

### Recommendations

Based on the above conclusion, the study recommends that private nursery/primary should play their social welfare service role religiously, because it will benefit both their neighborhood community and at the same time it will boost their profit and give good reputations to their school in the community. The proprietor/proprietress should also improve themselves from the way they relate with their host community since the business of nursery/primary cannot survive in isolation and for them to achieve their goals without stress. They should judiciously utilize the advantage of their relationship with their neighborhood to win the souls of many parents and also enlighten them about the purpose of their existence. The elites in the community of schools should come up with different ideals of solving some minor problems in the community such as drainage that has blocked, new way of disposing refuse, this will always bring the school closer to the community members and they will be most concerned with anything that will affect the school.

### References

- Ala O. F. & Ojedokun O. E (2019), Assessment of faith-based organizations Motive and Commitment to early childhood education in Osun State, Journal of Academic Social Sciences Educational Journal, vol.3, No.,1<sup>st</sup> August 2019
- Bala, B. (2013). Assessment of the role of school community relationship in the development of secondary education in Zamfara state. *Sokoto Educational Review Journal (SERJ)*, 14(1): 35-45
- Barnard, C. (2001). *Popular Sovereignty and Nationalism* (pp. 40-61). Cambridge: Harvard University Press.
- Eweniyi, I. T. (2012). Formal kindergarten experience as a predictor of academic achievement of primary five pupils in English Language. *International Journal of Academic Research in Business and Social Sciences* .2, (10) 383-390

- Fatoki, O. I. (2017). Socio-economic impact of tertiary institutions in Nigeria on Host Community. *American Journal of Management Science and Engineering*. Vol. 2, No. 6, 2017, pp. 176-182. doi: 10.11648/j.ajmse.20170206.13; Published: 2017
- Federal Republic of Nigeria (2013). *National Policy on Education Six Edition*: Abuja: NERDC
- Jummai, M. R. (2012). Language education in primary schools in Nigeria: contemporary issues and new direction. *Literacy Information and Computer Education Journal (LICEJ)*, 3, (3) 662-666
- Linda, M. (2018). Assessment practices and aspects of curriculum in early childhood education. Results of the 2007 NZCER national survey for ECE services, New Zealand Council for Educational Research New Zealand Council for Educational Research, Wellington, New Zealand © NZCER, 2008 ISBN 978-1-877293-63-4
- Putnam, R.D. (2000). *Bowling Alone: The collapse and revival of American community*. New York: Simon & Schuster.
- Oniwon, H. O. E (2015). An Examination of the role of nursery education on primary school pupils in Nigeria. *Journal of Education and Practice* www.iiste.org ISSN 2222-1735 Vol.6, No.21, Page 11 performance in entrance examination in Ibadan, progress for Children: A Report Card,"
- Wimmer, R. D. & Dominick, J. R. (2013). *Mass media research: An introduction*. (9th ed) Belmont: Wadsworth www.childinfo.org/water.html accessed on 7th March,
- Wilson, J. (2014). Community Relations: An Impetus for Educational Growth and Development in Nigeria Research on Humanities and Social Science ISSN (Paper) 2224-5766 ISSN (Online) 2225-0484 (Online) Vol.4, No.15,

### ASSESSMENT OF THE KNOWLEDGE AND LEVEL OF AWARENESS OF TEACHERS HANDLING DYSLEXIA IN LOWER PRIMARY SCHOOLS IN OSUN STATE, NIGERIA

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### Abstract

The study assessed the knowledge and level of awareness of teachers' handling dyslexia in lower primary school pupils in Osun State, Nigeria. It also determined the status of dyslexic children based on school type in the study area and investigated the influence of variables such as additional qualification and years of experience of teachers on awareness of symptoms of dyslexia in lower primary school in Osun State. The population for the study comprised all lower primary schools I-III and 3 teachers in Osun State. The study adopted a descriptive survey research design with the population for the study comprising all lower primary one, two and three teachers in Osun State. Multi stage sampling procedure was used to select the sample for the study. Three local government Areas (LGAS) were selected from each of the three senatorial districts in the state using simple random sampling technique. 10 primary schools (5 private schools and 5 public schools) were selected from each LGAS using simple random sampling technique, making a total of 30 schools. Three teachers were selected from primary one, two and three in each school using purposive sampling technique because primary one, two and three are the lower basic classes. This gave a total of 270 teachers that was used for the study. One-self designed research instrument was used to collect data for the study which was titled 'Level of Awareness of Teachers Handling Dyslexic Children Questionnaire' (LATHDCQ). The instrument was validated and tested for reliability and found reliable with a reliability coefficient of 0.75. Data collected were tested frequency percentages and regression analysis. The results of the study showed that the level of teachers' awareness on dyslexia symptoms in lower primary schools was moderate at 51.5% in Osun State. Further results showed that the status of dyslexic children in private schools is low at 53.6% while the status of dyslexic children in public schools is high at 51.6% in lower primary schools in Osun State. The teachers' knowledge of dyslexia symptoms showed a 52.2 % average in the study area with no significant difference between the influence of educational qualifications and years of teaching experience on awareness of symptoms of dyslexia. The study concluded that the teachers' knowledge and awareness relating to dyslexia symptoms in lower

primary school pupils were average in Osun State. The study therefore recommends a compulsory and comprehensive training program for all teachers especially at the entry level basically on special needs children. This would enable teachers to be in a better composition to identify, relate and manage well special needs children in school.

**Keywords:** Dyslexia, Children, Teachers, School

### Introduction

Early childhood education is a starting point for a child's development and the key foundation of the Nigerian educational system. Early childhood education is defined as the training given to children aged three through five in preparing for their entry into primary school (National Policy on Education (NPE, 2012). It includes daycare, popularly known in some part of the country as, crèche, nursery and the kindergarten. Early childhood education can further be allotted to children that falls under the age bracket range from birth to the age of eight years. Early childhood is a stage of rapid development and provides a pedestal on what the future is built on. Hence, from childhood, kindergarten and the primary level, children pass through a lot of development and knowledge acquisition. The knowledge imparted to the stated age groups includes: social skills, emotional skills, motor skills, cultural skills and cognitive. Early childhood provides crucial stimulation and guidance during the time in which a child's brain is developing faster than in any other period of life. Rose, (2009) stated that the quality of an education system cannot exceed the quality of its teachers and this truth applies to the assessment and teaching of learners of any age who are dyslexic. In other words, for learners to be successful, especially those who have a specific learning disorder such as dyscalculia, dysgraphia and dyslexia, teachers who are knowledgeable about what they are doing and why they are doing it are paramount (Rose, 2009). A specific learning disorder can be described as a disability referring to difficulties in any or combination of listening, speaking, reading and writing.

A learning disability is a disorder referring to difficulties in listening, speaking, reading, writing and



For the sampling population (n=270), the level of teachers' awareness of dyslexia symptoms among lower primary schools showed a 51.5% awareness in

Osun State, which was more than 50 % of the sampled population

**Research Question 2: What is the status of dyslexic children based on school type in the study area?**

**Table 2 Descriptive Analysis of the Status of Dyslexic Children based on School type in the Study Area**

S/N	Status		School Type
	Private	Public	
	F (%)	F (%)	
1.	Low	116(56.3)	12(18.8)
2.	Average	61(29.6)	19(29.7)
3.	High	29(14.1)	33(51.6)
<b>Total</b>		<b>206(100.0)</b>	<b>64(100.0)</b>
<b>N = 270</b>			

The descriptive analysis of the status of dyslexic children, based on school type among lower primary schools in Osun State (Table 2) showed that the status of dyslexic children in private schools was low at 56.3% compared to the 18.8 % low status obtained in public schools. Additionally, public schools have a

higher status of dyslexic children in public schools is high at 51.6% and low at 18.8 % in lower primary schools in Osun State. The results further showed there was higher level of status in public lower primary schools when compared to private school type.

**Research Question 3: What is the Level of Teachers' Knowledge of Dyslexia Symptoms in Lower Primary School Pupils?**

**Table 3: Descriptive Analysis of the Teachers' Knowledge of Dyslexia Symptoms among Lower Primary School Pupils in the Study Area**

S/N	Knowledge	Frequency (F)	Percentage (%)
1.	Poor	69	25.6
2.	Average	141	52.2
3.	Good	60	22.2
<b>Total</b>		<b>270</b>	<b>100.0</b>
<b>N = 270</b>			

From table 3, the results showed that the teachers' knowledge of dyslexia symptoms in lower primary school pupils is average at 52.2% in the study area. However, the knowledge of teachers' as regards dyslexia was still poor based on the 25.6 % observed in the studied population higher than the 22 % (good knowledge).

teaching experience of teachers on awareness of symptoms of dyslexia in lower primary school pupils in the study area.

In order to test this hypothesis, the data collected on teachers' qualifications and years of teaching experience (independent variables) as well level of teachers' awareness of symptoms of Dyslexia in lower primary school pupils (dependent variable) were subjected to regression analysis and the results are presented in table 4.

**Testing of Hypothesis**

Null Hypothesis: there is no significant influence of variables like educational qualifications and years of

**Table 4: Regression Analysis of Educational Qualifications and Years of Teaching Experience of Teachers on Awareness of Symptoms of Dyslexia in Lower Primary School Pupils in the Study Area**

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
R = 0.050a					
R2 = 0.003					
Adj. R2 = -0.005					
F = 0.335					
(Constant)	20.542	1.033		19.87	8.000
EQ	0.071	0.448	0.010	0.159	.874
YTE	-0.264	0.327	-0.050	-0.809	.419

- a. Dependent Variable: Teachers' awareness of symptoms of dyslexia
- b. Predictors: (Constant), Educational Qualifications (EQ), Years of Teaching Experience (YTE)

There was no significant difference in the relationship between the educational qualifications and years of teaching experience on the teacher's awareness of the symptoms in lower primary school in Osun state. This result showed a potential causative effect arising from non-awareness or knowledge of dyslexia, then the teachers' educational qualifications or years of experience.

**Discussion of Findings**

The findings of the study showed that the level of teachers' awareness on dyslexia symptoms in lower primary schools was moderate in Osun State. The results support the previous study of Karaman, Turkbay, Congologlu, and Gokce (2016), where they found that the level of parents' and teachers' awareness of dyslexia symptoms in schools is average. Furthermore, they suggested the need to create more awareness amongst the parents and teachers for early and appropriate intervention for the wellbeing of the children and the society as a whole. Our study result showed the need to increase and create a stronger association between the parents and teachers where issues of this could be discussed for further awareness, seminars, programmes and involvement. Generally, public primary schools are characterized by school fees and other administrative running costs that are considered low. This ensured a higher percentage of children from the less privileged class in the society are enrolled in public schools. This noticeable, but unbalanced trend correlates to the high status of dyslexic children observed in public schools. The issue is further collaborated by the low literacy level of parents and under-educational trainings of teachers at the public primary schools. The government will need to place more emphasis on the funding of public schools where trainings of teachers as regards the awareness of dyslexic children would be prioritized. Additionally, the involvement of parents in the acceptance and perception to dyslexic children cannot be overemphasized. (Maizatul, 2018) reported the need to raise the level of awareness of parents to the early detection and intervention to their children's conditions. The parent serves as the first and important intervention for dyslexic children and which can promote the relationship of the teachers to the children and in essence the wellbeing of each child.

In addition, the study revealed that the status of dyslexic children in private schools is low while the status of dyslexic children in public schools is high in lower primary schools in Osun State. This indicated that the teachers' knowledge of dyslexia symptoms in lower primary school pupils is average in the study area. The results in a way aligns with the findings of Lefly, Pennington and Enoch (2001) that there was a significant relationship between knowledge score and special education training as teachers with a Bachelor's Degree in Special Education were 1.75 times more likely to have a higher knowledge score on dyslexia. Hamid (2012) added that there might be a need for an awareness campaign for dyslexic children in a different part of the world as a way of easing the tension of children suffering from this disability. The state government can liaise with interested corporate bodies in providing the necessary fund for awareness and trainings of teachers on the status of dyslexia. The state basic education board in charge of primary schools in collaboration with the state ministry of education can help to retrain staff and provide special child educators in each that school that would address the noticeable shortfall in the teachers' status. Additionally, the state primary health development board tasked with health development at the local level can participate fully through enlightenments, jingles, trainings of primary healthcare personnel, periodic visitations to schools, and collaborations with special educational tutors via the state basic education board to discuss on the knowledge of dyslexia.

Finally, there was no significant influence of variables such as educational qualifications and years of teaching experience of teachers on awareness of symptoms of dyslexia in lower primary school pupils in the study area. The result negates the findings of Pennington (2001) when it was submitted that socio-demographic characteristics such as family background as well as teachers' years of teaching experience and qualifications predict parents and teachers' awareness of symptoms of dyslexia in schools.

**Conclusion**

Based on the findings of this study, dyslexia indicators in terms of knowledge and awareness amongst teachers in lower primary schools in Osun state needs to be improved upon if the desired impacts on educational acceptance and the mental health of children are to be taken into consideration. The educational qualifications and years of teaching experience of teachers was not a factor on the awareness of symptoms of dyslexia in lower primary

school pupils in the study area. However, further studies would be needed as regards this in order to provide an intervention method for the dyslexic children in the lower primary schools.

### Recommendations

There must be compulsory training at the entry level for all teachers especially on special education. This exercise should be an ongoing process with regular trainings or workshops for teachers at the primary level and stakeholders in the educational sector. Additionally, the government should provide a platform for oral exam with children with special needs especially the dyslexic ones so as to give them a sense of belonging and for effective educational trainings for them.

### References

- Alexander-Passe, N. (2015). The dyslexia experience: Difference, disclosure, labelling, discrimination and stigma. *Asia Pacific Journal of Developmental Differences*, 2(2), 202233.
- Ade Ojo (2012). Practitioners' perceptions of dyslexia and approaches towards teaching learners with dyslexia in adult literacy classes. *International Journal of Lifelong Education*, 31(5), 623-641. <https://doi.org/info:doi/>
- Avramidis, E., & Norwich, B. (2002). Teachers' attitudes towards integration: A review of the literature. *European Journal of Special Needs Education*, 17(2), 129-147. <https://doi.org/10.1080/08856250210129056>
- Federal Republic of Nigeria (2012). National Policy on Education, (4th Ed.) Lagos: NERDC
- Hamid, J. (2012). A Web-Based Screening System For Dyslexic Pupils: Do Teachers Need It? *Manager's Journal on Educational Psychology*, 5(4), 15.
- Hawn, C. (2009). Take two aspirin and tweet me in the morning: *How Twitter, Facebook, and other social media are reshaping health care*. 28(2), 361-368.
- Hazawawi, N. A. M., & Hisham, S. (2014b). Online dyslexia screening test for Malaysian young adults in Bahasa Melayu. Paper presented at the Information and Communication Technology for The Muslim World (ICT4M), 2014 The 5th International Conference on, Kuching, Malaysia.
- Hazawawi, N. A. M., & Hisham, S. (2014a). Online dyslexia screening test for Malaysian young

adults in Bahasa Melayu. Paper presented at the Information and Communication Technology for The Muslim World (ICT4M), 2014 The 5th International Conference.

- Hazawawi, N. A. M., & Hisham, S. (2014b). Online dyslexia screening test for Malaysian young adults in Bahasa Melayu. Paper presented at the Information and Communication Technology for The Muslim World (ICT4M), 2014. The 5th International Conference in, Kuching, Malaysia.
- Hinshelwood, J. (1917). Congenital word blindness. London: H. K. Lewis.
- Orton, S. T. (1937). *Reading, writing and speech problems in children*. New York: Norton.
- International dyslexia association. Dyslexia basics. Retrieved February 21, 2018 from [http://www.interdys.org/ewebeditpro5/upload/Dyslexia\\_Basics\\_FS\\_final\\_81407.pdf](http://www.interdys.org/ewebeditpro5/upload/Dyslexia_Basics_FS_final_81407.pdf)
- Good, T. L., & Brophy, J. E. (1997). *International Journal of Disability, Development and Education*, 50(1), 67-78
- Peterson, R. L., & Pennington, B. F. (2015). Developmental dyslexia. Annual review of clinical psychology, 11, 283-307.
- Richards, T., G.
- Peterson, R. L., & Pennington, B. F. (2015). Developmental dyslexia. Annual review of clinical psychology, 11, 283-307.
- Richards, T., G.
- Priestley, M. (2003). Disability: A life course approach. Cambridge: Polity Press.
- Rose, J. (2009). Identifying and teaching children and young people with dyslexia and literacy difficulties. Paper presented at From Inclusion to Belonging: *The Language of Learning Conference*, Cape Town, South Africa
- Sakhuja, S. (2004). Education for all and learning disabilities in India. Retrieved September 25, 2011 from [www.sspconline.org/opinion/EducationforAllandLearningDisabilitiesinIndia\\_SangeetaSakhuja\\_041004](http://www.sspconline.org/opinion/EducationforAllandLearningDisabilitiesinIndia_SangeetaSakhuja_041004).
- Slee, R. (2011). The Irregular School: exclusion, schooling and inclusive education. London: Routledge.
- Vellutino, F. R., Fletcher, J. M., Snowling, M. J., & Scanlon, D. M. (2004). Specific reading disability (dyslexia): What have we learned in the past four decades? *Journal of child psychology and psychiatry*, 45(1), 2-40.
- Wadlington, E. M., & Wadlington, P. L., (2005). What educators really believe about dyslexia. *Reading Improvement*, 42(1), 16

## PRE-SERVICE TEACHERS' PERFORMANCE AND ATTITUDE TOWARDS MATHEMATICS COMPUTER- BASED EXAMINATION; DIFFERENTIAL EFFECTS OF GENDER AND SCHOOL OF AFFILIATION IN OYO, OYO STATE

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### Abstract

The study investigated pre-service teachers' performance and attitude towards mathematics CBE; Differential effects of gender and school of affiliation. The study assessed the differential effects of gender on pre-service teachers' performance and attitude towards mathematics computer-based examination and evaluated pre-service teachers' performance and attitude towards mathematics computer-based examination based on field of affiliation. A mixed methods of research in concurrent triangulation and descriptive survey design was adopted for the research. All the 100 level pre-service teachers of Emmanuel Alayande College of Education, Oyo constituted the population for the study. Stratified random sampling technique was adopted to select 24 students for in-depth interview. Secondary data of students' performance scores in Mathematics CBE and primary data using Pre-service Teachers' attitude towards Mathematics CBE Interview (PTMCI, IRR=0.79) were collected for quantitative and qualitative analyses respectively. Data were analyzed using thematic analysis for the qualitative data, frequency counts, percentages and bar charts for descriptive data, t-test and ANOVA for hypotheses testing. Pre-service teachers had positive disposition towards Mathematics CBE. The male students from the school of science were more favorably disposed to CBE than the female counterparts in the non-science schools. There is significant difference in pre-service teachers' performance in Mathematics CBE based on gender in favour of the male ( $t=9.41$ ,  $df=1260$ ,  $p<.05$ ) and school of affiliation ( $F_{(5,1255)}=13.29$ ,  $p<.05$ ). Therefore, CBE is recommended for Basic General Mathematics for enhanced students' performance and attitude towards BGM.

**Keywords;** Pre-service teachers' performance; Pre-service teachers' attitude; Mathematics Computer Based Examination; Gender; School of affiliation

### Introduction

Empirical observations by the authors identified that pre-service teachers have phobia and dislike attitude towards Paper and Pencil Test (PPT) in Basic General

Mathematics (BGM). This has a negative impact on their performance in BGM. Efforts towards jerking up the pre-service teachers' attitude and performance in BGM have not yielded positive results. The lecturers are interchanged school by school, sometimes they co-lecture or team-teach the students, yet, the attitude and performance of the pre-service teachers in BGM have not significantly improved. The use of Computer Based Examination (CBE) was suggested as a way out of the hook as it aided learners' performance in many subjects and courses, improving the learners' cognitive, affective and psychomotor domains of learning (Olagunju, Bolaji & Adesina, 2013; Adebisi, 2019; Obanya, 2021; Okebukola, 2021).

Classification of test based on mode of presentation has the Paper-Pencil Test (PPT) and the computer-Based Test (CBT). The paper-pencil test consumes more time, materials and energy of the learners than the computer-based test that is more reflective, more instructive, more formative and more corrective in nature. The trending path of teaching and learning in the 21<sup>st</sup> century which is in tandem with CBT prescribed by the National Science Teaching Association (NSTA) in America that the Next Generation Science Standard (NGSS) is teaching and learning with technology and reflective thinking (NSTA, 2012; 2015; 2020). When teaching and learning is done technologically with the Instructional System Design (ISD) it is systematically sync with reflection in formative and summative types. The formative type of evaluation when done technologically has the capability to diagnose, identify and establish the learners' weaknesses and strength in instructional process, it equally has the aptitude of raising the intelligence and the educability of the learners in a course of instruction. Thus, CBT has latent capacity to raise learners performance in Basic General Mathematics, one of the courses pre-service teachers found aversive and negatively disposed to (Animasahun & Akinsola, 2019).

If computer-based test has inherent traits of raising students' performance in instructional process, does it