the acquisition of knowledge and hinder academic advancement. Individuals with this condition may also encounter difficulties in comprehending and retaining information, thereby impacting their aptitude in literacy. In addition, people with dyslexia often encounter cognitive challenges, including difficulties with memory, particularly when it comes to reading or recollecting a particular word (Al-Lamki, 2012).

Dyslexia, a condition that hinders the learning process, can significantly affect students' academic accomplishments and abilities. In a study conducted in Kenya, Kaluyu and Ooko (2016) found a noteworthy correlation between dyslexia and the academic performance of primary students. Dyslexia has a notable influence on the reading, spelling, organisation, and understanding of ideas in children, leading to a significant impact on their academic achievements due to the necessity of reading, comprehension, and writing in all academic subjects (Kaluyu & Ooko, 2016). For example, when dyslexic pupils in primary school struggle with reading and comprehension, they may struggle to understand instructions and complete assignments correctly. Lower grades and a lack of confidence in their academic abilities can result from this. Furthermore, dyslexia can impair a student's ability to express themselves clearly in writing, further impeding academic achievement.

In a study conducted by Zhou (2023), the impact of dyslexia on students' academic performance was examined. Utilising a qualitative-oriented methodology, the study undertook a comprehensive examination of existing literature about the origins, consequences, and potential remedies for dyslexia. The primary objective was to investigate the influence of dyslexia on students' scholastic performance. The findings indicated that youngsters with dyslexia commonly exhibit subpar academic performance and are more likely to discontinue their education. In Nigeria, a research conducted by Adubasim (2018) investigated different approaches to improve the cognitive abilities of dyslexic students, specifically focusing on working memory and processing speed. A quasi-experimental approach was employed in this study, which focused on a population of 24,727 senior secondary school students (S.S.2) attending public secondary schools in Port Harcourt, Rivers State, Nigeria. The study employed a purposive sampling technique, selecting three public schools from the secondary schools in Phalga and Obio/Akpor LGA of Rivers State. The findings indicated that Nigeria has a notable population of students grappling with dyslexia, yet minimal to no focus is placed on supporting these students. Furthermore, indisputable proof exists that certain students in Nigeria, similar to students in different regions across the globe, experience dyslexia.

In the study conducted by Ahmed (2015), the focus was on exploring the level of dyslexia awareness within the Doma local government area of Nasarawa State. The research specifically targeted specific elementary schools in the Doma local government area. A carefully crafted survey was created and sent out to a total of fifty-seven (57) elementary school educators who took part in the research. To assess the instrument's reliability, a preliminary study was carried out and its analysis was facilitated by the Statistical Package for Social Sciences (SPSS). The findings indicate that the p-value is greater than 0.05, suggesting a minimal positive correlation between dyslexia awareness and children's learning disability in the Doma local government area. Similarly, the results demonstrate that the p-

value is greater than 0.05, indicating that there is no variation in learning disability among children based on their gender.

There are numerous issues associated with dyslexia. Some issues are the extent to which dyslexia affects pupils, the lack of resources and support for pupils, the limited understanding and awareness of dyslexia among teachers and parents, and the high prevalence of dyslexia cases among pupils in primary and secondary schools in public and private schools in many parts of Nigeria. Among these issues, one of the problems that this study aims to address is the high prevalence of cases of dyslexia among pupils. This problem is very disturbing because it is often unnoticed and undiagnosed, leading to pupils struggling academically and experiencing low self-esteem. Experts estimate that dyslexia affects approximately 5–17% of the global population. However, in Nigeria, the prevalence rate is 20%, which is higher due to various factors such as limited access to quality education and inadequate resources for screening and diagnosis (Ozernov-Palchik & Gaab, 2016; Lawal, 2019; Wagner et al., 2021). Based on these factors, it is evident that dyslexia poses a significant challenge in Nigeria, impacting a larger proportion of the population compared to global estimates. Dyslexia's prevalence also varies based on gender. Males generally exhibited a higher incidence of reading difficulties compared to females, with an estimated ratio of around 3.4 to 1 (Hawke et al., 2009; Jiménez, 2009).

Unfortunately, presently, the infrastructure and support systems in public primary schools across the country are inadequate and may not be able to effectively cater to the needs of dyslexic pupils. This situation poses a significant barrier to their educational development and overall well-being. Without proper support, dyslexic pupils may struggle to keep up with their peers, leading to feelings of frustration, low self-esteem, and a higher likelihood of dropping out of school. Consequently, to bridge the gap in knowledge of the extent of prevalence and its effect on pupils' academic achievement, this study investigates the effect of dyslexia prevalence on the academic achievement of pupils in primary schools in Sapele local government area of Delta State.

Research Question

- 1. How prevalent is dyslexia among pupils in selected primary schools in Sapele LGA of Delta State?
- 2. What is the difference in the difficulty dyslexic pupils experience in reading and writing in selected primary schools in Sapele LGA of Delta State?
- 3. What is the difference in the academic achievement of dyslexia pupils compared to that of non-dyslexic pupils in selected primary schools in Sapele LGA of Delta State?

Hypotheses

- 1. There is no significant difference in the prevalence of dyslexia among male and female pupils in selected primary schools in Sapele LGA of Delta State.
- 2. There is no significant difference in the difficulty dyslexic pupils experience in reading and writing in selected primary schools in Sapele LGA of Delta State.
- There is no significant difference in the academic achievement of dyslexia pupils compared to that of non-dyslexic pupils in selected primary schools in Sapele LGA of Delta State.

Methodology

The study adopted descriptive and ex-post-facto research designs to investigate the effect of dyslexia prevalence on the academic achievement of pupils in primary schools in Sapele Local Government Area of Delta State. The descriptive and ex-post-facto research designs were both thought to be good for this study. The descriptive design gave a broad picture of how common dyslexia was in the target population, while the ex-post-facto design let the researchers look at data (academic achievement) that was already out there to be able to see how dyslexia prevalence might have influenced academic achievement.

The study's population consisted of 11,584 pupils from 42 public primary schools in Sapele Local Government Area of Delta State. A sample size of 375 pupils, comprised of both 176 dyslexic and 199 non-dyslexic pupils, was selected using a stratified random sampling technique. The researchers ensured that the sample represented different grade levels and gender ratios to increase the study's validity and generalizability.

The Screener for Reading and Writing (SRW), developed by Bassoa et al. (2021), was adopted as the assessment tool for identifying dyslexic pupils. This tool has been validated and proven to accurately identify individuals with dyslexia based on their reading and writing abilities. Additionally, the researchers provided training to the assessors (teachers) to ensure consistency and reliability in administering the SRW to all participants. The Screener for Reading and Writing (SRW) is a self-assessment tool. The frequency with which symptoms (listed in 16 items) manifest is measured using a four-point Likert scale. The scale was given to the teachers along with a list of the pupils who had been chosen. Teachers were given a deadline of 15 days to respond. Each item marked "never" received one point; "rarely" received two points; "sometimes" received three points; and "often/always" received four points. The minimum total score, indicating no difficulty, is 16 points; the maximum total score, indicating great difficulty, is 64 points.

To measure the academic achievement of the pupils, the researcher used the terminal examination administered at the end of the school year. The examination covered various subjects, such as Mathematics, Social Studies, Physical Education, Language, And Geography. The researcher collected the exam scores of all the chosen pupils and calculated their average performance. In order to address the research questions, the mean and standard deviation were employed, and the hypotheses were tested through t-tests with a significance level of 0.05.

Data Analysis

Research Question One: How prevalent is dyslexia among pupils in selected primary schools in Sapele LGA of Delta State?

Table 1: Mean rating and percentage of the prevalence of dyslexia among pupils in selected primary schools in Sapele LGA of Delta State

Category of Pupils	n	Percentage	Score Rating	Mean	SD
Non-Dyslexic	199	53.07	< 32	22.91	3.66
Dyslexia	176	47.73	> 32	49.02	7.77
Total	375	100			

In answering research question one, Table 1 shows how prevalent dyslexia is among pupils in selected primary schools in Sapele LGA of Delta State. The result revealed that out of the sample of 375 pupils who participated in the study, 47.73% were dyslexic, while 53.07% were non-dyslexic. Pupils with dyslexia had a mean rating >32 (M = 49.02, SD = 7.77), while non-dyslexic pupils had a mean rating < 32 (M = 22.91, SD = 3.66). Therefore, it can be deduced that dyslexia is substantially prevalent among pupils in selected primary schools in Sapele LGA of Delta State.

Research Question Two: What is the difference in the difficulty dyslexic pupils experience in reading and writing in selected primary schools in Sapele LGA of Delta State?

Table 2: Mean and standard deviation of the difference in the difficulty dyslexic pupils experience in reading and writing in selected primary schools in Sapele LGA of Delta State

LPS	N	Mean	Std. Deviation
Reading	176	23.19	5.54
Writing	176	22.90	5.62
Mean Diff.		0.29	

LPS = Language processing skills

In answering research question two, Table 2 shows the difference in the difficulty dyslexic pupils experience in reading and writing in selected primary schools in Sapele LGA of Delta State. The result revealed that among the pupils with dyslexia, pupils had more difficulty with reading (M = 23.19, SD = 5.54) than writing language processing skills (M = 22.90, SD = 5.62). Therefore, it can be deduced that dyslexic pupils had more difficulty with reading than with writing in selected primary schools in Sapele LGA of Delta State.

Research Question Three: What is the difference in the academic achievement of dyslexia pupils compared to that of non-dyslexic pupils in selected primary schools in Sapele LGA of Delta State?

Table 3: Mean and standard deviation of the difference in the academic achievement of dyslexia pupils compared to that of non-dyslexic pupils in selected primary schools in Sapele LGA of Delta State

Categories of Pupils	N	Mean	Std. Deviation
Dyslexia	176	38.94	3.92
Non-dyslexic	199	69.33	18.32
Mean Diff.	375	30.39	

In answering research question three, Table 3 shows the difference in the academic achievement of dyslexia pupils compared to that of non-dyslexic pupils in selected primary schools in Sapele LGA of Delta State. The result revealed that non-dyslexic pupils had better academic achievement (M = 69.33, SD = 18.32) than dyslexic pupils (M = 38.94, SD = 3.92),

with a mean difference in favour of non-dyslexic pupils. Therefore, it can be deduced that dyslexia hurt the academic achievements of pupils in selected primary schools in Sapele LGA of Delta State.

Hypothesis One: There is no significant difference in the prevalence of dyslexia among male and female pupils in selected primary schools in Sapele LGA of Delta State.

Table 4: Summary of t-test on the difference in the prevalence of dyslexia among male and female pupils in selected primary schools in Sapele LGA of Delta State

	Gender	N	Mean	SD	tcal	ttab	Sig.
Score rating	Male	81	49.84	7.20	1.30	1.96	0.20
	Female	95	48.32	8.20			

In testing null hypothesis one, Table 4 shows that there is no significant difference in the prevalence of dyslexia among male and female pupils in selected primary schools in Sapele LGA of Delta State (tcal = 1.30 < ttab = 1.96, p = 0.20 > 0.05). Thus, null hypothesis one is retained.

Hypothesis Two: There is no significant difference in the difficulty dyslexic pupils experience in reading and writing experience in selected primary schools in Sapele LGA of Delta State.

Table 5: Summary of t-test on the difference in the difficulty dyslexic pupils experience in reading and writing experience in selected primary schools in Sapele LGA of Delta State

	Category	N	Mean	SD	tcal	ttab	Sig.
Score rating	Reading	176	23.19	5.54	1.83	1.96	0.07
	Writing	176	22.90	5.62			

In testing null hypothesis two, Table 5 shows that there is no significant difference in the difficulty dyslexic pupils experience in reading and writing experience in selected primary schools in Sapele LGA of Delta State (tcal = 1.83 < ttab = 1.96, p = 0.07 > 0.05). Thus, null hypothesis two is retained.

Hypothesis Three: There is no significant difference in the academic achievement of dyslexia pupils compared to that of non-dyslexic pupils in selected primary schools in Sapele LGA of Delta State.

Table 6: Summary of t-test on the difference in the academic achievement of dyslexia pupils compared to that of non-dyslexic pupils in selected primary schools in Sapele LGA of Delta State

Categories of Pupils	n	Mean	SD	Tcal	ttab	Sig.
Dyslexia	176	38.94	3.92	21.57	1.960	0.00
Non-dyslexic	199	69.33	18.32			

In testing null hypothesis two, Table 6 shows that there is a significant difference in the academic achievement of dyslexia pupils compared to that of non-dyslexic pupils in selected primary schools in Sapele LGA of Delta State (tcal = 21.57 > ttab = 1.96, p = 0.00 < 0.05). Thus, null hypothesis three is rejected.

Discussion of the Findings

The result of research question one revealed that 47.73% of pupils in the study area were dyslexic, while 53.07% were non-dyslexic. Furthermore, the test of hypothesis one revealed that there is no significant difference in the prevalence of dyslexia among male and female pupils in selected primary schools in Sapele LGA of Delta State. The results align with the research conducted by Ahmed (2015), which demonstrated that regardless of the gender of pupils, there is no difference in learning disability in children.

The result of research question two revealed that pupils with dyslexia had more difficulty with reading than writing language processing skills. Furthermore, the test of hypothesis two revealed that there is no significant difference in the difficulty dyslexic pupils experience in reading and writing experience in selected primary schools in Sapele LGA of Delta State. The findings of Adubasim (2018) support the results, indicating that there exists a significant population of students with dyslexia in Nigeria, and unfortunately, these students receive minimal to no attention or support.

The result of research question three revealed that non-dyslexic pupils had better academic achievement than dyslexic pupils, with a mean difference in favour of non-dyslexic pupils. Furthermore, the test of hypothesis three revealed that there is a significant difference in the academic achievement of dyslexia pupils compared to that of non-dyslexic pupils in selected primary schools in Sapele LGA of Delta State. The results align with the research conducted by Zhou (2023), which revealed that children with dyslexia typically display low achievement in academics and have a higher school dropout rate.

Conclusion

The research examined the effect of dyslexia prevalence on the academic achievement of pupils in primary schools in Sapele, Nigeria. The findings of the study revealed that 47.73% of pupils in the study area were dyslexic, while 53.07% were non-dyslexic; pupils with dyslexia had more difficulty with reading than writing language processing skills; and non-dyslexic pupils had better academic achievement than dyslexic pupils, with a mean difference in favour of non-dyslexic pupils, among other findings. The study concluded that dyslexia has a significant and negative impact on the academic achievement of pupils in primary schools in Sapele, Nigeria, and calls for early identification and intervention strategies to support dyslexic pupils in improving their reading and language processing skills.

Recommendations

The study recommended as follows:

- 1. There should be increased awareness and understanding of dyslexia among teachers and school administrators to reduce the prevalence of dyslexia in primary schools in Sapele, Nigeria.
- 2. For administrators of primary schools to address the reading and writing difficulties faced by pupils with dyslexia, interventions and support systems like special education programmes and individualised instruction should be implemented.
- 3. To improve the academic achievements of pupils with dyslexia, psychological and educational interventions like the use of multisensory teaching methods and assistive technologies should be implemented.

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