

Teachers Variables and Utilization of Instructional Accommodations in Teaching Learners with Hearing Impairment in Akwa Ibom State

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Introduction

The education of children with hearing impairment has over the years generated a lot of interest to experts in the field of special education. The concern is on the best approach to improve the education of children with hearing impairment all over the world. Apparently, people recognized the need to assist children with hearing impairment to process linguistic information for educational attainment. Hearing impairment is the inability of the ear to receive and give meaningful interpretation to a message or sound. According to Okuoyibo (2006), hearing impairment is an umbrella term used to describe all aspects of disorder affecting the auditory system. Okuoyibo (2006) see it as any hearing loss ranging from mild to profound.

Ugwuanyi (2009) advocated for the use of sign language to improve the education of children with hearing impairment. Issues in education of children with hearing impairment came into limelight in 1550's when a Spanish Monk Pedro Ponce de Leon started to teach children with hearing impairment how to read, write and participate in the learning of other subject.

Accommodations are practices, procedures, and devices that provide equitable access during instruction and assessment of students who have documented evidence of disabilities. The use of accommodation ensures that every learner with disability in the school has a fair and equal opportunity to learn by receiving standard instruction and demonstrate mastery (Colorado Department of Education, 2015). This has become sacrosanct in special needs education as a measure of inclusion and complying with the principle of universal design for learning. However, accommodations must be used by teachers appropriately as it is not meant to reduce the value or acceptable standards rather to reduce the effect of hearing impairment on the child's learning process. This reinforces the place of professional and global best practices in administration of accommodations either in instruction or assessment. Ajuwon, (2002) and VESID (2006) indicate that accommodations are generally in four categories of presentation, response, time schedule and setting, however, each disability, child's needs, task among other factors are consider by the school and IEP team. For learners with hearing impairment accommodations like technology devices (hearing aid) and others are frequently used by teachers in Nigeria.

Base on the desire to achieve the purpose of accommodations and its appropriate use, this research is design to examine variables like teachers' teaching experience, knowledge on accommodations, teachers' participation in conferences/ workshops, teachers' specialization, and teachers' attitudes towards accommodations that may influence utilization of accommodations in teaching learners with hearing impairment.

Teachers years of experiences are seen as the number of years the teachers have been interacting with the content of the curriculum. The more the teacher is in constant touch with the curriculum, the more effective and versatile teacher is. This is because, the teacher has acclimatized himself with the logics and diverse behaviour of the students geared towards achieving academic success Noibi (2011) maintained that the requirement for acquisition of knowledge by expressing that there was no substitute to rehashed practice when adapting some fundamental aptitudes like perusing is not right. It is regularly agreed that a teacher gets aptitudes through experience and the more experience a teacher has, the more viable the teacher will be in his/her work (Oliva, 2018).Mutoro (2011) did an examination on the elements that impact educational plan execution. He concurs with Oliva that teacher's experience decides skill and proficiency and consistent educator's preparation makes the teacher open and adaptable in the usage of the educational programme. Teachers' ability to do this depend on many factors among these is teaching experience. Teaching experience is simply and most often measured or determined by number of years a particular teacher has spent in his or her teaching career. Teaching is complex activity that involves effective planning, organization of instructional resources, prioritizing ideas, interacting with learners, monitoring, adjusting and differentiating instruction to meet varied learning styles, abilities and disabilities purposefully to attain the predetermined objectives (Char, 2003). From the above, it is clear that teaching is not limited just transferring textbook knowledge it requires real and practical classroom experience in using instructional accommodations to teaching learners with hearing impairment (Harzing, 2016).

Knowledge generally means awareness, fact or having an understanding of something. Thus, teachers' knowledge on instructional accommodations will therefore be defined as awareness, information and understanding teachers have about the concept, nature, justification and process of administrating instructional accommodations to learners with hearing impairment. The concept of instructional has become essential part of education of learners with disabilities including those with hearing impairment due to the philosophy that it reduces the effect of disabilities on the difficulties faced by those with disabilities. This is why teachers as one of the major stakeholders in education of these learners need to have good knowledge of the concept and its process of administration. More so, effective use of instructional accommodations is as complex as disabilities especially technology based accommodations. In the light of this knowledge of accommodations can help teachers set good climate of responsibility, concern, and willingness to provide students with appropriate accommodations. Instructional accommodations are tools or procedures that ease and provide equal access for learners to actively participate in every learning activity in the classroom, school and home. This suggests that without such accommodations learning will be extremely difficult for those with disabilities.

Researches on teachers' attitudes in Nigeria have found that they either have positive or negative. Adebayo (2015) survey teachers' attitudes towards the use accommodations during national examinations and found that 36% consider the use of technology based accommodations as inappropriate practice that lower the standard and validity of the examination while 64% support the use of any accommodations that can reduce the effect of disability on the examinee. The study further indicate that teachers who support the use of accommodations during assessment teach and encourage parents to allow their children access to accommodations as it does not make a child inferior to his/her peers. In view of these studies, there is a need for a new study to contribute in resolving the issue concerning teachers' variables and utilization of instructional accommodations in teaching learners with hearing impairment in AkwaIbom State.

Statement of the Problem

A typical Nigerian classroom has learners with varied abilities and disabilities. Among those with disabilities are students with hearing impairment range in severity from mild to profound. This includes the subset of deaf and hard of hearing. Hearing impairment is a serious sensory deprivation that has been noted to hinder the afflicted persons' development in general and their academic achievement in particular. As a result of these difficulties their academic achievement are most often poor. Hearing plays a vital in the lives of the humans because the role in expressing and receiving language. Hearing problems creates individuals perspective in expressing and receiving information.

Hearing loss creates social skills, communications, and educational glitches. Pupils with hearing impairment have the same rights as all other children in spite of their communication barriers. These include the right to access all basic necessities of which education is not an exception. It is however, noted that lack of communication hinders hearing impaired pupils from being able to express their views and receive the same attention that other children receive, be it at home, in school, or in the community where they live. Unfortunately, most of the hearing impaired pupils have deficits in academic performance in school especially in reading and comprehension skills. Researches revealed that learners with specific learning disabilities including those with hearing impairment who access instructional accommodation services participate actively in every instructional activity and even perform better. Functional instructional accommodation most time depends on the adequacy of some indispensable behavioural traits of teachers, such as, teaching experience and knowledge among others hence the need for further investigation. It is based on this that the researcher carry out a study on teachers' variables and utilization of instructional accommodations in teaching learners with hearing impairment in Akwalbom State.

Purpose of Study

This study will investigated the influence of teachers' variables and utilization of instructional accommodations in teaching learners with hearing impairment in Akwalbom State. Specifically, the study intends to:

- Determine the influence of teaching experience on teachers' utilisation of Instructional accommodations in teaching learners with hearing impairment in Akwalbom State.
- Ascertain the influence of teachers' knowledge on utilisation of instructional accommodations in teaching learners with hearing impairment in Akwalbom State.
- Determine the extent to which teachers' participation in conferences/workshops in specific learning disabilities and relevant themes influence utilisation of instructional accommodations in teaching learners with hearing impairment in Akwalbom State.
- Ascertain the influence of teachers' training/specialization influence utilisation of instructional accommodations in teaching learners with hearing impairment in Akwalbom State.
- Determine the extent to which teachers' attitudes influence utilization of instructional accommodations in teaching learners with hearing impairment in Akwalbom State.

Research Hypotheses

The following null hypotheses are formulated to guide this study:

- There is no significant influence of teaching experience on teachers' utilisation of Instructional accommodations in teaching learners with hearing impairment.
- There is no significant influence of teachers' knowledge on utilisation of Instructional accommodations in teaching learners with hearing impairment Akwalbom State.

- There is no significant influence of teachers' participation in conferences/workshops in specific learning disabilities and relevant themes on utilisation of instructional accommodations in teaching learners with hearing impairment Akwalbom State.
- There is no significant influence of teachers' training/specialization on utilisation of instructional accommodations in teaching learners with hearing impairment Akwalbom State.
- There is no significant teachers' attitudes influence utilization of instructional accommodations in teaching learners with hearing impairment Akwalbom State.

Scope of the Study

The geographical scope covered the inclusive schools in Akwalbom State (Daughter of Charity and Special Education Center for Exceptional Children, Uyo) with focus on teachers in the two schools. The schools are inclusively run in both primary and secondary sections. The study will be also delimited in terms of variables to factors that may influence utilization of instructional accommodations in the education of learners with hearing impairment such as teaching experience, teachers' knowledge, teachers' participation in conferences/workshops, specialized training, and attitudes.

Research Design

The ex-post-facto (after the fact) research design was adopted for the study. The choice of this design is based on the fact that independent variables such as teaching experience, knowledge and others have occurred in the population the researcher is only examining their influence on the dependent variable which is utilization of instructional accommodations.

Area of the Study

The study will be carry out in Akwalbom State. This state is part of the Niger Delta Region in south-south geo-political zone of Nigeria. It was formally political and administratively by Cross River state until September 23rd 1987 when Akwalbom state was created by General Ibrahim Babagiada led administration. Akwalbom state is located in the coastal southern part of Nigeria, lying between latitude 4⁰ 32' and 5⁰, 33' North, and longitude 7⁰225' and 8⁰ 25' East.

Population of the Study

The population of this study consisted of all 139special education teachers in the special education centres in Akwalbom State. See appendix I (AKSMOE, 2022).

Sample and Sampling Technique

A sample size of 139 teachers in Special Education Centre selected through purposive sampling technique was used for the study. Purposive sampling technique which is a non-probability sampling technique was adopted because it is aim at picking a characterized audience who are teachers of learners with hearing impairment. The choice of this technique is based on the wealth of their knowledge of special education particularly hearing impairment and the subject matter of the research which is instructional accommodations.

Instrumentation

For the purpose of this study, a researcher's made instrument titled "Teachers' Utilization of Instructional Accommodations in Teaching Learners with Hearing Impairment Questionnaire (TUIATLHIQ)" will be used for data collection in the study. Structurally, it is subdivided into two part A and B, part A is concern with personal data of the respondents while the part B consist of 42 items that covers variables under study. The response scale for item 1-35 is Strongly Agreed (SA= 4), Agreed (A= 3),Disagreed (D=2) and Strongly Disagreed (SD =1) from item 36-42 is Never (N= 1), Occasionally(OC =2), Sometimes(ST=3) and Always (AL=4).

Validation of the instrument

To ensure the validity of the instrument, the initial draft of the instrument, Teachers’ Utilization of Instructional Accommodations in Teaching Learners with Hearing Impairment Questionnaire (TUIATLHIQ) will be subjected to face validity by three experts.

Reliability of the Instrument

To establish the reliability of the instrument for this study, Teachers’ Utilization of Instructional Accommodations in Teaching Learners with Hearing Impairment Questionnaire (TUIATLHIQ) was trial tested on 20 Special Education Teachers outside the study area who were not part of the main study. The scores obtain were subjected to Cronbach’s Alpha statistic which yielded a reliability coefficient index of 0.79 which indicated that the instrument is suitable and reliable for the study.

Method of Data Analysis

Dependent t-test was used to test the null hypotheses at 0.05 level of significance. In testing the hypotheses, when the probability level (p-value) was greater than .05 alpha level of significance, the null hypotheses were retained also when the probability level (p-value) was less than .05 alpha, the null hypotheses were rejected.

Results

Hypothesis One

There is no significant influence of teachers’ teaching experience on the use of instructional accommodations in teaching learners with hearing impairment

Table1: Summary of dependent t-test for influence of teachers’ teaching experience on the use of instructional accommodations in teaching learners with hearing impairment

Variable	n	\bar{X}	SD	df	t-cal.	p-value	Decision
Teachers’ teaching experience	319	16.48	3.77	230	-0.891	0.374	Retain H0 ₃
Use of instructional accommodations		16.80	4.02				

The result in Table 1 shows t-calculated value of -0.891 with an associated probability value of 0.374 was obtained with regards to the influence of teachers’ teaching experience on the use of instructional accommodations in teaching learners with hearing impairment. Since the associated probability of 0.374 was greater than 0.05, the null hypothesis three was retained. This implies that there is no significant influence of teachers’ teaching experience on the use of instructional accommodations in teaching learners with hearing impairment.

Hypothesis Two

There is no significant influence of teachers’ knowledge on the use of instructional accommodations in teaching learners with hearing impairment.

Table 2: Summary of dependent t-test for influence of teachers’ knowledge on the use of instructional accommodations in teaching learners with hearing impairment

Variable	n	\bar{X}	SD	Df	t-cal.	p-value	Decision
Teachers’ knowledge	139	18.19	3.06	230	5.308	0.000	Reject H0 ₁
Use of instructional accommodations		16.80	4.02				

The result in Table 2 shows t-calculated value of 5.308 with an associated probability value of 0.000 was obtained with regards to the influence of teachers’ knowledge on the use of instructional accommodations in teaching learners with hearing impairment. Since the associated probability of 0.000 was less than 0.05, the null hypothesis one was rejected. This implies that there is a significant influence of teachers’ knowledge on the use of instructional accommodations in teaching learners with hearing impairment.

Hypothesis Three

There is no significant influence of teachers’ participation in conferences/workshops in specific learning disabilities in relevant themes on the use of instructional accommodations in teaching learners with hearing impairment.

Table 3: Summary of dependent t-test for influence of teachers’ participation in conferences/workshops on the use of instructional accommodations in teaching learners with hearing impairment

Variable	n	\bar{X}	SD	df	t-cal.	p-value	Decision
Teachers’ participation in conferences/workshops	139	16.62	4.01	230	-0.510	0.611	Retain H0 ₄
Use of instructional accommodations		16.80	4.02				

The result in Table 3 shows t-calculated value of -0.510 with an associated probability value of 0.611 was obtained with regards to the influence of teachers’ participation in conferences/workshops in specific learning disabilities in relevant themes on the use of instructional accommodations in teaching learners with hearing impairment. Since the associated probability of 0.611 was greater than 0.05, the null hypothesis four was retained. This implies that there is no significant influence of teachers’ participation in conferences/workshops in specific learning disabilities in relevant themes on the use of instructional accommodations in teaching learners with hearing impairment.

Hypothesis Four

There is no significant influence of teachers’ specialized training on the use of instructional accommodations in teaching learners with hearing impairment.

Table 4: Summary of dependent t-test for influence of teachers’ specialized training on the use of instructional accommodations in teaching learners with hearing impairment

Variable	n	\bar{X}	SD	Df	t-cal.	t-crit.	Decision
Teachers’ specialized training	139	17.99	4.38	230	3.180	0.002	Reject H0 ₅
Use of instructional accommodations		16.80	4.02				

The result in Table 4.9 shows t-calculated value of 3.180 with an associated probability value of 0.002 was obtained with regards to the influence of teachers’ specialized training on the use of instructional accommodations in teaching learners with hearing impairment. Since the associated probability of 0.002 was less than 0.05, the null hypothesis five was rejected. This implies that there is a significant influence of teachers’ specialized training on the use of instructional accommodations in teaching learners with hearing impairment.

Hypothesis Five

There is no significant influence of teachers’ attitude on the use of instructional accommodations in teaching learners with hearing impairment.

Table 5: Summary of dependent t-test for influence of teachers’ attitude on the use of instructional accommodations in teaching learners with hearing impairment

Variable	n	\bar{X}	SD	df	t-cal.	p-value	Decision
Teachers’ attitude	139	18.07	3.07	230	4.743	0.000	Reject H0 ₂
Use of instructional accommodations		16.80	4.02				

The result in Table 5 shows t-calculated value of 4.743 with an associated probability value of 0.000 was obtained with regards to the influence of teachers’ attitude on the use of instructional accommodations in teaching learners with hearing impairment. Since the associated probability of 0.000 was less than 0.05, the null hypothesis two was rejected. This implies that there is a significant influence of teachers’ attitude on the use of instructional accommodations in teaching learners with hearing impairment.

Conclusion

The study concludes that teachers’ conceptual and professional knowledge or competence is vital and cardinal in the successful utilization of instructional accommodations in educating learners with the disability especially technology based accommodations that have become an integral part of modern classroom and educational practice in the country. Teachers’ teaching experience is important in teaching-learning process but it does not influence or enhance their ability to appreciate the concept and use of instructional accommodations in education of learners with hearing impairment. Teachers’ participation in conferences/workshops in special education is important but has no specific and prominent influence on their ability to use instructional accommodations that meet the instructional needs of learners with hearing impairment.

Recommendations

On the basis of the findings of this study, the researcher therefore makes the following recommendations:

- The management of schools should place emphasis on teachers' competence in using instructional accommodation to meet the needs learners rather than using seniority criteria in allocation of teaching responsibilities to teachers particularly those with learners with hearing impairment.
- Teachers' capacity on the implementation of instructional accommodations should be accorded greater priority in teachers training programme in the country to enhance their ability to use all categories of accommodations that will meet learners' needs and equalize opportunities in participating in all learning activities.
- Instructional accommodations should be included in basic special education course (Introduction to special education) meant for all teachers in training in Nigeria. This has become imperative as the prevalence of the disability is increasing due lack of effective intervention and inclusive educational practice in Nigeria.
- Nigerian universities and other higher institutions with special education programmes in specific learning disabilities should review and integrate academic accommodations into their categorical /non categorical approach as full and mandatory course to train students on global best practices on instructional accommodations with due regards to national peculiarity.
- Increased advocacy and public awareness on the use of Instructional accommodations and attitudinal re-orientation to educate parents and general education teachers on relevance of the practice should be designed and implemented.

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