

**Awareness and Knowledge of Dyslexia among Parents and Primary School Teachers in Ilorin Metropolis, Kwara State, Nigeria**

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**Abstract**

The study examined the awareness and knowledge of dyslexia among parents and primary school teachers in Ilorin, metropolis. A descriptive survey questionnaire was used in this study and it was conducted among parents and primary school teachers who reside in the three local government areas of Ilorin, (Ilorin south, East and Ilorin west) Kwara state. The survey was an attempt to sample the views, opinions of people selected to represent the entire population of the study. In this study, 200 respondents were chosen and two hundred questionnaires were administered accordingly and were duly completed and collected. The specific objectives were to examine the extent of awareness of dyslexia among parents and primary school teachers in Ilorin metropolis and determine how dyslexia affects children's academic performance. The findings showed that education and occupation are determinant factors that influence awareness of dyslexia among parents and teachers in Ilorin metropolis, Also it was shown that environment is a determining factor that influences awareness of dyslexia among parents and teachers, However, the study recommends that parents and teachers should spend more time with their dyslexic's children in order to enhance their academic performance.

**KEYWORDS;** Awareness and knowledge of dyslexia, effects of dyslexia on children, Causes of dyslexia, prevention of dyslexia and primary school teachers.

**INTRODUCTION**

During the twentieth century, dyslexia was primarily seen as a phonological deficit (specifically phonological awareness) that resulted in a reading deficit. If someone suffers from dyslexia, he/she has difficulty in reading because of a slight disorder of their brain (Collins English Dictionary, 2021). Dyslexia was seen as an issue with reading achievement specifically, caused by deficits in discrimination of written word sounds as opposed to a broader disorder of brain function (Wikipedia, 2019). However, much research from the 1990s onward has focused on the potential biological bases of dyslexia and understanding dyslexia as a disorder of brain function. One of the first weaknesses of

the strictly phonological deficit hypothesis for dyslexia was its inability to account for the genetic link of dyslexia.

Although the disorder varies from person to person, common characteristics among people with dyslexia are difficulty with phonological processing the manipulation of sounds, spelling, and/or rapid visual-verbal responding (National institute of neurological disorders and stroke, 2013, US). In individuals with adult onset of dyslexia, it usually occurs as a result of brain injury or in the context of dementia; this contrasts with individuals with dyslexia who simply were never identified as children or adolescents. Dyslexia can be inherited in some families, and recent studies have identified a number of genes that may predispose an individual to developing dyslexia.

It is believed that dyslexia can affect between five and 10 per cent of a given pupil in a population, although there has been no studies to indicate an accurate percentage. In Nigeria statistics are not readily available and not much is known about dyslexia. According to the Dyslexia Foundation of Nigeria, knowledge of the condition is not common in Nigeria and as a result children grappling with the challenge are beaten, called names, bullied and jeered, thus forcing them to develop an inferiority complex (Guardian, 2018). “Dyslexia is different from Attention Deficiency Hyperactivity Disorder, ADHD. However, they frequently co-exist and it is best to test for both separately. Early detection is necessary without which the person is misunderstood, beaten, called names both at home but worse in school, by teachers and misunderstood, by teachers and of course other children who see the person as stupid or lazy. “Before it is discovered if it ever is, the damage has been done, the person is intimidated, and will lose self-confidence.

According to Reid (2005), the teachers considered such a child as a stupid and lazy student; his parents think that he is slow; and his friends think that he is foolish, for he cannot read. Anytime he sees words and tries to read, he feels that the letters are moving and thus, he reads what he sees. Consequently, his reading sounds non sense. He also faces the problem of spelling and writing in which he cannot write correctly. Moreover, he is unable to differentiate some similar letters. Facing such kind of problem, the child is frustrated and he wants to be like other children who can read. However, the child is not as stupid as people think.

Previous studies indicate that there are several issues experienced by mothers with dyslexic children (Chandramuki, Venkatakrisnashastry, & Vranda, 2012). Mothers are often associated with having negative feelings such as denial, frustration, guilt and stress when an aspiration to have a ‘perfect’ child is unfulfilled (Vranda, 2012). The mothers are often disappointed when their children failed to meet their high expectation. About 95 percent of mothers of children with dyslexia are experiencing anxiety regarding the child’s future life and their academic performance (Karande, et al., 2009). Furthermore, they are also concerned with the child’s inappropriate behavior, which may affect their self-esteem and pattern of socialization with peers. These issues increase motherhood experiences that subsequently give negative effects to mothers' life, such as fatigue, lack of sleep and poor sleep quality, as well as changes in daily routine, loss of appetite and weight loss (Chien & Lee, 2013). Lack of cooperation and concern amongst teachers may be due to lack of knowledge and awareness about dyslexia. Most of the time, teachers are the person who educates and monitors the child at school. When the teachers are not concerned and do not give their full attention and cooperation, the child will be neglected,

which subsequently results in delays in receiving remedial and accommodative intervention. On the other hand, specific learning difficulties affect only certain aspects of pupils' learning. They cause low performance in one or more curriculum areas because of the difficulties pupils face in some aspects of literacy and numeracy skills (Frederickson and Cline 2009).

### **AWARENESS AND KNOWLEDGE OF DYSLEXIA**

The awareness of dyslexia varies from place to place, some people are aware of dyslexia in top world countries unlike Nigeria and some developing countries of the world. A child with dyslexia is usually seen as a pin in the ass especially to parent and teachers who have no knowledge about dyslexia. They usually think such child is cursed, a fool or an idiot because all their efforts to help him/her in becoming better person has yielded to nothing.

Moothedath and Vranda (2015) explored the knowledge of special learning disabilities among teachers at the primary level in Bangalore. The study took a sample of 200 teachers and found that there was a statistically significant relationship in overall level of knowledge and teacher gender, education, years of experience, type of school and class being taught. A similar study was conducted by Padhy, Goel, Das, Sarkar, Sharma and Panigrahi (2016) to investigate teacher perceptions about learning disabilities in the public schools of slum areas of Chandigarh, India. A purposive sampling technique was adopted to obtain a sample of 80 teachers from 103 schools there. A cross-sectional questionnaire was used to measure the teachers' perceptions regarding learning disabilities. It was found that 56.3% of them were aware of learning disabilities and approximately 68% of respondents believed that they did encounter such children in school. Shanker (2015) also investigated the impact of structured teaching programs on the level of knowledge of 60 teachers. The results revealed that teachers had very limited knowledge about learning disabilities, but that structured teaching programs contributed positively to enhance their knowledge. A study conducted by Shari and Vranda (2015) found that only 5% of teachers had adequate knowledge about learning disabilities. There were statistically significant differences in overall knowledge, causes and classification, clinical manifestation and investigations across the gender variable.

In both developed and under-developed countries, teachers and parents were usually not aware of learning problems found in children. Shukla and Agarwal (2014) found that 67% of teachers had no understanding about learning disabilities among primary school children, 20% of them had a very low level of understanding and only 12% knew about specific learning disabilities in the Haridwar region. Pawar and Mohith (2014) concluded that a self-instructional module brought significant improvement to the knowledge of primary school teachers regarding this issue. Williams et al. (2013) investigated a sample of 38 school teachers to explore a teacher training program's effectiveness for their understanding and knowledge about specific learning disabilities. By using convenient sampling technique and a quasi-experimental study, they found such teacher training programs played a significant role in increasing the level of knowledge about learning disabilities among primary school teachers in Bhainyawala, Dehradun. Bhanwara, Kelkar and Mandalia (2012) described how planned teaching is effective in increasing the knowledge regarding learning disabilities. The study was conducted in selected schools of the city of Pune, using samples of 60 for both male and female

teachers, and a non-convenient purposive sampling technique. Teachers acquired adequate knowledge according to the results. Natekar (2012) conducted a study to assess the knowledge of primary school teachers about learning disabilities and their prevention among children in Bangalore. A self-administered structured questionnaire was prepared and administered to 50 primary school teachers between the First to Seventh standard based on a purposive sampling technique. The outcome was that teachers did acquire adequate knowledge regarding learning disabilities.

According to Karande, Sholapurwala and Kulkarni (2011), 15% of school children were affected by learning disabilities in India. Although the government has carried out various awareness campaigns over the last decade, much is needed to be done to achieve an ideal scenario. For this, teachers will play a vital role, so proper training is required for screening for learning disability in primary school. School management should offer structured teaching programs and employ special instructors to ensure that children receive regular remedial education. Karande and Gogtay (2010) observed that teachers in educational institutions might draw on many subjects, including reading, writing, and mathematics during the education of their students. Most teachers acted in a friendly manner towards students, as a guide, father, mother, friend or companion, and therefore had the ability to identify symptoms of learning disability in children in the early stages.

### **CAUSES OF DYSLEXIA**

Specialist doctors and researchers are not precisely sure what causes dyslexia. Some evidence points to the possibility that the condition is genetic, as it often runs in families and others believed is as a result of impairment in the brain (Medical News Today{MNT, 2019}). There are two major causes of dyslexia, namely, genetic/hereditary and acquired dyslexia. Genetic causes/ hereditary constitute the defects found in a gene which are associated with problems of reading ability/ performance. Dyslexia often runs in families. About 40 percent of siblings of people with dyslexia also struggle with reading. Scientists have also found genes linked to problems with reading and processing language (medical news today, 2019).

Acquired dyslexia involves a small number of people with dyslexia who acquired the condition after they are born, usually due to a brain injury, stroke, or some other type of trauma. Brain imaging studies have shown brain differences between people with and without dyslexia. These differences happen in areas of the brain involved with key reading skills. Those skills are knowing how sounds are represented in words, and recognizing what written words look like.

According to the University of Michigan Health System (2016), dyslexia is the most common learning disability. 80 percent of students with learning disabilities have dyslexia. The International Dyslexia Association estimates that 15 to 20 percent of the American population has some of the symptoms of dyslexia, including slow or inaccurate reading, poor spelling, poor writing, or mixing up similar words. Dyslexia affects people of all ethnic backgrounds, although a person's native language can play an important role. A language where there is a clear connection between how a word is written and how it sounds, and consistent grammatical rules, such as Italian and Spanish, can be easier for a person with mild to moderate dyslexia. Languages such as English, where there is often

no clear connection between the written form and sound, as in words such as "cough" and "dough," can be more challenging for a person with dyslexia (medical news today, 2019).

### **EFFECTS OF LACK OF AWARENESS AND KNOWLEDGE OF DYSLEXIA**

Dyslexia represents significant challenges not just for the students/pupils but can also be traumatic for their parents (Elliott & Nicolson, 2016). Given that learning to read is a fundamental core skill of schooling and becoming literate opens doors to education, employment and adult wellbeing (Snowling & Hulme, 2012), parents of students with dyslexia show higher levels of anxiety than parents of non-dyslexic students (Snowling & Melby-Lervag, 2016). Parents experience stress in coping with their child's apparent poor academic progress (Karande & Kuril, 2011), particularly if they lack understanding of the dyslexia (Karande et al., 2009). Mothers, in particular, show higher levels of stress and depression and report significant impacts on family (Snowling, Muter & Carroll, 2007) and increased difficulties in everyday life (Bonifacci et al., 2014). The most-common maternal worries involve both emotional and practical difficulties (Earey, 2013), as their child's chronic poor performance at school relates to the child losing self-esteem, getting frustrated and developing withdrawn or aggressive behavior (Karande et al., 2009).

In addition, maternal anxiety is increased when attempting to seek appropriate help for their child (Earey, 2013) especially when bureaucratic processes appear to move slowly in providing effective interventions to help students overcome dyslexic difficulties. Mothers, by necessity, become advocates for their child (Poon-McBrayer & McBrayer, 2014) and are frequently required to face school teachers who appear uncooperative and unconcerned about their child's dyslexia (Karande et al., 2009) requiring parents to return repeatedly to the schools to remind them of their child's needs (Earey, 2013). Mothers become emotionally and physically drained as they become heavily involved in their child's remedial education (Bonifacci et al., 2014) and worry for the child's future (Karande et al., 2009). Many mothers choose to quit their jobs to focus their energy and time attending to their child (Poon-McBrayer & McBrayer, 2014). Ongoing chronic stress can lead to negative parenting practices and adversely affect the parent-child relationships and outcomes (Karande & Kuril, 2011). Poor attachment to parents by students with dyslexia may be due to a higher load of schoolwork straining the relationships within the family (Undheim & Sund, 2008). This is then compounded by higher parental distress related to the perception of having a relationship with a 'difficult child' (Bonifacci et al., 2014).

Teachers' expectations can have lasting consequences, especially if teachers have negative attitudes towards students with learning difficulties (Campbell et al., 2003) and this may happen because of lack of knowledge of dyslexia. Teachers with negative attitudes expect students to keep pace with their peers in class and learners who cannot do so are considered failures (Glazzard, 2012). Teachers with negative perceptions or unreasonable expectations will have an adverse impact on their students, as they can only see their students' shortcomings, rather than their own shortfalls in instructional practice (Glazzard, 2012). As a result, pupils with dyslexia may have a poor relationship with their teachers, which could have a negative effect on their motivation and self-esteem (Glazzard, 2012).

Hornstra, L, Joep Bakker, Linda van den Bergh, Marinus Voeten (2010) examined the attitudes and expectations of mainstream teachers to the academic achievement of pupils

with dyslexia in the Netherlands. They found a significant correlation between negative attitudes to such pupils and generally poor teacher-student interaction. This was in contrast with teachers who were more receptive to innovative practices and who consequently kept an open mind about learning disabilities. The study found that knowledge of the disorder, accompanying behaviour and underlying values amongst teachers had an impact on their teaching practice, in turn affecting their relationship with their students. Given that most students with dyslexia may not be able to learn how to read and/or spell in the usual way, teachers have a responsibility to identify the factors which possibly contribute to their poor performance (Hornstra et al., 2010). Such risk factors may include low or negative expectations amongst teachers; influenced by teachers' negative beliefs about dyslexia and often leading to poor student-teacher interaction and relationships.

### **STRATEGIES TO IMPROVE ON THE AWARENESS AND KNOWLEDGE OF DYSLEXIA**

Parents' awareness about dyslexia and its impact on their children is imperative in ensuring sustainable development of the children. Thus, parents need to be made aware of their children conditions as early as possible so that appropriate intervention could be taken, for the wellbeing of both parties (Athira Amira Abd Rauf , Maizatul Akmar Ismail , Vimala Balakrishnan and Khalid Haruna, 2018). According to Alias & Dahlan (2015), parents that are aware of dyslexia experience two significant challenges in raising a dyslexic child, namely; „Difficult yet enduring“ and „Self-perseverance“. Each of the challenges consists of sub-challenges that parents usually faced in dealing with dyslexic children.

The most important thing to parents with dyslexic children is to give their child sufficient time while exercising patience in teaching them because they require more time and assistance. There is also need to send them for extra classes provided by special educators to learn more efficiently (Yazid & Yin, 2015). Furthermore, the parents need to keep supporting and encouraging their children rather than scolding or pushing them, considering their nature in giving up, getting frustrated and becoming bored more easily. On the other hand, the process of teaching this type of children should include visual and storytelling aids to help in improving their studying abilities, as well as improving their attention spans (Yazid & Yin, 2015)

However, we now know that reading problems can be identified in early childhood and, with the appropriate support, there is a good chance struggling readers will go on to become good readers. A groundbreaking study by researchers at Yale University School of Medicine revealed that when children are taught solid decoding skills (connecting sounds with letters) early on, and get prompt, intensive help in learning spelling, vocabulary and comprehension skills, they can indeed master necessary reading skills (Shaywitz, 2021). In fact, researchers discovered through comparing brain scans of struggling readers with those who received intense help that the intervention helped "turn on" and stimulate the brain's reading systems.. There are several ways of improving the awareness and knowledge of dyslexia which may include the Mass media, Radio program, Television, Social media etc. The knowledge of dyslexia can be taught to a heterogeneous group of people through mass media such as radio, television, billboard, handbill etc..Radio program: A program can be scheduled for a certain period of time to

give the people insight on what dyslexia is. Looking at the present situation of Nigeria and the poverty rate some people may not be able to afford a television but they have radio. So one can talk about dyslexia signs and symptoms, causes and effect so that the people will be aware of the disabilities and make the necessary steps in tackling the disabilities.

### **THEORETICAL FRAMEWORK**

This study is anchored on the Magnocellular theory which is a unifying theory that attempts to integrate all the findings mentioned above. A generalization of the visual theory, the magnocellular theory (Stein and Walsh, 1997) postulates systems in the brain that the magnocellular dysfunction is not restricted to the visual pathways but is generalized to all modalities (visual and auditory as well as tactile).

The magnocellular theory and cerebellar theory of dyslexia propose that visual and motor skills may also be important factors that contribute to dyslexia. Furthermore, as the cerebellum receives massive input from various magnocellular, it is also predicted to be affected by the general magnocellular defect (Stein et al., 2001). Through a single biological cause, this theory therefore manages to account for all known manifestations of dyslexia: visual, auditory, tactile, and motor and, consequently, phonological (for an attentional variant see Hari and Renvall, 2001). Beyond the evidence pertaining to each of the theories described previously, evidence specifically relevant to the magnocellular theory includes magnocellular abnormalities in the medial as well as the lateral geniculate nucleus of dyslexics' brains (Livingstone et al., 1991; al., 2002).

**Dyslexics' binocular instability and visual perceptual instability, therefore, can cause the letters they are trying to read to appear to move around and cross over each other (Stein · 2001). Hence, blanking one eye (monocular occlusion) can improve reading. Thus, good magnocellular function is essential for high motion sensitivity and stable binocular fixation, hence proper development of orthographic skills. Many dyslexics also have auditory/phonological problems. Distinguishing letter sounds depends on picking up the changes in sound frequency and amplitude that characterize them. Thus, high frequency (FM) and amplitude modulation (AM) sensitivity helps the development of good phonological skill, and low sensitivity impedes the acquisition of these skills. Thus dyslexics' sensitivity to FM and AM is significantly lower than that of good readers and this explains their problems with phonology (Stein · 2001). The cerebellum is the head ganglion of magnocellular systems; it contributes to binocular fixation and to inner speech for sounding out words, and it is clearly defective in dyslexics. Thus, there is evidence that most reading problems have a fundamental sensorimotor cause.**

A study was conducted by Padhy, Goel, Das, Sarkar, Sharma and Panigrahi (2016) to investigate teacher perceptions about learning disabilities in the public schools of slum areas of Chandigarh, India. Before this study, no one has investigated the awareness and knowledge of dyslexia among parents and primary school teachers in Ilorin metropolis, Kwara state, Nigeria. As a result, this study aimed to investigate (1) whether the level of education of parents has any impact on the awareness of dyslexia (2) whether parents/teachers who reside in urban areas are more knowledgeable about dyslexia and (3) whether the parents who are working are more likely to be aware of dyslexia than those who are not working. This study hopes to fill this knowledge gap

## **Materials and methods**

### **Design, area, and sampling**

The method employed in this study was the survey method which involved the use of questionnaire. The survey was an attempt to sample the views, opinions of people selected to represent the entire population of the study. The essence of this study was to examine the awareness and knowledge of dyslexia in Ilorin South metropolis. The study covers only the Ilorin South local government area of Kwara state and to ascertain how knowledgeable are the people on the issues of dyslexia or given their opinion on what they think of dyslexia.

The population of the study covered the entire Ilorin South metropolis, Kwara state. According to the last 2006 census the total population of Kwara state was 2,365,353. The total number of males in Kwara state as that year was 1,193,783 and the total number of females was 1,171,570. The population of Ilorin south local government area during the 2006 population census was 209,251, comprising 103,606 (males) and 105,645 (females). There are 11 wards in Ilorin south local government area which include the following; Akanbi 1, Akanbi-V, Okaka 1, Akanbi 11, Balogun-Fulani 11, Okaka 11, Akanbi 111, Balogun-Fulani-111, Oke-Ogun, Akanbi-1V, and Balogun-Fulani-1. The researchers used purposive sampling technique to select ten political wards among the ten political wards in Ilorin south L.G.A.

In the second stage, the researchers selected two hundred respondents (100 teachers and 100 parents) as a sample size to represent the population of Ilorin South metropolis through simple random sampling technique by hand drawing method. The number of primary schools studied was three and the total number of teachers in these schools was 123. One hundred teachers (75 of them drawn from public schools and 25 from private schools) were sampled from these schools using hand drawing method. The teacher's school register was collected from the schools in various wards and their names were written down on a piece of paper and dropped inside a container. The researcher shook the container and picked the names until the required 100 respondents (teachers) were selected for the study. This method was also applied in the selection of 100 parents (50 from semi-urban areas and 50 from the city) of Ilorin south local government area, Kwara state.

### **INSTRUMENTATION**

The research instrument used in this study was questionnaire. It was adopted in order to minimize the problem associated with data collection to ensure that result from the study was valid and reliable as expected. In the questionnaire, structured questions were designed to sample respondents knowledge about the questions on the awareness and knowledge of dyslexia in which researcher can use to generate the findings on the entire population studied.

### **ADMINISTRATION OF THE INSTRUMENTS**

This refers to the tools used in gathering information needed from the research work from individual unit of analysis. Adequate information was solicited through appropriate scale selected from the population and since there was a limited time for this study. It was not appropriate to use mail method of the questionnaire administration which requires the posting of such questionnaire to the respondents. This is the face to face questionnaire which its administration requires that pre-determinant subject by the

given questionnaire in the present of the researcher was based. This method was easy and deemed appropriate because it was easy to distribute and collect the questionnaire from the respondents as soon as they finished without waiting for it to arrive from mail.

**METHOD OF DATA ANALYSIS**

Simple percentages, descriptive and inferential statistics were used in analyzing our data. Simple percentages enhanced the understanding of the traits of the categories, general distributions, and educational level among others. The central tendencies were also used in describing the demographic information of the respondents, mean decision for awareness of dyslexia, chi square analysis to analyze research hypothesis and spearman rank to analyze the knowledge of dyslexia. The data was run using statistical package for social science (SPSS) version 20.

**RESULTS**

**Table 4; SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS**

S/N	SOCIO-DEMOGRAPHIC FACTORS	FREQUENCY	PERCENTAGE (%)
1.	<b>SEX:</b>		
	Male	88	44.0
	Female	112	56.0
	Total	200	100
2.	<b>AGE</b>		
	20-29	39	19.5
	30-39	109	54.5
	40 and Above	52	26.0
	Total	200	100
3	<b>RELIGION</b>		
	Christianity	47	23.5
	Islam	152	76.0
	Others	1	0.5
	Total	200	100
4	<b>EDUCATIONAL QUALIFICATION</b>		
	SSCE	22	11.0
	NCE/ ND	89	44.5
	DEGREE/HND	89	44.5
	Total	200	100
5	<b>OCCUPATION</b>		
	Civil servant	42	21.0

	Businessman/woman	50	25.0
	Teacher	102	51.0
	Farmer	2	1.0
	Artisan	4	2.0
	Total	200	100
6	<b>ENVIRONMENT</b>		
	Urban	140	70.0
	Rural	60	30.0
	TOTAL	200	100

Source; Fieldwork, 2020

The above table (4.1) represents the socio-demographic factors of the respondents in which 200 respondents participated in the study and the respondents were 44.0% males and 56.0% females. The age range between 20-29 years old was 19.5%, 30-39 years old were 54.5% and 40 years and above were 26.0%. 76.0% of the respondents were practicing Islam, 23.5% practiced Christianity and 0.5% respondents neither practiced Islam, Christianity nor traditional religion. Furthermore, educational attainment data of the respondents recorded that 11.0% were SSCE holders, 44.5% were NCE/ND holders and 44.5% were Degree/HND holders. In addition, 21.0% were civil servants, 25.0% were businessmen/women 51.0% were teachers, and 1.0% was farmer while 2.0% were artisans. 70.0% respondents reside in urban and 30.0% lives in rural environment.

**HYPOTHESIS TESTING**

**Hypothesis one;** Parents with higher level of education are more likely to be aware of dyslexia than parents with lower education

**TABEL 2;** Chi-Square Analysis of Relationship between Parents' Education and Awareness of Dyslexia

Educational Qualification	Do you think that parents with higher level of education are more likely to be aware of dyslexia than parents with lower education		TOTAL
	YES	NO	
WAEC/NECO	17	14	31
ND/NCE	65	19	84
BSC/HND	70	15	85
TOTAL	152	48	200

**X<sup>2</sup> calculated =9.58      X<sup>2</sup> tabulated = 5.99      N = 200 DF = 2      Sig. =0.05**

The table 2 which represents the testing of hypothesis one showed chi-square analysis of educational qualification and awareness of dyslexia the x<sup>2</sup> calculated = 9.58 value is greater than the x<sup>2</sup> tabulated = 5.99 value, However, we accept the hypothesis one which states that parents with higher level of education are more likely to be aware of dyslexia than parents with lower education. Therefore, education is a good determinant factor that influences awareness of dyslexia among parents and teachers.

**Hypothesis two;** Parent/teachers who reside in urban area are more likely to be aware of dyslexia than parent/teachers who reside in rural areas.

**TABLE 3;** Chi-Square Analysis of Relationship between Environment and Awareness of Dyslexia

ENIRONMENT	Do you think parent/teachers who reside in urban area are more likely to be aware of dyslexia than parent/teachers who reside in rural areas		TOTAL
	YES	NO	
URBAN	89	51	140
RURAL	20	40	60
TOTAL	110	90	200

**$X^2$  calculated =15.5       $X^2$  tabulated = 3.84      N = 200 DF = 1      Sig. =0.05**

The testing of hypothesis two showed that when chi-square analysis of environment and awareness of dyslexia was tested, the  $x^2$  calculated value of 15.5 was greater than the  $x^2$  tabulated value of 3.84, therefore, we accepted hypothesis two which states that Parent/teachers who reside in urban area are more likely to be aware of dyslexia than parent/teachers who reside in rural areas. Therefore, place of residence or Environment is a determinant factor that influences awareness of dyslexia among parents and teachers.

**Hypothesis three;** Parents who are working are more likely to be aware of dyslexia than non-working parents

**Table 4;** Chi-Square Analysis of Relationship between Occupation and Awareness of Dyslexia

OCCUPATION	Do you think that parent who are working are more likely to be aware of dyslexia than non-working parents		TOTAL
	YES	NO	
Civil servant	23	10	33
Businessman/woman	30	13	43
Teacher	67	35	102
Farmers	2	7	9
Artisans	4	9	13
TOTAL	126	74	200

**$X^2$  calculated =14.0       $X^2$  tabulated = 9.4      N = 200 DF = 4      Sig. =0.05**

Table 4 which represented the testing of hypothesis three showed that when chi-square analysis of occupation and awareness of dyslexia was tested, the  $x^2$  calculated value of 14.0 was greater than the  $x^2$  tabulated value of 9.4. This means that occupation is an influencing factor that determines awareness of dyslexia among parents and teachers.

**Table 5:** Percentile and Mean Analysis showing the awareness of dyslexia among parents and teachers of primary school pupils

S/N	ITEMS	Yes	Percentage (%)	No (%)	Percentage (%)
1	Have you heard about dyslexia	105	(52.5%)	95	(47.5%)
2	Do you know what dyslexia is	96	(48.0%)	104	(52.0%)
3	Do dyslexic children write slowly	145	(72.5%)	55	(27.5%)
4	Are there ways dyslexia can be treated	168	(84.0)	32	(16.0)
5	Is there a way to increase the awareness of dyslexia	93	(46.5)	107	(53.5)
6	Are you knowledgeable about dyslexia	85	(43)	115	(57)
	Total	115	(57)	85	(43)
	Mean	<b>0.575</b>		<b>0.425</b>	

Table 5 shows the percentage of positive responses (YES) by Respondents to the items is (57%) with high mean of (0.575) which is greater than the percentage of negative responses (NO) (43%). This implies that teachers and parents were aware of dyslexia.

**Table 6;** Percentile and Mean Analysis showing the knowledge of dyslexia among parents and teachers of primary school pupils

S/ N	ITEMS	SA (%)	A (%)	Positive Response	D (%)	SD (%)	Negative Response
1	Dyslexia is an incurable illness	55 (27.5%)	22 (11.0%)	77 <b>(38.5%)</b>	64 (32.0%)	59 (29.5%)	123 <b>(61.5%)</b>
2	Dyslexia affect children's academic performance	51 (25.5%)	112 (56.0%)	163 <b>(81.5%)</b>	20 (10.0%)	17 (8.5%)	37 <b>(18.5%)</b>
3	Dyslexia can be inherited through gene	64 (32.0%)	89 (44.5%)	169 <b>(79.0%)</b>	26 (13.0%)	19 (9.5%)	46 <b>(21.0%)</b>
4	Dyslexia is a result of impairment in the brain cerebellum	72 (36.0%)	92 (46.0%)	164 <b>(82.0%)</b>	26 (13.0%)	10 (5.0%)	36 <b>(18.0%)</b>
5	Dyslexia causes low self-esteem of children	88 (44.0%)	89 (44.5%)	177 <b>(88.5%)</b>	13 (6.5%)	10 (5.0%)	23 <b>(11.5%)</b>
6	Dyslexic children have reading problems.	76 (38.0%)	98 (49.0%)	174 <b>(87.0%)</b>	11 (5.5%)	15 (7.5%)	26 <b>(13.0%)</b>
7	Social workers are one of the professionals that can reduce effect of dyslexia among children	61 (30.5%)	110 (55.0%)	171 <b>(85.5%)</b>	15 (7.5%)	14 (7.0%)	29 <b>(14.5%)</b>
8	Social workers play vital role in helping children with dyslexia	61 (30.5%)	108 (54.0%)	169 <b>(84.5%)</b>	16 (8.0%)	15 (7.5%)	31 <b>(15.5%)</b>
9	Dyslexic children have difficulty in sounding words	57 (28.5%)	93 (46.5%)	150 <b>(75.0%)</b>	34 (17.0%)	16 (8.0%)	50 <b>(25.0%)</b>
	Total			156 <b>(78.0%)</b>			44 <b>(22.0%)</b>
	MEAN			0.78			0.22

Table 6 shows the percentage of positive responses by the respondents on the items above was (78.0%) with high mean of (0.78) which is greater than the percentage of negative responses (22.0%). Therefore, this implies that teachers and parents are knowledgeable about the dyslexia in the study area.

### **STUDY FINDINGS**

The study focused on the awareness and knowledge of dyslexia among parents and primary school teachers in Ilorin south, Kwara state, Nigeria.. In the process of this research, attempts have been made to examine the opinion of the parents and teachers on awareness and knowledge of dyslexia Ilorin south metropolis. The respondents used in this study were 44.0% males and 56.0% females. The majority of the respondents (54.5%) were between the range of 30-39 years old while the fewer number of respondents (19.5%) were between the range of 20-29%.. Majority of the respondents (76%) were practicing Islam, 23.5% practiced Christianity and 0.5% respondents neither practiced Islam, Christianity nor traditional religion. Furthermore, educational attainment data of the respondents showed that NCE/ND holders and Degree/HND holders had the same percentage (45.5%). In addition, most of the respondents (51.0%) were teachers, and majority of respondents (70.0%) were residing in urban areas and 30.0% were living in rural environments.

The study findings showed that parents with higher level of education were more likely to be aware of dyslexia than parents with lower education. Therefore, education is a good determinant that influences awareness of dyslexia among parents and teachers in Ilorin Metropolis of Kwara state. The Principle of Inclusive Education recognizes that all children can learn regardless of their disabilities, age, gender, illnesses, race etc. It therefore tasks all nations to make quality education accessible to all children, including those with disabilities and disadvantaged children. Education has long been considered one of the primary mechanisms by which disadvantaged populations can successfully compete economically in society. Its status as an arbiter of social justice is difficult to surpass (Richardson, G. (2021). Available evidence shows that persons with disabilities are less likely to attend school, less likely to complete primary or secondary education, and less likely to be literate. Education is fundamental for social inclusion and participation in the labour market and plays a critical role in the acquisition of skills and knowledge.

The study also stated that people with disabilities who reside in urban areas are more likely to be aware of dyslexia than people who reside in rural areas. Persons with disabilities in rural areas tend to be at a disadvantage. Urbanization is believed to better respond to the needs of persons with disabilities as job opportunities and supporting facilities are more available in urban areas (Disability and Development Report, 2019). However, the percentage of employed persons with disabilities is similar in urban and rural areas and considerably lower than the percentage of employed persons without disabilities in both urban and rural areas (36 per cent and 34 per cent), suggesting that the locale of residence may not play a major role in the employment of persons with disabilities but that possible factors like discrimination and lack of accessibility at the workplace are major obstacles in both urban and rural areas It was therefore, concluded that environment is a good determinant factor that influences awareness of dyslexia among parents and teachers.

This study also showed that parents who were working are more likely to be aware of dyslexia than the non-working parents, however, the findings showed that occupation is a good determinant factor that influences awareness of dyslexia among parents and teachers in Ilorin metropolis, Kwara state, Nigeria. A research conducted on Kuwaiti parents showed that parents have awareness about dyslexia (Aladwani, et al 2012) which was invariably connected with their working experiences. With respect to participation, 'having a job' or 'being employed' and 'securing the current position' seemed to be very important factors in influencing awareness of dyslexia among parents and teachers in Nigeria. That observation is consistent with results from the IALS studies (International Adult Literacy Survey (Vogel SA, Holt JK, 2003).

## **5.2 CONCLUSION**

This research attempted to investigate on the awareness and knowledge of dyslexia among parents and primary school teachers in Ilorin south, kwara state.. Based on the findings in this study, it has been found that the parents with higher level of education are more likely to be aware of dyslexia than those with lower level of education, parents residing in urban centers or cities are more knowledgeable or aware of dyslexia than those in the rural areas .The parents who were working are more likely to be aware of dyslexia than the non-working parents.

## **5.3 RECOMMENDATIONS**

Dyslexia has been in existence and will continue to be in the near future. However, the rate at which it occurs can be controlled if not eradicated totally. The following are some of my recommendations in controlling the rate at which dyslexia occur;

1. Parents and teachers should be more attentive to their children/pupils. Paying attention to their behaviour will help them to notice any changes which will enable them to act faster.
2. Parents should spend more time with their dyslexic's children in other for them to improve in certain areas.
3. Teachers should try their best in helping dyslexic's children by monitoring them and more attention because of their difficulty in understanding.
4. School social worker and counselors should provide necessary assistance for both the parents and the dyslexic's children.
5. A general meeting should be conducted where parents will be counseled so that they can understand the implications and consequences of having dyslexia which will enable them to look after their dyslexic children.
6. The government can make polices that will cater for the needs of dyslexic's children.

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