ACADEMIC DIFFICULTIES OF HEARING IMPAIRED PUPILS IN SELECTED PRIMARY SCHOOLS IN RACHUONYO SOUTH DISTRICT, KENYA.

A Thesis

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In Partial Fulfillment of the Requirement of the Degree of Master of Special Needs Education

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DECLARATION A

"This thesis is my original work and has not been presented for a degree or any other academic award in any university or institution of learning.

Pamela Adoyo Auma

Signature

Date: 17 9 2012

DECLARATION B

"We confirm that the work reported in t	his thesis was carried out by the
candidate under our supervision"	
Name and signature of supervisor	
Traine and signature of supervisor	Name and signature of
	Supervisor
Date	Date

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ABSTRACT

This study focused on the Academic Difficulties of Hearing Impaired Pupils in Rachuonyo South District, Kenya. The specific objectives of the study were to determine the profile of the respondents as to age, gender, highest education qualifications, to establish the level of academic difficulties of male and female hearing impaired pupils and to establish whether there is a significant difference in the level of academic difficulties among the hearing impaired pupils.

The methods used to collect data were descriptive survey design. The descriptive correctional, descriptive comparative and ex post facto. The research instrument used was questionnaire.

In chapter four, the findings were presented and interpreted in relation to the study objectives and research questions. While linking the existing literature, results included demographic characteristics, frequency and percentages. Based on the findings, observation indicated a positive significant difference between the male and female hearing impaired pupils in terms of academic difficulties. In chapter five, development of solutions to the problem, summary of the findings and conclusions were attempted. The findings suggested recommendations on areas pertaining to the level of the teacher's education, the teaching methods and the provision of teaching learning materials.

CHAPTER ONE

THE PROBLEM AND ITS SCOPE

Background of the study

Hearing impairment is a condition that hinders a pupil from accessing the same source of information as their hearing counterparts. It can also be referred to as auditory impairment (Nduromo 1993). In many instances these children are retarded academically in language, arts specifically reading.

The hearing impaired pupil also suffers communication difficulties to a certain extent depending on the degree of the hearing loss. These degrees range from mild, moderate and profound. Since the hearing impaired learners do not hear well or at all they are either involved minimally or completely cut off from a conversation hence they live in a lonely world (Kershow, 1973)

Since the hearing impaired pupils experience the information processing problem, their performance of academic tasks is also handicapped, therefore looks for ways by which these learners can be assisted to overcome their academic difficulties and achieve academic ambitions as expected by the society.

In the dark ages the hearing impaired children were treated with negative attitudes by their parents and society at large. Nobody thought of educating them. In the 19th century some individuals and parents who realized that even the special needs children had potential to perform academic tasks started teaching them at their family level. One of such individuals was Dr. John of Beverly who was a bishop. He taught a person with hearing impairment how to articulate and talk. Didymus who featured in 685 A.D was reported to have been the first person to develop touch reading material for the visually impaired in Alexandria.

During the closing years of eighteenth century, following the American and French revolutions effective procedures were devised for teaching children with sensory impairments. Those who were deaf or blind (Winzer, 1996)

The historical roots of special education are found primarily in the early 1800s. contemporary educational methods for exceptional children can be traced directly to techniques pioneered during that era. And many (perhaps most) of today's vital controversial issues have been issues ever since dawn of special education (ball 1971 Kauffman 1976) lane, 1976).

The hearing impaired learners fall under special education and most of the originators of special education were European physicians. They were primarily young ambitious people who challenged the wisdom of the established authorities including their own friends and mentors (Kanner 1964) among these people was Jean Mark Graspard Itard (1775 - 1838), a French physician who was an authority on diseases on the ear and on the education of the deaf students, is the person to whom most historians trace the beginning of special education as we know today, Thomas Hopkins Gallaudet (1787 – 1851), a minister was a student at Andover Theological seminary, he tried to teach a girl who was deaf. Thomas Hopkins Gallaudet visited Europe to learn about educating the deaf and in 1817 established the first American residential school for the deaf and students in Hartford Connecticut (now known as the American school of the deaf) Gallaudet University in Washington DC, the only liberal arts college for deaf students in the world was named his honour (Daniel P. Hallahan and James M. Kauffman 2002) Samwel Gridley Howe (1801 - 1876) was another American who contributed to the teaching of both deaf/ blind children. His success in teaching Laura Bridgeman who was a deaf and a blind greatly influenced the education of Hellen Keller.

The use of sign language as a mode of communication in the 18th and 19th century for the deaf was received with a lot of controversy. Some educators believed that the deaf should be taught using spoken language of total communication approach to facilitate their full integration into the society being led by German, Samwel, and Heineken. The declaration of using speech and speech reading recorded the development of sign language for many years. The speech and speech reading was used for 30 years from 1858 to 1985 in Kenya. Between 1958 and early 60s the first schools and units for the deaf were established and the learners used Kenya sign

education has been achieved by the implementation of free primary education (FPE) in 2003. The child's rights education act has also contributed and made the numbers of learners in inclusive schools rise in access. The Act and Free Primary Education has enabled the hearing impaired learners be educated in either inclusive or special schools in Rachuonyo South District Kenya (Ministry of Education Science and Technology (2003) education sector strategy plans 2003–2007).

Statement of the problem

Education is a major concern of the Kenya Government. It is one of the areas of reference in the social pillar of the vision 2030 (Unicef 2010).

In Kenya Education is measured by the level of academic performance. The learners who perform well in Kenya Certificate of Primary education (KCPE) go to good secondary schools from which they perform well and join university. These learners then get in lucrative jobs.

Research indicates that the academic difficulties of the hearing impaired learners contribute to their low level of academic performance in Kenya.

The research therefore intends to determine the academic difficulty that these hearing impaired learners experience in Rachuonyo South district.

Purpose of the study

This study intended to validate the theory of information processing model on which this study was based, test the hypothesis that there is no significant difference in the level of academic difficulties in gender among the hearing impaired pupils in selected primary schools in Rachuonyo South District, Kenya to bridge the gaps identified in literature review and contribute to the existing knowledge on the areas of academic difficulties.

Research objectives

General: This study was to determine academic difficulties of hearing impaired pupils in Rachuonyo South District, Kenya.

Specific: The specific objectives to be sought further in this study were as follows:

1. To determine the profile of the respondents as to:-

Gender

Age

Highest education qualification

Teaching experience

- 2. To establish the level of academic difficulties of the hearing of male and female hearing impaired learners.
- 3. To establish whether there is significant difference in the level of academic difficulties in gender among the hearing impaired learners.

Research Questions

1. What is the profile of the respondents as to:-

Gender

Age

Highest Education qualifications

Teaching experience

- What is the level of academic difficulties of male and female hearing impaired learners?
- What is the significant difference in the level of academic difficulties in gender among the hearing impaired learners?

Null hypothesis

1. There is no significant difference in the level of academic difficulties in gender among the hearing impaired learners in selected primary schools in Rachuonyo South District Kenya.

Scope of the study

Geographical scope

This study was conducted in selected inclusive and special schools in the following zones:- Ramba, Awach, Saye, Ober, Ringa, Nyang'iela, Atandi, Ayiengo and Oyugis zones, whereby each zone produce one school.

Content scope

The study intended to establish the level of academic difficulties of the hearing impaired learners and establish whether there is a significant difference in the level of academic difficulties in gender among the hearing impaired pupils in selected primary schools in Rachuonyo South District Kenya.

Theoretical scope

The information – processing theory by Rowell Huesmann was proved.

Time scope

This study was conducted between September 2011 and September 2012.

Significance of the study

The findings of this study will benefit teachers, parents, and Ministry of Education and future researchers.

Teachers will understand the hearing impaired learners and apply appropriate teaching methods, teaching resources and techniques to suit the needs of these learners.

The parents will be guided on how to determine the effects of the problems and develop positive attitude towards these learners offering the necessary support.

The Ministry of Education will utilize the findings of the study to identify the areas that need improvement in the curriculum so as to help hearing impaired learners perform well academically.

The future researchers will utilize the findings to embark on a related study.

Operational Definitions of Key Terms

For the purpose of this study the following terms are defined as they are used in the study.

Academic difficulties refer to specific difficulties the hearing impaired learners may experience in school subjects. These are manifested when tackling academic tasks **Gender** refers to the female and male hearing impaired pupils.

Hearing impaired learners are those learners whose levels of academic achievement are low because of academic difficulties.

The profile of the respondents refers to the attributes of the respondents looked for in this study in terms of gender, age, highest education qualification and teaching experience

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Concepts, opinions, ideas from authors/ experts.

Academic Difficulties

It should be noted that one's ability to hear is very important in life. Those who cannot hear find themselves in a lonely world of their own. Regardless of the degree of hearing impairment, it makes considerable difference to one's reaction and the ability to think. (Anderson 1996).

Ross and his colleagues (1991) pinpoint specific difficulties learners with nearing impairment may experience in school subjects as follows:-

n language based subjects like English, science and social studies learners' daily work s poor on comprehension questions, although he or she reads well. The learners espect an answer already given by another learner.

n spelling, learners' performance on tests is poor even after studying learner has vords on spelling test numbered incorrectly. In independent class work, the learner sks for teachers help frequently. He or she does not know what to do on his or her wn. This learner does not complete work. In group projects/ work the learner is not elected for groups he or she does not participate. In test taking, the learners erformance on test is poor he or she does wrong page and asks several questions egarding what is expected.

According to Halland and Kauffman (1986) the hearing impaired children are equently handicapped in varying degrees with regard to educational achievement on nguage skills. The language skills probably the most important aspect of academic thievement which is the most affected by hearing impairment.

Kenya the medium of instruction in most primary schools is English. According to gotsky (1962) language contributes a lot to the intellectual ability of the hearing paired children and therefore thought depends on language. He further states that

severely hearing impaired children are also handicapped in cognitive ability. This is because speeches of children become interiorized as inner speech and which is the equivalent of cognitive thought.

Furth (1964, 1971) argues that deaf children do not depend on language. He urges that deaf children are not necessarily slower intellectually than hearing children. His conclusion on the comparison of the cognitive abilities of hearing impaired children more so the deaf children are essentially unimpaired except incases which particular concept is depended on language experience. Furth stresses that the hearing impaired children perform less well than hearing children on intellectual tasks. It may be because they have not received adequate parental stimulation or educational instruction.

Trybus (1985) assets that the deaf children and to some extent hard of hearing children have academic difficulties. These children cannot read complex language and solve complicated math problems.

According to Jensema (1975) the age at which a loss occurs and the degree of oss influences academic achievement. Reading achievement is higher for those children who lost their hearing loss at a later age than those who lost their hearing at an earlier age. He analyzed achievement test scores of 6.873 children, whereby age 6 to 19 who had hearing handicap severe enough to place them in special programmes. Jensema ealized that ten-year olds were doing arithmetic and fourteen year olds reading at a hird grade level. He states that in a ten year period from age 8 to age 18 are the overage hearing impaired.

Trybus and Karchmer (1977) had a report on the reading and arithmetic rogress of 1.543 deaf students over a three year olds with reading comprehension at a econd grade level and a twenty academic year in reading comprehension. They also bund that females score slightly higher than males, achievement level is inversely, elated to hearing loss, learners with no additional handicaps score higher than those with one or more, children entering school at age 5 score highest than those entering ither earlier or later, learners with no deaf parents score higher than those with either ne deaf parent or two normal- hearing parents.

According to Allen (1986) for every age 8 to 18 scores on reading comprehension were higher in 1983 than in 1974. The same pattern was in maths achievements. Although the scores of hearing impaired learners continued to lag behind those of hearing learners, there was an encouraging upward trend over the nine year period. This was because of improved instructional techniques and opportunities for learning which can also be applied in the schools in Rachuonyo South district for improvement and better academic performance of hearing impaired learners.

Differences in the level of academic difficulties in gender among the hearing impaired learners

Halland and Kauffman (1986) states that the hearing impaired children are frequently handicapped in varying degrees with regard to educational or academic achievement. Therefore the hearing impaired learners experience academic difficulties which contribute to their academic performance.

Quiley and King (1981) developed a reading series for deaf students called reading milestones. They controlled the language of the readers by applying he results of research with deaf students (quiley, 1976).

There are eight levels of reading difficulties arranged in sequence. A child who has mastered them all should be able to begin reading traditional basal text at a fourth grade level.

According to Allen, white and Karchmer (1983) stand ford achievement Test (SAT HI) shows the low achievement level of the hearing impaired, particularly in reading are to a great extent due to their inexperience in hearing and using spoken anguage and that the hearing impaired achieve at a lower level than the hearing thildren.

Theoretical perspectives

This study is based on the information processing system model which likens the numan memory to the working of a computer (Daniel Schalet, 1996). The memory comes after the auditory reception and therefore if the ears are impaired then

information will either be lost from the memory or distorted. Academic tasks are information that if not understood well by the learner, learning is tampered with. This information processing model is relevant to this study as it involves the aspects of academic difficulties which are thinking, understanding, behaviour, attention, accuracy, concentration, actions and associations.

In this information – processing model a stimulus that registers on human senses is remembered only if it draws attention which brings into consciousness, is encoded or transferred to storage sites in the brain and is retrieved for use at a later time (Arkinson and shiffrin, 1968).

The hearing impaired language development is delayed and the cognitive abilities of deaf and hard of hearing children are seriously hindered by their lack of complex academic performance in all areas requiring language reading or writing (Lazarus and Strichart, 1986). Since language contributes a lot to the academic performance of the learners, the hearing impaired learners are justified for their poor performance due to lack of encoding consciousness, encoding and retrieval of the information through language.

Learning is a step-by-step process and therefore the hearing impaired learners should understand theory and general principles before taking up the practical aspects of the subject at hand. Therefore the learners should understand the principles of grammar before attempting to write themes they should know how to add, subtract, multiply and divide before handling practical objects for example money (Lindergren, 1986).

The information processing model is very relevant because for a child to learn and perform well in school consciousness, encoding and retrieval must take place gradually theoretically and thereafter practical aspects. The theoretical part involves oral language. The hearing impairment therefore automatically hinders the conception of the language interfering with the consciousness, encoding and retrieval for better academic performance.

The most severely affected area of development for a learner with hearing impairment is the comprehension and use of speech language. Both speech and language may be

affected. Speech development relies on the discrimination of the differing sounds in any language and the accurate production of these sounds. Language development is far more complex and requires the mastery of not only the sounds of a language but also its system of rules for combing sounds into words and words into sequences that express thought, feelings, intentions and experiences that contribute to gradual learning (Warts, Calatta, Tompkins, 2007).

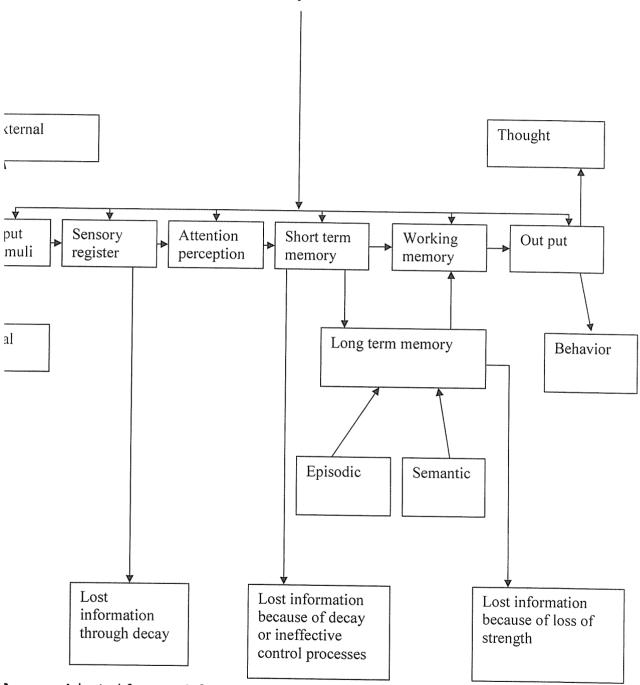
The information – processing model provides a useful way to conceptualize the process of learning by depicting the components of inputs, outputs, memory and an executive control function (Greeno, Collins and Resnick, 1996, Lyon and Krasnegor, 1996, Swanson, 1996). The learner has to search his or her memory to recognize the word and to determine its executive function) and finally the learner says the word (output performance). If the memory of the word has decayed or is lost, the learner will be unable to recognize or say the word. For a learner to determine the sound of a word auditory perception must take place and therefore the hearing impairment can deter the hearing impaired learners from determining the sounds. This contributes to the learners' inability to say the word and can paralyze learning.

Since ears are one of the senses used in the sensory register during the information-Processing the hearing impaired learners have a problem in the input of the information. This interpretation and maintenance of the information from the input receptor long enough for it to be perceived and analyzed becomes difficult.

Teachers use a number of verbal and nonverbal cues to get learners attention such as ringing a bell or saying. The hearing impairment learners make the learner not to pay attention to the information immediately making it to get lost from the sensory register. Once the sensory register loses the information the learning is hindered.

Figure 2.1

EXECUTIVE CONTROL (metacognition) planning, evaluating, regulating the information-process routines



Source: Adopted from an information processing model of learning

Related studies

Academic difficulties

The hearing impaired learners have the same 1Q score, distribution as do those learners who hear (Paul and Quiley, 1994, Sclesignger, 1983; Vernon, 2005. However, they are typically underachievers, lagging far behind their peers, in math and reading (Bess, 1988; Moores, 2004).

According to Moores (1985), there are five variables of academic achievement as follows:-The severity of the hearing impairment. The greater the hearing loss the more likely the learners will have difficulty learning language and developing academic skills. The age of onset of the hearing loss. Hearing loss before language developed (prelingual loss) is much more debilitating than hearing loss after language has developed (post-lingual loss). Intelligence test scores. The higher a learner scores on 1Q tests, the better his or her chance at achieving academic success will be. Socio-economic status of the family with hearing impairment and those who are deaf from higher socio-economic families are generally more successful academically than their lower socio-economic counter parts. Hearing status of parents. A learner who is deaf and has who parents who are also deaf is likely to have a better chance for academic success than learner who is deaf and has a normal hearing parent. This is especially true if the parents who are deaf are highly educated.

The hearing impaired learners experience reading challenges for example by age twenty half of such learners tested read low the mid-fourth grade level leaving them unable to read most newspapers which are written at least at the fifth grade level. Deaf learners and to some extent who are hard of hearing have academic difficulties (Trybus 1985) reported achievements test results for thousands of deaf students enrolled in residential and day schools throughout the county. The eighteen -year olds scored at a second grade level in both reading and arithmetic computation. The seventeen year old scored at a third grade level in reading and a sixth grade level in arithmetic scores probably reflected the amount of English involved in each subject. The under achievement in math probably stemmed from the more complex language

necessary to read and solve complicated math problem. Learners who are deaf have intelligence quotient that approximate that of their hearing peers (Heward, 2006). They experience difficulties with language skills like:-

Difficulties in comprehension and use of oral language which affects both speech and language. Difficulties in description of the differing sounds and the accurate production of the sounds due to the affected speech development. Difficulties in mastery of not only the language but also its system of rules for combing sound into words and words into sequences that express thoughts feelings, intentions and experiences. The automatic combing of hearing and language learning may be absent to differing degrees for each learner with a hearing impairment.

Jensema (1975) analyzed test scored of 6,873 children ages 6 to 19 who had nearing handicaps severe enough to place them in special education programs. He found ten-year-olds doing arithmetic and fourteen —year-olds reading at a third-grade evel. He therefore noted that in a ten-year period from age 8 to age 18 the average nearing impaired learners increases his vocabulary score only as much as average normal hearing learner does between the beginning of Kindergatten and the latter part of the second grade. He also found that the age at which a hearing loss occurs and the legree of loss influence school achievement. Reading achievement was higher for those earners who lost their hearing at age 3 than it was for those whose hearing loss nappened earlier. The academic performance suffered as the degree of loss increased. ensema's findings concur with that of Quiley (1969) who established a parallel elationship between degree of performance among hard of hearing youngsters. The reater the loss, the worse the academic performance. The hard of hearing had a traight line relationship. Once a loss measured in the severe or profound range (over 0dDb academic performance dropped markedly.

Trybus and Karchmer (1977) reported the progress in reading and arithmetic of ,543 deaf students over a three- year period. He found out that nine-year-olds with eading comprehension at second grade level and twenty-year-olds testing at a fifth rade level. This meant on average about a third of a year's progress every academic ear in reading.

They also found a relationship between certain variables and the reading achievement of deaf learners. Girls and white students tended to do better than did boys and minority group members. The severity of reading problems increased with the degree of hearing loss and the presence of other handicapping conditions. Youngsters who started school at age 5 tended to do better than did those who started earlier or later. Learners whose parents were deaf showed better performance than did learners with hearing parents.

According to Allen (1986) the academic performances of the deaf learners showed some improvement. This he established by analyzing two sets of achievement test scores of learners with hearing impairments one from 1974 and the other from 1983. He reported that for every age from 8 to 18 scores on reading comprehension were higher in 1983 than in 1974. He found the same pattern in math achievement. Although the scores of hearing impaired learners continued to lag behind those of nearing learners, there was an encouraging upward trend over the nine- year period. Although hard evidence is lacking, there is a feeling that improved institutional techniques and opportunities for learning were factors in these gains.

According to Johnson (2001 - 2002) and Moores (2001) a long term problem for deaf individuals is their academic achievement, particularly in the area of reading. By age 20 half of deaf learners tested read below the mid-fourth level leaving them anable to read most newspapers which were written at least at the fifth grade level.

Relationship of six variables to reading Achievement of Deaf learner.

Variable	Relationship with reading comprehension level
Sex	Females score slightly higher than males
Ethnic group	Whites score higher than Spanish- Americans or blocks
Degree of hearing loss	Achievement level is inversely related to hearing loss
Presence of additional	Learners with no additional handicaps score higher than those with
handicapping conditions	one or more
Age child began school	Children entering at age 5 score higher than those entering either
	earlier or later.
Parental deafness	Learners with note two deaf parents score higher than those with
	either one deaf parent or two Norman hearing parents.

Source: Adopted from "School Achievement scores of Hearing Impaired children: National Data on Achievement status and growth patterns" by R. Trybus and M. Karchmer 1977. American Annals of the Deaf.

CHAPTER THREE

METHODOLOGY

Research design

The researcher used a descriptive survey design, descriptive comparative and ex post facto in the study. Descriptive comparative was used to determine the difference in the level of academic difficulties of the hearing impaired learners in inclusive and special schools. The expost facto was used to retrieve data on academic difficulties.

Research population

The population consisted of 162 teachers from inclusive schools and 78 from special schools.

Sample size

The sample size of this study was determined by using Sloven's formula, whereby N is the targeted population and n is the sample size e is the level of significant which 0.05

$$n = \frac{N}{1 + Ne^2}$$

Table 1 below shows the respondents of the study with the following categories: Type of school, target population and sample size.

Table 1

Respondents of the study

Teacher	Target	Sample
	population	size
Inclusive (teaching both hearing impaired and normal pupils)	162	90
Special (teaching only hearing impaired pupils)	78	60
Total	240	150

Sampling procedure

⁵urposive sampling was used based on the following criteria, either male or female, qualified special needs teachers, teaching experience of more than one year and only nearing impaired learners.

Stratified random and simple random were used to select the different categories of espondents.

Research instruments

The Researcher used 21 questions adopted from standardized questionnaire where respondents answered questions that corresponded to the level and characteristics of academic difficulties experienced in subjects learnt in school.

Number 1 and 2 tested the pupil's attention and perception.

Number 12, 13, 14, 15, 16 tested understanding,

Number 5 and 10 tested concentration

Number 11 tested speed

lumber 21 application creativity and innovation

Jumber 6, 7, and 9 tested patience, behavior and accuracy respectively.

Vhen the numbers were ticked the pupils would be said to have difficulties in those reas.

This instrument was then chosen because predetermined and standardized questions would be simple and easy for respondents as it improved the report between the researcher and the respondents. A given set of alternatives were ranged from strongly agree, disagree and strongly disagree and these were assigned numerical values ranging from 1 to 4 respectively.

Validity and reliability

Validity of an instrument refers to the extent to which the instrument does what it is supposed to do. Best and Kahn (1989) states that the validity of an instrument refers to "asking the right question framed in the least ambiguous way" (p, 183). Content validity refer to the extent to which a test covers the content it is intended to cover (crane and Brewer 1974) .To ensure content validity the researcher carried out a pilot study involving 3 teachers .

In each case the respondent was asked to state whether the instrument ensured content validity after filling the questionnaire. All items in the instrument were discussed and their sequence, content, substance and repellence evaluated and this led to the inclusion of additional and relevant issues.

For reliability of the instrument the researcher used the test – retest technique .the researcher administered the questionnaire to four schools of the target population of the study. These schools were sampled from the nine schools. Sampling was done by allocating schools numbers on a piece of paper and put in a tray and then the five schools were randomly selected.

The researcher administered the same instrument twice to the same group of schools two weeks. The researcher then both tested and calculated the correlation co-efficient that was found to be 0.000 which was a positive correlation.

Data gathering procedure before the administration of the questionnaires

1. An introductory letter was obtained from the college of Higher Degree and Research at Kampala International University and presented to the district Education Officer in the District Where the study was conducted.

- 2. The researcher then visited the primary school and solicited approval from the primary heads to conduct the study.
- 3. When approved the researchers secured a list of the qualified respondents from the secure authorities in charge and selected through stratified random and simple random sampling to arrive at minimum simple size.
- 4. The respondents were explained to about the study and questionnaire delivered to capture quantitative data. Research assistants were selected, briefed and presented in order to be consistent in administering the questionnaires.

During the administration of the questionnaires.

- 1. The respondent were requested to answer completely and do not leave any part of the questionnaire unanswered.
- 2. The researcher and assistants emphasized retrieval of the questionnaires within two weeks from the date of distribution,
- 3. On retrieval, all returned questionnaires were checked if all and answered.

After the administration of the questionnaires

The data gathered was collaborated, encoded into the computer and statically treated using strengths weaknesses opportunities and threats [SWOT] analysis.

Data analysis

The frequency and percentage distribution were used to determine the profile of the espondents. Means and standard deviation were used to determine the level of scademic difficulties of the hearing impaired learners. The t-test was used to determine he significant difference between the profile variable.

!thical considerations

The following activities were implemented by the researcher to ensure confidentiality of the information provided by the respondents and to ascertain the practice of ethics in this study:-

- 1. Requested for permission to adopt the standardized questionnaire on academic difficulties through a written communication to the author
- 2. Coded the respondents and schools instead of reflecting their names.
- 3. Solicited permission through to written request to the concerned officials of the primary schools included in the study.
- 4. Requested the respondents to sign in the informed consent form
- 5. Acknowledged the authors quoted in the study and the author of the standardized instrument through citations and referencing.
- 6. Presented the findings in a generalized manner.

Limitations of the study

The researcher claimed an allowable 5% margin of error at 0.05 level of significance because of the following threats to validity. Measures were also indicated in order to minimize if not to eradicate the threats to the validity of the findings of this study.

- 1. Testing: The use of research assistants brought about inconsistency in the administration of the questionnaires in terms of administration time, items understanding and the explanation given to the respondents. To minimize this threat, the research assistants were oriented and briefed on the procedure to be done on data collection.
- 2. The distance to the sample schools: Some schools were located in difference this made the researcher to use lots of money during the movement time from one school to another.
- 3. The mode of transport: Affected the researcher's movements to schools in the areas where vehicles could not reach. The researcher therefore had to use bicycles, walk on foot since she had not learned to ride a bicycle she depended on boda boda. The cyclists also had the places they could not access due to mud and slope. The researcher therefore did most the work on foot which was slow and tiring.
- 4. Extraneous variable which were beyond the researcher's control such as respondents' honesty, personal biases and uncontrolled setting of study.

- 5. Time of the study: The rainy season affected quality work because movement was limited. Good amount of work could only be done on small fraction of the day early morning was cold wet and muddy, in the afternoon was rainy and became difficult to move.
- 6. Some of the respondents were suspicious and reluctant to provide data presuming the research was for researching for some political reasons other than academic. In such a case, the researcher could always produce a letter of introduction, thus emphasizing the genuineness and significance of the study being undertaken, this eliminated suspicion from some of those respondents. Nevertheless they provided information which was vital for the study. All questionnaires were answered and returned.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION OF RESULTS

Introduction

This chapter shows the demographic characteristics of respondents, Level of Academic difficulties, significant difference in the level of Academic difficulties in gender among hearing Impaired pupils in selected Primary Schools in Rachuonyo South District (Kenya). The presentation is based on data as collected from the field and as analyzed by the researcher. Respondents were asked to provide their gender, age, qualification and their teaching experience. Their responses were summarized using requencies and percentage distributions as indicated in table 2; below

Table 2 Profile of Respondents

Cotonomia		
Category	Frequency	Percent
Gender Male		
Female	105	70.0
	45	30.0
Total	150	100
Age		
20-30	5	3.3
31-39	70	46.7
40-50	40	26.7
51 and above	35	23.3
Total	150	100
Qualification		
Certificate	40	26.7
Diploma	60	40.0
Bachelors	30	20.0
Masters	20	13.3
Total	150	100
Experience		
1-2 years	25	16.7
3-4 years	46	30.7
5-6 years	35	23.3
7 years and above	44	29.3
Fotal	150	100

Results in Table 2. indicate that male respondents (70%) were the majority, while Female respondents were only 30%. This indicates a big gender gap resulting from the un- equal distribution of female employees in these selected primary schools of Rachuonyo South District -Kenya.

Concerning age group, respondents in this sample were dominated by those between 31-39 years (70%), suggesting that most of the teachers in these selected primary schools of Rachuonyo South District ,Kenya are youths. Regarding academic qualification, majority of the respondents (60%) were diploma holders, indicating that respondents are relatively qualified, and these were followed by certificate holders (40%), confirming just a relative level of qualification. With respect to teaching experience, majority of teachers have taught for 5-6 years (35%). And this implies a nigh level of teacher retention in selected primary schools of Rachuonyo South District, Kenya.

Level of Academic difficulties

The dependent variable in this study was Academic difficulties of Hearing impaired pupils in primary schools of Rachuonyo South District, Kenya, for which the esearcher wanted to determine its level. The level of Academic difficulties had twentyone (21) questions, in the questionnaire where by each of these questions was based on the four Likert scale where 1=Strongly disagree,2=disagree,3=Agree and 4=Strongly Agree. The respondents were asked to rate the extent to which the Level of Academic difficulties is very high, high, low or very low by indicating the extent to which they agree or disagree with each question and their responses were analysed using SPSS and summarized using means as indicated in table 3 below;

Table 3

Level of Academic difficulties of male and female hearing impaired pupils

Category		Interpretation	Rank	
Completing class or home work assignment		Very high	1.	
Organizing own things or school materials		Very high	2.	
Completing work accurately with out careless mistakes		High	3.	
Focus long enough to finish assigned activity or task	3.00	High	4.	
Waiting to take turns	2.97	High	5.	
Working with out distracting self or others	2.87	High	6.	
Carrying out mult- step instructions	2.73	High	7.	
Working at reasonable pace/finishing on time	2.70	High	8.	
Reinforcing task when necessary		High	9.	
Carrying out single step instructions		High	10.	
paying attention when directly instructed		High	11.	
Expressing ideas in written form		High	12.	
Comprehending oral instructions		High	13.	
Learning new ideas	3.07	High	14.	
Applying problem solving skills in class discussion	2.90	High	15	
Understanding and participating in class discussions	2.87	High	16	
Providing organized oral explanation and adequate descriptions		High	17	
Recalling and applying previously learned materials		High	18	
Reading and comprehending written material		High	19	
Comprehending and doing math problems		Low	20	
Understanding school and content vocabulary	2.38	Low	21	
Total mean	2.85	High		

Source: Primary data

ey for interpre	Interpretation	
26-4.00	strongly agree	Very high
51-3.25	Agree	High
76-2.50	Disagree	Low
,00-1.75	Strongly disagree	Very low

Results in Table 3 indicate that majority of respondents strongly agreed on two spects of academic difficulties and these are; Completing class or home work ssignment (mean=3.47), followed by Organizing own things or school materials mean=3.43). And this implies that hearing impaired pupils in primary schools of tachuonyo South District (Kenya) always find problems when it comes to these practices. Majority of respondents agreed on aspects from 3 up to 19 (means ranging from 2.55 to 3.08). Confirming that such practices are not performed well by hearing mpaired pupils in primary schools of Rachuonyo South District (Kenya) due to different problems they face, and hence concluding that the level of academic difficulties is relatively high basing on the total mean (mean=2.85).

The dependent variable in this study was Academic difficulties of hearing Impaired pupils in selected primary schools in Rachuonyo South District, Kenya. The aspects on academic dificulties were measured using twenty one qualitative questions in the questionnaire and each question was Likert scaled between one to four; where 1 = strongly disagree; 2 = disagree; 3 = Agree, and 4 = strongly Agree, the respondents were required to rate the academic difficulties of hearing impaired pupils in primary schools of Rachuonyo South District (Kenya), and their responses were analysed using SPSS and summarized using means as indicated in table 3 above.

Majority of respondents disagreed on the two aspects of academic performance and these are; Comprehending and doing math problems (mean=2.47) and Understanding school and content vocabulary (mean=2.38). This implies low levels of creativity and innovativeness on these two aspects on academic performance among the primary schools of hearing impaired pupils in Rachuonyo South District (Kenya).

Significant difference in the level of Academic difficulties in gender among he Hearing impaired pupils in selected Primary Schools in Rachuonyo South District (Kenya).

The third objective in this study was to establish whether there is a significant lifference in the level of Academic difficulties in gender among the Hearing impaired pupils in selected Primary Schools in Rachuonyo South District (Kenya). Therefore the esearcher hypothesized that the academic difficulties among the Hearing impaired pupils in selected Primary Schools in Rachuonyo South District (Kenya) significantly liffers according to Pupils' profile characteristics. To achieve this objective and to test or the null-hypothesis, the researcher used the students' two independent samples test and the results are indicated in table 4 below.

Table 4:

Significant difference in the level in Academic difficulties in gender among the Hearing impaired pupils in selected Primary Schools in Rachuonyo South District (Kenya).

/ariables		t-value	Sig	Interpretation	Decision on Ho
evel of Academic	Male			Significant	
difficulties	Female	12.636	.000	difference	Rejected

The results in table 4 indicate that there is a positive significant difference in the level of academic difficulties in gender among the Hearing impaired pupils in selected Primary Schools in Rachuonyo South District (Kenya), still results indicate that the t-values and sig-values for both male and female Pupils are, (t=12.636 and sig=.000). Therefore basing on these results, the null hypothesis is rejected leading to a conclusion that the academic dificulties among the Hearing impaired pupils significantly differ in different Primary Schools in Rachuonyo South District (Kenya).

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter presents a summary of major findings, conclusions and recommendations plus the suggested areas that need further research.

Findings

1. Profile

This study wanted to establish whether there is a significant difference in the evel of academic difficulties in gender among the Hearing impaired pupils in selected primary Schools in Rachuonyo South District (Kenya). The study had three specific objectives, which included:

i) The profile of respondents in gender, age, highest educational qualification and teaching experience, ii) Level of Academic difficulties in female and male hearing mpaired pupils, iii) the level of academic difficulties in gender among the hearing mpaired pupils in selected primary school in Rachuonyo South District (Kenya)

The findings indicated that majority of respondents were male (70%), between 31-39 years of age, majority were diploma holders (40%) and (46%) had an experience of 3-4 years.

2. Academic difficulties

The level of Academic difficulties of Hearing Impaired pupils in primary schools in Rachuonyo South District (Kenya) is generally high and this was indicated by the average mean of 2.85. The highest aspect of academic difficulties was completing class or home work assignment with a mean of 3.47, yet the lowest aspect was understanding and content vocabulary with a mean of 2.38.

The findings also indicated a positive difference in the level of academic difficulties in gender among the hearing impaired pupils in the selected primary schools n Rachuonyo South District (Kenya).

3. Gender differences in academic difficulties

The gender differences show that the female hearing impaired experience less academic difficulties than the male ones.

Conclusions

From the findings of the study, the researcher concluded that most of respondents were male (70%), between 31-39 years in age and majorities were diploma holders in education with an experience of 3-4 years.

The level of academic difficulties among the hearing impaired pupils is generally nigh, however there were only two aspects on academic difficulties which were low and hey were comprehending and doing math problems (mean 2.47) and Understanding chools and content vocabulary when directly instructed (mean 2.38).

The findings also indicated appositive significant different in the level of academic lifficulties in gender among the hearing impaired learners in selected primary schools in Eachuonyo South District (Kenya).

lecommendations

From the findings and conclusions of the study, the researcher recommends hat more research on hearing impaired pupils should be conducted in order to discover r find out new information concerning about hearing impaired pupils in the primary chools of Rachuonyo South District (Kenya). This will help to come up with strategies o respond to these hearing impaired pupils whenever they say something.

The Teachers of hearing impaired pupils in the primary schools of Rachuonyo outh District (Kenya) should go for bachelor studies, since majority of them are still at iploma level, this will also improve on the school effectiveness.

The Teachers of hearing impaired pupils in the primary schools should create ther ways to see that these pupils' complete class or home work assignment in time, this will improve on the academic performance of hearing impaired pupils in primary schools of Rachuonyo South District (Kenya).

The primary schools of hearing impaired pupils in Rachuonyo South District Kenya) should use different words and terms while teaching these pupils, this will help hese pupils understand school and content vocabulary and hence increasing on the evel of academic performance.

The Government of Kenya should be provide different mathematics materials such as mathematical sets, mathematics past papers to the hearing impaired pupils in tachuonyo South District, this will help them to Comprehend and do math problems and hence increasing on the level of academic performance.

reas for further research

The research does not and cannot guarantee that the study was completely xhausted. In any case, the scope of the study was limited in accordance with the pace, and objectives. It is therefore, suggested that a national research covering the /hole country be undertaken.

Iso, prospective researchers and even students should be encouraged to research into ne following areas:

- 1. Teachers' participation towards academic performance of hearing impaired pupils in the primary schools of Rachuonyo South District (Kenya).
- 2. Mult- Step instructions and comprehending oral instructions among the hearing impaired pupils in the primary schools of Rachuonyo South District (Kenya).
- 3. Organizing school materials and academic performance of hearing impaired pupils in the primary schools of Rachuonyo South District (Kenya).
- 4. Assessment of the challenges to academic performance of hearing impaired pupils in the primary schools of Rachuonyo South District (Kenya).

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APPENDIX 1 A TRANSMITTAL LETTER



Ggaba Road - Kansanga P.O. Box 20000, Kampala, Uganda Tel: +256-41-266813 /+256-41-67634

Fax: +256-41-501974 E- mail: admin@kiu.ae.ug Website: www.kiu.ac.ug

OFFICE OF THE COORDINATOR OF EDUCATION SCHOOL OF POSTGRADUATE STUDIES AND RESEARCH (SPGSR)

Dear Sir/Madam.

August 23, 2011

RE: REQUEST FOR PAMELA ADOYO AUMA MSE/24622/111/DF TO CONDUCT RESEARCH IN YOUR ORGANIZATION

The above mentioned' is a bonafide student of Kampala International University pursuing a Masters of Education in Special Needs Education.

She is currently conducting a field research of which the title is "Academic Difficulties of Hearing Impaired Pupils in Selected Primary Schools in Rachuonyo South District, Kenya".

four organization has been identified as a valuable source of information pertaining to ner research project. The purpose of this letter is to request you to avail her with the pertinent information she may need.

In y information shared with her from your organization shall be treated with utmost confidentiality, any assistance rendered to her will be highly appreciated.

Yours truly

Is. Kyolaba Sarah oordinator Education, (SPGSR).

APPENDIX 1B

TRANSMITTAL LETTER



MINISTRY OF EDUCATION

E:-mail: rachuonyosoutheduc.office@gmail.com

Telephone 05931267

When replying please quote

REF: RACH/TSC/244123/102

DISTRICT EDUCATION OFFICE, RACHUONYO SOUTH DISTRICT, P.O. Box 178, OYUGIS.

20/9/2011

PAMELA ADOYO AUMA TSC NO. 244123

RE: PERMISSION TO CONDUCT RESEARCH IN THE DISTRICT

Following your programme in Master of Education in Special Needs Education at Kampala International University, you have been allowed to conduct a field research of which the title is "Academic Difficulties of hearing impaired pupils" in selected primary schools in Rachuonyo South District.

You are therefore reminded to kindly inform this office once you are through.

JARED MOMANYI, FOR DISTRICT EDUCATION OFFICER, RACHUONYO SOUTH DISTRICT

C.C The Secretary,
Teachers Service Commission,
private Bag
NAIROBI.

-Co-coordinator Education SPP

APPENDIX 1 C

TRANSMITTAL LETTER FOR THE RESPONDENTS LETTER

Dear Sir/Madam,

Greetings

I am a master's student in Special Needs Education at Kampala International University with thesis on "Academic difficulties of hearing impaired pupils in selected primary schools in Rachuonyo South District, Kenya". As I pursue to complete this academic requirement may I request your assistance by being part

of the study.

Kindly provide the most appropriate information as indicated in the questionnaire and please do not leave any item unanswered. Any information from you shall be for academic purposes only and will be kept with utmost confidentiality.

May I retrieve the questionnaire two weeks after you receive them.

Thank you very much in advance.

Yours faithfully,

PAMELA ADOYO AUMA.

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APPENDIX II CLEARANCE FROM ETHICS COMMITTEE

Date.....

Candidate data

Name:

Pamela Adoyo Auma

Reg No:

MSE/24622/111/DF

Course:

Masters in Special Needs Education

Title of study

Academic difficulties of hearing impaired pupils in selected primary schools in Rachuonyo South District, Kenya

Ethical Review checklist

The study review considered the following

- Physical safety for human subjects
- Informed consent
- Privacy
- Cording of questionnaires/confidentiality
- Permission to conduct the study
- Citation/authors recognized
- Results of ethical review
- Approved
- Conditional(to provide ethics committee with corrections
- Disapproved/resubmitted proposal
- Ethics committee(name and signature
- Chairperson
- Members

APPENDIX III INFORMED CONSENT

I am giving my consent to be part of the Research study of Pamela Adoyo Auma that will focus on Academic Difficulties of Hearing Impaired Pupils in Selected Primary schools in Rachuonyo South District, Kenya.

I shall be assured of privacy anonymity and confidentiality and that will be given the option to refuse participation and right to withdraw my participation anytime.

I have been informed that the research is voluntary and that the results will be given to me if I ask for it

Initials:	 	
Date:	 	

APPENDIX 1V A

RESEARCH INSTRUMENTS

FACE SHEET: DEMOGRAPHIC CHARACTERISTICSOF THE RESPONDNTS.

	Gende	er (please tick)
		1. Male
		2. Female
	Age	
l	Highest (educational qualification (please specify)
	Certifica	
2.	Diploma	
3.	Bachelor	rs
4.	Masters	
Nu	mber of	years teaching experience (please tick)
		1-2years
	2.	3-4 years
	3.	5-6years
	4.	7 years and above

APPENDIX IV B

QUESTIONNAIRE TO ESTABLISH THE LEVEL OF ACADEMIC DIFFICULTIES

(for teachers)

Direction: Please tick a rating for each activity listed below.

Response Mode	Rating	Description	Legend	
Strongly agree	4	You agree with no doubt	SA	
Agree	3	You agree with doubt	A	
Disagree	2	You disagree with doubt	D	
Strongly disagree	1	You disagree with no doubt	SD	

NO.	LEVELS	1	2	3	4
1.	Paying attention when spoken to directly		-	J	
2.	Reinforcing task when necessary				-
3.	Carrying out single step instructions				-
4.	Carrying out multi-step instructions				
5.	Focus long enough to finish assigned activity or task				
6.	Waiting to take turns				
7.	Organizing own things or school materials				************************
8.	completing class or homework assignment				
9.	Completing work accurately without careless mistakes				***************************************
10.	Working without distracting self or others				····
11.	Working at reasonable pace/finishing on time				
12.	Applying problem solving skills in class discussion.				
13.	Comprehending oral instruction				
	Understanding school and content vocabulary.				

15.	Reading and comprehending written material			1	T
16.	Comprehending and doing math problems				
17.	Understanding and participating in class discussions				
18.	Providing organized oral explanation and adequate descriptions				
	Expressing ideas in written form				
20.	Learning new ideas				
21.	Recalling and applying previously learned material	************			
			i i		

Source: Adopted from **SSA-5665-BK** (01-2006) ef (01-2006)