

**PERCEPTION ON THE FACTORS INFLUENCING PERFORMANCE OF PRE-SCHOOL CHILDREN WITH HEARING IMPAIRMENT:  
A CASE OF KAAGA SCHOOL, IMENTI NORTH DISTRICT**

**BY**

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## DECLARATION

### Student Declaration

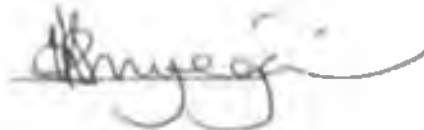
This research project is my original work and has not been presented to any other college or institution of higher learning for award of master degree or any other degree.



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### Supervisor Declaration

This research project has been submitted for examination with our approval as the University supervisors.



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## DEDICATION

I dedicate this research project to my son Andrew for his understanding during the project period

## **ACKNOWLEDGEMENT**

I would wish to extend my sincere thanks to my university supervisors, Dr. Justus Inyega and Mr. Timothy Maonga for their dedication and guidance while writing this research project for without them this project would not have been the way it is.

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## LIST OF ACRONYMS AND ABBREVIATIONS

<b>COED</b> -	Commission on Education of the Deaf
<b>CTRs</b> -	Class Teachers
<b>DEO</b> -	District Education Officer
<b>ECDE</b> -	Early Childhood Development and Education
<b>ECE</b> -	Early Childhood Education
<b>GC</b> -	Guidance and Counseling
<b>GCD</b> -	Guidance and Counseling Department
<b>HI</b> -	Hearing Impairment
<b>MoE</b> -	Ministry of Education
<b>PTA</b> -	Parents and Teachers Association
<b>STRs</b> -	Subject Teachers

## ABSTRACT

Every child is entitled to education rights in Kenya. It is well recognized that hearing is critical to speech and language development, communication, and learning. A hearing impairment signifies a full or partial loss of the ability to detect or discriminate sounds due to an abnormality associated with the physiology; anatomy or function of the ear. The purpose of this study was to find out the perception on the factors influencing the performance of pre-school children with hearing impairments. The specific objectives of the study were to establish the effects of learning resources, sign language, prejudice and training skills on learners with hearing impairment. This study adopted a descriptive research design. The target population of the study was 36 respondents. The researcher used questionnaires, interviews, observations and focus discussion groups to collect data. Primary data was derived through administration of questionnaires. Secondary data was obtained from existing literature. The questionnaires were self administered to the sampled respondents and for those who were not able to write or read the researcher, with the help of research assistants administered the questionnaires orally. Quantitative data collected using questionnaires was analyzed by the use of descriptive statistics using SPSS (Statistical Package for Social Sciences). The analyzed data was presented by use of frequency tables, percentages, charts and other figures as was found appropriate. The main findings of the study were that sign language has a great effect of performance of learners with hearing impairments in the school. The study also found that sign language techniques was the widely used as a learning resource in the school and that it affect performance of learners with hearing impairments to a great extent. The study also found that absenteeism due to lack of time management for them, late enrolment, being used like workers/ servants at home, assumptions that children with disability do nothing at school, lack of hearing assistance, and discrimination in regular schools and discrimination in the society are some of the prejudice factors that affect learners with hearing impairments. Finally, the study found out that training skills affect the performance of learners with hearing impairment to a very great extent

## CHAPTER ONE

### 1.0 INTRODUCTION

#### 1.1 Background of the Study

Globally, governments have a role to play in raising awareness of parents and educators about the value of schooling for children with hearing disability. Learners face a lot of difficulties in pursuit of academic excellence which have adverse effects to individual development and actualization of their potential and ultimate contribution to societal development. Deafness is a condition wherein the ability to detect certain frequencies of sound is completely or partially impaired, (Gargiulo, 2006). A hearing impairment signifies a full or partial loss of the ability to detect or discriminate sounds due to an abnormality associated with the physiology, anatomy or function of the ear. A hearing impairment is also described in terms of the degree of a hearing impairment, ranging from a mild hearing impairment to a profound hearing impairment, and type of hearing impairment - permanent [sensori-neural], not permanent [conductive] or a combination of both [mixed loss].

According to Gargiulo, (2006), significant problems that remain to be solved include earlier identification of children with hearing disability, providing early childhood and family learning activities (especially for language development during first three years of life), individualized education planning and placement that recognizes a child's right to be placed in a setting where they can most easily learn, and providing support to classroom teachers so that they can use methods of instruction that enable all children in the inclusive classroom to learn fruitfully. Practical recommendations include developing the capacity of the local deaf adults to infuse sign language into the school

life and developing an organizational structure that can provide continuous, professional support to teachers of students with hearing loss in the regular schools.

In fact, the challenges have denied humanity the enjoyment of multiple and unending benefits that could result from human creativity, ingenuity, inventiveness and innovations in all aspects of development and modernity that could have given the society a new facelift. There are many reasons for children to under perform at school such as medical problems, below average intelligence, specific disability, emotional problems, attention deficit, hyperactivity, a poor socio-cultural, home environment, psychiatric disorders or even environmental issues, (Owens, 1998).

The challenges manifest themselves in various ways ranging from inadequate learning resources, financial constraints, lack of teaching personnel, unfriendly curriculum, scarcity of teaching and learning resources, poor infrastructure and lack of access to education among many others. These have been felt among the continents by various governments. Indeed, such challenges have caused untold suffering to the learners with special needs who bear the brunt of poverty and attendant social vices that accost society and humanity in general. Learners with special needs are generally ignored and not accorded due attention in and most people only sympathize and do not believe they can offer much to selves and society (Randiki, 1994).

In sub-Saharan Africa, learners face unique challenges particularly those with hearing impairments. Learners with hearing impairments, unlike other learners face particular challenges, in terms of their uniqueness due to attendant problems brought about by hearing deficits. The challenges vary from region to region and from country to country. These challenges depend on various governments' efforts to ensure equitable provision

of education to her children. The challenges range from environmental limitations to inadequate personnel and manpower. Many countries in Africa do not have adequate trained personnel who can effectively cater for learners with hearing impairments; worse those who are there are not evenly distributed and many institutions suffer chronic understaffing. This has not only adversely affected enrolment of learning with hearing impairments but made those who have enrolled to drop out prematurely leading to loss of valuable human resource capital in education. Critical, also is the fact that those who remain in the learning programmes do not receive adequate attention due to shortage of trained personnel. Moreover, with free primary education and education for all programmes in many countries, the challenges face by learners with hearing impairment are likely to increase due to increased enrolment without concomitant increase in trained personnel and expansion of facilities and attendant equipments. However, various governments have made commendable efforts in alleviating the challenges so as to provide learners with hearing impairment an opportunity in education so as to contribute in nation building. In spite of these challenges, learners with hearing impairments are valuable investment in human capital in every nation.

The government of Kenya has made commendable efforts to provide her children with special needs decent education. This is evident considering the fact that learners with special needs require teachers who are specially trained with specialized skills and specialized equipments and with attendant specialized examination. There are a number of special schools who cater for learners with special needs ranging from hearing impairments, physical handicaps, visual impairment and mentally challenged just to

mention a few. Nevertheless with onset of free primary education there was a surge in enrolment of learners with special needs (Okong'o, 2007).

The Kaaga School for the Deaf in Meru, Kenya, is a 'deaf school' institution. While it has some deaf kids with multiple disabilities it's not specifically focused on the education of such children. Kaaga School for the Deaf Children was started in 1975 by the Methodist Women. Starting with only 7 pupils, the school has thereafter grown over the years to the present population. The institution runs under the sponsorship of the Methodist Church in Kenya. The school is managed by the Board of Governors who are recommended by the Methodist Church and appointed by the Minister of Education. It caters for the deaf children ages 6 to 20 years. Kaaga School for children with hearing impairments is one of the few special schools that cater for the learners with special hearing impairment or the deaf as they are referred. In Kaaga School for the deaf, learners with hearing impairments are enrolled from pre-school to class eight. The school is a co-education institution catering for learners from all parts of the entire country. The learners with hearing impairments face various challenges that adversely affect their academic performance. (Mugo, 2007).

## **1.2 Statement of the Problem**

It is well recognized that hearing is critical to speech and language development, communication, and learning. Hearing impairment is the most frequent sensory deficit in human populations, affecting more than 250 million people in the world. (WHO, 1991). School children with listening difficulties due to hearing loss or auditory processing problems continue to be an under identified and underserved population. Consequences of hearing impairment include inability to interpret speech sounds, often

producing a reduced ability to communicate, delay in language acquisition, economic and educational disadvantage, social isolation and stigmatization. The earlier hearing loss occurs in a child's life, the more serious the effects on the child's development. Similarly, the earlier the problem is identified and intervention begun, the less serious the ultimate impact.

Locally, there are limited studies on hearing impairment, for example, Okong'o, (2007), did a study on the effect of deafness on Primary School Enrolment and Attendance, Bowley, (1985), did a study on Kenya sign language while Chege, Mugwe, (1998), Prevention of deafness in Kenya. The challenges are brought about by limited resources, rigid curriculum, inadequate skilled personnel and poor instructional approaches. The situation has been aggravated with onset of free primary education and increasing levels of poverty in contemporary society. In Kenya, learners with hearing impairments are found across all the provinces (Mugo, 2007), therefore this study examines these factors that influence performance of learners with hearing impairment. The task of the study will theretofore be to explore the factors influencing performance of pre-school children with hearing impairments in Kenya. Learners with hearing impairment encounter various problems in accessing education.

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

The purpose of this study was to find the perception on the factors influencing the performance of pre-school children with hearing impairments specifically the Kaaga School for the deaf in Meru.



#### **1.4 Research Objectives**

This study was guided by the following research objectives

- i. To explore the perception on how learning materials affect performance of pre-school children with hearing impairment.
- ii. To determine how prejudice affects performance of pre-school with hearing impairments.
- iii. To determine the extent to which sign language affects performance of pre-school children with hearing impairments.
- iv. To evaluate the respondents' perception on whether training skills affect performance of pre-school children with hearing impairments.

#### **1.5 Research Questions**

The research study sought to answer the following research objectives:

- i. What is the perception on how learning materials affect the performance of pre-school children with hearing impairment?
- ii. Does prejudice affect performance of pre-school children with hearing impairments?
- iii. Does sign language influence the performance of pre-school with hearing impairments?
- iv. What is the respondents' perception on whether training skills affect performance of pre-school children with hearing impairments?

#### **1.6 Significance of the Study**

The study may be significant in that its finding, conclusion and emergent recommendation may be valuable in enabling informed planning of effective strategies

to improve academic performance for learners with hearing impairments by various schools for the deaf in Kenya:

The study may also be important to various stakeholders and policy makers on factors influencing the performance of pre-school children with hearing impairments.

Finally, the study may be of importance for it may lay the foundation for further studies by various researchers and academicians who would be interested in the same area given that very few studies in Kenya have considered on factors influencing the performance of pre-school children with hearing impairments.

### **1.7 Limitations of the Study**

This study was on factors influencing the performance of pre-school children with hearing impairments. The main limitation is that the study is only applicable to schools that have similar characteristics like Kaaga. The fact that the preschool children could only communicate with sign language also remained a limitation to the study. Finally, it was also a limitation to the study in assessing the truthfulness of the responses obtained.

### **1.8 Delimitations**

The scope of this study was Kaaga School for the deaf whereby the targeted populations of the study were the preschool pupils and the teachers. The study would have covered more factors influencing performance of children with hearing impairment but considered learning resources, sign language, prejudice and training skills.

### **1.9 Basic Assumptions of the Study**

This basic assumption was that the subjects of the study would be willing to respond to the questions raised in the questionnaire. The study also assumed that there would be no

serious changes in the composition of the target population that would be fundamental enough to affect the effectiveness of the study sample.

### **1.10 Definitions of Key Terms**

The following are operational definitions of significant terms used in the study:

**Hearing Impairments:** This is used to imply a difficulty in recognition of audible messages and stimuli or communication.

**Skills :** Refers to the ability and capacity acquired through deliberate, systematic, and sustained effort to smoothly and adaptively carryout complex activities or job functions involving ideas (cognitive skills), things (technical skills), and/or people (interpersonal skills).

**Deafness:** 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.

**Performance:** It is a mark of achievement or indicator in term of scores and grades that the learner gets in a subject

**Sign language:** A mode of non-verbal communication where you use fingers or hands to pass information

**Prejudice :** An opinion or judgment formed without due examination. Prejudice is a baseless and usually negative attitude toward

members of a group. Common features of prejudice include negative feelings, stereotyped beliefs, and a tendency to discriminate against members of the group.

**Perception:** The process by which people translate sensory impressions into a coherent and unified view of the world around them. Though necessarily based on incomplete and unverified (or unreliable) information, perception is equated with reality for most practical purposes and guides human behavior in general.

### **1.11 Organization of the Study**

The study was organized in three chapters. The first chapter encompasses the background of the study that spells out how the researcher made and developed the study. Specifically, the chapter entailed the statement of the problem, the purpose of the study, the research objectives, research questions, significance of the study, limitations of the study and delimitation, basic assumptions of the study, and the definitions of significant terms. Chapter two examines the literature review which entails the examination of previous studies carried out by various scholars, theoretical framework and conceptual framework. Chapter three presents research design methodology which comprises of the research design, target population, sampling and sampling techniques, sample size, instruments of data collection, and procedures for data collection and data analysis procedures. It is the conceptual structure within which research is conducted. It constitutes the blueprint for the collection, measurement and analysis of data.

## CHAPTER TWO

### 2.0 LITERATURE REVIEW

#### 2.1 Introduction

The chapter reviewed the studies that have been done by other researchers about perception on the factors of performance among learners with hearing impairments. The literature were reviewed and presented thematically guided by research objectives. The various sections are: causes of hearing impairment, theoretical framework, empirical review and finally the conceptual framework.

#### 2.2 Causes of Hearing Impairment

According to a study conducted by Thomas (2001), half of all the cases of congenital hearing impairment in children are caused by various genetic factors. An inherited hearing impairment does not necessarily mean that one or both parents also are hard-of-hearing. About 90 % of children with congenital hearing impairment are born to hearing parents, who may have passed on the condition by being carriers of recessive genes. In 20-30% of disordered cases, the cause of congenital hearing loss is not known.

Prenatal or genetic ailments account for 5-10% of the cases of congenital hearing loss and include infections during pregnancy, such as cytomegalovirus, rubella, herpes or syphilis, toxins consumed by the mother during pregnancy or other conditions occurring at the time of birth or shortly thereafter. Prematurely born babies also have an increased risk of becoming hard-of-hearing. Traumas after birth to the head or childhood infections, such as meningitis, measles or chicken pox, can cause permanent hearing loss. Certain modern medications, such as the antibiotic streptomycin and related drugs, also can be the cause of the child's hearing loss ( Thomas, 2001).

Hearing loss in childhood can be difficult to recognize. In almost two thirds of the disordered cases, parents are the first to suspect hearing loss, with other health care providers suspecting it first in approximately 15% of cases, and pediatricians in roughly 10%. Early screening of hearing ability as well as paying attention to the child's responses and general behavior is therefore important for starting treatment as early as possible. Children with hearing impairment as young as age 4 weeks can benefit from a hearing aid.

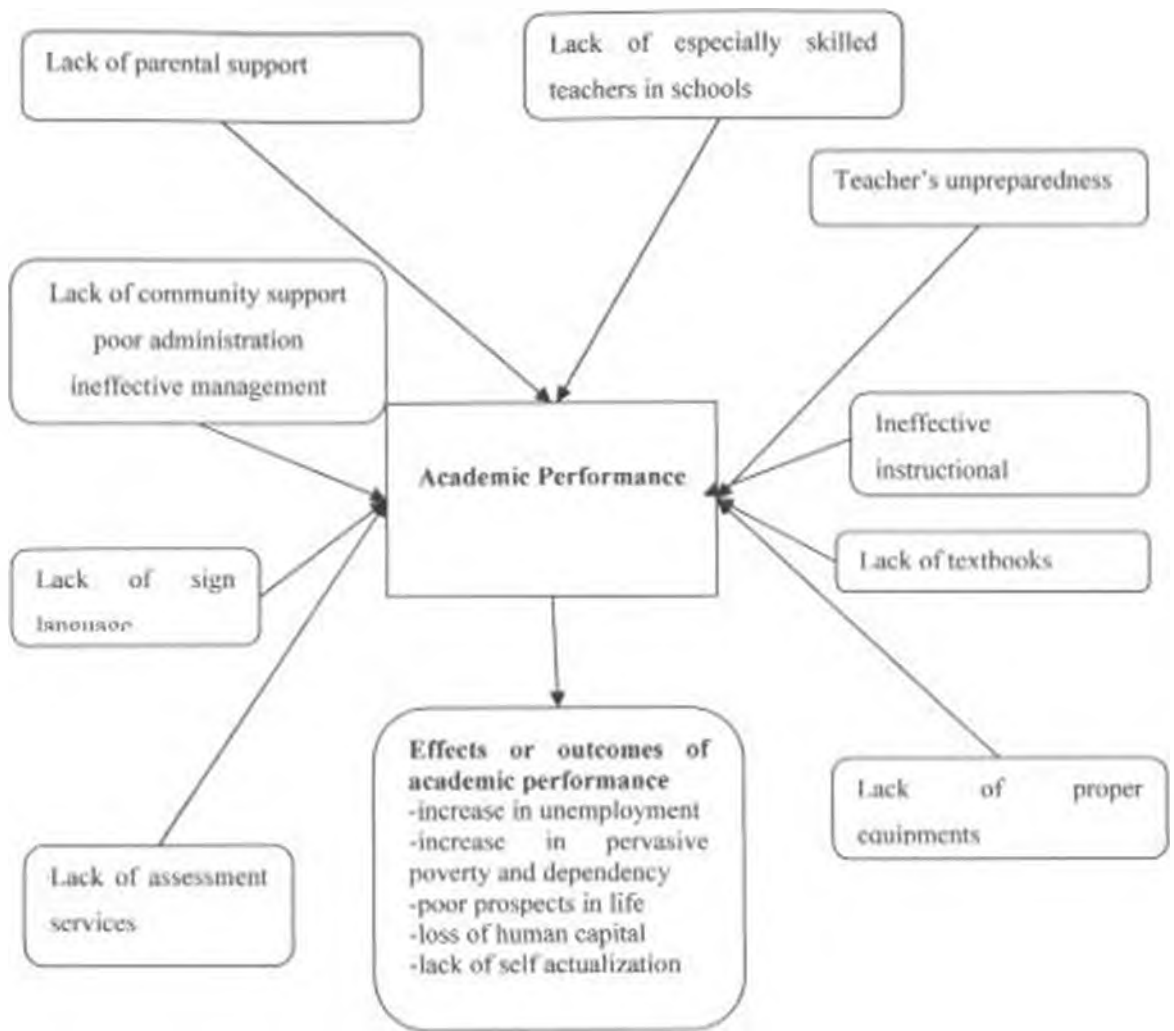
According to his study the occurrence 10-20% of hearing impairment is due to postnatal causes. Ear infections in children like Otitis Media may cause temporary hearing loss or lead to a permanent hearing impairment if left untreated. Otitis media is a type of inflammation in the middle ear or the area behind the eardrum that is usually associated with the buildup of fluid. The accumulated fluid may or may not be infected. Symptoms of the disorder, severity, frequency, and length of the condition vary. At one extreme is a single short period of clear, thin, non-infected fluid without any pain or fever but with a slight decrease in hearing ability. At the other extreme are repeated bouts with thick infection glue-like fluid and possible complications such as permanent hearing loss. Fluctuating conductive hearing impairment nearly always occurs with all types of otitis media. In fact the thing is the most common cause of hearing loss in young children

A passage between the middle ear and the back of the throat which is called the Eustachian tube is smaller and more nearly horizontal in children than in adults. For that reason it can be more easily blocked by conditions such as large adenoids and infections. Until the size and angle of the Eustachian tube changes as the child grows,

children are more susceptible to otitis media. Children learn the sound speech and language from listening to other people talk. For that the first few years of growth are especially critical for this development. If a hearing impairment of any sort exists, a child does not get the full benefit of language learning experiences.

### **2.3 Theoretical Framework**

This study examining the challenges affecting pre-school children with hearing impairment is based on the cause and effect theory. This theory is hinged on the premises enveloped in the fact that everything happening has a cause. The connection between cause and effect is quite real. When a cause is accompanied by suitable conditions, an effect inevitably develops. Given the same conditions, the same effect is always generated by the same cause. The effect produced by a particular cause becomes the cause of another phenomenon, which, in turn, becomes the cause of a third phenomenon, and so forth. This sequence of phenomena linked by the relationship of internal necessity is called a causal or cause-and-effect chain, or a chain of causality. All chains of causality have neither a beginning nor an end. Attempts to find an absolutely "first" or "final" cause entail resorting in one form or another to a miracle or supernatural force Alschuler (1980). Applied in this study, the theory of cause-effect shows that poor academic performance is caused by various factors and similarly it has many adverse effects to self and society at large.



**Figure 2.1: Schematic representation of the factors that affect academic performance and their effects to learners with hearing impairments**

The schematic representation show that notable causes of poor academic performance among learners with hearing impairments are lack of resources, poor communication when sign language is not used and understaffing among many others; similarly the effects of poor academic performance among learners with hearing impairments are loss of valuable human capital in education resulting unemployment and concomitant increase in pervasive poverty in society among others.



## **2.4 Empirical Review/ Factors that influence academic performance of Learners with HI**

These are many factors that influence performance among learners with hearing impairments. The factors may arise in the school environment or the home environment. Regular school attendance is critical in that it enables the learners to participate in school curriculum coverage. (Bandura, 1977). Learners who attend school regularly tend to do well in what is taught in school. Similarly, regular attendance has multiple benefits to learners with hearing impairments. For learners with hearing deficits, performance may not necessarily mean a low IQ. A change in attitude and a switch to novel learning techniques may be all that it takes to get that elusive first division! Each individual's learning mechanism differs. Some are predominantly auditory learners, others are visual and yet others are kinesthetic. Knowing which category a learner belongs to helps to assist him/her increase output and makes studying a lot easier.

The hearing problem normally factors a secondary problem of language deficiency. This can influence the hearing impaired child's personality and social development because these factors are greatly dependent on the communication process (Dembo, 1994). It is much more difficult for pre-lingual deaf children to learn to speak than those who have acquired their deafness mainly because they do not receive auditory feed-back from the sound they make.

Learners with hearing impairments who attend school regularly tend to develop more confidence in the content of what is being taught since they are able to learn interactively on daily basis, also develop academic prowess. Good and regular attendance ensures that one covers the syllabus before the exams and promotes revision

which has a positive correlation performance in exams. Regular attendance mitigate against incidences of poor performance and drop outs cases particularly for the learners with hearing impairments who face unique challenges due to their inherent disabilities. Attendance influences how well the learners fair in class work because regular practices promote perfection and reinforce learning; hence reducing chances of failure and frustrations (Daniel & Kauffman, 1991). Therefore the study will pursue issues that contribute to poor performance with a view to highlighting the effects of absenteeism to academic performance. This will inform the policy that can be instituted to reduce the vice. similarly, emergent recommendations on the way forward will be emanating from the study that could be used to improve academic performance among learners with hearing impairments.

Today education is viewed as the single most important factor in improving the quality of the lives to people, both economically and socially. According to Jacob and Ludwig (2008), one of the best ways to avoid being a poor adult is to obtain a good education. Individuals with higher academic achievement and more years of schooling generally earn more than those with lower levels of schooling. Education is viewed as one of the most important factors in enabling people to elevate their economic and social status (Payne, 2003). In particular, the boys and girls with hearing impairments face unique challenges that condemn them to poor performance.

Variations in etiology, onset degree and type of hearing loss as well as family and educational situations result in a widely diverse hearing impaired population. However, children and adults with hearing disabilities characteristically experience significant issues with regard to social and intellectual development, speech, language and

educational achievement. For the sake of this study, the researcher shall identify factors that mostly affect the learners with HI in Kenya with Kaaga School for the deaf being the area of investigation.

#### **2.4.1 Learning Materials and academic performance of Learners with HI**

Teaching or instructional materials play a critical role in enabling the student to grasp the content of what is learnt. Good and effective instructional materials determine how efficient the content is received and comprehended; this is critical for learners with hearing impairments, where specialized instructional materials are important if learners are to be assisted so as to achieve the objectives of learning. (Brokx, 1992). So, the choice of appropriate instructional materials for learners with hearing impairments determines how well the content is understood by the learners.

On the other hand, the learners with hearing impairments who actually are in deed visual learners memorize best by observing (Brokx, 1992). Storing data in the form of mental maps is an ideal learning technique. Kinesthetic learners are receptive to activities which imply that use of gestures and body language to compliment use of sign language can enhance proficiency and efficiency when teaching learners with hearing impairments.

Choice of instructional materials and learning resources and effective communication determines how well learners with hearing impairments perform in class work and attendant examinations (Craig & Havelid, 1996). The potency of effective teaching materials cannot be gainsaid as they have untold impact in academic performances of learners with hearing impairments. Therefore, it is pertinent that this study will explore

the importance of effective teaching materials in academic performance of learners with hearing impairments with a view to offer valuable and pragmatic suggestions on how to improve and maintain the efficacy of teaching learners with hearing deficits.

Social-emotional development in young children with hearing impairments show the same development patterns as in those without a hearing with regard to preschool friendships, ethnic, age and gender peer preferences (Craig & Haveld, 1996). Social-emotional development however, also depends heavily on the ability to use communication skills. Deaf children spend less time in cooperative peer play when they are with other deaf children even though they are interest in the interaction. They frequently get no response from their play partner because of language deficits.

Students who are deaf or have a partial hearing impairment have considerable difficult succeeding in an educational system that depends primarily on the spoken word and written language to transmit knowledge, (Luterman, 2000). This therefore calls for application of appropriate learning materials in the deaf school institutions.

#### **2.4.2 Sign Language and academic performance of Learners with HI**

Language handicap is the biggest hurdle in the education of the hearing impaired. Unfortunately hearing impaired children are frequently handicapped in varying degree in educational achievement (Chege & Mugwe, 1998). Reading ability which relies heavily on language skills and is probably the most important aspect of academic achievement is the most affected. As hearing impaired children lack language skills for their better educational performance, a better learning environment must be taken care of. Studies have also revealed that effective communication and, particularly for the

children with hearing impairments has a positive correlation with academic performance. (Daniel and Kauffman, (1991). This is due to the fact that the communication stimuli if well received the mind is able to decode, analyze, interpret and respond to information that is received which enables one to answer questions correctly, accurately and effectively. The fact that one has hearing impairments hinders the efficacy and the ability to receive the communication stimuli accurately and effectively. (Brokx, 1992).

According to Alpiner, & McCarthy, (1993), the main problem in the education of deaf children is the development of language. Bowley, (1995) however notes that effective sign language skills enable the student to excel not only in communication but also enhanced academic performance in deaf schools. Sign language is used all over the world by the hearing-impaired to communicate with each other and with those that hear. Sign language is more than just moving the fingers or hands; it is a viable, visible language in which gestures and facial expressions play a very important role. Sign language is a combination of finger spelling, lip formations, and signs which are all heavily reliant on gestures and facial expressions to effectively, convey meaning. Finger spelling uses the hand in various positions to represent the letters of the alphabet. Hence, the inability to answer questions directly is determined by how well the instructions guidelines and pertinent questions are received and appropriate responses encoded (Bowley, 1995).

Therefore, the fact those learners with hearing impairments communicate in sign language make it difficult for them to compete with other normal learner in ordinary learning milieu, where, the instructor is not conversant and fluent in sign language. This

affects effective communication and, in essence leading to poor performance. Further, due impairment the comprehension prowess and reaction time is slowed leading to slow rate in solving questions which makes many of the learners with hearing problems not to complete the exam within specified time eventually lowering the score. (Brokx, 1992). The combination of environmental factors such as lack of knowledge of sign language, limiting environment in terms of social interaction, poverty, negative attitude from teachers may also contribute to poor performance by demotivating the hearing impaired learners (Craig & Haveld, 1996).

Sign language is the mode by which communication is done to learners with hearing problems. It consists of particular symbols, gestures and body language meant to communicate critical information to learners with hearing deficits (Bowley, 1985). Similarly, learners with hearing deficits are comprised of various types of learners with different degrees of impairments i.e. mild, severe, moderate and profound. In essence, the degree of hearing impairments determines how effective one is able to respond to instructions accurately and effectively. (Bowley, 1985). Accurate responses and interpretations are critical to determine of how well one scores and ultimate performance in examinations. The environment where the instructors and fellow students are conversant and fluent in use of sign language improves and sustains performance of learners with hearing impairments; conversely, the environment where the teachers and the learners are not conversant in use of sign language, a learner with hearing impairments will perform poorly. Its critical, therefore that more often than not that consistence use of accurate sign language promote effective learning which results in good academic performance among learners with hearing deficits.

Studies have shown that when sign language is used interactively among learners and the instructors, their academic performance is improved and overall disciplines improved at all levels of learning. (Brooks, 1992). It is therefore crucial that this particular study will diligently explore the role of sign language in academic performance in contemporary learning environment so as to come up with valuable insights and suggestion that can inform sustainable strategies to initiate and maintain fairly stable academic performance among learners with hearing challenges. This will ultimately enable to harness valuable human capital investment for national development.

#### **2.4.3 Prejudice and academic performance among learners with HI**

Hearing impaired children face prejudice and ignorance on a daily basis. Children who have hearing impairment are in most cases discriminated against by their peers, teachers or other members of the society. As a matter of fact they are treated not according to the basic humanity in their individuality but according to their condition. In Kenya, for example, they are often called stigmatizing names or labels for instance they are referred to as 'visiwi', 'object of pity' among other demining or dehumanizing names. Consequently, their personal worthy or self-esteem is eroded which eventually undermines their academic performance. (Karanja, 1994). Similarly, school bullying has adverse effects to performance if the student is being bullied at school, this can affect academic performance; since this creates worry and anxiety that may lead to poor results because affected students are unable to concentrate in class work, (Chege & Mugwe, 1998).

Further, learners with hearing impairments are taken advantage by the society, abused and misused. A girl-child with hearing impairments is discriminated by the family and even the community and as such may lack psychological support which may lead to emotional dysfunctions and maladjustments that have adverse effects to academic performance (Chege & Mugwe, 1998). Problems at home also affect learning of students since they can interfere with concentration in school work and assignments. These interferences in the long run cumulatively lead to poor performance in examinations if no intervention measures are instituted.

Excessive ambition can result in frustration, leading to a lack of trying, particularly to learning with disabilities because the disability can be a crucial hindrance in realization of the targets set. This can result from parental or peer pressure. Lack of motivation, which is the opposite of excessive ambition, can be a disaster if not properly tamed and accorded proper guidance. The child needs to understand the importance of good grades. An older child should begin to look forward to a future career and be able to connect good grades with the achievement of career ambitions. Socio-cultural beliefs tend to discriminate a girl-child with hearing impairments; hence, less is invested in terms of education provisions to enable her to progress in her studies. This could lead to poor performance and eventually drop out of school. At family level, a girl with hearing impairments suffers negative attitudes from parent and siblings. She is overworked and given menial chores at the expense of learning. Therefore her performance is negatively affected; further, due to her disability effective learning opportunities are limited, which may also lead to poor performance. It is important that this study will mainly focus on



the factors that affect academic performance of girls with hearing impairments so as to provide crucial suggestions that are realistic and practical so as to curb these problems.

Research has established that boys with hearing impairments undergo feelings of negative self-concepts and lower self esteem compared to ordinary peers. The negative attitude and beliefs may lead to poor self concepts that may undermine their academic performance (Alschuler, 1980). Peers tend to discriminate them during play and social interactions which negatively affect interactive learning that may lead to poor performance. This is also compounded by deficits from hearing impairments. In some families, boys with hearing impairments are less valued since they are seen as non-performers; hence, most of the time they are menial tasks at the expense of learning which ultimately leads to poor performance (Bandura, 1977). In most institutions, the personnel with the ability to interpret sign language are limited which lowers their academic performance. Other factors that may affect academic performance of boys with hearing impairments are malnutrition, bad family life, divorce of parents, slow development of brain and bullying. Moreover, negative beliefs informed by socio-cultural traits tend to demean boys with disability and, particularly those with hearing impairments since they are deemed to be a bother or a curse or a bad omen in the family and by and large of the community (Craig & Havelid, 1996). In tradition with the societal perception, girls who have hearing impairments are discriminated and negatively labeled by peers and the society. Limitations and restrictions in social interactions may negatively affect learning and academic performance, (Bandura, 1977).

#### **2.4.4 Training Skills and academic performance of Learners with HI**

Teachers in the deaf schools have a responsibility to work with the children and their support team to help deaf children acquire speech and language so that they may become fully integrated and independent members of the community. Auditory Verbal Therapy is widely used for hearing impaired children based on the principle that usable hearing is common to about 95% of deaf children, and with powerful hearing aids or cochlear implants, these children can be taught to listen. Effective teaching skills and methods are very instrumental in instructing learners with HI. Moreover, the individual needs to be equipped with the skills that will enable them to negotiate communicative life successfully in a hearing world (Hogan, 2001).

Effective training skills means application of effective training approaches. Teachers in the deaf schools must adopt various approaches that enhance the academic performance of school children with hearing impairments. These approaches include: Auditory-Verbal which emphasizes the development and reliance upon auditory cues to receive and comprehend spoken language, Audito-oral which emphasizes the development and reliance on auditory cues to receive and comprehend spoken language, (Luterman 2000).

Total Communication is a multi-sensory training approach which emphasizes the simultaneous or combined use of spoken language in conjunction with a manual communication system (signs) to provide optimal input within a communicative interaction. Sign alone or sign with vocalization are acceptable responses to being interacted with. Typically maintaining English word order is emphasized by service providers implementing this approach, (Luterman 2000).

Studies have shown that teachers who handle learners with hearing impairments should be trained on specialized skills so as to be effective and proficient in teaching learners with hearing impairments, (Brooks, 1992). Effective teaching that is both practical and realistic enables the learner with hearing impairment to use residual ability so as to progress in academic tasks. This requires particular and specialized skills in specialized abilities like observation skills, communication skills using sign language, writing skills and drawing skills among others. Specialized instructional materials are critical in particular subjects if learners with hearing impairments have to benefit from formal learning.

According to Moores, (1987). Trainers must also have skills in manual communication; an approach which emphasizes conveying meaning and eliciting responses based on a formal visual communication system. There are two sign systems typically used: ASL (American Sign Language) which is a formal language with its own syntax and grammar and SEE (Signed Exact English) which follows Standard English syntax and marks English grammar forms with a set of endings. Supplemental auditory cues are compatible with SEE, as the word order is English word order and there is a match between what the child sees and hears.

The cued speech training approach provides supplemental visual gestures or "cues" to distinguish between speech sounds that look the same on the lips. It is therefore a phonemic based visual system, which is designed to supplement spoken language until the child has the opportunity to establish more precise auditory skills for distinguishing between similar-sounding or visually similar-looking sounds. Finally, Picture-Exchange Communication System (PECS) is used frequently with children with severe language

disorders but is not usually frequently used with hearing impaired children. These must go hand in hand for an enhanced academic performance of school learners with HI, (Nicolosi, Harryman, & Kresheck, (2003).

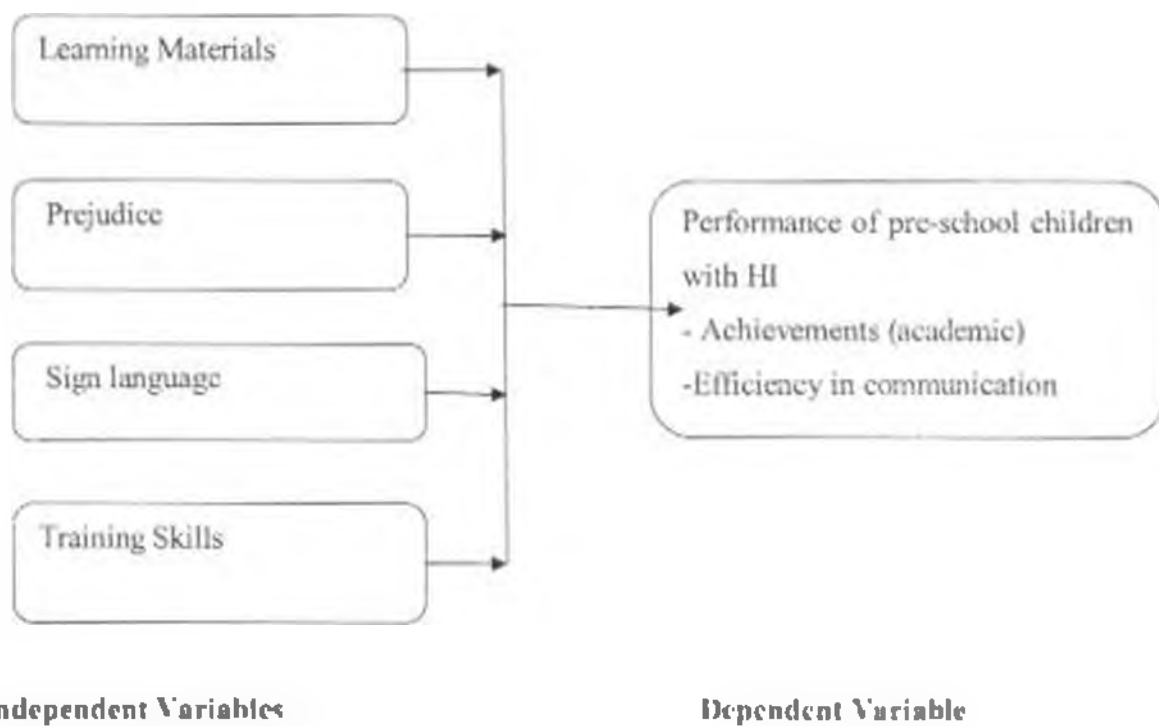
## **2.5 Deaf School Performance Measures**

Federal and state legislation has placed a renewed emphasis on accountability and academic outcomes among students who are deaf or hard of hearing. While much attention is given to norm-referenced standardized testing accommodations, there is a need for functional formative assessments for the purpose of monitoring students' academic progress. The Commission on Education of the Deaf (COED); *Towards Equality: Education of the Deaf*, the COED identified the need to ensure appropriate and individualized instruction that addressed educational, social, and communication requirements for children and youth with hearing loss. In deaf educational institutions, success is measured by academic performance, or how well a student meets standards set out by government and the institution itself in terms of communication standards and academic achievements (COED, 1988). Standard monitoring practices include the use of commercially or agency-developed achievement tests administered in the fall and spring of the academic year. The success of an individual student, a group of students, or a program is often described through performance scores on standardized tests that assign specific age- and grade-level criteria to an academic area (e.g., math, reading).

## **2.6 Conceptual Framework**

A conceptual framework is a diagrammatical research tool intended to assist the researcher to develop awareness and understanding of the situation under scrutiny and to

communicate this. An independent variable is one that is presumed to affect or determine a dependent variable. The independent variables in the study will be: learning materials, Prejudice, sign language and training skills. A dependent variable is what is measured in the experiment and what is affected during the experiment, it responds to the independent variable. The dependent variable in the study will be performance of pre-school children hearing impairment.



**Figure 2.2: A composition of factors affecting Performance of pre-school children with HI**

## CHAPTER THREE

### 3.0 RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter presented research design methodology. Research design is defined as a work-plan for research. It therefore included an outline of what the researcher will do from writing the research questions and objectives to the data analysis and interpretation of findings. The various sections in this chapter included research design, target population, sampling frame, instruments of data collection, validity and reliability procedures for data collection and; data analysis and reporting. It is the conceptual structure within which research is conducted.

#### 3.2 Research Design

The study adopted descriptive approach design. This type of research design depicts the state of affairs as it exists at present. It essentially describes, records, analyses and interprets conditions as they exist. The researcher has no control over the variables and he can only report what has happened or what is happening. The researcher attempts to discover factors when they cannot control the variables. According to Mugenda and Mugenda, (1999), descriptive research is a systematic collection and analysis of data in order to answer questions concerning current status of a program, proposal or activity. It is used to obtain data useful in evaluating present practice and providing basis for decision, (Bell, 1993). Salkind adds that the best application of sampling theory and practice can probably be found in descriptive design. This type of research was adopted because it helped identifying the perception on the factors influencing performance of preschool children in Kaaga School for the Deaf.

### 3.3 Target Population

Borg and Gall, (1989) define target population as all members of a real or hypothetical set of people, events or objects to which an investigator wishes to generalize the results of a research study. In this study the target population included pre-school children and teachers of Kaaga School for the deaf. The current enrolment of the pre-school was 24 children. The preschool had 10 teachers. The distribution of the target population was as shown in the table 3.1 below;

**Table 3.1: Target Population**

Component/ Categories	Target Population	Percentage (%)
Head teacher Deputy Head teacher	2	6
Teachers	10	28
Pre-school children	24	67
<b>Total</b>	<b>36</b>	<b>100</b>

Source, Mubichi Foundation Report, (2010)

### 3.4 Sampling Frame and Sample Size

A sample is a subject of the target population which the researcher intends to generalize the findings, (Cohen and Marrion, 1994). This study used a census approach since the population of 36 respondents is low. Therefore, the sample size of the study was 36 possible respondents.

### 3.5 Data Collection Instruments

The researcher used questionnaires, interviews, observations and focus discussion groups to collect data.

#### 3.4.1 Questionnaires

A largely pre-coded quantitative questionnaire was used to gather information from the sampled population. The questionnaire was tested and refined on the basis of a comprehensive pilot or pre-test exercise. The questionnaires was given to all sampled

respondents across various category spectrum, to explore perceptions and feelings, general experiences, as well as knowledge and general challenges facing pre-school children with hearing impairment. Specific questions were posed as to their experience on various factors affecting performance pre-school children with hearing impairment.

#### **3.4.2 Interviews Schedules**

These data collection tools enabled the researcher to obtain more authentic information on factors influencing performance of learners in the school beyond the limited questionnaire since respondents tend to give more and adequate information besides enabling the researcher have the advantage of comparing both the answers given and the body language hence assist the researcher to determine the authenticity of the information (See appendix C).

#### **3.4.3 Observation Schedule**

Observation is a vital data collection tool as it enables the researcher to obtain first hand information as opposed to questionnaires where respondents might not give authentic information in some questions. The researcher was able to observe the actions, behavior of the respondents among other observations. In this case the researchers was to observe some of the cases related to use of learning resources, sign language, prejudice as well as how well a teacher conducts his teaching, (See Appendix D).

#### **3.4.4 Focus Discussion Groups (FGDs)**

Focus Discussion Groups comprising persons of the sampled population, held to corroborate the information gathered through questionnaires and interview. FDGs on the challenges facing the pre-school children with hearing impairment will provide the opportunity for flexible and free flowing of information. The unstructured and



spontaneous are expected to reflect genuine opinion, ideas and feelings of the members about the topic under discussion. Focus groups are relatively inexpensive and can provide fairly dependable data within a short time frame. The researcher was the moderator and led the discussions on the objectives of the study. The researcher liaised with the relevant administration in organizing for these discussion groups.

### **3.5 Validity**

Validity is the degree to which the sample of the test represents the content that the test is designed to measure Orodho, (2005). In this case validity of the instruments was determined by the use of different methods to get similar data. These methods included interview guide, FGD and questionnaires. To ensure the instruments accuracy the university supervisor assessed the instruments and provide pertinent advice and the recommendation will be incorporated in the calibration of instruments. Further, a pilot study was conducted to remove any remove ambiguity hence enhance their validity of the items.

### **3.7 Reliability**

According to Mugenda and Mugenda (2003), reliability is the accuracy and meaningfulness of inferences based on research results. It is ability of the instrument to measure what it purports to measure, (Cochran, 1997). To test for content reliability, the researcher conducted a pilot study of the questionnaire, observation schedules and interview guides which were carried out on few population of the study which shares the same characteristics with the sampled population. Comparing the findings from respondents in the pilot school was used to assess reliability of the instruments. It was assessed by comparing responses from the different respondents and using different instruments to collect data. The data collected will be compared with the objectives of

the study. The selection of the pretest sample was based on assertion by Mulusa, (1999) that about 10 respondents which represented the target population in all the major respects be used in a pretest.

### **3.8 Data Collection Procedure**

Primary data will be derived through administration of questionnaires. Secondary data will be gotten from existing literature. The questionnaires was self administered to the sampled respondents and for those who were not be able to write or read the researcher, with the help of research assistants administered the questionnaires orally. Open-ended questions were used to solicit qualitative data and suggestions while closed ended questions sought to obtain quantitative data for statistical analysis. Interview schedules for pre-school learners were conducted with the help of class teachers.

### **3.9 Data Analysis**

The study generated both quantitative and qualitative data due to the nature of the instrument adopted which consists of both semi-structured questionnaires and observation techniques. The researcher perused the completed research instruments and documented the analysis-recording sheets. The questionnaires from the respondents they were sort and arranged according to different departments. The questionnaires were coded to each set to give an easy guide to grouping the information.

Quantitative data collected using questionnaires, was analyzed by the use of descriptive statistics using SPSS package 16.0 (Statistical Package for Social Sciences), and was presented through percentages, means and frequencies. The information was also be displayed by use of frequency tables, charts and other figures applicable in data presentation. Content analysis uses a set of categorization for making valid and replicable

inferences from data to their context. Content analysis will be used to analyze data collected from the open ended questions that is of qualitative nature.

## CHAPTER FOUR

### 4.0 DISCUSSION OF RESULTS

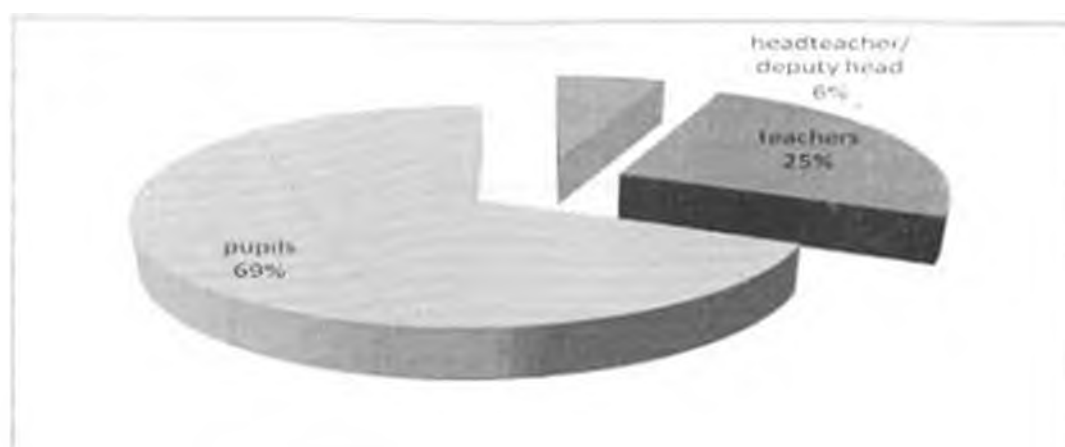
#### 4.1 Introduction

This chapter presents analysis and findings of the study as set out in the research methodology. The general objective of this study was to find out the perception on the factors influencing the performance of pre-school children with hearing impairments in Kaaga School for the deaf, Imenti North District. The study adopted a questionnaire, and an interview schedule as the only research tools in data collection on the views of the respondents on nature of credit risk management practices adopted.

#### 4.1.1 Response Rate

Table of Response	Frequency	Percentage
Responded	32	89
Not responded	4	11
<b>Total</b>	<b>36</b>	<b>100</b>

The study targeted 36 respondents who included the school administrators, the teachers and the preschool of Kaaga School for the deaf in collecting data with regard to factors influencing the performance of pre-school children with hearing impairments. From the study, 32 out of the 36 sample respondents filled and returned the questionnaires making a response rate of 89%. This reasonable response rate was made a reality after the researcher made clear interpretation on various questions which would not be clearly understood to the pre-school pupils. The distribution was as follows:



**Figure 4.3: Distribution of the Response Rate**

#### 4.2 Demographic Information

**Table 4.2: Gender**

Gender	Frequency	Percentage
Male	19	59
Female	13	41
<b>Total</b>	<b>32</b>	<b>100</b>

On the gender of the respondents who took part in giving their views on factors influencing the performance of pre-school children with hearing impairments at Kaaga School, majority of the respondents were male as shown by a percentage of 59% while others were female as shown by 41%. This indicates that many of the teachers and pupils were male.

**Table 4.3: Religion/ Faith of the Respondent**

Religion	Frequency	Percentage
Christians	30	94
Muslims	2	6
<b>Total</b>	<b>32</b>	<b>100</b>

The study also wanted to establish the marital status of the teacher respondents, according to the findings from the field, 94% of the total respondents were Christians

while 6% were Muslims. This is a clear indication that the school is normally dominated by Christians.

**Figure 4.4: Marital Status for Teacher Respondents**

Marital Status	Frequency	Percentage
Married	8	80
Single	2	20
<b>Total</b>	<b>10</b>	<b>100</b>

The study also required the teacher respondents to indicate their marital status, according to the study findings, majority of the teacher respondents were married as shown by 80% while a few were not married as shown by 20%.

### 4.3 Learning Resources

**Table 4.4: Whether there is use any of any learning resources for learners with hearing impairments in the school**

Response	Frequency	Percentage
Yes	29	91
No	3	9
<b>Total</b>	<b>32</b>	<b>100</b>

The study required the respondents to indicate whether there is use of any learning resources to teach learners with hearing impairments in the school. On this question the study established that 91% of the total respondents were of the opinion that there were learning resources to teach learners with hearing impairments in the school. This confirms with the literature findings that specialized instructional materials are important if learners are to be assisted so as to achieve the objectives of learning, (Brokx, 1992) and that the choice of appropriate instructional materials for learners with hearing impairments determines how well the content is understood by the learners.

**Table 4.5: Learning resources used for teaching learners with hearing impairments in the school**

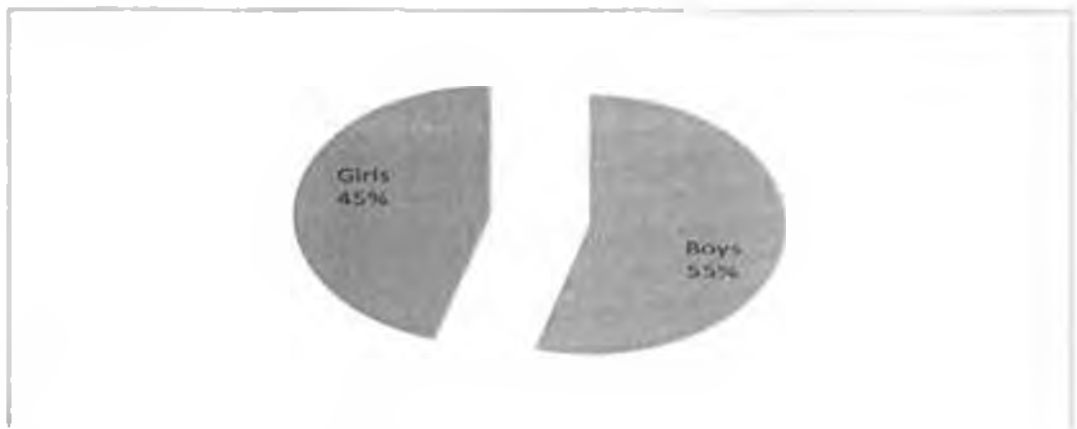
Types of resources	Frequency	Percentages
Charts	6	60
Real objects	3	30
Sign language techniques	8	80
Abacus	4	40
Magazines	2	20
Textbooks	4	40
Drawings	1	10
Picture charts	1	10
Models	1	10
Jigsaw puzzle	1	10
Photographs	1	10
<b>Total</b>	<b>32</b>	<b>100</b>

The table 4.5 above presents the learning materials used in deaf schools. The study required the respondents to indicate some of the learning materials used in their schools. On this question the study established that Sign language techniques are the widely used as shown by 80%. On the same question, majority of the respondents said that charts and text books were also widely used as shown by 60% and 30% respectively. Other respondents as shown by 30% claimed that real objects are used in enhancing performance of children with hearing impairment. Still other respondents were on the opinion that, Drawings, Picture charts, Models, Jigsaw puzzle, Photographs were also other learning resources that are used in teaching hearing impairment. This agrees with Brox, (1992) findings that learners with hearing impairments who actually are in deed visual memorize best by observing.

**Table 4.6: Gender that performs Better**

Gender	Frequency	Percentage
Boys	6	60
Girls	5	50
<b>Total</b>	<b>10</b>	<b>100</b>

The study was to establish the gender of the pre-primary that performs better in the school. According to the study findings, 60% of the total respondents were of the opinion that the boys performs better than the girls. On the same question, 50% of the respondents were of the opinion that girls perform better than the boys. This clearly indicates that the pupils almost perform on average. This information is also presented in the figure below;



**Figure 4.5: Gender that performs Better**

#### **4.3.1 Learning resources effect on performance of learners with hearing impairment**

On the question on whether learning resources has any effect in performance of learners with hearing impairments. Respondents said that Learning resources are used as reference by learners, helps learners to have mental picture and makes learner real like any other person in a learning institution. On the same line of explanation on the effects, others said that learning resources help pupils to remember and understand what they saw and that they enable the teacher explain what he/she is teaching easily thereby improving the performance of learners with hearing impairments. These finding also confirms with the literature findings that the choice of instructional materials and learning resources and effective communication determines how well learners with



hearing impairments perform in class work and attendant examinations. (Craig & Haveld, 1996).

**Table 4.7: Extent to which learning resources affect performance of learners with hearing impairments**

Extent	Frequency	Percentage
Very great extent	9	28
Great extent	14	44
Moderate extent	5	16
Little extent	3	9
No extent	1	3
<b>Total</b>	<b>32</b>	<b>100</b>

The study required to establish the extent to which learning resources affect performance of learners with hearing impairments. On this question majority of the respondents as shown by 44% learning resources affect to a great extent on performance of learners with hearing impairments, 28% very great extent, 16% great extent, 9% little extent while only 3% were for no extent.

#### 4.4 Sign Language

**Table 4.8: Effect of sign language on performance of learners with HI**

Response	Frequency	Percentage
Yes	31	97
No	1	3
<b>Total</b>	<b>32</b>	<b>100</b>

The respondents were also required to indicate whether sign language has any effect of performance in learners with hearing impairments. On this question, majority of the respondents as shown by 97% said that sign language has a great effect of performance in learners with hearing impairments in the school while only 3% were in disagreement with the same statement.

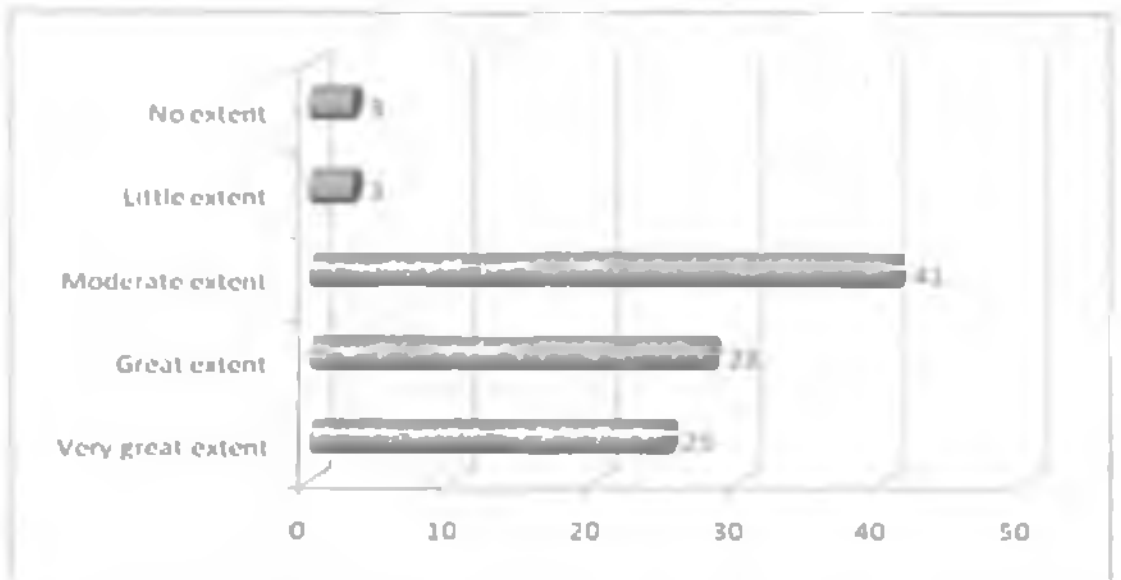
#### 4.4.1 Effect of sign language use on performance of learners with hearing impairments

On the same question, respondents were required by the study to indicate the various effects of the sign language that affects performance of learners with H.I. on this question, the study established that if pupils understands what is signed they are able to apply and answer questions, learners understand early what is taught, it helps the learner to take part in class discussion and understand instruction, since it is their mode of communication learner understands better when it is used, learners understands what is being taught with ease because the teacher uses sign language and total communication, learners understand what is taught because all concepts are interpreted and that learners understand sign language easily than verbal because it is their mode of communication.

**Table 4.9: Extent to which the sign language affect performance of the learners with hearing impairments**

<b>Extent</b>	<b>Frequency</b>	<b>Percentage</b>
Very great extent	8	25
Great extent	9	28
Moderate extent	13	41
Little extent	1	3
No extent	1	3
<b>Total</b>	<b>32</b>	<b>100</b>

On the extent to which the sign language affects performance of learners with hearing impairments, the study established that 41% of the total respondents were of the opinion that it affects to a moderate extent, 28% to a great extent while 25% was to a very great extent. This information is also shown in the figure below:



**Figure 4.6: Extent to which the sign language affect performance of the learners with hearing impairments**

#### **4.4.1 Other factors that affect performance of girls with hearing impairments**

On other factors that affect the academic performance of girls in the school, the study established that other inabilities associated with hearing impairment like blindness and other associated sicknesses affect performance to a very great extent. According to most of the respondents and on the same question, Girls have better memory and have high concentration span and that girls with hearing impairment are taken to school and are not overworked at home. Other factors that affect performance of girls included; Girls taken to school just for curiosity, many girls with disability have no access to school and girls are so much engaged in household chores

#### **4.4.2 Other factors that affect performance of boys with hearing impairments**

On other factors that affect boys with learning impairment, most of the respondents said that other inabilities associated with hearing impairment like blindness and other associated sicknesses affect performance to a great extent. Other factors raised that affect the performance of boys with learning impairment includes and not limited to;

boys are taken to school early enough, boys are able to concentrate in any learning environment, boys are not engaged in household chores. parents prefer to educate boys than girls in case of disability and that some boys with disability are much involved in household chore and lacks time for academic work.

#### 4.5 Prejudice and Performance

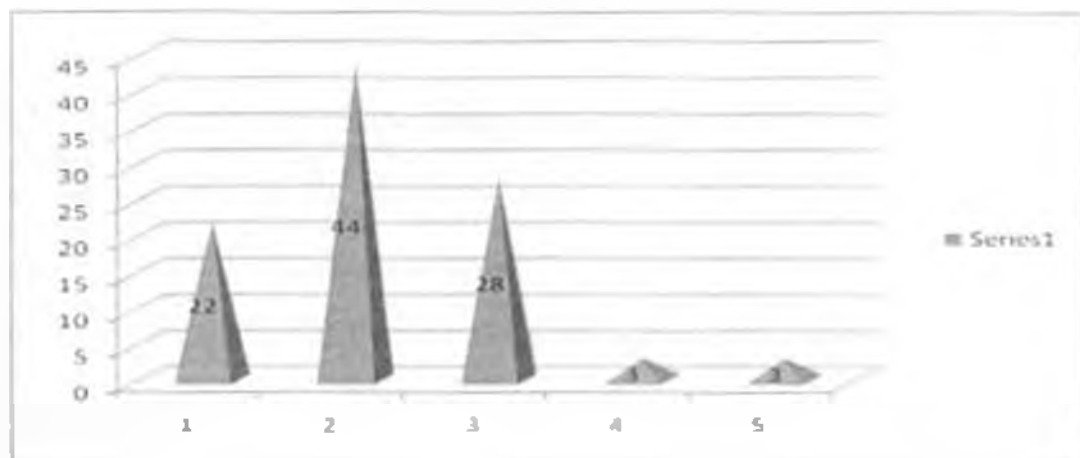
##### 4.5.1 Effect of prejudice on performance of learners with HI

The study also required the respondents to indicate factors related to prejudice that affect preschool pupils with learning impairment. On this question, majority of the respondents said that absenteeism due to lack of time management for them, late enrolment, being used like workers' servants at home, assumptions that children with disability do nothing at school, lack of hearing assistance, and discrimination in regular schools. On the same question, respondents argued that disruptions occurs either from parents, guardians or in the society thereby affecting the performance alongside lack of exposure to learning and ignorance that these children can perform better just like any other normal child in a learning institution. This is in agreement with the literature findings that learners with hearing impairments are taken advantage by the society, abused and misused. (Chege & Mugwe, 1998).

**Table 4.10: Effect of prejudice on learners with hearing impairments**

Extent	Frequency	Percentage
Very great extent	7	22
Great extent	14	44
Moderate extent	9	28
Little extent	1	3
No extent	1	3
<b>Total</b>	<b>32</b>	<b>100</b>

The study required the targeted population to indicate the extent to which prejudice affects learners with hearing impairments. On this question, majority of the respondents (44%) said that prejudice affects learners with hearing impairments to a great extent, 28% moderate extent, 22% to a very great extent while only 3% were to a little extent or no extent at all. This information is also presented in the figure 4.7 below;



**Figure 4.7: Extent to which prejudice affects learners with hearing impairments**

## **4.6 Training Skills**

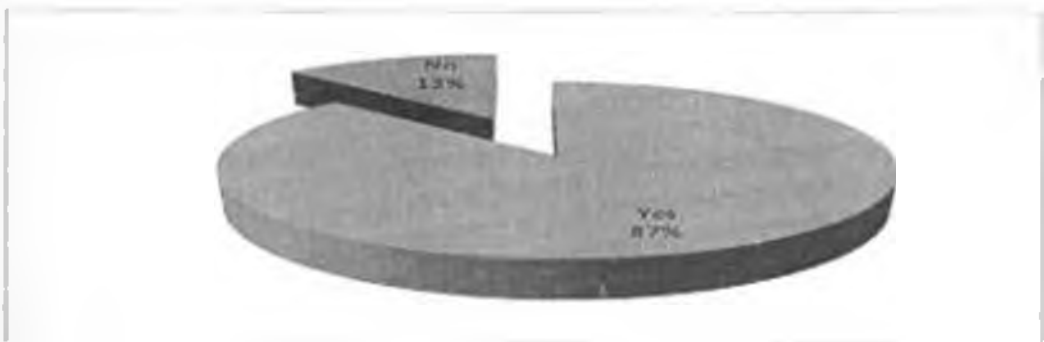
### **4.6.1 Methods used for teaching learners with hearing impairments**

The study also required the teacher respondents to indicate the methods used in teaching learners with hearing impairment, on this question, the study established that most of the methods used in the school were either, sign language, total communication, dramatizing, use of exact English, visual aids, pantomime, role play, eye contact, lip reading, use of signed English and finally the use of gestures. This is a clear indication that the teachers in the school are knowledgeable in the application of the various teaching methods for performance.

**Table 4.11: Whether good teaching methods and skills contribute to improved performance of learners with hearing impairments**

Response	Frequency	Percentage
Yes	28	88
No	4	13
Total	32	100

The study wanted to establish whether good teaching methods contribute to improved performance of learners with hearing impairments. According to the study findings majority of the respondents as shown by 88% said that good teaching methods contribute to improved performance of learners with hearing impairments. Only a few of the respondents as indicated by 13% of all the respondents who constituted of teachers and pre-primary school pupils who disagreed that good teaching methods contribute to improved performance of learners with hearing impairments. This agrees with the literature that individual needs to be equipped with the skills that will enable them to negotiate communicative life successfully in a hearing world (Hogan, 2001). This information is also presented in the figure below:



**Figure 4.8: Whether good teaching methods contribute to improved performance of learners with hearing impairments**

**Table 4.12: Extent to which training skills affect the performance of learners with hearing impairment**

<b>Extent</b>	<b>Frequency</b>	<b>Percentage</b>
Very great extent	15	47
Great extent	11	34
Moderate extent	3	9
Little extent	2	6
No extent	1	3
<b>Total</b>	<b>32</b>	<b>100</b>

The study was also to establish the extent to which skills affect the performance of learners with hearing impairment. On this question, majority of the respondents as shown by 47% said that training skills affect the performance of learners with hearing impairment to a very great extent, 34% to a great extent, 9% to a moderate extent while 6% to a little extent respectively.

## CHAPTER FIVE

### 5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents the discussion of the main findings of the study as stipulated in the research objective questions. The specific objectives of this study were to find out the perception on the factors (learning materials, prejudice, sign language and training skills and) influencing the performance of pre-school children with hearing impairments at Kaaga School for the deaf in Meru

#### 5.2 Summary of Main Findings

On perception on the effect of learning materials, the study established that that 91% of the total respondents were of the opinion that there were learning resources to teach learners with hearing impairments in the school and that sign language technique was the widely used. Other learning materials were drawings, picture charts, models, Jigsaw puzzle, and photographs. The study also established that Learning resources are used as reference by learners, helps learners to have mental picture and makes learner real like any other person in a learning institution and that learning resources help pupils to remember and understand what they saw and that they enable the teacher explain what he/she is teaching easily thereby improving the performance of learners with hearing impairments. Finally, majority of the respondents as shown by 44% said that learning resources affect performance of learners with hearing impairments to a great extent.

On sign language, the study established that sign language has a great effect of performance in learners with hearing impairments in the school and that if pupils understands what is signed they are able to apply and answer questions, learners understand early what is taught, it helps the learner to take part in class discussion and



understand instruction, since it is their mode of communication learner understands better when it is used, learners understands what is being taught with ease because the teacher uses sign language and total communication, learners understand what is taught because all concepts are interpreted and that learners understand sign language easily than verbal because it is their mode of communication. On the extent to which the sign language affects performance of learners with hearing impairments, the study established that 41% of the total respondents were of the opinion that it affects to a moderate extent.

On prejudice, the study established that absenteeism due to lack of time management for them, late enrolment, being used like workers/ servants at home, assumptions that children with disability do nothing at school, lack of hearing assistance, and discrimination in regular schools and discrimination in the society are some of the prejudice factors that affect learners with hearing impairments. In this case majority of the respondents said that prejudice affects learners with hearing impairments to a great extent.

On perception on the training skills, the study found out that most of the methods used in the school were either, sign language, total communication, dramatizing, use of exact English, visual aids, pantomime, role play, eye contact, lip reading, use of signed English and finally the use of gestures. This is a clear indication that the teachers in the school are knowledgeable with training skills in the application of the various teaching methods for performance. According to the study findings majority of the respondents as shown by 88% said that good teaching methods contribute to improved performance of learners with hearing impairments. Majority of the respondents as shown by 47% said

that training skills affect the performance of learners with hearing impairment to a very great extent.

### **5.3 Conclusion**

The study concludes that sign language techniques are the widely as the learning resources in the school and that they affect performance of learners with hearing impairments to a great extent. The study also concluded that learning resources are used as reference by learners, helps learners to have mental picture and makes learner real like any other person in a learning institution and that learning resources help pupils to remember and understand what they saw and that they enable the teacher explain what he/she is teaching easily thereby improving the performance of learners with hearing impairments.

The study also concludes that sign language has a great effect of performance of learners with hearing impairments in the school and that if pupils understands what is signed they are able to apply and answer questions, learners understand early what is taught, it helps the learner to take part in class discussion and understand instruction, since it is their mode of communication learner understands better when it is used.

The study also concludes that absenteeism due to lack of time management for them, late enrolment, being used like workers' servants at home, assumptions that children with disability do nothing at school, lack of hearing assistance, and discrimination in regular schools and discrimination in the society are some of the prejudice factors that affect learners with hearing impairments.

Finally, the study also concludes that most of the methods used in the school were either: sign language, total communication, dramatizing, use of exact English, visual

aids, pantomime, role play, eye contact, lip reading, use of signed English and finally the use of gestures. This is a clear indication that the teachers in the school are knowledgeable and with training skills in the application of the various teaching methods for performance. The study therefore concluded that training skills affect the performance of learners with hearing impairment to a very great extent.

#### **5.4 Recommendations**

The study recommends that the school adopt even the modern learning materials for this will have a very great impact on the performance of learners with hearing impairments.

The study also recommends the assessment of the learning materials purchased to know their effectiveness on the performance of the preschool children. The study also recommends that parents or guardians whose children have hearing impairments acquire the knowledge on the use of sign language for it affects performance to a great extent.

The study also recommends that the society, parents, the teachers, the administrators, the nongovernmental organization adopt positive perceptions on children with hearing impairment for this negatively affects their performance. Having a positive attitude could greatly encourage them improve performance in school. The study recommends that teachers be awarded scholarships when available so as to improve their teaching skills. They should be allowed to know and experience modern teaching methods that will help improve the performance of preschool children. Various strategies must be put in place so as to add value to the preschool children education with hearing impairment especially increased funds through the ministry, the various concerned NGOs and also the well wishers and sponsors. Finally, this study recommends that other factors not discussed in this research report be established alongside their relative effects towards the performance of learners with hearing impairment or other disabilities.

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**Appendix A:  
Introduction Letter**



**UNIVERSITY OF NAIROBI  
COLLEGE OF EDUCATION AND EXTERNAL STUDIES  
SCHOOL OF EDUCATION  
DEPARTMENT OF EDUCATIONAL COMMUNICATION AND TECHNOLOGY**

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OR P.O BOX 92  
KIKUYU

28<sup>th</sup> March 2011

**TO WHOM IT MAY CONCERN**

Dear Sir Madam,

**RE: FLORENCE GACHERI MUGUNA**

This is to certify that **FLORENCE GACHERI MUGUNA** is a bonafide student of the University of Nairobi, Department of Educational Communication and Technology. She is pursuing Masters in (ECE) Education and has completed her course work. She is working on her project titled **"FACTORS INFLUENCING PERFORMANCE OF PRESCHOOL CHILDREN WITH HEARING IMPAIRMENT IN KENYA. A CASE OF KAAGA."**

Any assistance accorded to her will be highly appreciated

Yours faithfully,

**PROF. P.O.O. DIGOLO  
CHAIRMAN,  
DEPARTMENT OF EDUCATIONAL COMMUNICATION AND TECHNOLOGY**



**Appendix B:  
Letter to Respondents**

**University of Nairobi**

**School of Early Childhood Education**

**P.O. Box 924563,**

**Nairobi**

**Jan 2011**

**Dear Sir/Madam,**

**RE: PERCEPTION ON THE FACTORS INFLUENCING PERFORMANCE OF  
PRE-SCHOOL CHILDREN WITH HEARING IMPAIRMENT**

I'm a post graduate student at the University of Nairobi carrying out a research on the above topic. The purpose of the research is to fulfill on academic requirement of having skills in the collection and analysis of data towards a master of education degree and I have sampled your company as a case study for this exercise.

I am asking for your cooperation to allow me collect data from your school. Your responses will make a real contribution towards understanding the problems of learners with hearing impairment. Please note that the information sought is purely for academic purposes and will be treated with strict confidentiality.

Yours faithfully,

Florence

Student



### Appendix C:

#### Questionnaire for Head Teacher/ D. Head teacher

The basic objective of the study is to explore the perception on the factors influencing performance of learners with hearing impairments in Kaaga School, Imenti north district. Please be open to expose all issues as accurately and honestly as possible. This is not a test; the questions are intended for educational research to solve a problem.

#### Section A. Personal Information

[ ] Tick or fill in the appropriate response[s]

Age \_\_\_\_\_ years

Sex. Male [ ] Female [ ]

Religion Faith. Christianity [ ] Islamic [ ] Others \_\_\_\_\_

Marital status – married [ ] single [ ]

Teaching experience [ ]

#### Section B – Perception on factors affecting the academic performance learners with hearing impairments

Guidelines: tick YES [ ] OR NO [ ]. Write brief comments in the blank spaces.

1. Name some learning resources used for teaching learners with hearing impairments in your school

.....  
.....

Do you use any learning resources to teach learners with hearing impairments in your school? Yes [ ] No [ ]

Please explain

.....  
.....

2. Do you think use of learning resources has any effect in performance of learners with hearing impairments? Yes [ ] No [ ]

Please explain

.....  
.....

3. Which gender performs better in pre-school? Boys [ ] Girls [ ]

Please explain

.....  
.....  
4. Name factors that affect performance of girls with hearing impairments

.....  
.....  
5. Name factors that affect performance of boys with hearing impairments

.....  
.....  
6. Name methods used for teaching learners with hearing impairments

.....  
.....  
7. Do you think that good teaching methods contribute to improved performance for learners with hearing impairments? Yes |  | No |

Please explain

.....  
.....  
8. Do you think that sign language has any effect performance in learners with hearing impairments? Yes |  | No |

Please explain

.....  
.....  
**End**

**Thanking you in advance for your good mutual cooperation**

**a) QUESTIONNAIRE FOR TEACHERS OF LEARNERS WITH HI**

The basic objective of the study is to explore the perception on the factors influencing performance of learners with hearing impairments in Kaaga School, Imenti north district. Please be open to expose all issues as accurately and honestly as possible. This is not a test; the questions are intended for educational research to solve a problem.

Please your views, observations and suggestions will be valuable in drawing practical strategies to inclusively empower the entire community and humanity to unite and work together to improve academic performance of learners with hearing impairments in our schools.

The contents of this questionnaire will be treated with utmost confidentiality. The identity of the respondents will not be revealed. Do not in any way write/reflect your names or any other cues and details that may in any way disclose your identity. This will safeguard your good reputation, integrity and your good name.

**Section A. Personal Information**

Tick or fill in the appropriate response[s]

1. Age \_\_\_\_\_ years

2. Sex. Male  Female

3. Religion/Faith. Christianity  Islamic  Others \_\_\_\_\_

4. Teaching experience

5. Marital status – married  single

**Section B – Perception on the factors affecting performance of learners with hearing impairments**

**Guidelines: tick YES  OR NO . Write brief comments in the blank spaces.**

6. Name some learning resources used for teaching learners with hearing impairments in your school

.....  
.....  
.....

7. Do you use any learning resources to teach learners with hearing impairments in your school? Yes  No

Please explain

.....  
.....

8. Do you think use of learning resources has any effect in performance of learners with hearing impairments? Yes [  ] No [  ]

Please explain

.....  
.....

9 Which gender performs better? Boys [  ] Girls [  ]

Please explain

.....  
.....

10. Name factors that affect performance of girls with hearing impairments

.....  
.....

11. Name factors that affect performance of boys with hearing impairments

.....  
.....

12. Name methods used for teaching learners with hearing impairments

.....  
.....

13. Do you think that good teaching methods contribute to improved performance of learners with hearing impairments? Yes [  ] No [  ]

Please explain

14. Do you think that sign language has any effect of performance in learners with hearing impairments? Yes [ ] No [ ]  
Please explain

End

Thanking you in advance for your good mutual cooperation

## Appendix D:

### Interview Schedule for Learners with HI

The basic objective of the study is to explore the perception on the factors influencing performance of learners with hearing impairments in Kaaga School, Imenti north district. Please be open to expose all issues as accurately and honestly as possible. This is not a test; the questions are intended for educational research to solve a problem.

Please your views, observations and suggestions will be valuable in drawing practical strategies to inclusively empower the entire community and humanity to unite and work together to improve academic performance of learners with hearing impairments in our schools.

The contents of this questionnaire will be treated with utmost confidentiality. The identity of the respondents will not be revealed. Do not in any way write reflect your names or any other cues and details that may in any way disclose your identity. This will safeguard your good reputation, integrity and your good name.

#### Section A. Personal Information

Tick or fill in the appropriate response[s]

1. Age \_\_\_\_\_ years

2. Sex \_\_\_\_\_ Male  Female

3. Religion Faith. Christianity  Islamic  Others

4. Class .....

5. Section B – Perception on the factors influencing performance of learners with hearing impairments

Guidelines: tick YES  OR NO . Write brief comments in the blank spaces.

1. Do you use any learning resources to teach learners with hearing impairments in your school? Yes  No

Please explain

.....  
.....

2. Name some learning resources used for teaching learners with hearing impairments in your school

3. Do you think use of learning resources has any effect in performance of learners with hearing impairments? Yes [ ] No [ ]

4. Please explain

5. Which gender performs better? Boys [ ] Girls [ ]  
Please explain

6. Name factors that affect performance of girls with hearing impairments

7. Name factors that affect performance of boys with hearing impairments

8. Name methods used for teaching learners with hearing impairments

9. Do you think that good teaching methods contribute to improved performance of learners with hearing impairments? Yes [ ] No [ ]  
Please explain

10. Do you think that sign language has any effect of performance in learners with hearing impairments? Yes [ ] No [ ]  
Please explain

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Thanking you in advance for your good mutual cooperation

**Appendix E:  
Observation Schedule**

1. What are the learning resources available in class?
2. How easily do students seem to be understanding in regard to the learning resource?
3. What use is being made of the resources?
4. How well the teacher explains in sign language?
5. Benefits of the sign language to the pre-school children?
6. How the school administrations consider a deaf child?
7. How the teacher treats the deaf child?
8. How the preschool children interrelate?
9. How well is the teacher applying the resources?
10. What other skills does the teacher have?