THE EFFECT OF DEAFNESS ON ATTACHMENT AMONG CHILDREN IN SELECTED DEAF CENTRES IN NAIROBI COUNTY

by

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In accordance with Daystar University policies, this thesis is accepted in partial fulfilment of requirements for the Master of Arts degree in Child Development

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I declare that this thesis is my original work and has not been submitted to any other college or university for academic credit.

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Ruthuku June Wanjiku

Dedication

To Diana Achieng'

My friend and inspiration

Acknowledgement

The Book of Ecclesiastes tells us that there is a season and time for everything; a time to begin and a time to end. As I write the final pages of this thesis, my heart is full of gratitude to God and the individuals who facilitated the success of this document. First, I would like to acknowledge my mother, Pauline Ruthuku, for her love and unwavering support. To Elly Munoru, my fiancée, I express my gratitude for the support, encouragement and prayers. Secondly, I would like to thank my supervisor, Mrs. Grace Karanja, and my reader, Dr. Lincoln Khasakhala, for the invaluable input and encouragement. Your guidance made all the difference. To Dr. Harrahs Malinda, you are my pillar of support. Your encouragement pushed me to go an extra mile. To Daystar University and faculty, I thank you for the opportunity to learn and change my way of thinking about children. Above all, to Him who makes everything beautiful at its own time, Thank you Jesus, without You I would not have made it.

ABSTRACT

Deafness is a condition that affects 20 million children worldwide, 80% of whom live in the developing countries. With this condition comes a challenge for the deaf child in terms of language and communication. Without communication and language skills, inclusion in the family, education, society; and in the long run employment might be impossible. This will definitely affect the attachment process. The researcher recognized this aspect and purposed to study "The effect of deafness on attachment among children in selected deaf centres in Nairobi County". The purpose of the study was to find out the effect of deafness on attachment among deaf children aged between 12 and 20 years. The objectives of the study included: 1) To find out whether deafness affects attachment in deaf children, 2) To establish the challenges that hearing caregivers experience in their interaction with their deaf children. The study employed descriptive research. A sample population of 36 deaf children aged between 12 and 20 years was used. The participants were derived from public schools. The schools included: Joseph Kang'ethe Primary, Race-course Primary, Aga Khan Primary and Giovanni e Silva school in Nairobi County. The major sampling technique used was purposive sampling. The researcher used both questionnaires and focus group discussion questions for data collection. Data analysis was done through descriptive techniques with the help of Statistical Package for Social Scientists (SPSS, Version 17.0) and qualitative data analysis methods. Data was presented and displayed graphically using tables, graphs and charts. The findings indicated that a large percentage of the caregivers [mothers (77.1%) and fathers (94.4%)] do not know sign language. The findings also indicated that 52.9% of the deaf children do not bother telling their caregivers about their problems. As a result, attachment is affected. The researcher recommends sign language training for the caregivers.

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CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

Introduction

There is very little understanding of what it means to be deaf and consequently families with deaf children are unable to support their communicational and educational development. In most developing countries, deaf children are not diagnosed at birth and when the child is diagnosed parents do not have access to relevant information about deafness. Questions about the future of their child are not addressed and there is little peer support. As a condition that hinders normal language development, deafness also makes interaction and communication challenging. Without communication and language skills, inclusion in family, society, education and employment is impossible (Policy document, 2008-2013).

Background

Hearing and speech are essential means of learning, playing and developing social skills in a child. Indeed, children begin to learn how to communicate through imitating or copying the sounds they hear. If a child has a hearing loss that is undiagnosed, they can miss much of the speech and language around them (Palo Alto Medical Foundation, 2012). World over, deafness affects approximately 20 million children, 80 percent of whom live in developing countries (Policy document, 2008-2013).

Glimpses into the lives and communication of the deaf and hearing impaired people are seen in history across Africa. For much of Africa, there is a long, slow progress in deaf people acquiring public space and a voice of their own. Their

experiences have involved severe economic poverty and adversity; stigmatizing attitudes and exclusionary practices. However, this has not been the norm everywhere in Africa, and many deaf people have shown great resilience, perseverance, humour and ingenuity in their dealings and communications with the non-deaf world (Kiyaga & Moores, 2003).

There are unpublished essays and theses and little-known books lying in African academic libraries and indeed European and American libraries which may yield useful literature (Adepoju, 1999; Engelbrecht, 1956/1961; Gebre-Michael, 1983; Gessese, 1970; Mocke, 1971). Literature on the deaf people's culture and background is certainly needed not only by the deaf community, but by people that hear who may be providing services especially in countries where information resources are weak. In her studies, Markku (1997, p. 143) describes how the hearing people in Eritrea reacted towards the deaf during training: “Because all the trainees were hearing people, it was difficult for them to imagine what the world is like for the deaf.” In the same breath, to the best of the researcher’s knowledge, no studies have been done in Africa to determine whether deafness as a factor affects or hinder child-caregiver attachment.

Previous studies that have been conducted on the factors affecting attachment in children have been confined to the industrialized countries of the West as revealed by a review of the empirical literature (De Wolff &Van Ijzendoorn 1997; Podosa et al., 2002; Thomson & Raikes 2003; Berk 2006). More specifically, the studies have tested the effects of factors such as the quality of care giving, infant characteristics, family circumstances and parental state. However, in her first developmental study, Ainsworth (1982) viewed infant-mother attachment on an evolutionary perspective which was

conducted in a non-western culture more specifically the Baganda from Uganda. She highlighted that there is a sound development of close attachment and at the same time increasing competence and independence of a securely attached infant. On the other hand, the insecurely attached infant clings to his mother and refuses to leave her. Ainsworth however does not indicate whether the same findings would be applicable to the child with hearing impairment.

In Kenya, the deaf persons are estimated to be between 650,000 and 750,000 (Ndurumo, 2003). They are a distinct cultural-linguistic group who live and interact with one another. They have their own customs, habits, thought patterns, language, common experiences and values that identify them as a unique cultural group. They do not consider that they are handicapped or disabled; rather, they consider themselves a minority group within their context (Njoroge, Ngatha & Ndung'u, 2010). Deafness can be categorized into two: conductive deafness which is caused when fluid collects behind the eardrum in the middle and becomes infected, and sensory-neural(or nerve) deafness which is caused by problems in the inner ear or along the nerve pathway from the inner ear to the brain stem (see fig. 1.1). The sensory-neural deafness is a permanent condition. Causes of deafness may include heredity, maternal rubella and congenital cytomegalovirus which are all prelingual causes as well as meningitis and otitis media which are postlingual causes.

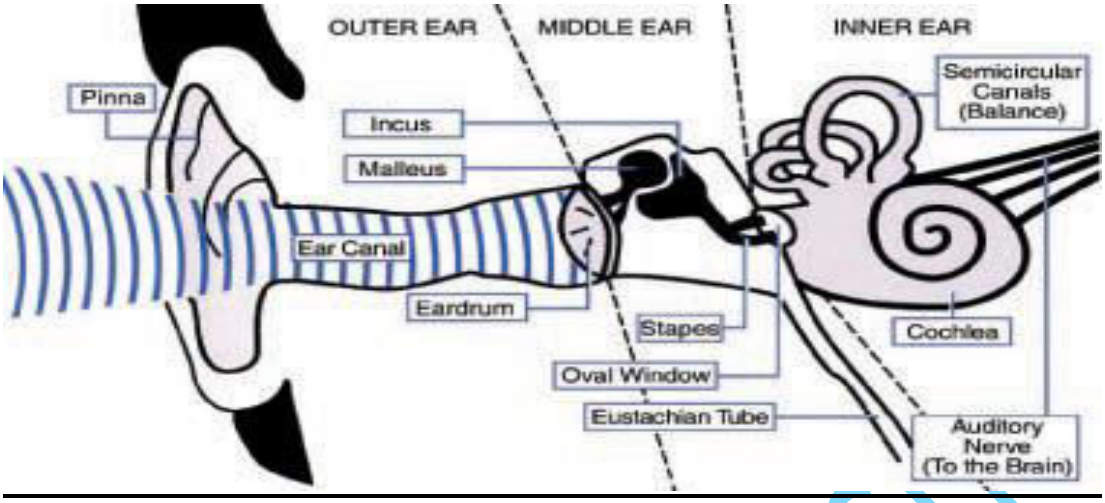

Figure 1.1: The Ear

Source: Turnbull, Turnbull, Shank & Leal, 1995.

Deafness in children is a serious concern because it interferes with the development of language which sets humans apart from other living things (Turnbull et al, 1995). As a condition that hinders normal language development, deafness also makes interaction and communication challenging. It was therefore important to understand how the deaf child interacts with his/her caregiver and the wider community, and how, if need be, this interaction can be enhanced resulting to appropriate social development. It was for this reason that the researcher intended to study this special group of children and established how deafness affects the attachment process and also made appropriate recommendations.

Some of the challenges the deaf child experiences are in their social interactions, language and communication. In social interactions, the deaf child's social skills are poor or under developed and may have a negative impact on social development. The deaf child also experiences low self-esteem and low confidence due to their inability to

interact, and this affects their relationship with peers and family. Since they are deaf, group participation is lower than that of their peers and this affects their leisure/play activities. In addition, the child may withdraw from social situations due to embarrassment and this contributes to isolation (Bleckly, 2012).

When it comes to language and communication, most deaf children may experience delays in speech and language development hindering their ability to communicate effectively. The deaf child may also have poor mental acuity due to poor speech and language development. The deaf child may have little or no skills to ask the questions to get help leading to parents guessing what the child is trying to communicate (Bleckly, 2012). Due to this challenge the deaf child's needs are not adequately met.

In addition, there is a significant impact on the family that alters communication, parent-child relationships and family dynamics (Calderon & Greenberg, 1993; Christiansen & Leign, 2002; Marschark, 1993). The lack of a shared language between the deaf child and their caregiver may cause a problem in understanding each other, and therefore may hinder the attachment process. Bowlby (1969) used the term attachment to describe the strong affection tie that children feel for special people in their lives. Human beings are born prepared by millions of years of primate evolution to respond to the sights and sounds of people and to behave in ways that elicit responses from them. Humans share with many mammals the inability to function independently soon after birth hence the need to bond with others of the same species (Maccoby, 1980). According to Bowlby (1969), children who are securely attached take pleasure in their interactions and feel comforted by their caregivers' presence in time of stress or uncertainty. The

caregiver plays an important role in the life of a child. A caregiver is an individual such as a parent, foster parent, or head of a household who attends to the needs of a child. Attachment plays a crucial role in children's lives and anything that undermines this bond triggers grief and despair and sets the stage for poor developmental outcomes (Berk, 2006).

Some of the factors that can interfere with the process of attachment include the sense of loss and distress that many parents initially feel when they realise that the child is deaf; fear of the unknown, the child's future, other people's reactions, fear of the child itself and difficulties in communication. According to Glynn (2010), shared language and experiences are a major part of forming attachment. The issue of shared language can cause problems to a deaf child. The relationship between attachment and mutual signal-response system is evident in extreme form in the cases of deaf infants. It is unfortunate that caregivers and paediatricians do not often recognize a child's deafness until the second year of life (Maccoby, 1980; Berk 2006). As a result of this, the attachment of these undiagnosed children to their caregivers is often slow to develop and may be weak (Maccoby, 1980).

A number of theorists (Bowlby, 1969; Ainsworth, 1982) have done tremendous researches explaining attachment especially for regular infants. However, the researcher has not come across studies that have been done in the Kenyan context to find out the attachment process of the deaf child to caregivers taking into consideration their limitation in language. It is clear that development of secure attachment between infants and their caregivers provide a sound foundation on which to build a well-rounded person.

This study was designed to establish whether deafness as a factor affects the attachment process between a deaf child and their hearing caregiver. The study also assessed the challenges faced by deaf children and their caregivers.

Problem Statement

According to Ndurumo (2000), the deaf community in Kenya comprises of approximately 650,000 to 750,000 individuals who have experienced hearing loss. According to Lederberg and Mobley (1990), over 90% of hearing impaired children are born to hearing parents who have had little or no previous contact with hearing impairment and therefore are unprepared to raise a child with special needs. Due to this, communication and interaction between the deaf child and caregiver is affected especially because of lack of shared language. Glynn (2010) states that shared language and experiences are a major part of forming attachment. Consequently, the deaf child is unable to communicate their needs and wants to their hearing caregivers and vice versa. This may result to the deaf child feeling lost and not understood. Some of these deaf children may display behaviours like: anger, withdrawal, being reserved, sadness and avoidance of people. The researcher presumed that due to the lack of shared language, an insecure attachment may develop between the deaf child and their caregiver. Hence, there was a need to find out whether deafness in children does affect attachment so as to make appropriate recommendations.

A review of the empirical literature revealed that most studies (Bowlby, 1969; Ainsworth, 1982) that have been conducted focus on attachment of normal regular children and how this attachment bond forms through their interaction with their

caregiver. The studies have been enlightening to both scholars and the wider society but have overlooked the deaf child and how the child forms an attachment to their hearing caregiver taking into consideration that they have a limitation in communication and language.

Purpose of the Study

The purpose of this research was to find out the effect of deafness on the attachment among deaf children aged between 12 and 20 years.

Objectives of the Study

1. To find out whether deafness affects the attachment in deaf children aged between 12 and 20 years.
2. To establish the challenges that deaf children experience in their interaction with their hearing caregivers.
3. To establish the challenges hearing caregivers experience in their interaction with deaf children.

Research Questions

1. Does deafness affect the attachment in deaf children aged between 12 and 20 years?
2. What challenges do deaf children experience when interacting with their hearing caregivers?

3. What challenges do the hearing caregivers experience when interacting with their deaf children?

Justification

To the best of the researcher's knowledge, she had not come across any literature in Kenya on deafness and its effect on attachment. It is of great concern that not much has been done in the non-western countries to explain the attachment process; more specifically looking at attachment and deafness in children. Due to lack of adequate studies in this area, it was not very clear what effect deafness in children has on the attachment process.

Significance of the Study

The first importance of the study lies in the applied utility of the knowledge it will create. The study will equip caregivers of deaf children with insight on what attachment is and how they can enhance it especially through learning sign language. Learning sign language will ensure that the deaf child and caregiver have a shared language through which they can communicate therefore enhancing attachment. The study will also help the society to better understand persons with deafness and take initiative to learn the skills required to interact and communicate with them.

A second importance of this study is its contribution to academic knowledge in the field of child psychology and development. Through this study, scholars will have an understanding of the deaf child and whether their condition affects their attachment process.

A third importance is that through this study, those who are charged with the responsibility of making policies will have knowledge and understanding of the situation of the deaf child. Hence, the policy makers will strive to come up with policies that are both innovative and empowering to the deaf child and their hearing caregiver.

Assumptions

The researcher assumed that deafness as a factor does affect attachment. The respondents were available and willing to share the information required for the study which included confidential information.

Limitations and Delimitations

The deaf children had difficulties understanding the questions posed to them due to the limitation in language. However, this limitation was managed through translating the questionnaire into the Kenyan Sign Language. In addition, extra sign language interpreters were used during the research process. The researcher trained these sign language interpreters. A second limitation was that the respondents would not be willing to release confidential information to the researcher. This limitation was managed through the assurance of confidentiality and anonymity of the respondents. A third limitation was the availability of the caregivers. This limitation was managed through using the available caregivers and making recommendation for further research.

Methodology

The study employed descriptive research utilizing 36 deaf children aged between 12 and 20years and their caregivers. The participants were derived from four schools with

deaf units in Nairobi County. The schools include Joseph Kang'ethe Primary School, Race-course Primary School, Aga Khan Primary School and Giovanni e Silva School.

Information from the respondents was gathered using two methods: structured questionnaire method as well as focus group discussions. The structured questionnaires consisted of a list of questions with all possible alternatives from which the respondents selected the answer that best described their situation. The focus group discussions were guided by a set of predetermined questions. The researcher used these methods because of their suitability and appropriateness. In determining an appropriate sample size, the major sampling technique used was purposive sampling. Data analysis was done through descriptive techniques with the help of Statistical Package for Social Sciences (SPSS, Version 17.0) as well as qualitative data analysis methods. Data was presented graphically using tables and charts.

Definition of Terms

According to Vandervert (1988), an operational definition identifies one or more specific observable conditions or events that guide the researcher on how to measure that event. The definitions are also used to define system states in terms of a specific, publicly accessible process of preparation or validation testing, which is repeatable at will. The operation chosen will often have an immediate impact on the course of the research, especially the findings.

For the purpose of this study the following terms are operationalized:

Effect: According to the Oxford Advanced Learner's dictionary, 6th ed., (2000), effect is a change that something causes in something else; a result. For this study, effect will be defined as the consequence that deafness has on attachment.

Deafness: This is a condition whereby a hearing impairment is so severe that the child is impaired in processing linguistic information through hearing, with or without amplification, adversely affecting the child (Turnbull et al., 1995). For this study, deafness will be defined as a permanent loss of hearing which adversely affects the child's normal ability to develop language.

Attachment: The strong affection tie that children feel for special people in their lives (Bowlby, 1969). For this study, attachment will be defined as the child-caregiver strong and affectionate connection that leads to a mutual feeling of pleasure when interacting.

Child: According to The Children's Act (2001), a child is defined as any human being under the age of eighteen years. For this study, a child is every human being between the ages of 12 to 20 years. The researcher selected this age bracket because at this stage the child can think more logically and also reason about ideas or premises that are real or not.

Caregiver: A caregiver is an individual such as a parent, foster parent, or head of a household who attends to the needs of a child (Berk, 2006). For this study, a caregiver is a person who takes care of children. It could be a mother, father, guardian or foster parent.

Summary

The chapter formed the introduction to the study. It presented what the researcher intended to study which is deafness and whether it affects attachment. The objectives, justification and significance have also been presented and these will help in guiding the research.

CHAPTER TWO

LITERATURE REVIEW

Introduction

The literature review in this chapter presents what other scholars have written on the subject of deafness and attachment. This will be followed by factors considered to affect attachment in children. A theoretical framework in this section included theorist John Bowlby, Erik Erickson and Abraham Maslow.

Psychoanalytic theorist (Erikson, 1963) and ethologists (Bowlby, 1969) believe that the feelings of warmth, trust and security that infants gain from secure attachments will set the stage for healthy psychological development in later life (Shaffer, 2009). The central theme of these attachment theories is that mothers who are responsive to the infant's needs establish a sense of security. Both theorists' discussions on attachment development are quite significant for this research. A conceptual framework was also formulated.

Deafness and Attachment

A careful review of literature indicates that a number of studies have been done on the subject of deafness and attachment, and this is especially in the western countries. According to Lederberg and Mobley (1990), over 90% of hearing impaired children are born to hearing parents who have had little or no previous contact with hearing impairment. In these families, both educators and researchers have hypothesized that the development of a normal mother-child relationship is disrupted by the inability of the

child to understand his or her mother's normal communication. In support of this hypothesis, studies have been done with hearing mothers of deaf 3 to 5 year olds. These parents tend to be controlling, intrusive, didactic, rigid, disapproving, dominant and negative with their children than mothers of hearing children. Deaf preschoolers have been rated as less responsive, creative, happy and positive with their mothers than their hearing counterparts. In addition, it has been found out that deaf preschoolers had shorter interactions with their hearing mothers, and also initiated interactions less frequently than did hearing preschoolers.

Other studies have examined differences between deaf/hard-of-hearing and hearing persons with regards to two interrelated and continuous developmental processes: attachment (Bowlby, 1969) and individuation (Mahler, 1963). The findings of these studies show that deaf/hard-of-hearing participants expressed more fear of attachment and more fear of individuation that than did hearing participants. Higher fear of attachment correlated with lower self-esteem and well-being. It is important to note that the participants were persons aged 18 to 35 years. Attachment is a developmental process that originates in early childhood and affects behaviour throughout life. Attachment focuses on the emotional bonding between an infant and caretaker, mainly the mother (Bowlby, 1969). During mother-child interactions, the infant internalizes the mother's responsiveness and behaviour as internal working models that serve later in the establishment of new relationships (Bowlby, 1988). Thus, at older ages and into adulthood, attachment relationships mirror the attachment style of the developing infant.

The presence of a child with a disabling condition, such as deafness, may alter the family climate and its interpersonal relationship, especially when the parents are hearing, thus affecting the attachment process (Leatherman-Sommers, 2000). According to Leatherman-Sommers (2000), there are several reasons why deaf/hard-of-hearing children are assumed to be at risk for developing an insecure attachment: Hearing mothers of deaf/hard-of-hearing children reveal stress and depression when the child's deafness is diagnosed and might neglect the needs of their young children; mothers fail to adjust their communication to the hearing deficit of the child and continue to comfort the child by voice; and mothers tend to control interactions with their deaf/hard-of-hearing child and tend to be insensitive to the child's needs, initiations or wishes. According to Sinkkonen (1994), the deaf child may also be unaware of the importance of his or her voice in communication and therefore may fail to influence others' behaviour or receive their attention and care; moreover, the child cannot hear the mother when she is not visible and therefore does not have the continued assurance about her presence or the comfort that the mother's voice can provide, which in hearing children can reduce separation anxiety.

Moreover, Lederberg and Mobley (1990) also compared the attachment style and interactions of 41 dyads of hearing impaired toddlers, aged between 18 to and 22 months, and their hearing mothers with a same-age group of hearing dyads. The two groups of toddlers were found to differ in their communicative competence. However, no differences emerged between the two groups of toddlers in their attachment to their mother or in the characteristics of their interactions for example initiative, creativity, attentions span. Although the mothers of deaf toddlers experienced more stress and were

more pessimistic about the future of their children, no significant intergroup differences arose on mothers' affect, sensitivity, dominance or teaching behaviour during interactions with their children (Lederberg, 1993). The researchers concluded that the attachment style is not determined by level of communication, language development or maternal stress. They suggested that mother-child interaction during the first year or two depends more on the mother's ability to meet the child's needs than on the child's characteristics that is deafness. In sum, available research indicates that hearing impairment per se is not necessarily associated with toddlers' insecure attachment and that communication competence, mother's higher education level and greater use of total communication characterizes better mother-child interactions at the preschool period.

The studies that have been done in the western countries have not been conclusive. Some of the researchers have downplayed the importance of shared language especially in enhancing attachment, but in essence shared language might be a key factor in determining whether bonding will take place (Glynn, 2010).

Factors Considered to Affect Attachment security in Children

Quality of care-giving: The caregiver-child relationship is the principal factor in attachment security. Dozens of studies report that sensitive care-giving-responding promptly, consistently, and appropriately to infants and holding them tenderly and carefully-is moderately related to attachment security in both biological and adoptive mother-infant pairs and in diverse cultures (DeWolff & van Ijzendoorn, 1997; Posada et al., 2002, 2004; Stams, Jutter, & van Ijzendoorn, 2002; van Ijzendoorn et al., 2004). In contrast, insecurely attached infants tend to have mothers who engage in less physical

contact, handle them awkwardly, behave in a 'routine' manner and are sometimes negative, resentful and rejecting (Ainsworth et al., 1978; Isabella, 1993; Pederson & Moran, 1996).

According to Berk (2006), care that is characterised by a positive attitude on the part of the caretaker, sensitivity to the infant's needs, ample stimulation and emotional support as well as an established interactional synchrony with the infant is likely to promote secure attachment. Infants who exhibit the resistant attachment quality often have caregivers who are inconsistent in their care-giving for instance reacting indifferently depending on their moods as well as being unresponsive in a number of occasions. Infants who exhibit the avoidant attachment quality often have caregivers who are impatient and unresponsive to the infant's signals, express negative feelings and seem to get little pleasure from close contact with them.

Infant Characteristics: Another important factor is the infant's contribution to the attachment relationship. According to Berk (2006), infants actively participate by making their needs known, relaxing when comforted and reciprocating with affection. The infant's disposition may contribute partially to the type of attachment they form.

Family Circumstances: Issues such as job loss, failing marriage, arrival of new siblings, financial difficulties and other stressors may interfere with the sensitive parental care resulting to problems with attachment. These stressors can interfere with the infant's sense of security by exposing them to angry adult reactions or unfavourable child-care arrangements (Thomson & Raikes, 2003 as quoted by Berk, 2006).

Parental state: Every parent or caregiver has expectations about their unborn children. The desire of every parent is to beget a regular child. When these expectations are not met there is a sense of loss and distress that many parents initially feel when they realise that the child has a limitation. In the case of a deaf child, the lack of understanding between the two may result to the hearing caregiver revealing stress and depression, and are likely to be insensitive to the child's need, initiations or wishes resulting to neglect of their child. This may also be a major contributing factor to insecure attachment.

Theoretical Framework

Development of Child-Caregiver Attachment

Bowlby's Ethological Theory on Attachment

According to Bowlby (1969), who first applied the idea of the infant-caregiver bond, the term attachment describes the strong affection ties that children feel for the special people in their lives. Bowlby (1969) hypothesized that the infant's relationship to the caregiver begins as a set of innate signals that call the adult to the infant's side. As time passes, a true affectionate bond develops which is supported by new cognitive and emotional capacities as well as a history of consistent, sensitive, responsive care by the caretaker. Out of this experience, children form an enduring affection bond with their caregivers that enable them to use this attachment figure as a secure base across time and distance. The observations that Bowlby (1969) conducted suggest that the establishment of attachment between infants and caregivers may be a necessary prerequisite for normal social and emotional as well as personality development. Attachment plays a crucial role

in children's lives and anything that undermines this bond may trigger grief and despair and set the stage for poor developmental outcomes.

A major assumption of the ethological approach is that all species, including human beings, are born with a number of innate behavioural tendencies that have in some way contributed to the survival of the species over the course of evolution. Bowlby believed that many of these built-in behaviours are specifically designed to promote attachments between children and their caretakers. He concluded that to grow up mentally healthy, an infant and young child should experience a warm, intimate and continuous relationship with his or her caregiver in whom both find satisfaction and enjoyment.

Attachment develops in four phases:

a) Pre-attachment phase (birth to 6 weeks) also known as the asocial phase: Built-in signals that include grasping, smiling, crying and gazing into the adult's eyes-help bring newborn babies into close contact with other humans. Once an adult responds, infants encourage her to remain nearby because closeness comforts them. Babies of this age recognize their mother's smell and voice, and they will soon recognize her face. This may not be so for the deaf infant especially when it comes to recognizing the voice of the mother. However, these children are not yet attached, since they do not mind being left with an unfamiliar adult.

b) ''Attachment-in-the-making'' phase (6 weeks to 6-8 months) also known as the phase of indiscriminate attachment: Infants respond differently to a familiar

caregiver than to a stranger. For example, the baby smiles, laughs and babbles more freely with the mother and quiets more quickly when she picks him up. As infants interact with the caregiver and experience relief from distress, they learn that their own actions affect the behaviour of those around them. The infants begin to develop a sense of trust that is, the expectation that the caregiver will respond when signalled, but they still do not protest when separated from the caregiver.

c) ‘‘Clear-cut attachment’’ phase (6-8 months to 18 months-2 years) also known as the specific attachment phase: Attachment to the familiar caregiver is evident. Infants display separation anxiety that is, they become upset when the adult on whom they have come to rely on leaves. Separation anxiety does not always occur; like stranger anxiety, it depends on infant temperament and on the current situation. This is at an age where the infant can crawl; they may try to follow along behind the mother to stay close and will greet her warmly when she returns. According to Schaffer (2009), the child has established their first genuine attachment.

It is important to note that with the formation of a secure attachment to the caregiver comes another important consequence: it promotes the development of exploratory behaviour. Ainsworth (1979) emphasized that an attachment object serves as a secure base for exploration. This is a point of safety from which an infant can feel free to venture away.

d) Formation of a reciprocal relationship (18 months-2years and on): Bowlby believed that by the end of the second year, rapid growth in representation and language permits toddlers to understand some of the factors that influence the parent's coming and going and to predict her return. As a result separation protest declines. The child starts to negotiate with the caretaker using requests and persuasion to alter her goals.

Although Bowlby discussion on the four phases of how attachment develops did not expound more on ages 2 and beyond, the theory is still applicable because the experiences of infants in their formative years affects their ability to relate with their caregivers and other significant individuals in their later years. Bowlby's theory is useful in forming the groundwork for this study. These phases are all vital to the research since they explain attachment as a process; one stage leading to the next stage. The phases give a presentation of the characteristics of the infant which aid in understanding the different gains and achievements in the different phases.

With age, children depend less on the physical proximity of the caregiver and more on a sense of confidence that they will be accessible and responsive in times of need. According to Bowlby (1980), out of their experiences during these four phases, children construct an enduring affectionate tie that they use as a secure base in the parent's absence. This image serves as an internal working model, or set of expectations about the availability of attachment figures, their likelihood of providing support during times of stress and the self's interaction with those figures. The internal working model

becomes a vital part of personality, serving as a guide for all future close relationships (Bretherton & Munholland, 1999).

Table 2.1: *Assessing Children's Attachment Quality*

Quality	Characteristics
Secure Attachment	The infant uses the parent as a secure base, is active and intentionally explores the environment in the presence of the caretaker, protest by crying at being separated from the caretaker, with the ability to be soothed when the caregiver returns as well as experiences initial wariness of strangers, with subsequent acceptance if reassured by the caretaker.
Insecure-Avoidant Attachment	The infant seems unresponsive to the caregiver when present, they do not show signs of distress at the caretaker's departure, or seek comfort upon return, instead may avoid or slowly greet the caregiver and when held they often fail to cling, engage in superficial exploration of the environment as well as experience discomfort around strangers, but without an active resistance to their advances.
Insecure-Resistant Attachment	The infant seeks closeness to the caregiver and often fails to explore their environment; experiences agitation and distress at the caretaker's departure, will continue crying, fussing even after return and cling onto them with angry, resistive behaviour, struggling when held and often hitting and pushing; experiences fear of strangers, tends to stay close to caregiver in new situations.
Disorganized/disoriented Attachment	This quality reflects the greatest insecurity as it appears to be a combination of the resistant and avoidant patterns that reflects confusion about whether to approach or avoid the caregiver

	(Main & Solomon, 1990). The infant may act dazed and freeze, or may move closer to the caregiver then move away abruptly when reunited with them. They also may show no attachment behaviours or exhibit other extremely serious problems for instance displaying fear of caregiver rather than being comforted.

In summary, table 2.1 presents the different types of attachment forms that an infant may experience depending on the treatment the infant receives during their early childhood years. The table also presents a brief summary of the characteristics of each attachment type. These attachment types form the foundation of the research, and will serve as guidelines to establishing where the deaf child is at in terms of his/her attachment.

Table 2.2: *Assessing attachment problems in young children*

Behaviour	Signs of Attachment Disorders
Showing affection	Lack of warm and affectionate interchanges across a range of interactions; promiscuous affection with relatively unfamiliar adults.
Comfort Seeking	Lack of comfort seeking when hurt, frightened, or ill; comfort- seeking in odd or ambivalent manner.
Reliance for help	Excessive dependence, or inability to seek and use supportive presence of attachment figure when needed.
Cooperation	Lack of compliance with caregiver requests and demands by the child as a striking feature of caregiver-child interactions, or compulsive compliance.
Exploration behaviour	Failure to check back with caregiver in unfamiliar settings, or exploration limited by child's unwillingness to leave caregiver.
Controlling behaviour	Over-solicitous and inappropriate care-giving behaviour, or excessively bossy and punitive controlling of caregiver by the child.
Reunion responses	Failure to re-establish interaction after separations including ignoring/avoiding behaviour, intense anger, or lack of affection.

Source: From 'Disorder of attachment' by C. Zeanah, O. Mammen, and A. Lieberman, in C. Zeanah Jr. (Ed).

In summary, table 2.2 presents the problems that are associated with little or no attachment. Children may experience problems especially if the relationship with their primary caregiver is not of good quality. The child can be indifferent to their caregiver's advances due to lack of appropriate responsiveness to the child's needs. The signs presented on the table will form a basis for analysis especially when looking at deaf children who are insecurely attached.

Bowlby's theory illustrates that infants tend to form attachment to their primary caregivers regardless of their condition. Loving, mutually responsive early care is essential for the child to develop into an emotionally secure and confident individual. When an infant is securely attached to their caregiver a good foundation for future relationships is formed. Attachment progresses throughout life. If the deaf child does not receive the loving care from the caregiver, they are likely to experience insecure avoidant or insecure resistant form of attachment.

Bowlby's attachment theory is of importance since it forms the foundation of the research. Bowlby's discussion on attachment formation process in children has been informative to the research. In summary, Bowlby believed that for proper mental health to take place in infants and children, they have to have experienced a warm, intimate, continuous and responsive relationship with their caregivers. However, in his studies on children and attachment, there is no mention of attachment and the deaf child.

Erik Erickson's view on the development of Child-Caregiver Attachment

In coming up with his psychosocial stages of development, Erikson argued that human beings develop according to a preset plan called the epigenetic principle. This principle consists of two main elements namely: that personality develops according to predetermined steps that are maturational set and that society is structured so as to invite and encourage the challenges that arise during these particular stages (Kaplan, 2000).

Every society tends to encourage such an unfolding of social development though the precise details may vary from one culture to another (Birch, 1997). Each of the stages he came up with is centered on each person's relationship to the social environment. Apart from this, each stage is also marked by a turning point or crisis in personality development which has to be resolved. There are two alternative ways to resolve the crisis, one of which is adaptive and the other is maladaptive.

When it comes to attachment, Erikson believed that not only will a mother's feeding practice influence the strength or security of her infant's attachment but also her overall responsiveness to all her child's need. This responsiveness is more important than feeding. A caregiver who consistently responds to the infant's needs fosters a sense of trust in the caregiver as well as in other people around the child; whereas unresponsive, minimal or inconsistent care-giving makes the infant develop insecure attachment and mistrust (Erikson, 1963). He adds that children who have learned not to trust their caregiver during infancy may come to avoid or to remain sceptical about close mutual-trust relationships throughout life.

Erickson's Psycho-social stages

a) Basic trust versus mistrust: This is from birth to 1 year. From warm, responsive care, infants gain a sense of trust or confidence that the world is good. Mistrust occurs when infants have to wait too long for comfort and are handled harshly. For Erikson, this stage is a critical time for the infant to form their first trusting relationship. When a child receives unresponsive care during this stage of life, their first attachments are likely to be insecure, but if their later care is warm and sensitive, the child may develop trusting relationships (McDevitt & Ormrod, 2007).

b) Autonomy versus shame and doubt: This is from age 1 to 3 years. Using new mental and motor skills, children want to choose and decide for themselves. Autonomy is fostered when parents permit reasonable free choice and do not force or shame the child.

c) Initiative versus guilt: This is from age 3 to 6 years. Through make-believe play, children experiment with the kind of person they can become. Initiative, which is a sense of ambition and responsibility, develops when parents support their child's new sense of purpose. The danger is that parents will demand too much self-control which leads to over-control, meaning too much guilt.

d) Industry versus inferiority: This is from age 6 to 11 years. At school, children develop the capacity to work and cooperate with others. Inferiority develops when negative experiences at home, at school or with peers lead to feelings of incompetence.

e) Identity versus identity confusion: The adolescent tries to answer the question, who am I, and what is my place in society? Self-chosen values and vocational goals lead to a lasting personal identity. The negative outcome is confusion about future adult roles.

Erikson's model of psychosocial development is a very significant and meaningful concept. Life is a series of lessons and challenges which help humans to grow. Erikson illustrates the various psychosocial crises that humans go through. These crises help in understanding and explaining how personality and behaviour develops in people. As such, the theory is useful for teaching, parenting, self-awareness, dealing with conflict and generally understanding self and others.

Erikson's psychosocial stages present a process of how children develop personality and social competence. Erikson points out that the transition between the stages is overlapping. A connection can be seen in the different crisis stages. The successful completion of one stage will lead to the successful completion of the subsequent stage. For instance, if a child successfully negotiates the first stage (basic trust versus mistrust) the transition to the next stage will be easy. The opposite is also true. For the purpose of this study, deaf children who are in the fourth (industry versus inferiority) and fifth (identity versus role confusion) stages will be used. How these children negotiate these stages will mainly depend on their experiences in their formative years.

Since the research study will attempt to find out the effect of deafness on the attachment process, the researcher saw it fit to discuss Erikson's theory since it presents concepts that are crucial to the development of a child. From infancy, children begin to

encounter crises which if not dealt with amicably can lead to adjustment problems, and this is no exception for the deaf child.

Of great importance to this research is the fact that Erikson mentions in his first stage (basic trust versus mistrust) that if the child receives unresponsive care during this stage of life, their first attachments are likely to be insecure. The attainment of basic trust is an attitude towards oneself and the world. Formation of insecure attachment affects the child's ability to deal with the subsequent crises and also may set the stage for problems in the formation of meaningful relationships both with their caregivers and other adults. They begin a lifelong pattern of withdrawal and separation from others, trusting neither themselves nor other people. However, in his discussion, Erikson did not mention anything about the deaf child and whether they also do experience these crises. It is safe to assume that these crises do apply to the deaf child since they are affected when their environment is not conducive for them.

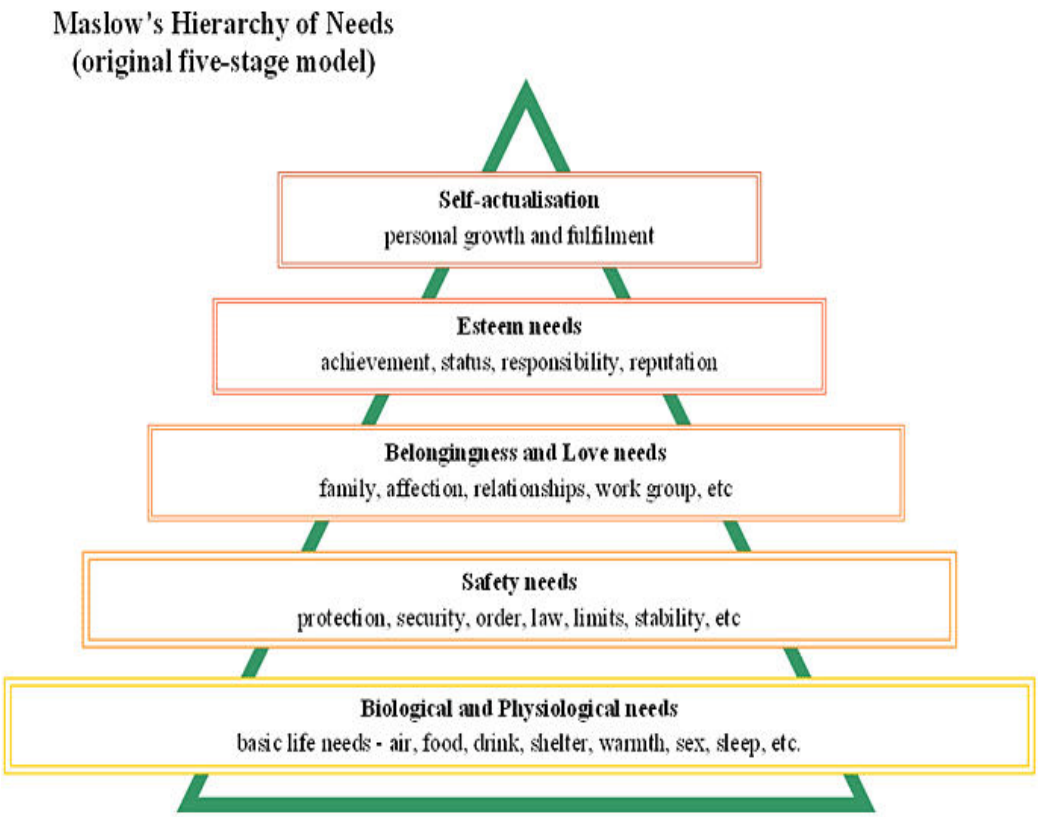

Figure 2.1: Abraham Maslow's Hierarchy of Needs

Source: www.maslow.com

Maslow (1954), a humanistic psychologist, arranged motives in a hierarchy which he based on observations of historical figures, famous living individuals and even friends whom he admired greatly. Maslow's theory holds that we all have a needs hierarchy in which our inborn needs are arranged in a sequence of stages from most 'primitive' to most 'human' (Zimbardo, 1985). At the bottom of this hierarchy are the basic needs (food, water, oxygen, rest, sexual expression). When they are pressing other needs are put on hold and are unlikely to influence our actions. However, when they are reasonably well satisfied then the needs on the next level- Safety needs (security,

comfort, tranquillity) motivate us. When we are no longer concerned about danger, we become motivated by attachment needs-(need to belong, to affiliate with others, to love and be loved). If we are well fed and safe and feeling a sense of social belonging, we move up to esteem needs (need to like oneself, to see oneself as competent and effective). It is important to note that pathology may result when needs at any level are frustrated. As we move to the top of the hierarchy, we find the person who is nourished, safe, loved and loving, secure in a sense of worthwhile self. Some people go beyond these basic human needs in the quest for fullest development of their potential or self-actualization-self aware, self-accepting, socially responsive, creative, spontaneous and open to challenges among other positive attributes (Zimbardo, 1985).

Maslow's hierarchy of needs present a chain of order where individuals strive to attain the utmost achievement of self-actualization. But before one can attain this, a number of needs have to be met. One significant level to this research is the belongingness level. Here, attachment which is the need to belong, to love and be loved is discussed. If this need is not met the individual is unable to progress to the next level. This will also lead to feelings of insecurity especially if one does not feel accepted and loved.

Conceptual Framework

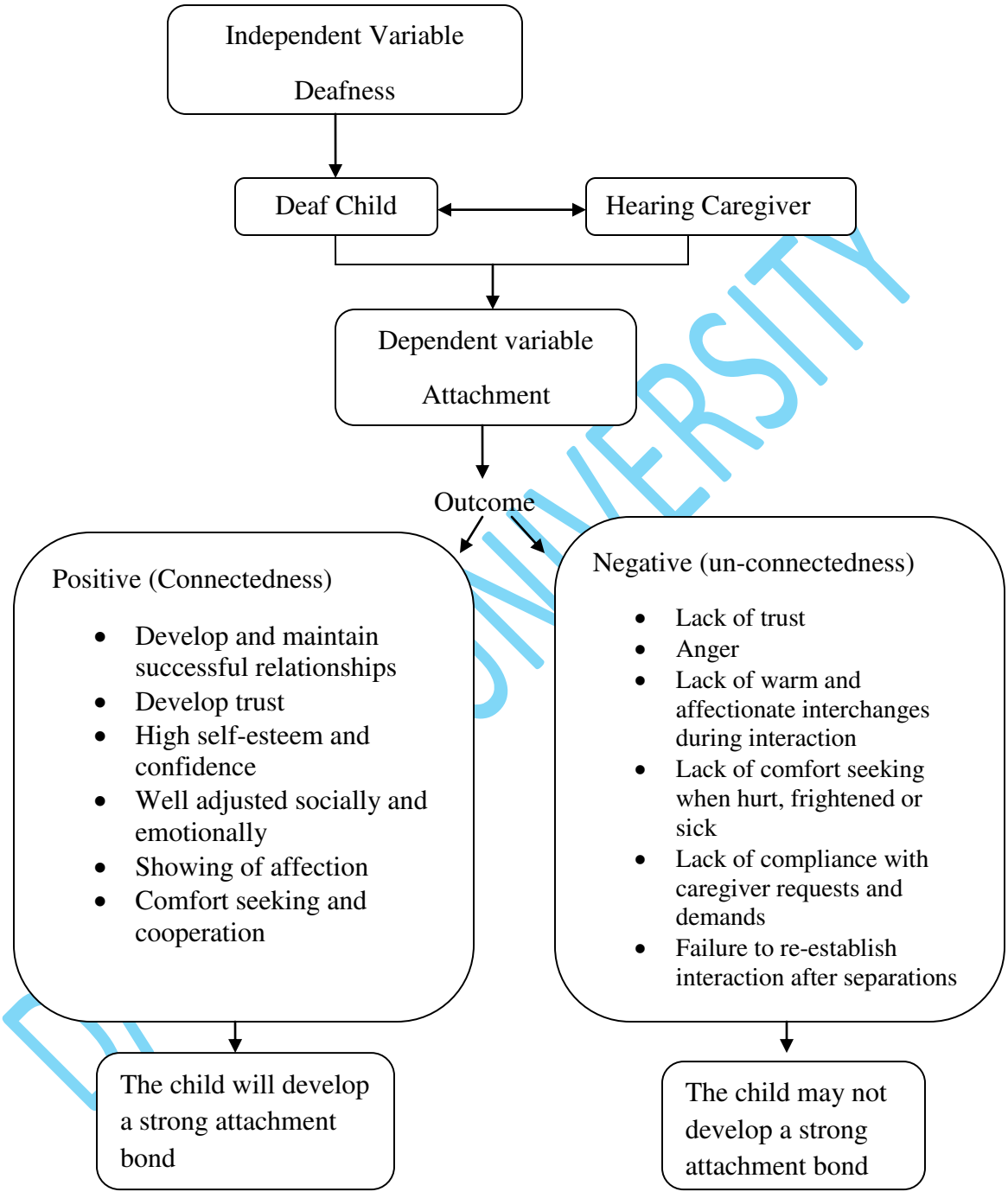

Figure 2.2: Conceptual Framework

Source: Author, 2013.

The independent variable in this study is deafness. The dependent variable is attachment. When deafness presents itself in a child, the attachment process between the deaf child and their hearing caregiver might be affected positively or negatively. A positive outcome includes: development of trust, high self esteem and confidence, comfort seeking and cooperation. This leads to a strong attachment bond. On the other hand, a negative outcome includes: lack of trust, anger, lack of comfort seeking when hurt, frightened or sick. As a result, the child may not develop a strong attachment bond.

Summary

Chapter two presented the theoretical framework as well as studies that have been done by other scholars on deafness and attachment. A conceptual framework which outlined the various variables of the research study was also formulated.

CHAPTER THREE

RESEARCH METHODOLOGY

Introduction

This chapter described the methods and procedures that were used in the study. These methods and procedures helped in answering the research question-whether deafness in children affects attachment. The study was carried out in schools within Nairobi County.

Research Design

According to Kothari (2004), the term research design refers to the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. This study used the survey research design. Survey research is a type of descriptive research which seeks to obtain information that describes existing phenomena by asking individuals about their perception, attitudes, behaviour or values (Mugenda & Mugenda, 1999). In this study, original information was gathered from two groups: the deaf child and their hearing caregiver. The information gathered was used to describe the population.

Study Location

The study was conducted in the city of Nairobi, the administrative commercial capital of Kenya. Nairobi County extends over an area of approximately 696sq. kilometres with an estimated population of 3,138,295 (Central Bureau of Statistics, 2009). This study focused on schools which have deaf children and are located in Nairobi

County. Nairobi County was selected as the most suitable location of study due to the availability and the accessibility of the schools with special education units/curriculum. The units include: Joseph Kang'ethe Primary School, Race-course Primary School, Aga Khan Primary School deaf units and Giovanni e Silva School for the Deaf.

In Nairobi County, there were no primary and secondary level schools for the deaf but only units. These units were in schools that have special needs children. In these units the number of children was quite small especially because of lack of space and necessary trained personnel as well as facilities.

Population

A population is a complete set of individuals, cases or objects with some common characteristics that differentiate it from other populations (Mugenda & Mugenda, 2003). The population of study was deaf children and the target age bracket is 12 to 20 years. The rationale behind the selection of this age was that the deaf children had rationalized their thinking, and in addition they had knowledge of sign language and hence they were able to communicate. The respondents were selected from different deaf centres in Nairobi County. The deaf centres included Aga Khan Primary school (Parklands), Giovanni e Silva (Zimmerman), Race-course Primary School (Starehe) and Joseph Kang'ethe Primary School (Kibera). The total number of deaf children in these four centres regardless of gender and age is 121.

Table 3.1: *Total population of deaf children in the selected deaf centre/schools*

Schools/Centres	Classes								Total
	Pre-unit	1	2	3	4	5	6	7	
Giovanni e Silva	7		4	3		5		7	26
Aga Khan Primary	8	7	4	4		4		4	31
Race-course Primary	16	3	4	4	4		5	5	41
Joseph Kang'ethe Primary	2	1	1	3	10		3	3	23
									121

According to the Kenya National Survey for Persons with Disabilities (2008), various efforts to determine the disability status through census and surveys have not been conclusive. It is therefore important to note that the total number of Persons with Disabilities in Kenya remains unknown. This included the deaf community. To ensure that the sample was representative of the population, the researcher only selected those respondents with the characteristics that were relevant to the substantive interest of the study.

Sample Procedure

The researcher utilized purposive sampling technique. In purposive sampling technique, the researcher deliberately selected a reliable target sample population for the study. The researcher purposively chose the particular unit of the universe for constituting a sample on the basis that the small mass selected out of a huge one was representative of the whole (Kothari, 2004). For the purpose of this study, the researcher

picked the total population of deaf children aged between 12 to 20 years in the selected deaf centres. The respondents' were obtained from classes 5 to 7. This was because the units had no students in class 8. The researcher selected this group because the respondents' had reached formal thought processing, were able to read, write and understand sign language. However, the deaf children aged 11 years and below were excluded mainly because of limited knowledge in sign language.

The reason for selecting this technique was because it is fast, inexpensive and the availability of the respondents.

Sample Size

A sample is a subset of a particular population (Mugenda & Mugenda, 1999). It would have been ideal for the researcher to study the whole population but this was not possible, and for this reason a sample size of 56 participants was chosen: 36 (100%) deaf children aged 12 to 20 years old, and 20 caregivers. The caregivers included parents, guardians, adoptive and foster parents.

Data Collection Strategies and Tools

Data Collection Strategies

The researcher contacted the schools' administration for consent in order to conduct the research. The response was positive and a day for conducting the research agreed on. The research was done on the given days using a self administered questionnaire for the deaf children. This process engaged extra sign language interpreters to further explain the questionnaire. For the focus group discussion, the researcher

engaged the schools' administration in planning for a meeting with the caregivers. A set of predetermined questions were used to guide the discussions.

Questionnaire

A questionnaire is a research instrument which consists of a number of questions printed or typed in a definite order on a form or set of forms (Kothari, 2004). The researcher used structured questions. For the deaf child, the researcher used a structured questionnaire which consisted of a list of questions with all possible alternatives. The structured questionnaire used was adapted from the Inventory of Parent and Peer Attachment (IPPA). This is a self report questionnaire with a likert scale response format and consists of 29 items for the mother and 29 items for the father (Armsden & Greenberg, 1987). The questions were translated into the Kenyan Sign Language (Appendix II). This questionnaire had two parts: Part A consisted of the demographic information of respondents (age bracket, gender). Part B consisted of structured constructs which the respondents ticked according to a response that best fitted their situation on a three point likert scale of 1= Yes, 2= Fair and 3= No. The reasons why the researcher used the IPPA tool included: It was an already existing standardized tool, its proven validity and reliability, clarity of direction and its relevance in addressing the issue of attachment in children. The gathering of data from the caregiver was as a means of validating the data given by the deaf child. Each item on the questionnaire was tailored to address a specific objective or research question in the study. The reason for choosing the questionnaire method was because it is easier to administer and to analyze.

Focused Group Discussions

The qualitative technique used in data collection in this study was focus group discussions. The focus group discussion questions were prepared for the caregivers. This is a group discussion of approximately 5-10 persons guided by a facilitator, during which group members talk freely and spontaneously about a certain topic. Its purpose is to obtain in-depth information concepts, perceptions and ideas of a group (RushKoff, 2005). Focus group discussions aim to be more than a question-answer interaction. The idea was that the group (the caregivers) discussed the challenges they experience when interacting with each other under the guidance of the facilitator who in this case was the researcher.

The members of the focus group discussion were selected through purposive sampling. The discussion was guided by an outline of questions which helped in meeting the objectives of the research. The focus group allowed the researcher to study the respondents in a more natural setting. Focus groups have a high apparent validity-since the idea is easy to understand and the results are believable. The focus group is low in cost and the researcher is able to get results relatively fast and is able to increase the sample size of a report by talking with several people at once (RushKoff, 2005).

Data Analysis

Data analysis is the process of bringing order, structure and meaning to the mass of information collected (Mugenda & Mugenda, 1999). In this study, data analysis was done using Statistical Package for Social Sciences (SPSS), pie charts and graphs. The researcher analyzed the information in a systematic way in order to come to conclusions

and recommendations. The data analysis process involved logging in the data; checking the data for accuracy; transforming the data; and developing and documenting a database structure that integrates the various measures. The focus group discussions were analyzed through qualitative data analysis methods.

Ethical Considerations

A number of ethical considerations were taken into account. Ethical issues or considerations are guiding principles which a researcher needs to work within, with an aim of protecting the right to privacy and self-determination of all respondents and ensuring that no one intentionally harms another person (Monette, Sullian & Dejong, 1994).

Endorsement or the institutional approval was sought prior to the data collection and this motivated and reassured the respondents'. Where institutional approval is required researchers provide accurate information about their research proposals and obtain approval from host institutions or organizations appropriate approval prior to conducting research (Mc Burney & White, 2007). The researcher conducted the research in accordance with the approved research protocol. Approval was sought from Daystar University, the Ministry of Higher Education and the participating schools' administration. All the respondents were given a brief introduction and the purpose of study.

When obtaining informed consent the researcher must inform participants of the purpose of the research, expected duration and procedures, as well as explain the limits of

confidentiality (Burney & White, 2007). Informed consent is a critical aspect when dealing with minors. The researcher sought consent from the director and head-teachers of the participating schools, and from the respondents'. This was done through explaining what the purpose of the study was, how administration of the questionnaire was to be done and that the results would solely be used for academic purposes.

The confidentiality and anonymity of the respondents was kept at all levels. The information conveyed by the respondents was only made available to the researcher. The questionnaires administered did not give any provision for identity discloser instead the questionnaires were numbered for analysis purposes.

Emotional safety was ensured. Banyard and Grayson (2000) emphasized that, it is important to protect the participants from any form of emotional and psychological harm. The researcher gave the respondents freedom to express their feelings and opinion without fear, prejudice, judgment and discrimination, and the respondents were treated with respect and dignity during the research process.

Summary

This chapter presented the research design, the population, population sample and sampling procedure that were considered in collecting the data. The tools for data collection were also discussed. The chapter also presented ethical procedures to be observed during the research process.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS

Introduction

This chapter presented the analysis of the research findings. The data is presented in tables and charts. A total of 36 questionnaires were administered to the deaf children whilst the caregivers responded to focus group discussion questions. The questionnaires used were in two parts-demographic information and attachment assessment, and were translated into Kenya Sign Language. The return rate for the questionnaires was 100%. The researcher had invited 20 caregivers for the focus group discussions but only 8 attended the session. During the first session, 3 caregivers attended the discussion while the second session had 5 caregivers.

Analysis of the Deaf Child Questionnaire

The following is the analysis from questionnaire 1 Appendix II as analyzed in the order of the research questions:

I. Demographic Information

The study population ranged between ages 12 to 20 years. Table 5 below presents respondents interviewed by age and gender. Males interviewed were 17 while the females interviewed who were the majority were 19.

Table 4.1: *Respondents' age and gender*

Age in Groups	Males n(17)	Percent	Females n (19)	Percent
12-15years	10	27.8%	5	13.9%
16-19years	5	13.9%	9	25.0%
20 and Above	2	5.6%	5	13.9%
Totals	17	47.2%	19	52.8%

From the findings most of the respondents were living with their mothers (50%), 2.8% lived with their fathers and 47.2% lived with both. Among the deaf children majority were living with their hearing caregivers (86.1%) while the others had deaf caregivers (13.9%). This finding concurs with Lederberg and Mobley (1990), who stated that 90% of hearing impaired children are offspring to hearing parents. These hearing caregivers are mostly unprepared to bring up a deaf child. The development of a normal mother-child relationship is disrupted and as a result attachment is affected.

Table 4.2: *Whom the respondents' live with*

Living with Mother		Living with Father		Living with Both	
Yes	%	Yes	%	Yes	%
18	50	1	2.8	17	47.2

II. Attachment Assessment

Friendship between respondents' and Mother/Father

Table 4.3 below presents the percentages of the respondents' who indicated that they and their mother/father have a good friendship. 31.4% and 44.4% of the female respondents' said that they have a good friendship with their mothers and fathers respectively. From the findings, 40% of the male respondents' indicated that they consider their mothers' as friends more than the females. The opposite is true of their female counterparts (44.4%) who consider their fathers as friends more than they do their mothers.

Table 4.3: *Friendship between respondents' and Mother/Father*

Good Friends with mother	Females	Frequency	Male	Frequency
Yes	31.4%	11	40%	14
Fair	17.1%	6	8.6%	3
No	2.9%	1	0	
Good friends with father	Females	Frequency	Male	Frequency
Yes	44.4%	8	27.8%	5
Fair	11.1%	2	16.7%	3

Respondents' enjoying time with mother/father

Table 4.4 below shows that the respondents, both male and female (28.6%), enjoy spending time with their mother while 29.4% with their fathers. However, of great concern is that 71.4% do not enjoy spending time with their fathers and 70.6% with their mothers. The researcher presumes that lack of sign language skills on the part of the caregivers may contribute to the deaf children not enjoying spending time with their caregivers. This is an indicator of attachment problems.

Table 4.4: *Respondents' enjoying time with mother/father*

Enjoying time with mother	Female	Frequency	Male	Frequency
Yes	28.6%	10	28.6%	10
Fair	11.4%	4	14.3%	5
No	11.4%	4	5.7%	2
Enjoying time with father	Females	Frequency	Male	Frequency
Yes	29.4%	5	29.4%	5
Fair	23.5%	4	11.8%	2
No	5.9%	1		0

Response to Mother/Father knowing sign language

Table 4.5 below indicates that 22.9% responded that their mothers know sign language while 5.6% responded that their fathers know sign language. Majority of the mothers (77.1%) and fathers (94.6%) do not know sign language. According to Glynn (2010), shared language is a major part in forming attachment. This finding indicates that most of these deaf children's attachment process may be affected due to lack of sign language skills on the part of the caregivers.

Table 4.5: *Response to Mother/Father knowing sign language*

Sign Language	Mother	Percentage	Father	Percentage
Yes	8	22.9%	1	5.6%
Fair	16	45.7%	7	38.9%
No	11	31.4%	10	55.6%

Respondents' love for self

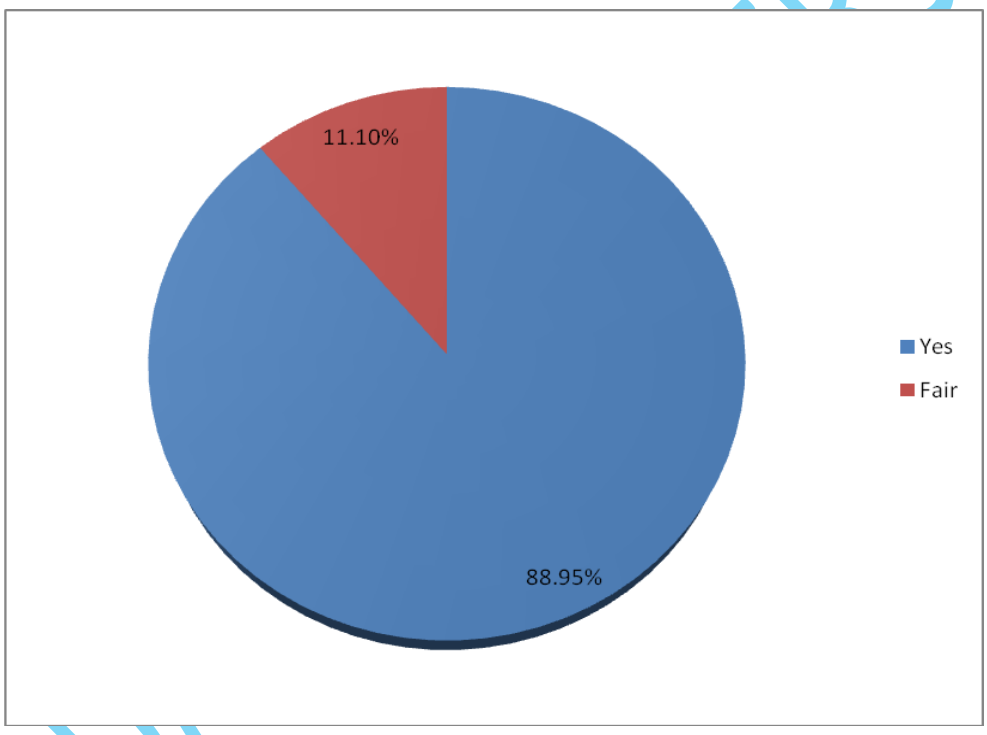

Figure 4.1: Respondents' love for self

In figure 4.1 above, the findings indicated that majority of the respondents' (88.95%) love themselves the way they are. This could indicate that love for self is not affected by lack of attachment or by deafness.

Respondents' condition in relation to feeling inadequate

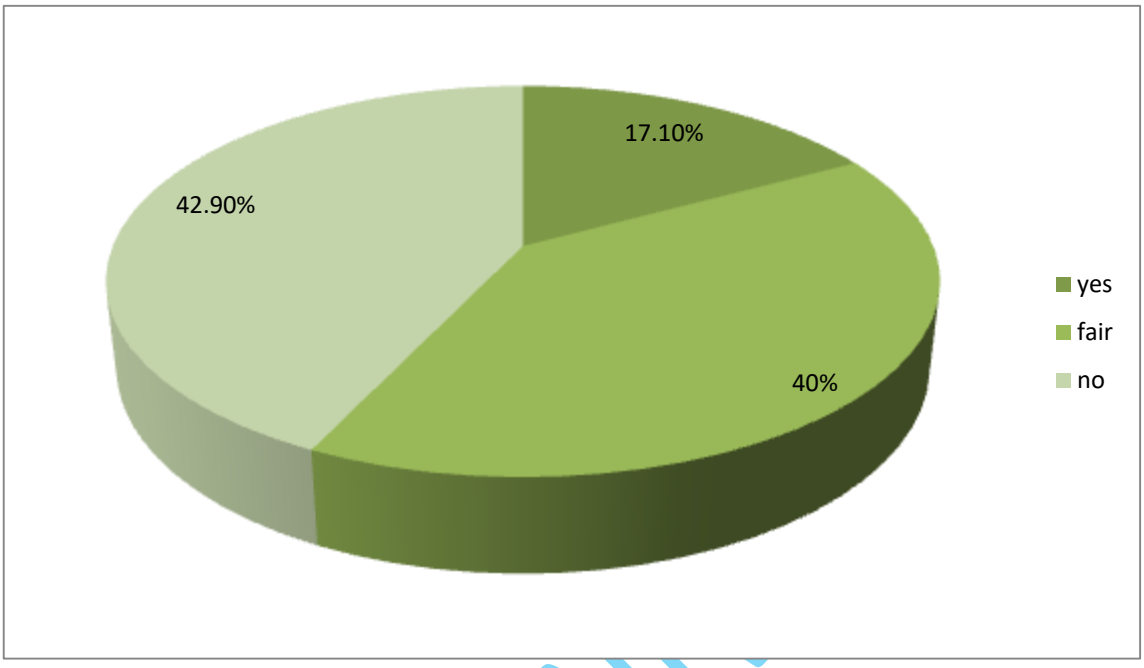

Figure 4.2: Respondents' condition in relation to feeling inadequate

Figure 4.2 above shows the responses given by the respondents' in relation to the question 'My condition makes me feel inadequate'. 17.1% affirmed that their condition makes them feel inadequate as compared to 42.9% who did not feel inadequate. This finding implies that most of the deaf children have accepted their condition. However, 40% were not sure of how they feel about their condition. This might also be a factor that affects the attachment process.

Respect of feelings from Mother/Father

Table 4.6 below indicates that over 70% of the respondents' feel respected by their mothers/fathers. The findings show that both the male and female respondents felt more respected by their mothers (91.4%) than their fathers.

Table 4.6: *Respect of feelings from Mother/Father*

Respect of feelings	Mother		Father	
	Frequency	Percentage	Frequency	Percentage
Yes	32	91.4%	12	70.6%
Fair	1	2.9%	4	23.5%
No	2	5.7%	1	5.9%

Response to Mother/Father doing a good job

Table 4.7 below shows that most of the respondents' (82.4%) indicated that their mothers do a good job. This is probably due to the fact that most of the mothers know or fairly know sign language. 66.7% of the respondents' indicated that their fathers fairly do a good job. This can be attributed to lack of sign language skills as well as their unavailability. The researcher observed that during the focus group discussion sessions only mothers attended. This led the researcher to conclude that the male parent might not be available for the deaf child.

Table 4.7: *Response to Mother/Father doing a good job*

Does a good Job	Mother		Father	
	Frequency	Percent	Frequency	Percent
Yes	28	82.4%	3	33.3%
Fair	4	11.8%	6	66.7%
No	2	5.9%		

Response to wishing for a different Mother/Father

The researcher sought to establish if the respondents' wished for a different mother/father. From the findings, 82.4% wished for a different father as compared to 38.9% who wished for a different mother as indicated on Table 4.8. These findings may imply that most of the female and male respondents' do not consider their fathers' as an attachment figure.

Table 4.8: *Response to wishing for a different Mother/Father*

Wish for a different Parent	Mother		Father	
	Frequency	Percent	Frequency	Percent
Yes	8	22.2%	14	82.4%
Fair	5	13.9%	2	11.8%
No	22	61.1%	1	5.9%

Respondents' feelings towards being accepted by Mother/Father

Further inquiries were made to establish if the respondents' mothers/fathers accept them as they are and from the findings over 70% felt accepted.

Table 4.9: *Respondents' feelings towards being accepted by Mother/Father*

Acceptance as I am	Mother		Father	
	Frequency	Percentage	Frequency	Percentage
Yes	25	71.4%	13	72.2%
Fair	4	11.4%	2	11.1%
No	6	17.1%	3	16.7%

Response to letting feelings show around Father/Mother

From figure 4.3 below 58.8% of the respondents felt that there was no use letting their feelings shows around their fathers as compared to 40.6% towards their mothers. The researcher presumes that these findings might result from lack of understanding between the respondents' and their mothers/fathers to the extent of not letting their feelings show around them. The lack of understanding might be as a result of lack of sign language skills which adversely affects the caregivers' level of responsiveness to the respondents' feelings and needs. Erikson believed that the overall responsiveness to a child's needs is more important. Unresponsiveness, minimal or inconsistent care-giving makes the child develop insecure attachment (Erikson, 1963).

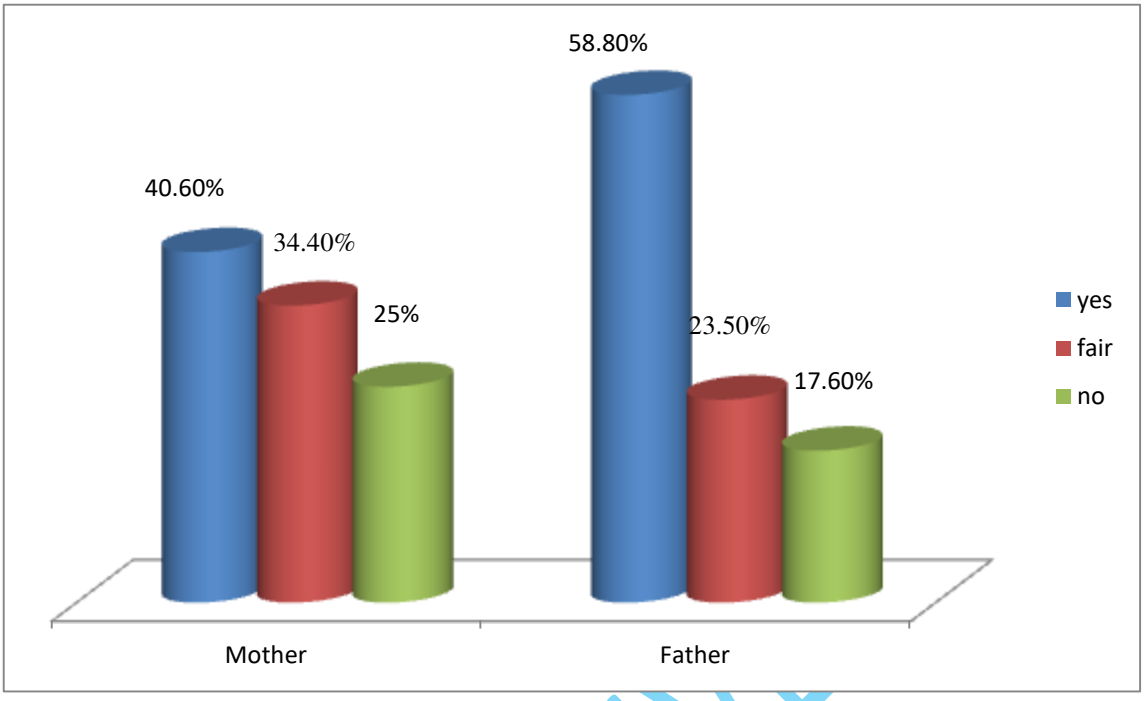

Figure 4.3: Response to letting their feelings show around their Father/Mother

Mother/Father ability to tell when respondents' are upset

Figure 4.4 below shows that 33.3% of the respondents' fathers could tell when they were upset while 11.4% responded that the mothers could tell when they were upset. However, 88.6% and 66.7% of the respondents' felt that their Mothers and Fathers could not tell when they were upset about something. The researcher presumes that due to the lack of sign language skills the mothers/fathers are not able to identify whether their deaf children are upset. This may in turn affect the attachment process.

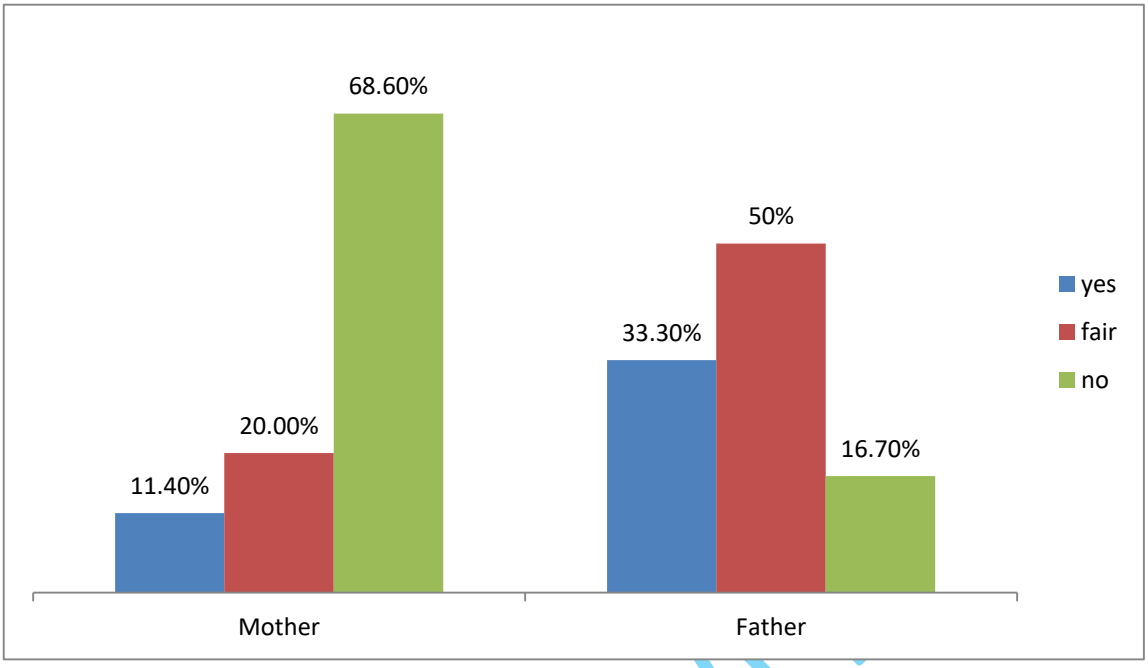

Figure 4.4: Mother/Father ability to tell when respondents' are upset

Respondents' feelings of shame when talking over their problems with their Mother/Father

Figure 4.5 below shows that 35.3% of the respondents' responded that talking over their problems with their mother/father made them feel ashamed or foolish. Shame could indicate that the transition from one crisis to another in Erikson's psychosocial stages was not fostered. According to Erikson (1963), a child's past experience of mistrust will lead them to have feelings of shame and doubt on themselves. This affects the attachment process.

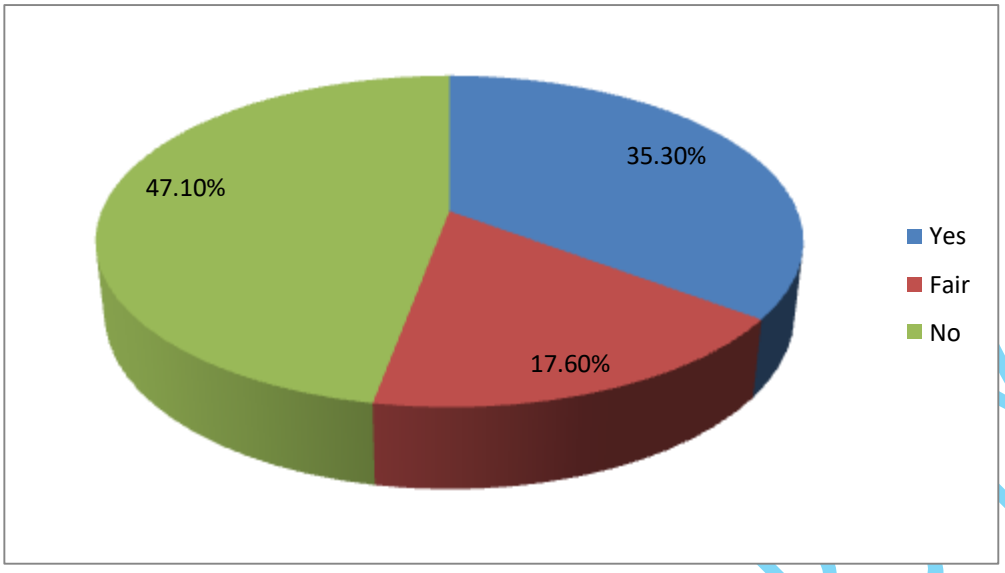

Figure 4.5: Respondents' feelings of shame when talking over their problems with their Mother/Father.

Respondents' feelings of expectations from their Mother/Father

The researcher sought to find out if the mothers/father expected too much from the respondents'. From the findings, the females (27.8%) indicated that their fathers expected too much from them while the males (31.4%) indicated that their mothers expected too much from them.

Table 4.10: *Respondents' feelings of expectations from their Mother/Father*

Mother Expects too much	Females		Males	
	Frequency	Percentage	Frequency	Percentage
Yes	6	17.1%	11	31.4%
Fair	6	17.1%	2	5.7%
No	6	17.1%	4	11.4%
Father Expects too much	Females		Males	
	Frequency	Percentage	Frequency	Percentage
Yes	5	27.8%	2	11.1%
Fair	2	11.1%	4	22.2%
No	3	16.7%	2	11.1%

Respondents' getting upset easily

Figure 4.6 below indicates that 70.6% don't get upset around their mothers/fathers. The study went further to establish whether the mothers/fathers care about the respondents' point of view when discussing things. 65.7% of the respondents' cited that their mothers care about their point of view. The researcher presumes that this may be as a result of the mothers knowing sign language than the fathers (Table 4.5).

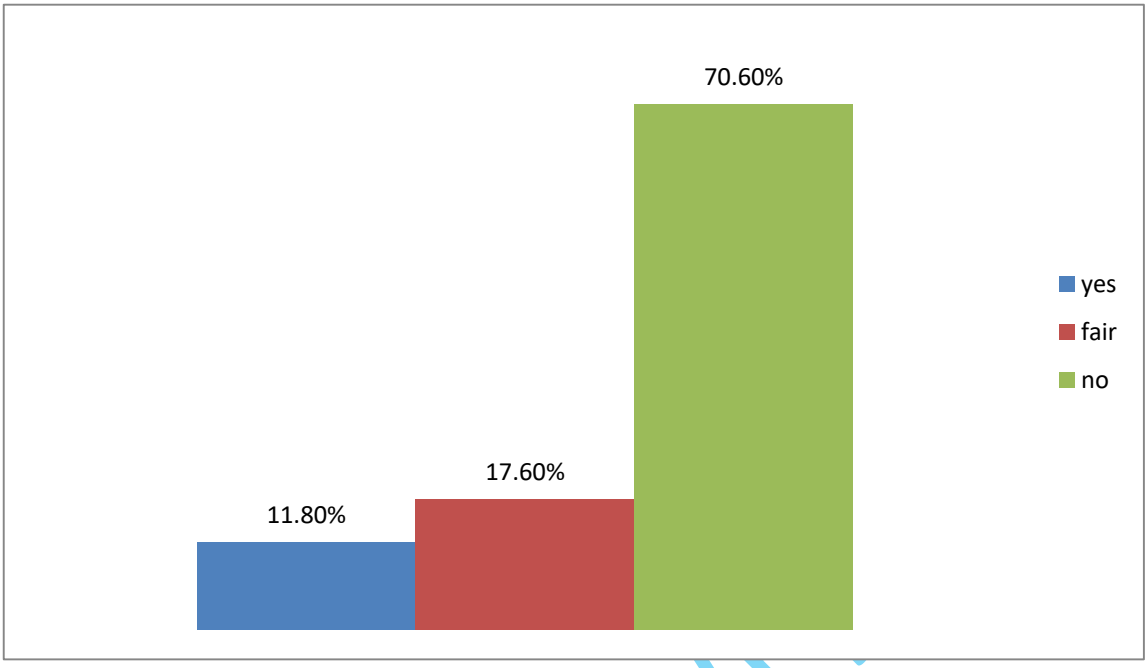

Figure 4.6: Respondents' getting upset easily

Father/Mother trusting the judgment of the respondents

Table 4.11 below shows 34.3% of the respondents indicated that their mothers trusted their judgment while 11% of the respondents' indicated that their fathers trust their judgment. On the other hand, 65.7% of the respondents' indicated that their mothers do not trust their judgement compared to 88.9% whose fathers do not trust their judgement.

Table 4.11: *Father/Mother trusting the judgment of the respondents*

Trust my judgment	Mother		Father	
	Frequency	Percent	Frequency	Percent
Yes	12	34.3%	2	11.1%
Fair	12	34.3%	7	38.9%
No	11	31.4%	9	50%

Respondents' who did not bother Mothers/Fathers with their problems

As shown on figure 4.7 below 52.9% of the respondents' indicated that their mothers/fathers had their own problems and so did not bother them with theirs. This finding concurs with Zeanah et al, (1993), in that one of the signs of attachment disorders in children is a child's inability to seek and use supportive presence of attachment figure when needed. The respondents' inability to seek out support from their Mothers/Fathers during times of need could be an indicator of attachment problems.

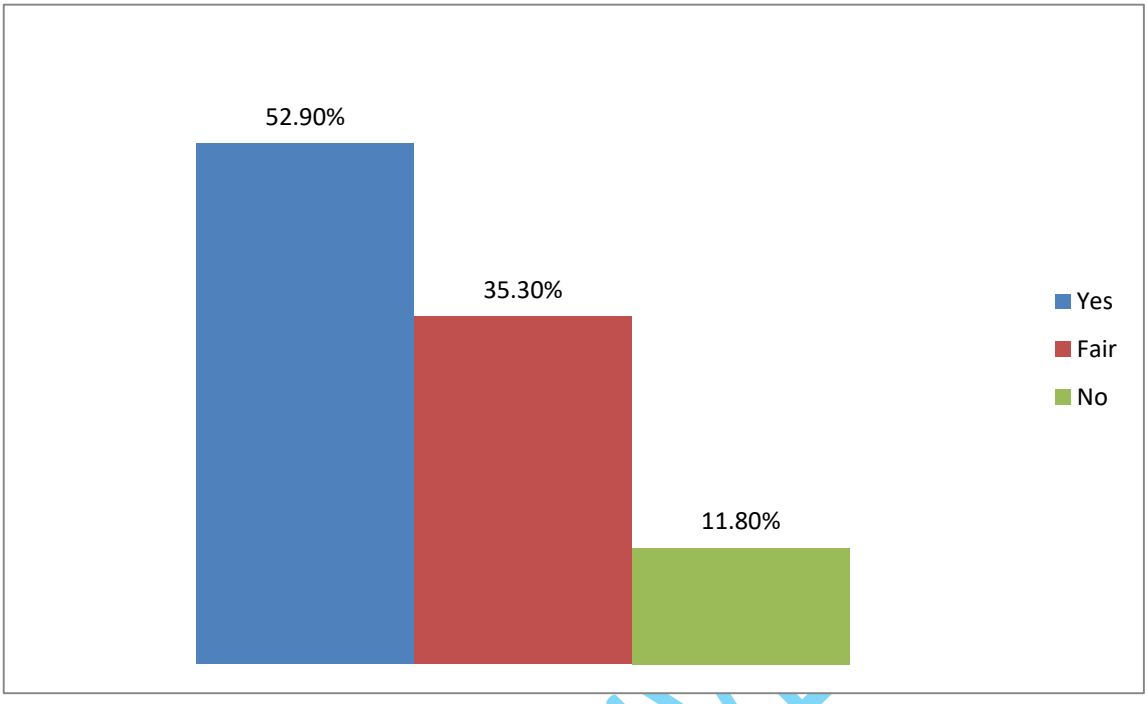

Figure 4.7: Percentage of respondents' who did not bother their Mothers/Fathers with their problems

Respondents' feeling towards Mother/Father helping them understand themselves

From the Figure 4.8 below, 47.1% of the respondents' indicated that their fathers/mothers fairly helped them understand themselves better. The researcher supposes that this is as a result of lack of sign language skills. Shared language brings about interaction and understanding, which then leads to bonding. 35.3% of the respondents' indicated that they were helped to understand themselves better.

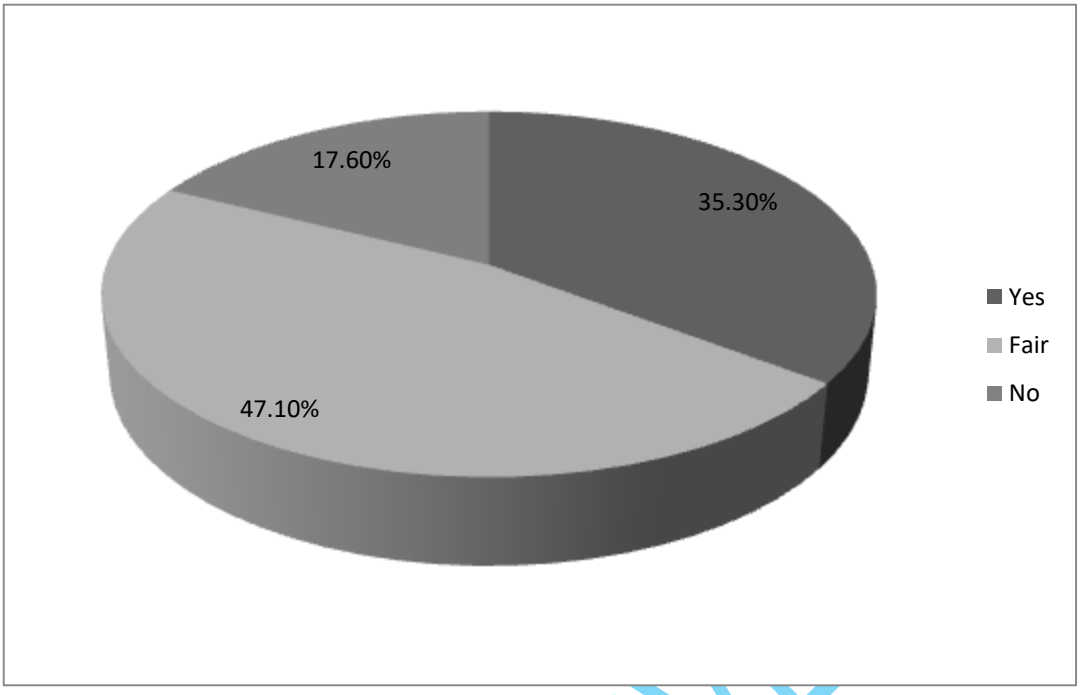

Figure 4.8: Respondents' feeling towards Mother/Father helping them understand themselves

Respondents' telling Mother/Father about their problems and troubles

Table 4.12 below shows that 11.1% of the respondents' told their fathers when they had problems or troubles while 88.9% of the respondents' did not open up to their fathers. These findings could imply that the due to lack of sign language skills the respondents' are not able to communicate with their fathers. In comparison, the mothers scored 34.3% which can be attributed to their ability to communicate with the respondents'.

Table 4.12: *Tell Mother/Father about my problems and troubles*

Tell Father/Mother about problems and Troubles	Mother		Father	
	(n=36)	Percentage	(n=36)	Percentage
Yes	12	34.3%	2	11.1%
Fair	12	34.3%	9	50.0%
No	11	31.4%	7	38.9%

Percentage of respondents' feeling angry towards Mother/Father

From the figure 4.9, more than half of the respondents' (62.5%) felt angry with their mothers/fathers. According to Zeanah et al, (1993), one of the signs of attachment disorders is anger. The researcher supposes that the respondents' feel angry with their caregivers because of lack of understanding. This could emanate from the caregivers' lack of sign language skills. Figure 4.7 indicates that the respondents' do not bother their caregivers with their problems. This could lead to the respondents' feeling angry therefore affecting attachment.

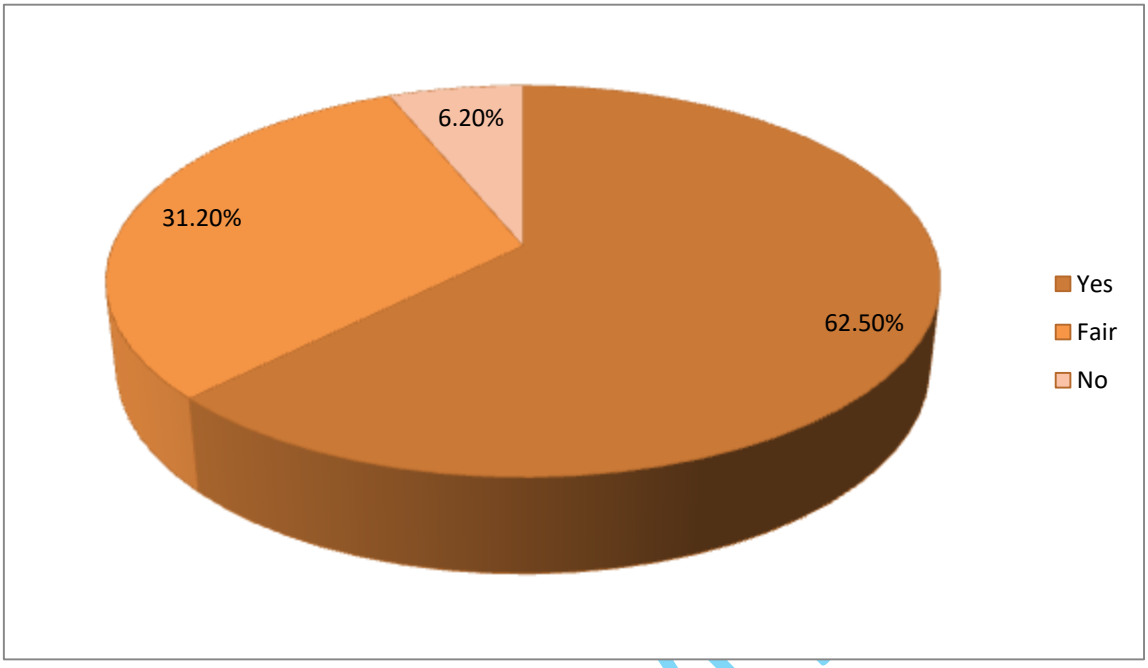

Figure 4.9: Percentage of respondents' feeling angry towards Mother/Father

Attention from Mother/Father

Table 4.13 shows that 64.7% of the respondents' do not get attention from their fathers while 23.5% do not get attention from their mothers. The lack of attention can be attributed to lack of communication skill on the part of the mothers and fathers. The lack of a shared language may result to the respondents' not getting sufficient attention from their caregivers' thus affecting attachment.

Table 4.13: *Attention from Mother/Father*

Don't get much Attention from mother/father	Mother		Father	
	Frequency	Percentage	Frequency	Percentage
Yes	4	23.5%	11	64.7%
Fair	6	34.3%	3	17.6%
No	7	31.4%	3	17.6%

Percentage of respondents' helped to talk about their difficulties

From the figure 4.10 below, it was clear that the respondents' were fairly helped by their mothers (50%) and fathers (56.2%) to discuss their difficult. 31.2% and 6.2% of the respondents' were not helped to talk about their difficulties by their fathers and mothers. These findings can be attributed to the caregivers' lack of communication skills which affects their ability to interact with their deaf children. This results to attachment problems.

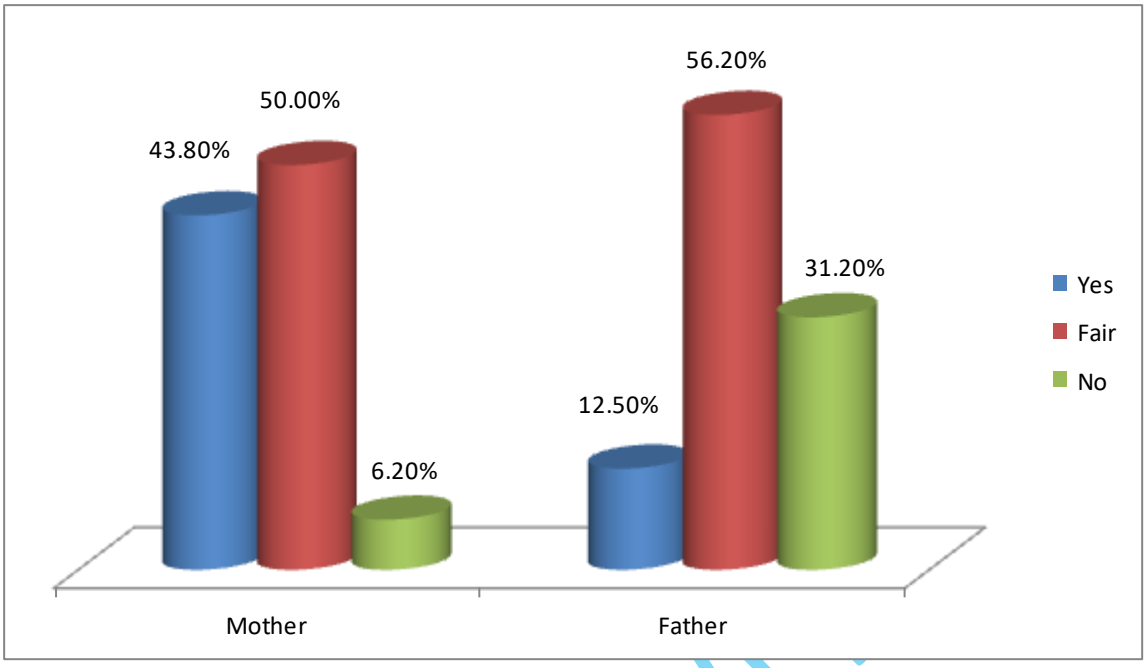

Figure 4.10: Percentage of respondents' helped to talk about their difficulties

Mother/Father understands the respondents'

From the table 4.14 close to half of the respondents (44.4%) responded that their mothers understand them. The respondents' indicated that the fathers (27.8%) understood them.

Table 4.14: *Mother/Father understands the respondents'*

Understand Respondent	Mother		Father	
	Frequency	Percentage	Frequency	Percentage
Yes	16	44.4%	10	27.8%
Fair	12	33.3%	7	19.4%
No	6	16.7%	1	2.8%

Mother/Father tries to understand when I am angry

From the findings 41.7% of the mothers did not try to understand the respondents' and 5.9% of the fathers did not try to be understanding. This could be due to lack of a shared language.

Table 4.15: *Mother/Father tries to understand when I am angry*

Tries to be understanding	Mother		Father	
	Frequency	Percentage	Frequency	Percentage
Yes	12	33.3%	11	64.7%
Fair	7	19.4%	5	29.4%
No	15	41.7%	1	5.9%

Respondents' trust of Mother/Father

33.4% of the respondents' did not trust their fathers while 30.6% did not trust their mothers. Trust is an integral part in attachment. Erikson (1963) said that the attainment of basic trust is an attitude towards oneself and the world. A caregiver who consistently responds to the child's needs fosters a sense of trust in the caregiver. These findings may imply that the respondents' do not trust their caregivers because of unresponsiveness to their needs and this is due to lack of shared language between them.

Table 4.16: *I trust my Mother/Father*

Trust	Mother		Father	
	Frequency	Percentage	Frequency	Percentage
Yes	23	63.9%	12	66.7%
Fair	6	16.7%	3	16.7%
No	5	13.9%	3	16.7%

Respondents' feelings of not being understood

From the findings 48.6% indicated that their mothers fairly understood while 55.6% pointed out that their fathers fairly understood what they were going through these days.

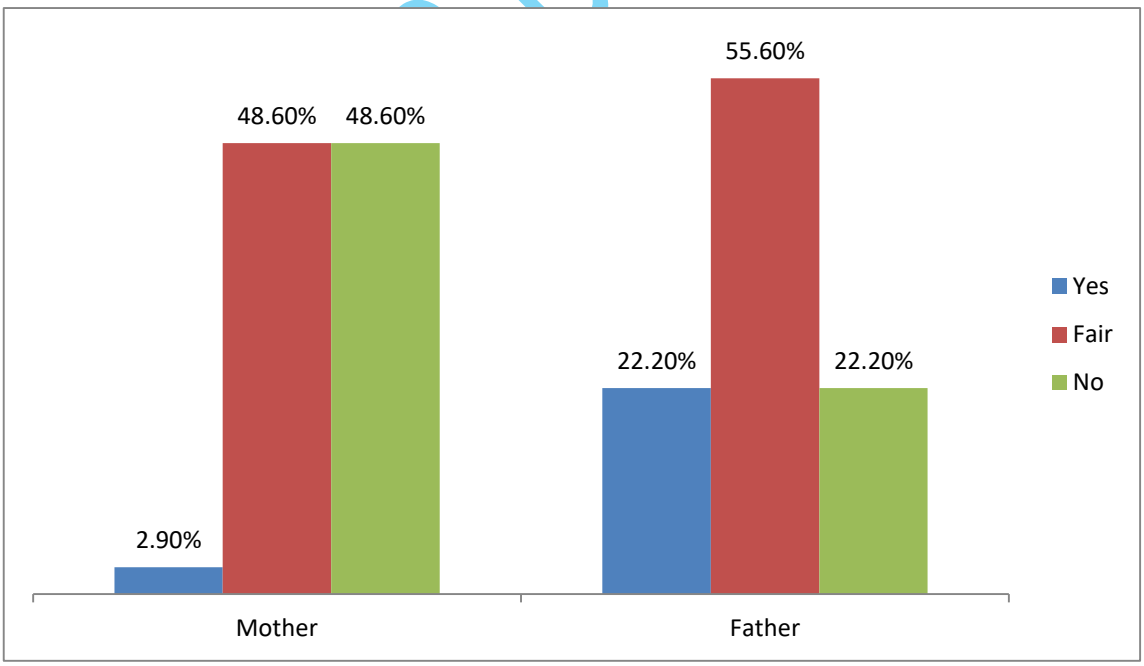

Figure 4.11: Percentage of respondents' feeling of not being understood these days

Respondents' can count on Mother/Father

Table 4.17 indicates that 38.9% of the respondents' cannot count on their fathers while 44.1% cannot count on their Mothers. These findings imply that more than a third of the respondents' cannot count on their caregivers' when they need to talk. This is a sign the bond between the deaf children and caregivers' has been affected.

Table 4.17: *Respondents' can count on Mother/Father*

Count on	Mother		Father	
	Frequency	Percent	Frequency	Percent
Yes	19	55.9%	11	61.1%
Fair	10	29.4%	6	33.3%
No	5	14.7%	1	5.6%

Respondents' relationship with Mother/Father can be improved

The researcher wanted to find out from the respondents' if their relationships can be improved. Table 4.18 below shows more than half of the respondents 72.2% indicated that their relationship with their fathers could be improved, while 55.9% of the respondents indicated that the relationship with their mothers could be improved.

Table 4.18: *Respondents' relationship with Mother/Father can be improved*

Relationship Can be Improved	Mother	Percent	Father	Percent
Yes	19	55.9%	13	72.2%
Fair	13	38.2%	5	27.8%
No	2	5.9%		

Analysis of the Focus Group Discussion for the Caregivers

The following is the analysis for the focus group discussion; Appendix III, as analyzed in the order of the questions, 8 female caregivers attended the session.

Caregivers' first discovery of child's hearing impairment

The Focus Group discussion was derived from mothers who are the primary caregivers of these deaf children. The researcher sought to establish when the caregivers first discovered that their children had a hearing impairment. It is unfortunate that caregivers and paediatricians do not often recognize a child's deafness until the second year of life (Maccoby, 1980; Berk 2006). Most of the caregivers discovered when their children were over the age of 1 year. However, one of the caregivers made an earlier discovery (5-6months) due to her experiences with her other children.

Caregivers' preparedness to raise a child with hearing impairment

All caregivers were in agreement that they were not prepared to raise a child with hearing impairment. This finding tallies with Lederberg & Mobley (1990), according to them over 90% of hearing impaired children are born to hearing parents who have had little or no previous contact with hearing impairment and are therefore unprepared.

Challenges experienced by caregivers' when interacting with their deaf children

The caregivers were in agreement that lack of communication and understanding between them and their deaf children is a major challenge to their interactions. This is due to the lack of sign language skills on the part of the caregivers. Another challenge the researcher noted was that of lack of acceptance (denial) on the part of the caregivers. This may imply that due to unpreparedness the caregivers might have had difficulties in

accepting the condition of these children. Stigmatization from the community was also a challenge to the respondents'. In addition, a lack of sign language interpreters to assist the caregivers communicate effectively with their children was noted by the researcher as a fourth challenge. All these challenges interfere with the caregiver's ability to effectively interact with her deaf child hence affect the attachment process.

Measures taken by caregivers' to learn how to communicate with their deaf children

The caregivers indicated that they have been learning sign language to assist them communicate effectively with their children.

Relationship comparison before and after learning sign language

The researcher sought to establish if there were any differences before and after the respondents' learnt sign language. The following were their responses: Before learning sign language, the respondents' relationships with their deaf children were characterized by lack of understanding between them due to lack of communication, feelings that the child ignored their caregivers, worries that the child felt lonely, child played alone, lack of acceptance (denial), experienced pain, feeling that the child was cursed and lack of appreciation of the child.

After learning sign language, the caregivers observed the following differences: They were able to understand each other-the caregivers would sign to their deaf children and they would respond, communicate, identify the problems experienced by their deaf children, discipline them effectively, form support groups from among themselves. In addition, the deaf children took initiative to teach their family members sign language making inclusion easier. Through this attachment has been improved.

Deafness as a hindrance to bonding

All caregivers were in agreement that deafness hindered the bonding process between them and their deaf children.

Summary of key findings

The findings of this study revealed that there is indeed a problem with attachment between the deaf children and their caregivers. One of the key findings was that a majority of the caregivers did not know sign language; 77.1% and 94.6% of mothers and fathers respectively. As a result, the relationship between the two was and still is strained. The deaf children pointed out some key indicators to this effect: 1) 71.4% and 70.6% did not enjoy spending time with their fathers and mothers; 2) 82.4% wished they had different fathers while 38.9% wished for different mothers; 3) 35.3% of the respondents' felt ashamed when talking about their problems with their caregivers; and 4) 62.5% felt angry with their caregivers.

The focus group discussions revealed that the caregivers experienced challenges in their relationship with their deaf children which could have led to problems in bonding. Some of these challenges included: lack of communication and understanding due to lack of sign language skills, lack of acceptance and stigma from the community.

CHAPTER FIVE

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

Introduction

In this chapter, the findings of the study are discussed. Recommendations are proposed and areas of further research are suggested.

Discussion of the key findings

The main aim of this study was to find out the effect of deafness on the attachment among deaf children. A total number of 36 deaf children participated during this study. A questionnaire was administered to the deaf children and focus group discussion questions to the sessions held with the caregivers. The information gathered has been discussed as follows:

The findings indicated that 77.1% of the mothers and 94.4% of the fathers do not know sign language. According to the researcher, language is an important aspect in enhancing attachment. Glynn (2010) says that shared language and experiences are a major part of forming attachment. Based on the finding, a large percentage of the caregivers do not know sign language hence were unable to communicate with their deaf child. As a result, the development of a normal mother-child relationship is disrupted by the child inability to understand their caregiver and vice versa. This hinders the attachment process leading to un-connectedness between the parent and affected child.

The central theme of the psychoanalytic and ethological attachment theories is that mothers who are responsive to the child's needs establish security. According to

Bowlby (1980), as they age, children depend less on the proximity of the caregiver and more on a sense of confidence that they will be accessible and responsive in times of needs. Erikson (1963) also believed that responsiveness to all the child's needs by their caregiver is the most important. Responsiveness occurs when there is mutual understanding between the caregiver and the deaf child. From the findings of this study, the caregivers indicated that one of the major challenges that they have is lack of understanding between them and their deaf children. This is due to lack of sign language skills which is the only mode of communication for deaf children. A vicious cycle of lack of sign language, lack of understanding and unresponsiveness develops. This results to insecure attachment

Both the psychoanalytic and ethological theories give a scenario where a child passes through different stages in life. Both theorists agree that the experiences of children in their formative years affect their ability to relate with their caregivers and other significant individuals in their later years. From the research findings, some of the characteristics that the deaf children indicated and which would lead to the researcher concluding that deafness does affect attachment are: anger, lack of comfort seeking when they are troubled, and inability to seek and use supportive presence of attachment figure. These characteristics may be as a result of their earlier experiences with their caregivers. These experiences negatively affect the attachment process and as a result un-connectedness between the caregiver and deaf child develops. Erikson (1963) believed that the formation of un-connectedness affects the child's ability to deal with the crises. The child begins a lifelong pattern of withdrawal and separation from others.

According to the findings, 62.5% of the respondents' are angry with their caregivers. The respondents (deaf children) indicated that they are angry with their mothers and fathers. Zeanah et al (1993) handbook on disorders of attachment points out that one of the signs of attachment disorders is anger. The researcher supposes that this anger emanates from the deaf children not being understood by their caregivers due to lack of sign language skills on the part of the caregiver.

The findings also indicated that 52.9% of the deaf children felt that their mothers and fathers had their own problems and so did not bother them with theirs. When asked whether they tell their fathers and mothers about their problems and troubles, 38.9% responded that they do not tell their fathers while 31.4% do not tell their mothers. This finding concurs with Zeanah et al (1993), who stated that one of the characteristics of attachment disorder is the inability to seek and use supportive presence of attachment figure when needed.

On attachment and deafness, the caregivers were in agreement that deafness hinders bonding between them and their deaf children. This was clearly shown when the caregivers responded to the focus group discussion questions. According to them, one of the major challenges they experience is in communication. Without this communication (sign language) they are unable to understand their deaf children and hence the attachment process is affected.

Bowlby (1969) and Erikson (1963) stated that attachment forms within the first year of a child's life. Majority of the caregivers found out that their children were hearing impaired after the age of 1 year. Late diagnosis is bound to affect the attachment

formation. According to Maccoby (1980), it is unfortunate that caregivers do not often recognize a child's deafness until the second year. As a result, the attachment of these undiagnosed children is often slow to develop and may be weak.

In addition, all caregivers indicated that they had difficulties in accepting the condition of their children. Due to unpreparedness the caregivers experienced denial and pain. This also affected the caregivers' ability to form an attachment with their deaf children. This concurs with Leatherman-Sommers (2000) who said that deaf children are assumed to be at risk for developing an insecure attachment is because hearing mothers of deaf children reveal stress and depression when the child's deafness is diagnosed and might neglect the need of their young children.

Conclusion

The research findings presented are an indication that development of a normal mother-child relationship is affected by deafness. Deafness is a permanent loss of hearing which adversely affects the child's normal ability to develop language. Without language and support from the caregivers', the deaf children are angry, not understood and withdrawn. The findings indicated that the caregivers' were unprepared to raise a deaf child resulting to attachment problems.

Recommendations

Recommendations for Caregivers

Majority of deaf children in Kenya are born to parents who are hearing. According to the research findings, 86.1% of deaf children have hearing caregivers. Many of these children have been denied their right to inclusion in the family and

community especially because of the communication barrier. From the research findings, only 22.9% of the mothers and 5.6% of the fathers know sign language.

1. It is essential for caregivers to take the initiative to learn sign language. Sign language is the only mode of communication for the deaf child. This shared language will enhance understanding between the caregivers and deaf children, and hence develop more positive attitudes towards each other.
2. Caregivers of deaf children need to establish support groups where they can learn from each other's experiences. One of the challenges that these caregivers have is that of stigmatization. Support groups will help them feel that they are not alone.

Areas for Further Study

1. This research study was done with a focus of finding out whether deafness affects attachment. The research was done in four schools with deaf units in Nairobi County. The researcher recommends that further studies be carried out in deaf schools outside Nairobi County.
2. More studies to be conducted on urban rural/rural rural deaf schools with boarding facilities.
3. The study was conducted on deaf children aged between 12-20 years old. The researcher recommends that a similar study be conducted on the ages of between 3-5 years old, and 6-10 years old and findings disseminated.

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APPENDIX 1

LETTER OF TRANSMITTAL

Dear Respondent,

RE: REQUEST FOR AUTHORITY TO COLLECT DATA

I am June Wanjiku Ruthuku, a student at Daystar University, pursuing an MA degree in Child Development. I am undertaking a research study on "The effect of deafness on attachment among children in selected deaf centres in Nairobi County". I therefore request you to allow me some time to collect information from you. You are free to participate in the research process. This research is not only geared towards finding out whether the condition of deafness does affect the ability of a child to form an attachment, but also making recommendations that will facilitate the proper development of attachment. Hence, your honest responses will greatly enhance the quality of this research. Any information collected will be treated with confidentiality and will not be disclosed to other parties or used for any other purpose that this study. In this regard, the researcher has prepared a questionnaire. I humbly request you to please read carefully and enter your sincere responses on the attached questionnaire. Do not write your name on the questionnaire.

Your co-operation will be highly appreciated.

Thanking you in advance

Yours sincerely,

June Wanjiku Ruthuku

APPENDIX II

QUESTIONNAIRE FOR THE DEAF CHILD

I. Demographic Information (Tick appropriately)

Age: ☐

Gender: ☐ Female ☐ Male

I live with? ☐ Mother ☐ Father

My mother/father/guardian is ☐ Deaf ☐ Hearing

II. Inventory of Parent and Peer Attachment (IPPA)

Attachment Assessment

This questionnaire asks about your relationships with your mother. Each of the following statements asks about your feelings about your mother/father or the woman/man who has acted as your mother/father (e.g., a natural mother/father and a step-mother/father). Answer the questions for the one you feel has most influenced you.

Almost Never or Never True	**Not Very Often True**	**Sometimes True**	**Often True**	**Almost Always or Always True**
1	**2**	**3**	**4**	**5**

1.	My mother and I are good friends	1	2	3	4	5
2.	I enjoy spending time with my mother	1	2	3	4	5
3	My mother know sign language	1	2	3	4	5
4.	I love myself the way I am	1	2	3	4	5
5.	My condition makes me feel inadequate	1	2	3	4	5

6.	My mother respects my feelings	1	2	3	4	5
7.	I feel my mother does a good job as my mother	1	2	3	4	5
8.	I wish I had a different mother	1	2	3	4	5
9.	My mother accepts me as I am	1	2	3	4	5
10.	I like to get my mother's point of view on things I'm concerned about.	1	2	3	4	5
11.	I feel it's no use letting my feelings show around my mother.	1	2	3	4	5
12.	My mother can tell when I'm upset about something.	1	2	3	4	5
13.	Talking over my problems with my mother makes me feel ashamed or foolish.	1	2	3	4	5
14.	My mother expects too much from me.	1	2	3	4	5
15.	I get upset easily around my mother.	1	2	3	4	5
16.	I get upset a lot more than my mother knows about.	1	2	3	4	5
17.	When we discuss things, my mother cares about my point of view.	1	2	3	4	5
18.	My mother trusts my judgment.	1	2	3	4	5
19.	My mother has her own problems, so I don't bother her with mine.	1	2	3	4	5
20.	My mother helps me understand myself better.	1	2	3	4	5
21.	I tell my mother about my problems and troubles.	1	2	3	4	5
22.	I feel angry with my mother.	1	2	3	4	5

23.	I don't get much attention from my mother.	1	2	3	4	5
24.	My mother helps me talk about my difficulties.	1	2	3	4	5
25.	My mother understands me.	1	2	3	4	5
26.	When I am angry about something, my mother tries to be understanding.	1	2	3	4	5
27.	I trust my mother.	1	2	3	4	5
28.	My mother doesn't understand what I'm going through these days.	1	2	3	4	5
29.	I can count on my mother when I need to get something off my chest.	1	2	3	4	5
30.	If my mother knows something is bothering me, she asks me about it.	1	2	3	4	5
31.	Do you think the relationship between you and your mother can be improved	1	2	3	4	5

The next set of questions asks you about your relationship with your male Parent (i.e. father or whomever takes care of you).

1.	My father and I are good friends	1	2	3	4	5
2.	I enjoy spending time with my father	1	2	3	4	5
3	My father know sign language	1	2	3	4	5
4.	My father respects my feelings.	1	2	3	4	5
5.	I feel my father does a good job as my father.	1	2	3	4	5
6.	I wish I had a different father.	1	2	3	4	5
7.	My father accepts me as I am.	1	2	3	4	5

8.	I like to get my father's point of view on things I'm concerned about.	1	2	3	4	5
9.	I feel it's no use letting my feelings show around my father.	1	2	3	4	5
10.	My father can tell when I'm upset about something.	1	2	3	4	5
11.	Talking over my problems with my father makes me feel ashamed or foolish.	1	2	3	4	5
12.	My father expects too much from me.	1	2	3	4	5
13.	I get upset easily around my father.	1	2	3	4	5
14.	I get upset a lot more than my father knows about.	1	2	3	4	5
15.	When we discuss things, my father cares about my point of view.	1	2	3	4	5
16.	My father trusts my judgment.	1	2	3	4	5
17.	My father has his own problems, so I don't bother him with mine.	1	2	3	4	5
18.	My father helps me understand myself better.	1	2	3	4	5
19.	I tell my father about my problems and troubles.	1	2	3	4	5
20.	I feel angry with my father.	1	2	3	4	5
21.	I don't get much attention from my father.	1	2	3	4	5
22.	My father helps me talk about my difficulties.	1	2	3	4	5
23.	My father understands me.	1	2	3	4	5
24.	When I am angry about something,					

	my father tries to be understanding.	1	2	3	4	5
25.	I trust my father.	1	2	3	4	5
26.	My father doesn't understand what I'm going through these days.	1	2	3	4	5
27.	I can count on my father when I need to get something off my chest.	1	2	3	4	5
28.	If my father knows something is bothering me, he asks me about it.	1	2	3	4	5
29.	Do you think the relationship between you and your father can be improved	1	2	3	4	5

QUESTION FOR CHILD DEAF

I. DEMOGRAPHIC INFORMATION (TICK ONE)

AGE: ☐

YOU: ☐ BOY ☐ GIRL

ME LIVE WITH WHO? ☐ MOTHER ☐ FATHER

MOTHER/FATHER/SPONSOR MINE ☐ DEAF ☐ HEARING

II. INVENTORY OF PARENT AND PEER ATTACHMENT (IPPA)

ATTACHMENT ASSESSMENT

QUESTION THIS TALK ABOUT RELATIONSHIP WITH MOTHER YOUR. QUESTION EACH TALK ABOUT FEEL YOUR ABOUT MOTHER/FATHER YOUR IF TRUE THEY ACT AS PARENT YOUR OR STEP-PARENT YOUR. ANSWER QUESTION ONE YOU FEEL MORE IMPORTANT.

		YES	FAIR	NO
		1	2	3
1.	ME AND MOTHER MINE FRIEND GOOD	1	2	3
2.	ME ENJOY HAVE/SPEND TIME WITH MOTHER MINE	1	2	3
3	MOTHER MINE KNOW SIGN LANGUAGE	1	2	3
4.	ME LOVE MYSELF PERSONAL	1	2	3
5.	SITUATION MINE MAKE ME ENOUGH NOTHING	1	2	3
6.	MOTHER MINE RESPECT FEEL MINE	1	2	3
7.	ME FEEL MOTHER MINE DO JOB GOOD	1	2	3
8.	ME WISH ME HAVE DIFFERENT/ANOTHER MOTHER	1	2	3
9.	MOTHER MINE ACCEPT ME PERSONAL	1	2	3

10.	ME LIKE GET MOTHER MINE POINT ABOUT THING ME HAVE CONCERN	1	2	3
11.	ME FEEL NOT GOOD SHOW MOTHER MINE FEEL MINE	1	2	3
12.	MOTHER MINE CAN TELL ME TIME ME NOT HAPPY ABOUT SOMETHING	1	2	3
13.	TALK ABOUT PROBLEM MINE WITH MOTHER MINE MAKE ME FEEL SHAME OF FOOL	1	2	3
14.	MOTHER MINE EXPECT ME MORE	1	2	3
15.	ME EASY ANGRY WITH MOTHER MINE	1	2	3
16.	ME ANGRY ALOT THAN MOTHER MINE KNOW	1	2	3
17.	TIME ME DISCUSS THINGS MOTHER MINE CARE POINT MINE	1	2	3
18.	MOTHER MINE TRUST JUDGEMENT MINE	1	2	3
19.	MOTHER MINE HAVE HER OWN PROBLEM SO ME NOT WANT BOTHER HER WITH PROBLEM MINE	1	2	3
20.	MOTHER MINE HELP ME UNDERSTAND MYSELF WELL	1	2	3
21.	ME TELL MOTHER MINE ABOUT PROBLEM MINE OR TROUBLE MINE	1	2	3
22.	ME FEEL ANGRY WITH MOTHER MINE	1	2	3
23.	ME NOT HAVE ALOT ATTENTION FROM MOTHER MINE	1	2	3
24.	MOTHER MINE HELP ME TALK DIFFICULTIES MINE	1	2	3
25.	MOTHER MINE UNDERSTAND ME	1	2	3

26.	TIME ME ANGRY ABOUT SOMETHING MOTHER MINE TRY UNDERSTAND WELL	1	2	3
27.	ME TRUST MOTHER MINE	1	2	3
28.	MOTHER MINE UNDERSTAND NOTHING WHAT ME GO THROUGH THESE DAYS	1	2	3
29.	MOTHER MINE THERE THERE TIME ME WANT TO TALK	1	2	3
30.	IF MOTHER MINE KNOW SOMETHING BOTHER ME, SHE ASK ME ABOUT IT	1	2	3
31.	YOU THINK POSSIBLE RELATIONSHIP BETWEEN YOU AND MOTHER YOUR CAN IMPROVE	1	2	3

QUESTION THIS TALK ABOUT RELATIONSHIP WITH FATHER YOUR

1.	ME AND FATHER MINE FRIEND GOOD	1	2	3
2.	ME ENJOY HAVE/SPEND TIME WITH FATHER MINE	1	2	3
3	FATHER MINE KNOW SIGN LANGUAGE	1	2	3
4.	FATHER MINE RESPECT FEEL MINE	1	2	3
5.	ME FEEL FATHER MINE DO JOB GOOD	1	2	3
6.	ME WISH ME HAVE DIFFERENT/ANOTHER FATHER	1	2	3
7.	FATHER MINE ACCEPT ME PERSONAL	1	2	3
8.	ME LIKE GET FATHER MINE POINT ABOUT THING ME HAVE CONCERN	1	2	3
9.	ME FEEL NOT GOOD SHOW FATHER MINE FEEL MINE	1	2	3
10.	FATHER MINE CAN TELL ME TIME ME NOT HAPPY ABOUT SOMETHING	1	2	3

11.	TALK ABOUT PROBLEM MINE WITH FATHER MINE MAKE ME FEEL SHAME OF FOOL	1	2	3
12.	FATHER MINE EXPECT ME MORE	1	2	3
13.	ME EASY ANGRY WITH FATHER MINE	1	2	3
14.	ME ANGRY ALOT THAN FATHER MINE KNOW	1	2	3
15.	TIME ME DISCUSS THINGS FATHER MINE CARE POINT MINE	1	2	3
16.	FATHER MINE TRUST JUDGEMENT MINE	1	2	3
17.	FATHER MINE HAVE HIS OWN PROBLEM SO ME NOT WANT BOTHER HIM WITH PROBLEM MINE	1	2	3
18.	FATHER MINE HELP ME UNDERSTAND MYSELF WELL	1	2	3
19.	ME TELL FATHER MINE ABOUT PROBLEM MINE OR TROUBLE MINE	1	2	3
20.	ME FEEL ANGRY WITH FATHER MINE	1	2	3
21.	ME NOT HAVE ALOT ATTENTION FROM FATHER MINE	1	2	3
22.	FATHER MINE HELP ME TALK DIFFICULTIES MINE	1	2	3
23.	FATHER MINE UNDERSTAND ME	1	2	3
24.	TIME ME ANGRY ABOUT SOMETHING FATHER MINE TRY UNDERSTAND WELL	1	2	3
25.	ME TRUST FATHER MINE	1	2	3
26.	FATHER MINE UNDERSTAND NOTHING WHAT ME GO THROUGH THESE DAYS	1	2	3

27.	FATHER MINE THERE THERE TIME ME WANT TO TALK	1	2	3
28.	IF FATHER MINE KNOW SOMETHING BOTHER ME, HE ASK ME ABOUT IT	1	2	3
29.	YOU THINK POSSIBLE RELATIONSHIP BETWEEN YOU AND FATHER YOUR CAN IMPROVE	1	2	3

APPENDIX III

FOCUS GROUP DISCUSSION QUESTIONS FOR THE CAREGIVERS

1. When did you know that your child was deaf?

_____

_____

2. Were you prepared to raise a child with hearing impairment?

_____

_____

3. What challenges do you experience when interacting with your deaf child?

_____

_____

4. What measures have you taken to learn how to communicate with your deaf child?

_____

5. Compare your relationship with your deaf child before and after you began learning sign language.

_____

_____

6. Do you think your child's condition hinders bonding?

_____