THE PERFORMANCE OF THE HEARING IMPAIRED CHILDREN IN AN INCLUSIVE SETTING: A CASE STUDY OF MUHURU DIVISION, NYATIKE DISTRICT, MIGORICOUNTY

BY

OPIYO JOAN DORAH

BED/33142/111/DF

A DISSERTATION SUBMITTED TO THE COLLEGE OF EDUCATION, OPEN AND DISTANCE LEARNING (COEDL) IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF BACHELOR OF EDUCATION SPECIAL NEEDS OF INTERNATIONAL UNIVERSITY

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DECLARATION

I, Opiyo Joan Dorah affirm that the work contained in this proposal is by my hard work. It has never been submitted for any award here in or any other institution of higher education.

Signature: ©Piyo Joan Dorah.....

Opiyo Joan Dorah

Student

Date of Submission: 14/10/2013...

APPROVAL

This is to certify that this research work was supervised and is now ready for submission to the academic board for consideration and approval.

Signature: .....

Mr. Oketcho Pius

Supervisor

Date: 14/10/2013.....

DEDICATION

I dedicate this piece of work to my beloved husband Micheal Otieno for all his love, care and support, my children Tracey Kate, Rachel Wonder and Denis Carson.

I can not forget my Dad Reubon and Mon Rachel for their support towards my course.

ACKNOWLEDGEMENTS

I would like to acknowledge my Supervisor Mr. Oketcho who spared his time for his endless guidance that has led to the success of this research.

I would also like to acknowledge my relatives and friends who have been helping me in all ways both financially and guidance.

May God bless you.

Kampala International University
Institute of Open and Distance Learning
P O Box 20000 Kansanga, Kampala, Uganda
256 41 373 498/ 256 41 373 889 (Ug) 254 20246275 (Ke)
e-mail: efagbamiye@yahoo.com Tel: 0753142725

MARKING GUIDE FOR STUDENTS' RESEARCH REPORTS

STUDENT'S NAME: OPIYO JOAN DORAH
REG. NO.: BED/33142/111/DF
MAIN SUPERVISOR/SECOND EXAMINER: OLETCHO PIUS
TITLE OF REPORT: THE PERFORMANCE OF THE HEARING IMPAIRED CHILDREN IN AN INCLUSIVE SETTING: A CASE STUDY OF MUTUKULA DIVISION, NYATILE DISTRICT, MIGORI COUNTY

Major Areas	Required	Marks	Examiner's assessment
Preliminary Pages: Properly written Title Page, Declarations, Dedications, Approval and Acknowledgements. Table of Contents, List of Tables, and Figures and Abstract	The candidate should present the work in an organized manner and the title page should match the text.	5	04
Chapter One Background of the Study Problem Statement Objectives Scope and Significance of the Study	The Candidate should indicate the historical/conceptual background and the context of the study. The Background should be specific, identify the gap to be filled. The objectives should be specific, and relate to the study. Variables should be clearly indicated. The significance and scope should be stated. Candidates should indicate to which people the study will be helpful and how.	10	07
Chapter Two Review of Relevant Literature	Review of relevant literature should be in line with the variables and identify exiting gaps.	10	08
Theoretical Framework/Conceptual Framework/Research questions Hypotheses	The conceptual framework/theoretical framework should indicate the interaction of the variables. The intervening variable should also be stated.	10	08
Chapter Three: Methodology Research Design Population Sample and Selection Methods Procedures for Data Collection	Candidates should indicate and justify the design used. The candidate should indicate the population, the sample size, the methods and the instruments used. The method of data analysis should be clearly stated.	10	07
Chapter Four Data analysis Presentation and interpretation of results	The candidate should indicate the results as per the objectives; there should be a systematic flow of the findings. Each objective should be analyzed.	20	15
Chapter Five Discussion Summary Implications for theory and research Implications for practice Conclusions	The candidate should indicate the major findings and highlight the alignment or otherwise within the previous findings. Implications for research and practice should be identified.	30	15
Reference and appendices	An appropriate format should be used to write the references and all the necessary information should be appended.	5	04
Overall assessment out of 100%			68%

Prof. E.O. Fagbamiye
Director

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ACRONYMS

UNESCO	-	United Nations Education Scientific and Cultural Organization
SPSS	-	Scientific Package for Social Scientists

ABSTRACT

The study was about the performance of impaired children. The study was guided by three objectives; Causes of Hearing Impairments, establish characteristics of hearing impairments and Interventions to assist learners with hearing impairments.

CHAPTER ONE

INTRODUCTION

1.0 Background to the Study

Hearing impairment or hard of hearing or deafness refers to conditions in which individuals are fully or partially unable to detect or perceive at least some frequencies of sound which can typically be heard by members of their species. Hearing loss When applied to humans, the term impaired is rejected within the Deaf culture movement, where the terms Deaf and hard of hearing are preferred.

A hearing impairment exists when an animal has diminished sensitivity to the sounds normally heard by its species. In humans, the term hearing impairment is usually reserved for people who have relative insensitivity to sound in the speech frequencies. The severity of a hearing impairment is categorized according to the increase in volume that must be made above the usual level before the listener can detect it. In profound deafness, even the loudest sounds that can be produced by an audiometer (an instrument used to measure hearing) may not be detected.

Another aspect to hearing involves the perceived clarity of a sound rather than its amplitude. In humans, that aspect is usually measured by tests of speech perception. These tests measure one's ability to understand speech, not to merely detect sound. There are very rare types of hearing impairments which affect speech understanding alone.

The record of the twentieth century in expanding educational opportunities is a source of shame (UNESCO, 1996). The growth in primary school enrolment in sub-Saharan Africa since 1960's have led to a serious deterioration in the quality of education. Warning of the falling quality have become even more persistent in recent years, as the financial squeeze and tighter budget have starved education of essential operating inputs in terms of text books, physical facilities and from stakeholders.

Shortages of teachers, who are skilled in teaching learners with hearing problems, in most public schools could also be a major impact of instructional materials to hearing impairment. This is majorly due to mass influx of learners into schools as a result of free and compulsory primary education. This can make teachers unable to cope with the workload which is

experienced in classrooms. Hearing impairment has been greatly hindered since this factor has been given little consideration especially in Kenya (UNESCO, 2005). Teachers' Vs individual pupil's interaction is quite minimal. Due to this, poor performance has been experienced in most schools and failure to acquire elementary skills such as reading and writing. Therefore, the government ought to increase the number of teachers into classrooms to ensure quality instruction in the inclusive setting.

1.1 Statement of the Problem

According to the World Bank, there has been tremendous growth in the provision of free primary education in Sub-Saharan Africa in the last fifteen years. Enrolment in primary schools in the region has increased greatly (Heneveid & Hellen, 1996). This expansion has put pressure on the quality of primary education as the number of learners continues to rock high levels. Due to this, it has reduced government's ability to support schools in terms of teachers, teaching materials and physical infrastructure.

Poor learning outcomes have been experienced in Muhuru, Nyatike district over the last one decade. It is against this background that this research study was set to determine the performance of hearing impaired children.

1.2 Objectives of the Study

This research was guided by two sets of objectives

1.2.1 General Objective

To assess the performance of the hearing impairing children in an inclusive setting in Muhuru division, Nyatike district.

1.2.2 Specific Objectives

i. Causes of Hearing Impairments

ii. Establish characteristics of hearing impairments

iii. Interventions to assist learners with hearing impairments

1.3 Research Questions

i. What are the causes of hearing Impairments?

ii. What are the characteristics of hearing impairments?

iii. What are the interventions to assist learners with hearing impairments in order to help them perform better?

1.4 Scope of the Study

The study is about the performance of the hearing impaired children in an inclusive setting in Muhuru division, Nyatike district. It was carried between December 2012 and October 2013.

1.5 Significance of the Study

(i) Be a guide to the government in establishing strategies for monitoring quality education in inclusive setting in public primary schools.

(ii) Make recommendation that would stimulate the government effort to find solutions to problems facing inclusive education.

(iii) Serves as a reference guide among other divisions within the district in terms of provision of instructional materials in our inclusive education setting in primary schools.

(iv) The teachers would be in-serviced on proper methods of handling children with disabilities. Teachers would be encouraged to develop positive attitudes towards SNE learners. Apart from being role models, teaches would also find joy in their teaching career and accept any learner as unique individual with varied abilities.

(v) The parents who are the key players in education will be well informed and be educated on the current issues related to child rights and their access to education. They will also be responsible for providing basic needs. Above all, they would start to treat learners with disabilities as equal with the rest of the children as the saying goes "disability is not inability".

(vi) Raise issues that will require further research by other scholars of the curriculum implementation.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

The general purpose of this review is to provide an overview of impact of instructional materials on learners with hearing impairments in primary schools as established from previous studies.

Man is a social being, who wants to converse and make contact. A hearing child masters language automatically by picking up from the talking environment around him. But in the case of a hearing impaired child, he/she should be taught' language. Children who are deprived of hearing, are cut off from the world of sound and language. According to Quigley and Paul, language handicap is the biggest hurdle in the education of the hearing impaired. Therefore, teaching language and acquisition of language skills are the central themes of any educational programme for the hearing impaired.

The focus of this study is quality. It is therefore important to review literature in specific variables that can hinder the provision and access to quality education and learning in primary schools. Education (Ross and Mahick 1990) define quality in education as an improvement in the environment in which the learners work with aids to learning provided for that purpose by the school system.

2.1 Characteristics of Hearing Impairments

The causes for hearing loss and the effects it has are simply too varied to lend credence to a typical case. People with hearing impairments have different learning styles and abilities. They do have one characteristic in common: Their ability to hear is limited and this disability may be reflected in other cognitive, academic, physical, behavioral, and communication characteristics.

Cognitive: There is considerable debate about the extent to which cognitive development is limited by hearing impairments. The environment of people who are deaf or hard of hearing is often qualitatively different from that of people who can hear. Much of what we think of as intelligence is developed through hearing and using language. It has been argued that people with hearing impairments do not think in an abstract way and that their intellectual

functioning is limited. Moores (1987) puts the theories about the cognitive functioning of deaf learners into perspective:

Paul and Jackson (1993) believe that differences in the cognitive performance of learners who are deaf and of their hearing peers are more due to inadequate development of a conventional language system than to limited intellectual ability.

Academic: The severity of the hearing loss, the age of its onset, the socioeconomic status of the child's family, and the hearing status of the child's parents are related to the academic success experienced by learners with hearing impairments. Children and young adults who have mild hearing losses generally perform better academically than those with severe losses.

Learners who are deaf from birth tend to have more difficulty acquiring academic skills than those who hear, then later lose their hearing. Learners with hearing impairments from families of high socioeconomic status and those who have hearing parents tend to experience fewer academic difficulties than learners from families of low socioeconomic status or those whose parents are hearing impaired.

Physical: Few physical characteristics are specific to those who are deaf or hard of hearing. The widespread belief that the individual compensates for deficiencies in one sense by developing extraordinary abilities in another is unfounded. People who are deaf or hard of hearing have senses of sight, smell, taste and touch like their peers who do not have hearing impairments.

A characteristic that does differentiate people with hearing impairments from their neighbors and peers is their functional hearing. Functional hearing refers to a person's ability to understand information presented orally and is related to how a person might be taught. For example, a person with a moderate functional hearing loss might not be able to profit from a normal classroom presentation and would require some instructional adaptation to be successful.

Behavioral: Generalizations about the social, emotional, and behavioral functioning of learners who are deaf or hard hearing are based on the performance of these learners on standardized tests. But most of these tests are inappropriate for use with this group.

Moores (1987) describes two perspectives on the social, emotional, and behavioral functioning of those who are deaf or hard of hearing: One is that people with hearing impairments are deviant and evidence many problems; the other is that people with hearing impairment are different and need access to services that encourage their optimal development. Based on a review of the research on the social and emotional functioning of people who are deaf, he concludes that: the evidence suggests that the social-emotional adjustment of the deaf is similar to that of the hearing, with great individual variation. Most deaf individuals cope with the reality of deafness as a life long condition and lead normal, productive lives. This fact supports the contention that deafness itself has no direct impact, either negative or positive, on the development of a mentally healthy individual.

Recent evidence suggests that those who are deaf prefer to be with others who are deaf, that adults who are deaf tend to cluster in groups, socialize, and marry. There has been much discussion of deaf culture, a concept implying that people who are deaf experience and design their lives differently from the hearing people with whom they share the planet (Humphries, 1993). Accordingly, many people who are deaf see the experiences and signed language of deaf communities as the most important factors in their lives. People who are deaf teach one another how to function in society as well as how to get along with others. Sometimes, parents who are deaf want their children to be born deaf so they can share the culture.

Communication: Learning to speak is difficult if you can't hear. Paul and Jackson (1993) argue that "most deaf learners have not learned either to speak or sign language at a highly competent level despite the advent and proliferation of signed systems . . ." Largely as a result of this inadequate development of a primary form of language many learners who are deaf experience difficulties in developing language and literacy skills needed for effective communication.

2.2 Causes of Hearing Impairment

2.1.1 Long-term exposure to environmental noise

Populations of people living near airports or freeways are exposed to levels of noise typically in the 65 to 75 dB (A) range. If lifestyles include significant outdoor or open window conditions, these exposures over time can degrade hearing.

Noise-induced hearing loss typically is centered at 3000, 4000, or 6000Hz. As noise damage progresses, damage starts affecting lower and higher frequencies. On an audiogram, the resulting configuration has a distinctive notch, sometimes referred to as a "noise notch." As aging and other effects contribute to higher frequency loss (6-8kHz on an audiogram), this notch may be obscured and entirely disappear.

Louder sounds cause damage in a shorter period of time. Estimation of a "safe" duration of exposure is possible using an exchange rate of 3 dB. As 3 dB represents a doubling of intensity of sound, duration of exposure must be cut in half to maintain the same energy dose. For example, the "safe" daily exposure amount at 85 dB A, known as an exposure action value, is 8 hours, while the "safe" exposure at 91 dB(A) is only 2 hours (National Institute for Occupational Safety and Health, 1998). Note that for some people, sound may be damaging at even lower levels than 85 dB A. Exposures to other autotoxins (such as pesticides, some medications including chemotherapy, solvents, etc.) can lead to greater susceptibility to noise damage, as well as causing their own damage. This is called a synergistic interaction.

Many people are unaware of the presence of environmental sound at damaging levels, or of the level at which sound becomes harmful. Common sources of damaging noise levels include car stereos, children's toys, transportation, crowds, lawn and maintenance equipment, power tools, gun use, and even hair dryers. Noise damage is cumulative; all sources of damage must be considered to assess risk. If one is exposed to loud sound (including music) at high levels or for extended durations (85 dB A or greater), then hearing impairment will occur. Sound levels increase with proximity; as the source is brought closer to the ear, the sound level increases.

2.1.2 Genetic

Hearing loss can be inherited. Both dominant genes and recessive genes exist which can cause mild to profound impairment. If a family has a dominant gene for deafness it will persist across generations because it will manifest itself in the offspring even if it is inherited from only one parent. If a family had genetic hearing impairment caused by a recessive gene it will not always be apparent as it will have to be passed onto offspring from both parents. Dominant and recessive hearing impairment can be syndromic or nonsyndromic.

2.1.3 Disease or illness

Measles may result in auditory nerve damage, Meningitis may damage the auditory nerve or the cochlea, Autoimmune disease has only recently been recognized as a potential cause for cochlear damage. Although probably rare, it is possible for autoimmune processes to target the cochlea specifically, without symptoms affecting other organs. Wagener's granulomatosis is one of the autoimmune conditions that may precipitate hearing loss. Fetal alcohol syndrome is reported to cause hearing loss in up to 64% of infants born to alcoholic mothers, from the autotoxin effect on the developing fetus plus malnutrition during pregnancy from the excess alcohol intake. Premature birth results in sensor neural hearing loss approximately 5% of the time.

2.1.4 Medication

Some medications cause irreversible damage to the ear, and are limited in their use for this reason. The most important group is the amino glycosides (main member gentamicin) and platinum based chemotherapeutics such as cisplatin. Various other medications may reversibly affect hearing. This includes some diuretics, aspirin and NSAIDs, and macrolide antibiotics.

Extremely heavy hydrocodone (Vicodin or Lorcet) abuse is known to cause hearing impairment. Commentators have speculated that radio talk show host Rush Limbaugh's hearing loss was at least in part caused by his admitted addiction to narcotic pain killers, in particular Vicodin and OxyContin.

2.1.5 Exposure to autotoxin chemicals

In addition to medications, hearing loss can also result from specific drugs; metals, such as lead; solvents, such as toluene (found in crude oil, gasoline and automobile exhaust, for example); and asphyxiants. Combined with noise, these autotoxin chemicals have an additive effect on a person's hearing loss. Hearing loss due to chemicals starts in the high frequency range and is irreversible. It damages the cochlea with lesions and degrades central portions of the auditory system. For some autotoxin chemical exposures, particularly styrene, the risk of hearing loss can be higher than being exposed to noise alone. Controlling noise and using

hearing protectors are insufficient for preventing hearing loss from these chemicals. However, taking antioxidants helps prevent autotoxin hearing loss, at least to a degree.

2.1.6 Physical trauma

There can be damage either to the ear itself or to the brain centers that process the aural information conveyed by the ears. People who sustain head injury are especially vulnerable to hearing loss or tinnitus, either temporary or permanent.

Exposure to very loud noise (90 dB or more, such as jet engines at close range) can cause progressive hearing loss. Exposure to a single event of extremely loud noise (such as explosions) can also cause temporary or permanent hearing loss. A typical source of acoustic trauma is an excessively loud music concert.

2.3 Interventions to Assist Learners with Hearing Impairments

Reduce distance between student and speaker as much as possible, when using instructional materials so as to make the pupil get understood.

Speak slowly and stress clear articulation rather than loudness when speaking. Student turns head and leans toward speakers.

Use face-to-face contact as much as possible. Use complete sentences to provide additional context during conversations or instructional presentations.

Use visual cues when referring to objects in the classroom and during instructional presentation. Have classmates take notes during oral presentations for student to transcribe after the lesson.

Oral communication methods emphasize the development and use of skills in the areas of speech, speech reading, and residual hearing. Proponents of this method believe that the goal of education is the development of skills that foster full participation in mainstream (that is, hearing) society.

With sign systems, people with hearing impairments express ideas using manual and non-manual body movements instead of speech. The manual aspects of this form of

communication are displayed by shaping, moving, and positioning the hands. Non-manual movements include other parts of the body-eyes, eyebrows, cheeks, lips, tongue, and shoulders-in the language being used.

Here it would be interesting to relate the oral-aural controversy that has existed ever since sign language has. Sign Language was founded for the first time in the eighteenth century in Europe. A Frenchman by the name of Charles Michel de l'Epee (born 1712), intensely religious minded and a priest by profession came across two twin sisters in Paris who were deaf-mute

Assistive listening and telecommunication devices take advantage of residual hearing or other senses to enable people with hearing impairments to communicate better. Hearing aids are the most widely recognized and used assistive listening devices. They are worn in the ear, behind the ear, on the body, or in eyeglass frames. Classroom amplification systems are another form of assistive listening device in which a microphone is used to link teachers to learners who wear a receiver that often doubles as a hearing aid.

Telecommunication devices are small keyboards with screens or printers that can be connected to telephones. Telecommunication devices for the deaf (TDDs) and text telephones enable people with hearing impairments to make and receive telephone calls. When a call is make using these devices, the incoming and outgoing conversation appears on the screen or printer. Computerize fax modems and regular fax machines enable people with hearing impairments to communicate without speaking or hearing by using the phone system at their home, school, or work.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This is the chapter in which it describes the research design, the study area, and the target population, sample size, sampling procedures; research instruments and methods of data collection and analysis that were used in this study.

3.1 Research Design

This study used qualitative methods to investigate the performance of children with hearing impairments.

3.2 The Area and Population of Study

Muhurus is a town found in Migoricounty. It has an urban population of about 20,000 and a total population of 45,000 (2009 Census)

3.4 Sample framework

3.4.1 Sample Size

A total of eighty (80) respondents were interviewed. These were as follows:-
10 Headteachers, 20 teachers, 30 parents and 20 learners.

3.4.2 Sampling technique and Procedure

According to Mutai (2001) in purposive sampling, the researcher handpicks the cases to be included in her sample on the basis of his judgment of their typical in terms of their current enrolments.

It is through this method that would came up with sample that was satisfactory to his research problem.

Systematic sampling was used to select 5 learners from each school by the use of class registers depending on the number of learners in the class register. Every third (forth) learners will be selected for inclusion in the sampling depending on the number of learners in the

class. Simple random sampling was used to select 10 class teachers where by 5 teachers were selected from each school.

3.5 Methods

3.5.1 Instruments Used for Data Collection

In order to achieve the objective of this study, the researcher used the following methods of data collection to get information on the performance of the hearing impaired children in an inclusive setting in Nyatike District The methods enabled the researcher to generate enough information so as to make conclusions and draw conclusion appropriately to these issues.

Questionnaire

The questionnaires were administered on some children, parents and teachers in the rural and urban areas so that the researcher could compare and contrast data given on the performance of the hearing impairing children in an inclusive setting in Nyatike District in the two regions. Questionnaires were given to local government and local leaders.

Interview

The researcher conducted face-to-face interviews with some women, girls both illiterates and literates on issues pertaining to the respondents background, the school enrollment. Local government leaders and education officer.

3.5.2 Sources of data

Primary source of data

This was got through the use of self administered questionnaires and interviews.

Secondary data

Text books and other related works of outstanding scholars whether Published, Magazines, Written data sources included published and unpublished documents, agency reports, newspaper articles, internet sources and so forth was referred to so as to give more light on issues of the performance of the hearing impairing children in an inclusive setting in Muhuru division, Nyatike District.

3.6 Data Analysis

Data was analysed qualitatively and quantitatively. Different data sets were used in analyzing data collected, i.e. where necessary SPSS package was used. Bar graphs were used to give a clearer outlook about the performance of the hearing impairing children in an inclusive setting in Muhuru division, Nyatike District and they were done in Microsoft Excel. Recommendations were made using the outcome of the result of the analysis.

3.7 Ethical Consideration

Bearing in mind the ethical issues, the researcher provided the respondents with the necessary information as regards the main purpose of the research, expected duration, procedures followed, and the researcher was in position to keep privacy and not disclose the confidentiality of respondents and researchers responsibility.

3.8 Limitations

The research study was faced by a number of problems and constraints and hence may not adequately meet the intended objectives to the required level.

Financial constraints have limited the researcher from having a thorough research process for instance; undertaking pretexts and piloting studies had to be foregone.

Again data collection and processing was done in bits because the researcher could not raise the required fund in lump some as she had to find herself.

Problem of distance between the researcher and her supervisor while in the field did impede proper continuous assessment of research, thus research process could only be dictated when it's already late.

The researcher faced a problem of time constraints. The time allocated for the study was not enough for a thorough investigation because the research was conducted with academic urgency in the three years while also the researcher was required to attend to his academic work.

3.9 Delimitations

This research which was facilitated by the following favorable factors;

Since the researcher was a resident of the area, he had accommodation hence less expenditure.

The researcher being a resident was familiar to the people whom she obtained information. The researcher did not find problems in transport because the infrastructure is good.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF FINDINGS

4.0 Introduction

In this section, a core of the study is presented. Data collected from the respondents is analysed. The discussion is presented in accordance with research questions and objectives of the study.

4.1 Demographic Background of the Respondents

4.1.1 Sex

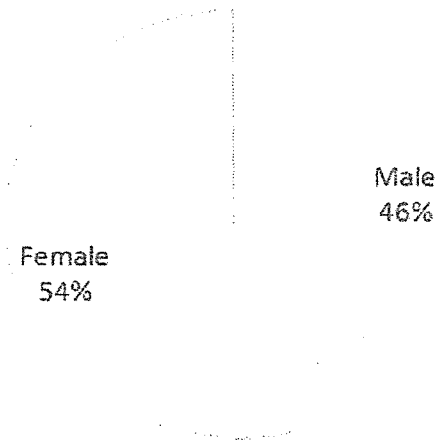
Table 1: The sex of the respondents

Sex	Frequency	Percentage
Male	37	46.25
Female	43	53.75
Total	**80**	**100.00**

Source: Field work 2012

From the table 1, results indicate that majority of the respondents were female (53.75%) while only 46.35% were male.

Figure 1: Sex of the respondents



Source: Fieldwork 2012

4.1.2 Age

Table 2: Age of the respondents

Age brackets	Frequency	Percentage
Below 19	2	02.50
20-24	22	27.50
25-29	28	3500
30-34	19	23.75
35-39	5	06.25
40 -44	3	03.75
45+	1	01.25
Total	**80**	**100.00**

Source: Fieldwork 2012

From the table 2, majority of the respondents fall in the 25-29 age group followed by 20-24, 30-34, 35-39, 40-44, below 19 and 45+ with 35.00%, 24.50%, 23.75%, 6.25%, 3.75%, 2.50% and 1.25% respectively.

4.1.3 Marital status

Table 3: The respondent's martial status

Marital status	Frequency	percentage
Single	35	43.75
Married	25	31.25
Divorced	5	6.25
Never married	15	18.75
Total	**80**	**100.00**

Source: Fieldwork 2012

Table 3 results indicate that majority of the respondents were single followed by married, never married and divorced with 43.75%, 31.25%, 18.75% and 6.25% respectively.

4.1.4 Education background

Table 4: Education background of the respondents

Level	Frequency	Percentage
Primary	8	10.00
Secondary	26	32.50
Tertiary	17	21.25
University	29	36.25
Total	80	100.00

Source: Fieldwork 2012

Table 4 shows that most of the respondents were university graduates with 36.25% followed by secondary graduates with 32.50%, tertiary and primary with 21.25% and 10.00% respectively.

4.1.5 Occupation

Table 5: The respondent's Occupation profession

Occupation	frequency	Percentage
Farmer	3	03.75
Others	22	27.50
self employed	10	12.50
Civil servants	45	56.25
Total	**80**	**100.00**

Source: Fieldwork 2012

From table 4.5, it can be established that most of the respondents were civil servants with 56.25% followed by others with 27.50% followed by self employed and farmer with 12.50% and 3.75% respectively.

4.2 Characteristics of Hearing Impairment

Table 6: Characteristics of hearing impairment

Characteristics	Frequency	Percentage
Cognitive	25	31
Academic	15	19
Physical development	10	13
Behaviour	20	25
Communication	7	09
Others	3	04
Total	**80**	**100**

Source: primary data 2012

From table 6, it can be established that the common characteristic is cognitive with 31% followed by behaviour, academic performance, physical development, communication and others with 25%, 19%, 09% and 04% respectively.

4.3 Causes of Hearing Impairments

Table 7: Causes of Hearing Impairments

Causes	Frequency	percentage
Long term exposure to environment noise	17	21
Genetic	10	13
Diseases or illness	30	38
Medication	10	13
Exposure to autotoxin characters	9	11
Physical trauma	4	05
Total	**80**	**100**

Source: Fieldwork 2012

From the study it can be established that the most causes of hearing impairments to learners with hearing impairments is diseases or illness with 38% followed by long term exposure to environment noise , genetic and medication, exposure to autotoxin characters and physical trauma with 21%, 13% and 13%, 11 % and 5% respectively.

Through the informal interviews with the respondents it was discovered that teachers use a lot of time in demonstrating how the instructional materials work in order to make the learner achieve or get what he or she is expected to learn.

4.4 Intervention

Table 8: Intervention

Intervention	**Frequency**	**Percentage**
Reduce distance while teaching	35	43.75
Speak slowly	16	20.00
Face-to-face	18	22.50
Telecommunication devices	7	8.75
Others	4	5.00
Total	**80**	**100.00**

Source: Fieldwork 2012

From the study it was established that most of the respondents gave reducing distance while teaching as the best intervention with 43.75% followed by face-to-face, speak slowly while demonstrating, telecommunication devices and others with 22.50%, 20.00%, 8.75% and 5.00% respectively.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATION

5.0 Introduction

This chapter focuses on the discussion of the results, conclusion and recommendation in relation to the purpose of the study, objectives and hypothesis of the study.

5.1 Discussion

Through the study majority of the respondents were female (53.75%) while only 46.35 were male and they fell in the 25-29 age group followed by 20-34, 30-34, 35-39, 40-44, below 19 and 45+ with 35.00%, 24.50%, 23.75%, 6.25%, 3.75%, 2.50% and 1.25% respectively.

It was also found out that majority of the respondents were single followed by married, never married and divorced with 43.75%, 31.25%, 18.75% and 6.25% respectively. Most of the respondents were university graduates with 36.25% followed by secondary graduates with 32.50%, tertiary and primary with 21.25% and 10.00% respectively.

5.1.1. Characteristics of hearing impairments

Through the study it was established that the common characteristic is cognitive with 31.25% followed by behaviour, academic performance, physical development, communication and others with 25.00%, 18.75%, 8.75% and 3.75% respectively.

5.1.2 Causes of hearing impairments

From the study it was shown that the most impact of performance of learners with hearing impairments diseases or illness with 38% followed by long term exposure to environment noise, genetic and medication, exposure to autotoxin characters and physical trauma with 21%, 13% and 13%, 11% and 5% respectively.

5.1.3 Intervention

From the study it was established that most of the respondents gave reducing distance while teaching as the best intervention with 43.75% followed by face-to- face, speak slowly while

demonstrating, telecommunication devices and others with 22.50%, 20.00%, 8.75% and 5.00% respectively.

5.2 Conclusion

Impacts of instructional materials to learners with hearing impairments are closely related to the support inputs into the system in relation to the raw materials (learner) and the finished product outcome of the success and achievement. These include the academic performance, communication, interaction, sign language.

5.3 Recommendations

The government should give out credits to the natives and promote financial institutions giving out small loans to people enabling them to develop the quality of education

They should develop a positive lovely attitude towards the people in Nyatike by identifying them as having equal rights and freedom like any other community member and that is their natural right to enjoy them freely so as to eliminate income inequalities.

Enhance sensitization of parents and communities, through public awareness campaigns and other communication strategies on the value of education, with a view to minimizing the impact of the practices that militate against it.

Professional interpreters should be made available and used on a regular basis for ethnic minority during the peace process.

Further more the government should set up a loan scheme. This scheme to be both for the learners and school owners. For learners can borrow the money and pay it after the graduation especially at university level. While school owners can borrow money and pay it after along period of time.

Private proprietors should ensure that conducive study environment is catered for learners to perceive whatever has been taught to them. This will be realised when the best structures (classrooms) have been constructed.

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APPENDICES

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	2nd week	Approval
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December	3rd & 4th weeks	Submission

APPENDIX B: BUDGET

ITEMS	COSTS IN KShs.
Stationary	2,000
Printing /binding	I 000
Facilitation /meals	2,000
Transport	5,000
Miscellaneous	2,000
Total	**12,000**

APPENDIX C: QUESTIONNAIRES

I am student at KIU, I am carrying out a research study on the topic: **Performance of the Hearing Impaired Children in an Inclusive Setting,**

The purpose of this study is to collect data on the topic. Your response will be treated with confidentiality and the information obtained is strictly for education purposes.

You are kindly requested to fill the questionnaire.

(Tick where applicable)

SECTION A: DEMOGRAPHIC BACKGROUND

1. Sex: (a) Male ☐ (b) Female ☐
2. Age of the Respondent: (a) Below 19 ☐ (b) 20-24 ☐ (c) 25-29 ☐
   (d) 30-34 ☐ (e) 35-39 ☐ (f) 40-44 ☐ (g) 45+ ☐
3. Marital status: (a) Married ☐ (b) Single ☐ (c) Divorced ☐
   (d) Never married ☐
4. Education Background: (a) Primary ☐ (b) Secondary ☐ (c) Tertiary ☐
   (d) University ☐
5. Occupation of the respondent: (a) Farmer ☐ (b) Civil Servant ☐
   (c) Businessman/woman ☐ (e) Others (specify) ☐

SECTION B: CHARACTERISTICS OF HEARING IMPAIRMENTS

6. What are the characteristics of hearing impairments?
7. After seeing them do you help the learner with hearing impairments? Yes ☐ No ☐

   If yes what do you do?.....

SECTION C: CAUSES OF HEARING IMPAIRMENT

8. What are the causes of hearing impairment? .....

   .....

SECTION D: INTERVENTIONS TO HELP THEM PERFORM WELL

9. What are the impacts of instructional materials to learners with hearing impairments?

.....

.....

10. How have you tried to eliminate or solve them?

.....

.....

11. What are your recommendations to the improvement of quality education?

.....

.....

THANK YOU FOR YOUR COOPERATION

SECTION D: INTERVENTIONS TO HELP THEM PERFORM WELL

9. What are the impacts of instructional materials to learners with hearing impairments?

.....

.....

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.....

.....

THANK YOU FOR YOUR COOPERATION

Table 3 results indicate that majority of the respondents were single followed by married, never married and divorced with 43.75%, 31.25%, 18.75% and 6.25% respectively.

4.1.4 Education background

Table 4: Education background of the respondents

Level	Frequency	Percentage
Primary	8	10.00
Secondary	26	32.50
Tertiary	17	21.25
University	29	36.25
Total	80	100.00

Source: Fieldwork 2012

Table 4 shows that most of the respondents were university graduates with 36.25% followed by secondary graduates with 32.50%, tertiary and primary with 21.25% and 10.00% respectively.

4.1.5 Occupation

Table 5: The respondent's Occupation profession

Occupation	frequency	Percentage
Farmer	3	03.75
Others	22	27.50
self employed	10	12.50
Civil servants	45	56.25
Total	**80**	**100.00**

Source: Fieldwork 2012

From table 4.5, it can be established that most of the respondents were civil servants with 56.25% followed by others with 27.50% followed by self employed and farmer with 12.50% and 3.75% respectively.

4.2 Characteristics of Hearing Impairment

Table 6: Characteristics of hearing impairment

Characteristics	Frequency	Percentage
Cognitive	25	31
Academic	15	19
Physical development	10	13
Behaviour	20	25
Communication	7	09
Others	3	04
Total	**80**	**100**

Source: primary data 2012

From table 6, it can be established that the common characteristic is cognitive with 31% followed by behaviour, academic performance, physical development, communication and others with 25%, 19%, 09% and 04% respectively.

4.3 Causes of Hearing Impairments

Table 7: Causes of Hearing Impairments

Causes	Frequency	percentage
Long term exposure to environment noise	17	21
Genetic	10	13
Diseases or illness	30	38
Medication	10	13
Exposure to autotoxin characters	9	11
Physical trauma	4	05
Total	**80**	**100**

Source: Fieldwork 2012

From the study it can be established that the most causes of hearing impairments to learners with hearing impairments is diseases or illness with 38% followed by long term exposure to environment noise , genetic and medication, exposure to autotoxin characters and physical trauma with 21%, 13% and 13%, 11 % and 5% respectively.

Through the informal interviews with the respondents it was discovered that teachers use a lot of time in demonstrating how the instructional materials work in order to make the learner achieve or get what he or she is expected to learn.

4.4 Intervention

Table 8: Intervention

Intervention	**Frequency**	**Percentage**
Reduce distance while teaching	35	43.75
Speak slowly	16	20.00
Face-to-face	18	22.50
Telecommunication devices	7	8.75
Others	4	5.00
Total	**80**	**100.00**

Source: Fieldwork 2012

From the study it was established that most of the respondents gave reducing distance while teaching as the best intervention with 43.75% followed by face-to-face, speak slowly while demonstrating, telecommunication devices and others with 22.50%, 20.00%, 8.75% and 5.00% respectively.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATION

5.0 Introduction

This chapter focuses on the discussion of the results, conclusion and recommendation in relation to the purpose of the study, objectives and hypothesis of the study.

5.1 Discussion

Through the study majority of the respondents were female (53.75%) while only 46.35 were male and they fell in the 25-29 age group followed by 20-34, 30-34, 35-39, 40-44, below 19 and 45+ with 35.00%, 24.50%, 23.75%, 6.25%, 3.75%, 2.50% and 1.25% respectively.

It was also found out that majority of the respondents were single followed by married, never married and divorced with 43.75%, 31.25%, 18.75% and 6.25% respectively. Most of the respondents were university graduates with 36.25% followed by secondary graduates with 32.50%, tertiary and primary with 21.25% and 10.00% respectively.

5.1.1. Characteristics of hearing impairments

Through the study it was established that the common characteristic is cognitive with 31.25% followed by behaviour, academic performance, physical development, communication and others with 25.00%, 18.75%, 8.75% and 3.75% respectively.

5.1.2 Causes of hearing impairments

From the study it was shown that the most impact of performance of learners with hearing impairments diseases or illness with 38% followed by long term exposure to environment noise, genetic and medication, exposure to autotoxin characters and physical trauma with 21%, 13% and 13%, 11% and 5% respectively.

5.1.3 Intervention

From the study it was established that most of the respondents gave reducing distance while teaching as the best intervention with 43.75% followed by face-to- face, speak slowly while

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