# CHALLENGES TO STUDENTS WITH VISUAL IMPAIRMENTS' PARTICIPATION IN TERTIARY INSTITUTION DURING THE PANDEMIC IN OYO STATE.



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This study was conducted to identify COVID-19 related challenges confronting students with visual impairment in tertiary institution in Oyo state. The study adopted the descriptive (survey) design. A sample size of fifty (50) students with visual impairment (27 males and 23 females) purposively selected from two inclusive tertiary institutions were used for the study. A self-developed instrument was used in collecting data for the study. The reliability of the instrument was established through test-retest method and reliability co-efficient of 0.73 was derived. Data collected was analysed using mean, standard deviation and T-test at 0.05 alpha level of significance. The study revealed that students with visual impairment in tertiary institution encounter a lot of COVID-19 related challenges. The findings of the study also revealed that there is no significant gender difference in the challenges encountered by students with visual impairment in tertiary institution during COVID-19. It was recommended that the government should put in place measures to remedy pre and post COVID-19 challenges confronting students with visual impairment in tertiary institution.

Keywords: Students with Visual Impairment, COVID-19, Challenges.

## Introduction

Education system is very important to every nation because it sustains both the social, political and economic development. The focus on education as an engine of security is based on the general belief that education creates improved citizens and helps to upgrade the general standard of living in a country. Education is the best tool for overall development for students with visual impairment. It guarantees all round security and independence for them. Education makes life worthwhile for students with visual impairment and makes them relevant in today's society. Mmadu (2013) stated that education is an inalienable right of every child and it is pertinent for students with visual impairment as well as other students with disabilities to be educated along with other students.

Education is a platform for students with visual impairment to acquire social skills, entrepreneurial skills and other self-help skills for effective participation in social and entrepreneurial activities. Education is the process through which impaired individuals and non-impaired individuals are made participatory members of the society towards the growth and development of the society. It gives individuals with visual impairment the opportunity to play their roles in the society and be useful to themselves and their families. A nation is non-inclusive when it fails to educate the impaired and non-impaired individuals in the same school setting which makes it difficult for each citizen to co-exist peacefully.

Owoade (2020) noted that the Nigerian education system is an inclusive one in which both the impaired and non-impaired are educated in the same school setting. Students with visual impairment in an inclusive setting are not able to access information via visual modalities but are educated with the use of Braille, typewriter, digital audio player, abacus, computer with JAWS and talking dictionary. Students with visual impairment in an inclusive classroom read Brailed books, Braille their notes, use typewriter to type answers to text and examination questions for their teachers to read. The students also record textbooks and notes on digital audio player. Abacus is an instrument that students with visual impairment use in calculating and solving mathematics while computer with JAWS is used to access information on the internet.

The attendant problems of visual impairment and the use of these equipment for learning became more challenging during the COVID-19 pandemic (Pineda and Corburn, 2020). Most activities in the world today are conducted through the use of information communication technology referred to in the society of impaired individuals as assistive technology devices the foundation for the education of students with visual impairment. Procurement and use of assistive technology devices such as Braille machine, digital audio player, computer with JAWS and the likes is a big challenge to students with visual impairment and their parents before COVID-19. The onslaught of COVID-19 experienced in Nigeria on 27<sup>th</sup> February 2020 which brought about lockdown, loss of jobs, increased poverty and other COVID-19 precautionary measures such as wearing of face mask, physical distancing and virtual learning made learning and life generally more difficult for students with visual impairment.

Mahfuz, Sakib and Husain (2021) noted that the COVID-19 global pandemic directly points towards the future when even day-to-day activities could be conducted online using information technology devices and services and one of the cracks is the persons with special needs in the country that remain unable to reap the potentials and benefits of growing technological advancement. Prominent among these persons with special needs are students with visual impairment whose inability to access basic technology to cope with the needs of the time in a society where provision of relevant resources is necessary for their academic progress is of great concern. It is also difficult for them to access other facilities available in their campuses. The issue of

COVID-19 that brought about the introduction of virtual learning into the Nigerian system of education whereby lecture is delivered online and students participates from their various homes.

Virtual learning is new in Nigeria that even lecturers and sighted students are experiencing difficulties and difficulties become more challenging for students with visual impairment. Suraj (2020) noted that poor access to information and relevant learning support materials impeded students with visual impairments' access to a range of learning materials as well as forced them to endure an inflexible education routine in the phase of COVID-19. Essentially, the shortage or absence of assistive technology devices at home makes the learning process challenging and limits the capacity and output of the visually impaired students. The frequent need of personal assistance or support from their course mates and friends on how to participate in Zoom class, write assignment, submit assignment, write and submit examination online is lacking.

The lack of awareness and insufficient knowledge on disinfection of their assistive devices is capable of imposing a great challenge on students with visual impairments' health and academic progress. A student with visual impairment may not be aware of disinfecting the tips of foldable canes whenever it is use, magnifiers purchased from optical shops, haptic devices used in schools or colleges or borrowed from the library until they are informed about the need of disinfections.

Students with visual impairment depend on touch and tactile senses to for their routine school activities which may further increase the chance of getting infected with the virus. Many restrictive and control measures, including the adoption of new behavioural changes for example, social distancing during movement out in the open, limited contact or tactile contact recommended by the World Health Organization, pose huge challenges for students with visual impairment. The COVID-19 added to the sudden change in routines and roles that comprise individuals' identity which grant sense to daily doings may have had consequences at physical, social, psychological and emotional stability of students with visual impairment, which invariably affects their functioning at school. Lock down also made it impossible for students with visual impairment in tertiary institutions to access resource rooms, equipment and interact with special educators.

Discrimination and stigmatizing situation is another challenge facing students with visual impairment in the phase of COVID-19 whereby the government do no provide facilities and enabling environment to assist students with visual impairment participate in virtual learning. Negligence also results to inequities in access to information and healthcare services among students with and without visual impairment. High cost of living is another challenge facing students with visual impairment and their parents as it makes it difficult for them to procure and replace assistive technology devices for learning.

COVID-19 prompted challenges students with visual impairment in tertiary institution are facing are too numerous too mention and if this category of students are to develop their talents, progress academically, become useful to themselves and contribute meaningfully to the economic growth of the society, government at all levels must do the needful by addressing these challenges adequately. Shalaby, Odayappan, Venkatesh, Srinivasan and Shukla, (2020) noted that COVID-19 may have had a disproportionate impact on students with visual impairment as evidenced assessment with students with visual impairment suggested. It therefore become imperative to investigate the challenges students with visual impairment are experiencing in tertiary institutions during the pandemic.

### Statement of the Problem

Students with visual impairment in higher institutions are being confronted with a lot of challenges including lack of learning resources in accessible format, negative attitude by teachers and students, mobility problems among others. These challenges are more profound with the onslaught of COVID-19 and its impact, which has added more to the existing challenges. Students with visual impairment are experiencing more problems such as coping with social distancing, problems associated with virtual learning, high cost of assistive technology devices and lack of support by sighted guides as a result of COVID-19 precautionary measures. All these result to lack of interest in education, poor participation in class, poor communication among the students and diminished emotions. Inability of students with visual impairment to fully participate in the class and communicate effectively to fellow students and teachers leads to poor academic achievement among students with visual impairment. Evidence in literature has also shown that researchers have not paid enough attention to the challenges encountered by students with visual impairment during COVID-19. It therefore becomes necessary to investigate challenges students with visual impairment face in tertiary education during the pandemic.

#### **Purpose of the Study**

The study was conducted to investigate various challenges encountered by students with visual impairment in tertiary institutions in Oyo state.

# **Research Questions**

- 1. What are the challenges students with visual impairment in tertiary institution encounter during COVID-19?
- 2. What efforts have education stakeholders made to ameliorate challenges students with visual impairment in tertiary institution encounter during COVID-19?

## **Hypothesis**

1. There is no significant gender difference in the challenges encountered by students with visual impairment in tertiary institution.

# Methodology

Survey design was adopted in carrying out the research as it is the most suitable design for a descriptive research.

## **Population**

The population of the study comprised all students with visual impairment in tertiary institution in Oyo state.

# Sample and Sampling Technique

The sample of the study comprised fifty (50) students with visual impairment (27 males and 23 females) purposively selected from two inclusive tertiary institutions in Oyo state. Random sampling technique was adopted in selecting two (2) local government areas and two (2) inclusive tertiary institutions that were used for the study. Thirty (30) students with visual impairment were selected form school 1 while twenty (20) students with visual impairment were selected from school 2.

#### Instrument

A self-developed questionnaire was used in collecting data for the study. The questionnaire was divided into two (2) sections. Section 1 is comprises the demographic data of the respondents while section 2 contain fifteen (15) questions that were meant to identify various challenges students with visual impairment experience in tertiary institution during COVID-19. The questionnaire is four likert scale ranging from strongly agree to strongly disagree. Strongly agree attracts 4 marks, agree 3 marks, disagree 2 while strongly disagree attract 1 mark.

# Validity of the Instrument

The instrument was subjected to item analyses by experts in special education to ensure its face and content validity.

The reliability of the instrument was established through test-retest method and reliability co-efficient of 0.73 was obtained at 0.05 alpha level of significance.

## **Procedure for Data Collection**

The questionnaire was administered on the students by reading out the questions to them and allowing them to select answers as applicable to each student.

### **Method of Data Analysis**

Data collected was analysed using mean, standard deviation and T-test.

# Result

S\N	Items	Mean	SD
1	COVID-19 made studying more difficult for me	3.64	0.86
2	My academic achievement was better with physical class than online class	3.12	0.84
3	Lack of funds for subscription interferes with my participation in E-learning	3.92	0.39
4	I cope better with virtual learning than physical classroom	1.44	0.81
5	Social distancing discouraged sighted students from assisting me	1.36	0.69
6	Inability to access resource room has no negative influence on my studies	2.3	1.04
7	I find it difficult to participate in virtual learning	3.52	0.89
8	I am unable to get support from sighted students on how to write and submit my assignment online	2.56	0.81
9	My parents have not been able to pay my school fees due to COVID-19	2.22	0.42
10	Lack of campus accommodation for students in the face of COVID-19 added more to the challenge of academic rigour	3.72	0.45
11	Accessing information on the internet was made possible by the computer with JAWS provided for me by the government	1.00	0.00
12	The school authorities extended special education services (e.g Brailing of textbooks) to me at home during the lockdown	1.00	0.00
13	I received the COVID-19 palliative distributed by the federal government	1.00	0.00
14	My local government gave me a mobility cane to enable me move around unaided during the COVID-19	1.00	0.00
15	I was encouraged to stay focused on my studies by my teachers and fellow students.	2.72	1.37

# Table 1

Table 1 shows that students with visual impairment in tertiary institution encounter a lot of COVID-19 related challenges. High mean scores of items 1, 2, 3, 7 and 10 (3.64, 3.12, 3.92, 3.52 and 3.72) indicated that students with visual impairment in tertiary institution are facing a lot of challenges that may linger even after COVID-19. These challenges need urgent attention from all education stakeholders to enable students with visual impairment in tertiary institution achieve their academic goal.

The low mean scores of items 11, 12. 13 and 14 (1.00) showed that education stakeholders have not put any measure in place to ameliorate the problems students with visual impairment in tertiary institution encounter during the pandemic.

Students with visual impairments' positive response to item 9 indicated that there is apparently a high level of parental acceptance and care among students with visual impairment.

# **Hypothesis**

1. **HO1:** There is no significant gender difference in the challenges encountered by students with visual impairment in tertiary institution during COVID-19.

**Table 2.** Showing significant gender difference in the challenges encountered by students with visual impairment in tertiary institution during COVID-19.

Significant at 0.05 level of significance.

Gender	N	X	SD	DF	Cat.t-value	Critical t-value	
Male	27	19.97	0.69				
Female	23	20.20	0.78	48	.181	2.00	

Table 2 revealed that calculated t-value is .181 and critical t-value is 2.00, since the critical t-value is greater than calculated t-value, the null hypothesis which stated that there is no significant gender difference in the challenges encountered by students with visual impairment in tertiary institution during COVID-19 is accepted. This means that challenges imposed on students with visual impairment in tertiary institution by COVID-19 have equal influence on both male and female students with visual impairment and so, remedial measures guarantee equal benefits to both students.

# **Discussion**

Findings of this study revealed that students with visual impairment in tertiary institution encounter a number of COVID-19 related challenges such as inability to cope with virtual learning, lack of learning resources in accessible format, campus accommodation problem among others. This corroborates with the finding of Oviedo-Cáceres, Arias-Pineda, Yepes-Camacho and Falla (2021) discovered that social isolation produced by the COVID-19 Pandemic has caused challenges to student with visual impairment. This is in line with the finding of Mahfuz, Sakib and Husain (2021) that found that students with visual impairment in tertiary institution encountered challenges during COVID-19 which resulted to poor academic performance of the students.

Owoade (2020) discovered that students with visual impairment faces challenges derived from school related factors, parents related factors and teacher related factors. The finding of this study contradicts the finding of Armitage and Nellums (2020) that found that academic challenges students with visual impairment are facing are more of vision loss related than COVID-19 related.

It was also discovered that challenges students with visual impairment in tertiary institution encounter have currently not received any attention from government officials and school authorities. The finding of this study is in line with that of Adelaja (2021) who found that impact of COVID-19 on the venerable group is neglected by the society. The finding of this study agrees with the finding of Okoye and Adirika (2019) that found that one of the outstanding problems facing students with visual impairment in tertiary institution has to do with negligence and negative attitude towards them.

This finding is in consonance with the findings of Mng'ong'ose, Ngoboka, Kavenuke and Ndekwe (2017) who found that lack of learning materials in accessible format and the existence of architectural barriers in university environment shows that students with visual impairment in tertiary institution are not receiving enough attention from the school authorities. This finding contradicts the finding of Mahfuz, Sakib and Husain (2021) that discovered that there is a legal framework in Bangladesh which supports the extension of educational services to students with visual impairment at home to enable them participate in online classes and online examinations.

The finding of this revealed that there is no significant gender difference in the challenges encountered by students with visual impairment in tertiary institution during COVID-19. The finding is in support of that of Oviedo-Cáceres, Arias-Pineda, Yepes-Camacho and Falla (2021) who found that students with visual impairment experience several challenges during COVID-19 irrespective of gender difference. This is also in line with the findings of Okoye and Adirika (2019) who found that gender has no significant difference on challenges students with visual impairment in tertiary institution encounter.

This study revealed that students with visual impairment in tertiary institution are facing a lot of vision loss related challenges and COVID-19 related challenges. The study also found that not much has been done by all education stakeholders to ameliorate these problems.

#### Conclusion

The current COVID-19 pandemic, followed by the national lockdown to mitigate the transmission of the virus poses many challenges, including academic challenges, to the life students with visual impairment. A sudden disruption of support system and assistance to these groups of students has a serious impact on their academic progress and general well-being. Ensuring that students with visual impairment maximize their

potentials and achieve their academic goals is critically important during the present and post-pandemic. This can be achieved through inclusive education services, involving a team of professionals, students with visual impairment themselves and family members. Vision loss is associated with many challenges, and any emergency like COVID-19 or lock down only adds to the existing difficulties. Established policies and laws are very necessary in every nation to help students with visual impairment cope with emergency situations.

#### Recommendation

- 1. The government should put in place measures to remedy pre and post COVID-19 challenges confronting students with visual impairment in tertiary institution.
- 2. The school authorities should create a disability friendly university environment to enable students with visual impairment overcome numerous challenges confronting them.

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