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**RELATIONSHIP BETWEEN SELF-ESTEEM AND
ACADEMIC ACHIEVEMENT OF GIRLS WITH
HEARING IMPAIRMENTS IN SECONDARY
SCHOOLS FOR THE DEAF IN KENYA**

MARCH 2010

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BY

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REG. NO. E83/10695/2006**

**A THESIS SUBMITTED TO THE SCHOOL OF EDUCATION
IN FULFILMENT FOR THE DEGREE OF DOCTOR OF
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EDUCATION OF KENYATTA UNIVERSITY**

MARCH 2010

DECLARATION

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



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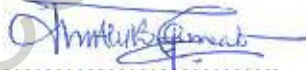
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DEDICATION

To my loving Father Zakayo Bunyasi whose foresight in education and constant encouragement drove me to this level of education and to my husband James and our loving children Nancy, Collins, Sylvia, Violet and Liz for their unending moral support and encouragement.

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ABBREVIATIONS

BOG	Board of Governors
BSEI	Battle Self-Esteem Inventory
FAST	Family Systems Test
FPE	Free Primary Education
HI	Hearing Impairments
KCPE	Kenya Certificate of Primary Education
KCSE	Kenya Certificate of Secondary Education
KNEC	Kenya National Examinations Council
MOE	Ministry of Education
MSEI	Modified Self-Esteem Inventory
NELS	National Educational Longitudinal Study
PCEA	Presbyterian Church of East Africa
PH	Physically Handicapped
SCQ	Subject Communication Questionnaire
SDQ	Self-Description Questionnaire
S-E	Self-Esteem
TAT	Thematic Apperception Test
TSC	Teachers Service Commission
UNESCO	United Nations Educational Scientific and Cultural Organization
UNICEF	United Nations International Children's Educational Fund
UK	United Kingdom
UPE	Universal Primary Education

ABSTRACT

The problem addressed in this study was that although several factors such as school environment, family status and/or communication barriers had been cited as contributing to the perpetually dismal academic achievement of girls with hearing impairments, personal esteem factors, especially interest, competence, value and responsibility had not been adequately explored. Consequently, their achievement had been low and continued to be low despite the government's effort to increase educational opportunities for all its citizens through legislative and policy frameworks. The researcher postulated one null hypothesis H_0 : There is no significant difference between self-esteem and academic achievement of girls with hearing impairment. The study was guided by Carl Roger's person-centered or client-centered theory. The theory states that factors, which predicted later behaviour in human beings were self-understanding. The study used an Ex-post facto design. Rosenberg self-esteem scale was used to measure self-esteem dimensions whereas school academic scores were used to measure academic achievement. Participants for the study were drawn from schools for girls with hearing impairment in Central and Western provinces of Kenya constituting a sample of fifty-three girls. Data were collected through the use of questionnaires and interviews and analyzed using the Statistical Package for Social Sciences programme. The results obtained indicated that girls with hearing impairments possessed high self-esteem yet their academic achievement was low. The correlation between self-esteem and academic achievement on Pearson Product Moment Correlation was at a moderate level. It was concluded that girls with hearing impairments placed more value on relational aspects (grooming), music and dance. They lagged behind in terms of provision of quality education due to lack of specialized technological devices. The study recommended that teachers should make deliberate use of positive reinforcement that would encourage girls' participation and promote their self-esteem towards academic performance. Principals of schools should initiate active collaborations with parents, teachers, students and other interested partners in developing constructive projects. The government to make curriculum to be flexible as the current curriculum was quite wide, rigid, examination oriented, had fixed timeframe and totally lacked diversity. Another recommendation was for the curriculum developers to reconsider curricula adaptation to allow diversity. The examining body to focus on practical assessment through strategies like observations, demonstrations and/or use of sign language interpreters for all required examinations. Provision of assistive devices is a necessity. The government should increase disability fund to cater for girls' exceptional needs as a very vulnerable group of learners and provide opportunities for capacity building for assistive devices technicians. Further intensive research to investigate the crucial emerging issues that contributed to the moderate correlation which occurred yet the academic achievement was low and self-esteem was high. Another recommendation is further research in the area of communication proficiency in Kenya Sign Language for all teachers in schools that admit learners with hearing impairment.

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND TO THE STUDY

In this chapter, a discussion on the background to the study is covered as well as the statement of the problem, purpose of the study, objectives and research questions. Significance of the study, the scope and limitations and theoretical framework are also discussed. Lastly, an illustration on the conceptual framework is presented.

Kenya has made concerted effort to bridge the gender gap in education of girls on the understanding that gender disparities lead to more inequalities in meaningful lifelong education. As a country, it recognizes that education is a human right and has put in place both legislative and long-term policy frameworks to ensure that basic education is available and free for all. To meet the national goals of education, recent policy initiatives have focused on dealing with key challenges such as access, participation, retention, equity, quality, relevance, transition and efficiency that take into consideration gender and geographical disparities.

Educating women comes from the recognition of their crucial role in society, namely, giving birth to children and playing a major role in the implementation of any family planning programmes. They bear the main responsibility for nutrition and health of their families, particularly children. They also play a predominant part as educators for future generation (Juma, 1994). Numerous studies have shown the impact of maternal

education, which plays a major role in determining the level of infant and child mortality. Juma (1994) reveals that educating women so that they acquire information, knowledge and skills, increases their self-confidence and raises their status as full participating members of the society. In Kenya, women are said to constitute 50 percent of the country's population yet they are the poorest strata of the society. According to UNESCO estimates, nearly half of the women in developing countries do not know how to read and write (UNESCO, 1988). Nonetheless, it has been established that countries that have the highest rate of women illiteracy have also low enrolment rates for girls at primary to secondary education levels. With the introduction of Universal Primary Education (UPE) and Free Primary Education (FPE) in Kenya, female illiteracy has reduced.

In spite of the efforts to increase female educational opportunities, enrolment ratios in secondary school and university admissions for girls is lower than for boys. It is worse for the girls with hearing impairments. A report by UNICEF (2001) reveals that with only two secondary schools for children with hearing impairments available to graduates of primary schools in Kenya, relatively few join secondary schools and transit to post secondary education. The pattern of gender enrolment is tabulated below:

Table 1.1: Enrolment in special needs institutions by category in 1999 and 2003

Category	1999			2003		
	Boys	Girls	Total	Boys	Girls	Total
Special Primary	3,716	2,796	6,512	13,353	10,106	23,459
Special Secondary	492	388	880	6490	536	7,026
Special Tech/Vocational	305	246	551	1,286	1,114	2,400
Primary Units/Integrated	3,323	2,417	5,740	53,112	75,828	128,940
Total	7,836	5,847	13,683	74,241	87,584	162,825

Source: Special Education Section and Statistics Section, MoE (2007)

Table (1.1) shows the enrolment pattern in Special Needs Education (SNE) institutions by category in 1999 and 2003 in Kenya. Indeed, this table reveals a gap in access for girls with hearing impairments to post secondary education and likewise to professional training and career upward mobility. In addition, the Kenya National Examination Council (KNEC), which is a body mandated with the responsibility of assessment and evaluation of academic standards (Table 1.2) shows that the performance of girls with hearing impairments is low in Kenya Certificate of Secondary Education (KCSE) examinations in special sampled schools between 2003 and 2006.

Table 1.2: Kenya Certificate of Secondary Education performances in special schools from 2003 to 2006

Centre Name	Gender	2003		2004		2005		2006	
		Entry	Mean Score	Entry	Mean Score	Entry	Mean Score	Entry	Mean Score
Rev. Muhoro (HI)	Female	33	2.7	19	2.2	26	2.8	26	2.5
	Male	17	2.0	27	2.7	17	3.4	19	2.6
Joytown (PH)	Female	14	4.9	10	4.9	21	5.0	23	4.7
	Male	14	6.3	10	6.4	20	5.2	9	4.6
Thika Sch. For Blind	Female	13	5.2	20	4.8	25	5.4	18	6.1
	Male	31	5.0	28	5.1	28	6.0	36	5.8
St. Angela Mumias (HI)	Female	7	3.7	14	2.2	16	1.5	16	1.4
	Male	-	-	8	2.6	9	2.3	-	-

Source: Kenya National Examinations Council (2003-2006).

It was on this premise that the need to focus on the individual girls' competencies and experiences arose. The fact that several factors such as school environment, lack of resources, family status and communication barriers had been observed, little was known concerning personal self-esteem. It was evident that parental socio-economic status, teachers' attitude and lack of learning resources in the school environment affected

provision of basic physiological needs (Mwathi, 1998). However, the Kenya government through its initiative to provide free education has enabled parents to send their children to school without much strain. Great sensitization on change of attitude towards persons with disabilities through media, workshops and policy frameworks, had also brought about attitudinal change that had led to the introduction of inclusive education, which was a great celebration in the schools. With all these measures in place, performance of girls with hearing impairments was low hence the need to investigate the underlying factors of which the search for individual self rating was to be considered.

Self-esteem was viewed as the affective or evaluated counterpart to cognitive representations of the self (Brown, 1998). It was widely acknowledged as having a strong influence on psychological orientation of the individual, including motivation to engage in efficacious behaviour. According to Brown (1998), the experience of being competent to cope with the basic challenges of life emerges from one's self-esteem. This consists of two components, the self-efficacy which is confidence in one's ability to think, learn, choose and make appropriate decisions and self-respect, which is confidence in one's right to be happy and by extension, confidence that achievement, success, friendship, respect, love and fulfillment are appropriate to oneself. In essence, one's confidence provide strengths to participate in various activities of choice and as a result, gain experience.

Branden (1969) points out that people acquire experience differently and this affects their existence. Their self-evaluation is the basic context in which they act and react, choose

their values, set their goals and meet the challenges of life. Their responses to events are shaped in part by who and what they think they are, that is, how competent and worthy they perceive themselves to be. In other words, self-esteem is a basic human need just as other needs mentioned earlier. These differences in how peoples' perceptions are have important implications for other elaborate behaviours including such areas like academic achievement (Cloninger, 2004).

Educational achievement on the other hand has great value to human beings and the society in which they belong. That is the reason for every nation to monitor the progress of its citizens through organizations or bodies like KNEC, to keep track of educational performances or achievements irrespective of gender, disability, colour and religion. For instance, in Kenya, the KNEC records (Table 1.2) reveal the gap that exists in the performance of girls with hearing impairments, which was the focus for this study. Despite the fact that several studies have been carried out to investigate factors affecting educational development of children with disabilities in general such as social, economical, school factors (resources in terms of materials and personnel), (Murugami, 2002; Mwathi, 1998; & Oliwa, 1998), no study has investigated the personal or the intrinsic factors which were focused on, that is "self-evaluation".

1.2 STATEMENT OF THE PROBLEM

Academic achievement of girls with hearing impairments has been low and continues to be low perpetuating a need for investigation. A gap exists in their academic performance as compared to the performance of boys with hearing impairments or compared to other

girls with other disabilities (visual impairments and physical impairments). The KNEC performance for the years 2003-2006 as shown in (Table 1.2) reveals this disparity. Many factors could be contributing to the low performance such as school environment, family status or communication barriers which other scholars have studied (Maqsud, 1991; Murugami, 2002; Mwathi, 1998; & Oliwa, 1998). However, other personal factors such as interest, competence, value and responsibility could be major contributors for dismal or low performance. An early intervention in terms of coming up with tangible findings that would enable initiation of appropriate guidelines to boost their performance at this level is crucial. Therefore the need to find out the relationship between self-esteem and academic achievement of girls with hearing impairments is inevitable.

1.3 PURPOSE OF THE STUDY

The purpose of this study was to establish the relationship between self-esteem and academic achievement for girls with hearing impairments in Kenya. Girls with hearing impairments achieve considerably lower in the academic arena compared to hearing girls or even girls with visual or physical impairments. The study set out to establish whether low self-esteem was linked to low academic achievement.

1.4 OBJECTIVES OF THE STUDY

The specific objectives of the study were to:

- (i) Determine the relationship between self-esteem level and academic achievement scores of girls with hearing impairments in secondary schools.

- (ii) Establish the nature of social relationships among girls with hearing impairments in secondary schools.
- (iii) Analyze other unique pedagogical and structural attributes that were influencing academic achievement and self-esteem for girls with hearing impairments in secondary schools.

1.5 RESEARCH QUESTIONS

- (i) What is the relationship between self-esteem level and academic achievement score of girls with hearing impairments?
- (ii) What is the nature of social relationships among girls with hearing impairments?
- (iii) What are other unique pedagogical or structural attributes that are influencing academic achievement and self-esteem for girls with hearing impairments?

1.6 HYPOTHESIS

- There is no significant relationship between the self-esteem level and mean academic achievement score of secondary schoolgirls with hearing impairments.

1.7 SCOPE OF THE STUDY

The study was restricted to identifying the levels of self-esteem and their effect on academic achievement of the girls with hearing impairments in secondary schools in Kenya. Issues of concerns were self-evaluation, self-affirmation, self-perception and self-

assessment in general and how these related to academic achievement for girls with hearing impairments.

1.8 LIMITATIONS

The study was limited to only two secondary schools for girls with hearing impairments in Kenya. These were the only schools that admitted girls with hearing impairments to pursue higher education at secondary school that offered an academic curriculum. Other schools offered different curricula either on technical or vocational training.

1.9 DELIMITATIONS

Delimitations of the study ranged from unavailability of several secondary schools for girls with hearing impairments, lack of time to lack of finance. Another impediment was lack of adequate respondents in every class as the number of girls per class was below ten and even to an extent of finding only six girls in a class.

1.10 SIGNIFICANCE OF THE STUDY

The researcher found very few studies in Kenya that had been conducted in the field of education for persons with hearing impairments. Perhaps many researchers had concentrated on other disabilities other than hearing impairments and literature in the area was indeed scarce. The study sought to contribute towards sealing the gap that was in existence with its findings directly as well as to highlight issues of interest that needed redress by future researchers. The study also hoped to give a scholarly contribution with empirical information on the relationship between self-esteem and academic achievement

of girls with hearing impairments. It was also hoped that the study would contribute to the advocacy of empowering girls with hearing impairments to participate in professional upward mobility so that they could be included in social and economic activities of the larger society. The study identified the extent to which self-esteem of girls with hearing impairments was related to their academic achievement and gave guidelines on appropriate intervention measures to improve the girls' academic future practices.

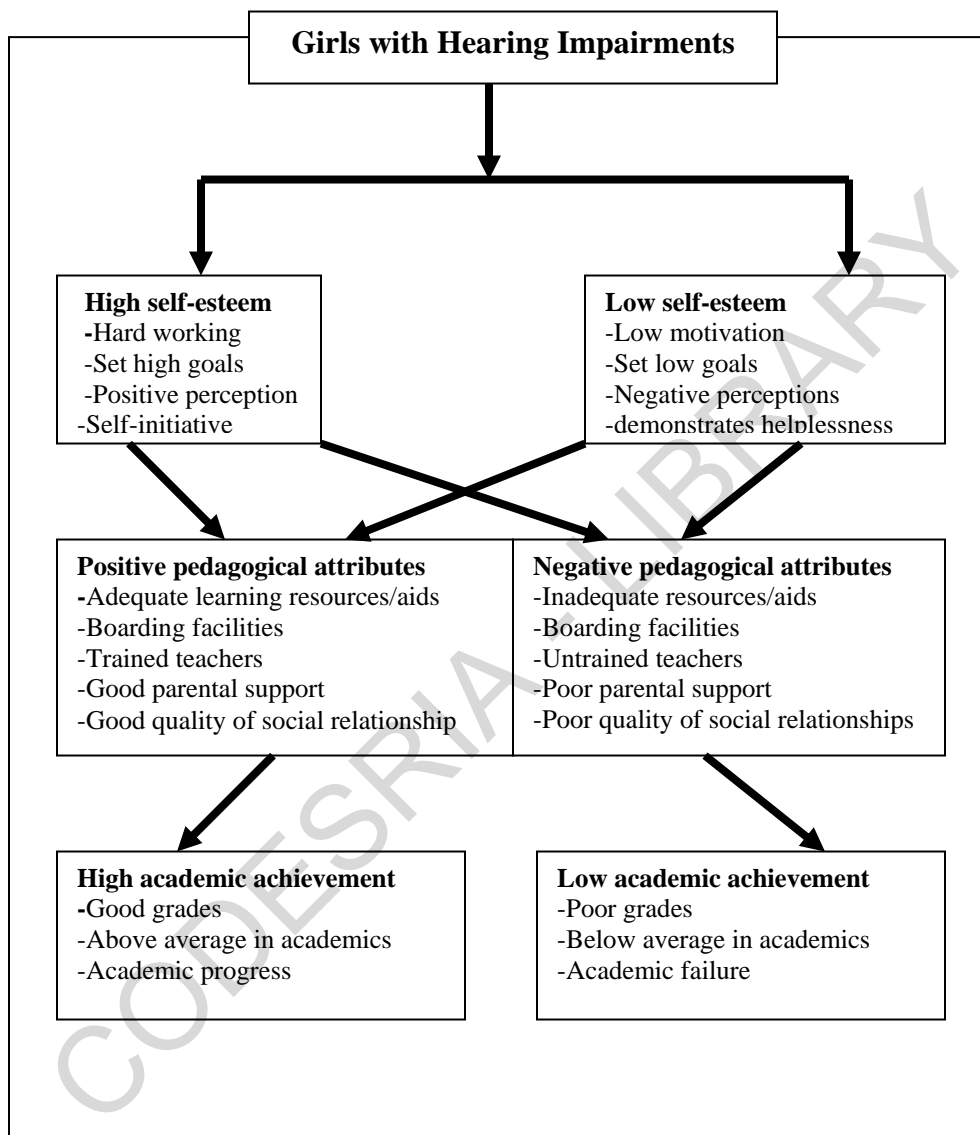
1.11 THEORETICAL FRAMEWORK

The theoretical framework to guide the study was based on Rogers (1951) person-centered or client-centered theory as it is known to many people. He investigates an internal influence, the child's self-understanding or self-insights that enable an individual to have personal assessment. He also investigates children's behaviour in relation to external factors which include family environment, economic and cultural influences as well as social and educational background. The findings of his study indicate that the factor which most accurately predicted later behaviour is self-understanding. Rogers (1951) states that the basic nature of human being when functioning fully is constructive and trustworthy. When one is freed of defensiveness and is open to experience, his/her reactions are bound to be trusted as positive, forward moving and constructive. He argues that one needs to maintain and enhance the self, in order to become a fully functioning person, which is the main goal of all human beings. He adds that a child's self-understanding encompassed the acceptance of self and reality as well as responsibility for the self.

Rogers (1951) posits that each person has a private experiential world, which includes the present experiences and memories of past experiences that actively guide the person's perception of the moment. He suggests that higher levels of development sharpen and define experiential world and they lead to the formation of the self. Rogers further notes that the development of the "self" emerges as the child interacts with other people and learns to distinguish what is direct and immediate to oneself and what is external to oneself. As the self emerges, the child develops a need for positive regard which includes acceptance, love and approval from other people notably the mother or caregiver during infancy. If the mother or caregiver does not bestow positive stimulation, an infant's tendency towards actualization and enhancement of self is hampered. This marks the beginning of internalization of the attitudes and behaviour of others and the feedback received refines the child's self-esteem.

1.12 CONCEPTUAL FRAMEWORK OF THE STUDY

In developing the conceptual framework of this study, an attempt was made to investigate the possible nature of relationship between self-esteem dimension and school academic achievement of girls with hearing impairments. Figure 1.1 exhibits the conceptual framework, which encompasses the major variables that is self-esteem and the possible pattern of influence on academic achievement for girls with hearing impairments.



Source: Self adopted conceptual framework of the study

Figure 1.1: Correlates of self-esteem and its influence on academic achievement

The researcher's own adaptation of the conceptual model shown in Figure 1.1 demonstrates the influence of self-esteem (independent variable) on academic achievement (dependent variable) as shown by the arrows. For instance, self-esteem for

girls with hearing impairments manifests as high or low. When self-esteem is high, it makes an individual to work hard at any task, set high goals, have a positive perception and develop self-initiatives. At this level if the individual receives positive pedagogical attributes as intervention measures, she stands a chance of acquiring good grades and performing above average leading to high academic achievement. Alternatively, should the pedagogical attributes be negative in nature yet self-esteem is high as shown in the figure 1.1 then, the resultant effect will be low academic achievement.

When self-esteem manifests as low, it leads to setting low goals, developing negative perception and low motivation and if the intervention measures emerge to be negative pedagogical attributes, then the individual will score poor grades, experience failure leading to low academic achievement. Should the trend happen to change course such that the intervention is positive pedagogical attributes then the individual would receive good grades, score above average in academics leading to high academic achievement (Figure 1.1). Intervention measures have high possibilities of altering the trend positively or negatively. Intervening measures in reference include availability of learning resources, provision of hearing aids, boarding facilities and trained teachers in manual communication, parental support and quality of social relationships. All these occurrences have great influence on educational developments of girls with hearing impairments hence the need for investigation.

1.13 OPERATIONAL DEFINITIONS OF CENTRAL TERMS

Achievement: Means something accomplished, as by superior ability, special effort, or great valour (Norwick & Strickland, 1973).

Academic achievement: Is the degree of activity a student exerts in his/her schoolwork in order to succeed academically (Orodho, 2005).

Deaf: This refers to a hearing impairment which is so severe that the individual is impaired in processing linguistic information through hearing, with or without amplification, which adversely affects educational performance (Heward, 2006).

Disability: As used in the study, this term means any restriction or lack of ability to perform any activity in the manner or within the range considered normal for a human being (Heward, 2006).

Hard of hearing: Refers to a person who has residual hearing that can enable successful processing of linguistic information with or without a hearing aid (Heward, 2006).

Hearing impairment: This is a generic term used to refer to a hearing loss which ranges in severity from slight to profound and often includes two sub-groups: deaf and hard of hearing (Heward, 2006).

Self-esteem: Refers to respect for or a favourable impression of oneself (Brown, 1998).

Special institutions: These are educational set ups where learners with special needs are educated or trained by skilled personnel (Heward, 2006).

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter reviews the theories of personality and related literature on the self-esteem theme as well as on self-esteem and academic achievement upon which this study is based. It highlights what other scholars have done globally, elsewhere in Africa and in Kenya, on the subject of present investigation. The highlight was organized as follows: Nature and source of self-esteem, self-feelings and hypothetical self-views, social relationship and self-esteem, review of empirical studies and self-esteem, Global studies on relationship between self-esteem and academic achievement, studies in Kenya on self-esteem and academic achievement and the summary of the chapter.

2.1.1 Nature and Source of Self-esteem

Self-esteem is used to refer to a personality variable that captures the way people generally feel about themselves. Researchers call this form of self-esteem global self-esteem or trait self-esteem. The term is also used to refer to the way people evaluate their various abilities and attributes. For example, a person who doubts his ability in school is sometimes said to have low academic self-esteem, and a person who thinks is popular and well-liked is said to have high social self-esteem. Attempts to define self-esteem have ranged from an emphasis on primitive libidinal impulses to perceptions that one is a valuable member of a meaningful universe (Brown, 1998). Self-esteem develops at an early age and is characterized by feelings of belonging rooted in social experiences and the feeling of mastery, which is more personal in nature. A sense of mastery involves the

perception that one has an impact on the world in his day-to-day life. Mastery is used interchangeably with competence. It is a feeling we get when we are immersed in an activity or are striving to overcome some obstacles. Both feelings of belonging and mastery normally develop early in life.

Erik Erikson's model of psychosocial development provides a useful springboard for considering how these feelings arise. According to Erikson, the first developmental task which infants face is establishing feelings of trust with their caregivers. These feelings of trust, which are thought to develop during the first year of life, correspond to the feelings of belonging, which are integral to a sense of high self-esteem. It emerges that most hearing parents of children with hearing impairments on discovery of the impairment suffer anxiety, guilt, depression and denial (Powell, Finitzo-Hieber, Friel-Patti & Henderson, 1985). They do not easily accept the child in order to provide the primary needs of love, care-giving and stimulation. Such children do experience rejection and may definitely develop a sense of basic mistrust, which hampers their personality development hence inhibits establishment of self-esteem.

Shindi (1983) notes that persons with disability usually have negative social experiences from the family because the family experiences a lot of stress when a handicapped member is born into the family. He further notes that the public's negative attitude towards such children often results in loneliness on the part of the person with disability. This usually robs the person's experience that facilitates adjustment and development of

positive self-esteem resulting in a situation where persons with disability are likely to be maladjusted in behaviour and develop negative self-esteem.

The next stage Erikson describes is the “autonomy versus shame and doubt” stage. This stage involves the development of feelings of mastery. As noted, children develop feelings of mastery when they are encouraged to explore, create and modify their world. They may fail to develop these feelings when their parents or caregivers subvert, ridicule or are overly critical to their effort (Brown, 1998). If parents are overly protective or unjust in their use of guidance, the child will be doubtful and experience shame (Marschark, 1993). Studies have shown that hearing parents of children with hearing impairments are overly protective to a point that they do not let go of their infants with a hearing impairment (Marschark, 1993) yet this is the time when the child increases physical skill and develops independence in acts or performances that may lead to self-satisfaction/fulfilment.

A child who develops a secure attachment relationship comes to believe he/she is essentially good and worthy of love while a child who develops an insecure attachment comes to believe he/she is bad and unworthy of love. These beliefs are generalized to other people and situations and form the basis for the development of self-esteem. According to Ezeilo (1990), the individual’s self-esteem functions to direct (whether normal or abnormal) the way she/he may reflect her/his response to how others treat and what labels others assign her/him. Mayer (1967) reveals that an individual’s self-concept affects the way he/she interacts with his/her environment positively or negatively

depending on the feedback received. Self feelings has a direct link with the hypothetical self-views as discussed below.

2.1.2 Self-feelings and hypothetical self-views

The distinctions between shame and guilt highlight that self-feelings are often influenced by our ideas about who we could be, should be or ought to be (Brown, 1998). These hypothetical self-views are observed by scholars as: the attainable self- which Rosenberg (1979) refers to as the committed self whereas Markus and her colleagues in Brown (1998) call it the possible self. They represent the kind of a person one wants to be and can be, all of which means what one aspires to be. In most cases, people aspire to be good, happy and be able to achieve their best. Indeed, some live to these expectations while others do not. Girls with hearing impairments fail to meet their expectations attaching their failure to accomplish certain obligations to the presence of the impairments, which emerge as a self-fulfilling prophecy.

According to Brown (1998), the ideal self is achieved when people entertain more idealized or glorified views of themselves. They tend to recognize that these idealized self-images are largely flights of fancy. However, it is only when our idealized self becomes a must self that it becomes a source of psychological distress (Brown, 1998). Another related type of belief concerns our ideas about what we should be or ought to be that is, the ought self. Higgins (1987) in Brown (1998) argues that people are prone to feelings of guilty and anxiety when their perceptions of who they are at present do not coincide with their ideas about who they think they ought to be. Perceptions of who they

are at present as girls with hearing impairments fall short of what they expect to be that is capable of acquiring a high level education and securing a good job. Instead, hearing impairments makes them have the feeling of incapability and as such resolve to despair in life, not being committed to studies and rationally engage in truancy, school dropout, engage in early marriages and the like. Studies have shown that girls with hearing impairments have low aspiration towards academic achievements (Yee, Watkins & Crawford, 1997).

People also think of themselves in terms of what they are afraid of becoming or do not want to become. For instance, one fears to be a failure in business or to be dependent on one's children. Oglivie (1987) refers to these images as aspects of undesired self and suggests that they play an important role in how happy and satisfied people are in their lives. The greater the psychological distance between how we think of ourselves now and what we fear becoming, the happier we are in life. These potential negative self-images also serve as an important motivational incentive. They can force people to work hard in an attempt to avoid these negative identities. To girls with hearing impairments this undesired self does not matter simply because they hope to grow up and get married to a man who also has a hearing impairment and as such, develop a deaf identity. Most girls with hearing impairments are highly influenced by this deaf culture (Gregory, Knight, McCracken, Powers & Watson, 1999).

Lynas (1986) studied the effect of deafness on social grouping and relationships. He concluded that children with hearing impairments formed less adequate social

relationships as compared to the hearing. He also reported that the limitation in language caused inferior social grouping in preadolescents. However, he emphasized that children with hearing impairments associated with other hearing impaired counterparts. The link between social relationships and self-feelings is also thought to have motivational significance. This insight lies at the heart of social identity theory, which asserts that:

- Social relationships are important component of the self-esteem which refers to the way people characteristically think about themselves (Brown, 1998)
- That people are motivated to feel good about themselves and
- That people feel better about themselves when they believe the groups they belong to are somehow better than the groups to which they do not belong.

Such is a recognition that is well-grounded among persons with hearing impairments as they conform to the deaf identity as that satisfies each individual's self-esteem and creates a base for belonging (Gregory et al., 1999).

Baumeister (1991) reveals that people find meaning in life by attempting to satisfy four needs which are purpose, value, efficacy and self-worth. Purpose (being purposive) involves having particular goals in form of either intrinsic fulfillments which are satisfying in themselves or extrinsic ones aimed at achieving desired goals. Value refers to the desire to justify what we do and to endow it with legitimacy. Efficacy is usually satisfied by performing particular acts or by the understanding that we feel we possess some abilities. Yet self-worth is derived from a person's sense of confidence in what he or she does and believes.

Baumeister (1991) asserts that today, value is sought in the personal achievement at school, at work, in relationships and in particular, development of self. In his views, self or identity becomes particularly significant as a source of meaning because our sense of self-worth and our sense of efficacy also depend on the way we think about ourselves. He contends that in the modern world, the enhancement of self or identity in itself becomes a value base and a moral ground for personal evaluation. Positive self-esteem operates in effect, as the immune system of consciousness, providing resistance, strength and a capacity for regeneration. Without positive self-esteem, psychological growth is stunted and social relationship shattered.

2.1.3 Social Relationship and Self-esteem

Self-esteem is a function of reflected appraisals of close family members and friends, parents or other close adults like teachers (Rosenberg, 1979; Rosenberg, Schooler, Schoenbach & Rosenberg, 1995). Perceptions of self-worth or self-esteem result from social attachments to close friends and family members. This reflects positively on a person and provides interpersonal support (Schwalbe & Staples, 1991). Researchers have concluded that self-esteem results from reflected appraisals in one's immediate social network such as teachers, parents, friends not on reflected appraisals in the larger society order (Rosenberg, 1979; Hughes & Demo, 1989; Rosenberg & Simons, 1979; Wade, Thomson, Tashakkori & Valente, 1989). According to the theory of personal control, the successful performance of a variety of tasks shape the sense of control (Mirowsky & Ross, 1989). For adolescents, perceived competence and success in school may be most important to beliefs about personal control.

Research has found that academic achievement is associated with a high sense of control (Finch, Shanahan, Mortimer & Ryn, 1991; Garmer & Cole, 1986; Mone, Baker & Jeffries, 1995). The sense of personal control is a learned generalized expectation that outcomes are contingent on one's choices and actions (Mirowsky & Ross, 1989; Seeman & Seeman, 1983). Perceived powerlessness (the opposite of a sense of control) is the belief that outcomes of situations are determined by forces external to oneself such as powerful others, luck, fate or chance and that one has little control over meaningful events and circumstances in one's life. As such, powerlessness is the cognitive awareness of a discrepancy between one's goals and the means to achieve them. The external force in this case is the hearing society which underscores the abilities of those with hearing impairments. This stems from the societal or cultural beliefs associated with the causes of disabilities as bad omen or curse, witchcraft or punishment from God.

Perceived control is the cognitive awareness of a link between efforts and outcomes. Thus perceived control and powerlessness represent two ends of a continuum with the belief that one can shape conditions and events in one's life on one end and the belief that one's actions cannot influence events and circumstances on the other (Mirowsky & Ross, 1989). The sense of personal control appears in the literature under a number of different names notably mastery (Pearlin, Menaghan, Lieberman & Mullan, 1981), the sense of personal efficacy or self-efficacy (Bandura, 1986; Downey & Moen, 1987), personal autonomy (Seeman & Seeman, 1983) and instrumentalism (Wheaton, 1980). At the other end of the continuum fatalism (Wheaton, 1980), perceived helplessness (Elder & Liker, 1982) and perceived powerlessness or helplessness (Seeman & Seeman, 1983).

Continued experience of failure in the face of effort leads to a sense of powerlessness and helplessness characterized by passivity and giving up (Wheaton, 1980) whereas continued experience of success leads to a sense of personal control, characterized by instrumentalism and an active approach to life. Thus, through accumulated experiences of success or failure, a person learns that his or her own behaviour can or cannot produce desirable outcomes. Girls with hearing impairments often fall victims of this kind of assumption once they experience difficulties and as such become passive in their educational pursuit.

Adolescents with hearing impairments whose parents have low levels of education and are economically poor may experience failure disproportionately compared with those of more advantaged parents. Parents who are well-educated and well-to-do may help their children develop skills and habits that make the children more effective at schoolwork which indirectly increases the children's sense of control (Mirowsky & Ross 1989). These scholars reveal that well-educated parents with high incomes may also raise adolescents' perceptions of control directly because they value self-reliance, personal responsibility and personal development in children and may encourage and reward independence. Mirowsky and Ross (1989) also note that people who feel in control of their lives are more likely to attempt to solve problems; those who feel powerless are more likely to try to forget about problems and hope they will go away.

According to Mirowsky and Ross (1989) people with little perceived control over their lives have a reactive, passive orientation whereas those with high control have a proactive

outlook. Instrumental persons are likely to accumulate resources and to develop skills and habits that prevent avoidable problems and reduce the impact of unavoidable problems. Thus overtime, they improve their positions even more producing a self-amplifying reciprocal effect between achievements and perceived control.

Lewis, Ross and Mirowsky (1999) found that the sense of personal control decreased the odds of dropping out of school by reducing non-marital pregnancy while Dunifon and Duncan (1998) found that the sense of personal control among young adults was associated with high earnings 15-25 years later. In theory, the sense of personal control affects subsequent success in school. Lin, Kaplan and Risser (1992) found reciprocal relationship between academic achievement and self-esteem among students in grades 7-12, that is students who score high on general self-esteem achieve high grades and high grades in turn are associated with high levels of general self-esteem which serves as a motivator. In fact, high self-esteem motivates one to set higher goals in academic undertakings.

Osbourne (1995) states that everyone's self-esteem is influenced by a number of factors. Parents, teachers, co-workers, friends, fellow classmates, and the environment are constantly influencing self-esteem. Self-esteem is the product of two internal assessments or judgments, the global judgment and one's self-worth. The key to self-esteem is that the amount of discrepancy between what a person desires and what that person believes he/she has achieved and the overall sense of support that person receives from people around him/her gives the strengths to operate on. For instance, having one's academic

achievement meet one's academic expectations and desires are major keys to most college students' evaluation on self-esteem. Having a high self-esteem has many positive effects and benefits, especially among college students. Students who feel positive about themselves have fewer sleepless nights, succumb less easily to pressures of conformity by peers, are less likely to use drugs and alcohol, are more persistent at difficult tasks, are happier and more sociable, and most pertinent to this study is that they tend to perform better academically (Osbourne, 1995).

On the other hand, college students with low self-esteem tend to be unhappy, less sociable, more likely to use drugs and alcohol, and are more vulnerable to depression, which are all correlated with lower academic achievement (Wiggins, 1994) in Ross and Broh (2000). Wiest (1998) in Sirin and Jaskson (2001) posit that academic achievement is influenced by perceived competence, locus of control, autonomy, and motivation. If a student perceives himself/herself positively, he/she sets higher goals and becomes motivated to succeed academically. However, past research has shown that self-esteem and academic achievement correlate directly to a moderate degree (Wiggins, 1994) in Ross and Broh (2000). He asserts that Honors students tend to demonstrate higher academic self-esteem and competency. For them, this academic self-esteem seems to become a motivational factor that enables them to engage in meaningful academic pursuits (Wiggins, 1994) in Ross and Broh (2000). For many college students, their self-esteem is based or enforced by their academic success or achievements, which make them set higher goals and focus on thorough participation as illustrated in the empirical studies that follow.

2.2 REVIEW OF EMPIRICAL STUDIES ON SELF-ESTEEM

Yee, Watkins and Crawford (1997) conducted a study on self-esteem and hearing impairments of secondary school students in Hong Kong. The purpose of the study was to compare the self-esteem of forty-five moderately severe hearing impaired students and three hundred normal hearing secondary school students in Hong Kong. The researchers used the Self-Description Questionnaire, SDQ (Marsh, 1986). The possibility of gender differences in this study was also examined. The analysis indicated that the hearing impaired group particularly the males, tended to report higher self-esteem in a number of dimensions of the self such as self-worth, capability of performing acts, taking responsibilities but not the females. The findings of this study show that the self-esteem of females with hearing impairments is not as high as for males with hearing impairments.

Woolfe and Smith (2001) carried out a study on self-esteem and cohesion to family members of deaf children in relation to the hearing status of their parents and siblings in United States of America. The purpose of the study was to examine whether for deaf children, the hearing status of both parents would have an effect on the self-esteem ratings and perceived cohesion with family members. Forty-five deaf children (with deaf parents/deaf siblings; deaf parents/hearing siblings; hearing parents/deaf siblings and hearing parents/hearing siblings) participated. The researchers used a two-way participants design. For self-esteem, the Battle Self-Esteem Inventory (BSEI) was used which has two components, general and social with thirty items while for family cohesion, the Family Systems Test (FAST) was used. The findings revealed that deaf

children with deaf parents had higher self-esteem than those with hearing parents. This study is closely related to the current study because it gives the insight of other factors that may have significant influence on the study (parental hearing status).

Desselle (1992) in her study for doctoral dissertation, *Navigating two cultures: Deaf children, self-esteem and parent's communication patterns* sought to determine the effect that parents' communication methods had on the self-esteem of their deaf children. At a southern residential school in United States, deaf students ranging in age from thirteen to nineteen were administered the Modified Self-Esteem Inventory (MSEI) and the Subject Communication Questionnaire (SCQ). The result showed that a relationship existed between the parents' communication methods and the deaf adolescents' self-esteem. Parents who used total communication (speech, finger spelling and sign language) had adolescents whose self-esteem scores were higher than parents who used speech (oral only) communication. Similarly, parents whose sign language skills were more proficient had children whose self-esteem scores were higher than those of parents who were less skilled in sign language. The study had similarities with the current study because girls with hearing impairments who were studied all had communication as a barrier to their social interaction especially if parents were hearing and being the caregivers could affect their self-esteem during the upbringing process. However, parental communication was considered as an external variable while the focus of the study was on internal variable, the self-esteem.

Robinson-Awana, Kehle and Jensen (1986) in Ardail (2005) asked 7th graders to take a self-esteem inventory, both as themselves and as someone of the opposite sex. They found that both boys and girls believed that girls had lower self-esteem. Indeed the adolescent females were significantly more likely than adolescent boys to state that they were “not smart enough” or ‘not good enough’ to attain their desired careers. Similarly Rojewski (1996) reported that female adolescents were likely to aspire to lower levels occupation compared to males. Likewise Powell and Luzzo (1998) reported that males between ages fifteen and nineteen believed that they had more control over their career decision making than did females of comparable ages. Ardail (2005) claims that women lack strong expectations of their own personal efficacy in a number of occupations particularly in natural sciences, engineering and mathematics. These observations reveal that there is a gap in women’s self esteem and achievement, indeed the gap widens as a hearing impairment acts as an added disabling condition to the girls/women. The study at hand intended to find out if there was a relationship between the self-esteem and academic achievement for girls with hearing impairments that tended to hamper their academic growth/advancement.

In a study with deaf children, Schlesinger and Meadow (1972), found that deaf children whose parents were deaf rated superior in maturity, responsibility and independence than deaf children of hearing parents. The deaf children also scored significantly higher on self-image. Indeed, deaf children whose parents had higher levels of educational achievement obtained the lowest self-image scores. Schlesinger and Meadow (1972) interpreted these results to mean that the higher parental expectations when not attainable

may result in negative self-esteem. Majority of hearing parents with deaf children usually have high expectations and even go out shopping for remedies to a hearing impairment their children possess. However, the basis of psychological and social adaptation problems faced by children with hearing impairments lie in their poor oral communication skills (Kamonya, 2008). The same children also experience poor academic achievement and poor levels of success which all contribute to lowered self-esteem and thus a negative self-concept. Observations on global studies reveal variations on relationship between self-esteem and academic achievement as shown in the next section.

2.3 GLOBAL STUDIES ON RELATIONSHIP BETWEEN SELF-ESTEEM AND ACADEMIC ACHIEVEMENT

Studies on the relationship between self-esteem and academic achievement have yielded contradictory results over several decades. Though some researchers argue that academic achievement is critical to the development of a positive view of the self, research shows that African-American students with learning disabilities maintain high levels of global self-esteem despite lower levels of academic achievement (Ardail, 2005). These contradictions may be attributed to several factors such as lack of common definitions across studies for conceptualizing self-esteem, instrument variation measuring self-esteem, sampling biases, self-esteem preservation, lack of African-American student engagement within school culture and the like. Reference to students with learning disabilities was made for purposes of relating two groups of students with special needs

among whom girls with hearing impairments fall. Interestingly, no study on self-esteem and academic achievement for girls with hearing impairments has been carried out.

In Ardail's study several patterns of behaviour were observed among students with learning disabilities. They included an expectation to be less internally motivated to achieve academically, withholding effort to preserve self-esteem perceptions and an internalized belief in lack of ability as a primary reason for failure. According to Ardail (2005), interventions found to be successful in addressing lower levels of achievement were, positive teacher feedback, active parental involvement, making instructions relevant to student lives and increased choice and responsibility in learning.

The African-American students were documented as performing at lower levels of achievement than their typical peers (Van Laar & Weiner, 1998). These lower levels of achievement are considered threats to self-esteem and therefore, a threat to positive views of self. One issue researchers have explored among African-American students with learning disabilities is how these students' measure of global or overall self-esteem have maintained congruency, if not higher levels than those of white peers in the face of lower academic achievement. Among explanations posited by researchers for this departure from the idea that academic achievement is integral to positive views of the self lies in the concept of multi-dimensional or domain-specific models of self-esteem (Harter, Whitesell & Junkin, 1998; Klooomok & Cosden, 1994).

Domain-specific models of self-esteem recognize the concept as having various subcategories (examples, general intellectual ability, physical appearance, peer likeability) rather than consider it as global, monolithic entity. This conceptual framework has allowed researchers to suggest that individuals attach greater levels of importance to various subcategories of self-esteem (Harter, Whitesell & Junkin, 1998; Kloomok & Cosden, 1994). For instance, if a student considers his/her ability to be low in the particular area of academic functioning (low self-esteem in the domain of academic self-concept), less importance may be attached to academic success in order to preserve overall or global self-esteem. So, such a student may focus on or put more emphasis on other behaviours that conform with his/her interests such as engagement in socialization, good-grooming to mention a few.

Erikson (1990) (as cited in Osbourne, 1995) has specifically indicated that achievement in school is an integral factor in creating and maintaining a positive, healthy view of the self. In addition, because most schools attach a high value to academic success, it often becomes a primary measure by which students judge themselves, their esteem and their self-worth as they progress through elementary and secondary education (Lerner, 2003). Research efforts dedicated to examining the relationship between self-esteem and academic achievement have shown that low self-esteem, in particular is associated with low achievement (Harter, Whitesell & Junkin, 1998). However, findings within the intervention research have consistently shown that high self-esteem does not motivate students to achieve (Gaskin-Butler & Tucker, 1995; Holly, 1987).

Researchers have noted a paradoxical finding in that many African-American students maintained high level of global self-esteem though they did not perform at high academic levels (Osbourne, 1995). Results from a research conducted by Mboya (1986) on Black adolescents in United States of America found that these students viewed academic achievement as “a separate activity” which did not influence their global feelings of self. The diminished influence that academic achievement played on global self-esteem served as a self-worth protection agent (Osbourne, 1995). Another area shown to have statistical significance influencing educational outcomes of African-American students was that of future educational expectations. Research in the area revealed that the expectations of obtainable future opportunities played an empirically significant role in the academic efforts of African-American students (Sirin & Jackton, 2001).

Mickelson (1990) study (in Sirin & Jackton, 2001) examining the “attitude-achievement paradox” among African-American learners reported that the lower achievement of these students was partly due to the “accurate perception that for people like them, educational efforts and credentials were not rewarded in the opportunity structure in the same way as for the whites. She based her argument on the societal view that people of colour, women, and working class individuals received less pay, fewer job opportunities and inequitable opportunities for promotions when compared to middle-class white-males. Girls with hearing impairments who participated in the study could possess similar views. Biases ranging from the fact that they were girls and had hearing impairment as compared to the hearing majority was an issue of concern and so upward mobility and job acquisition was competitively high.

Mickelson (1990) (as cited in Sirin & Jackton, 2001) made a case for two sets of attitudes towards education that influenced future expectations; abstract attitudes and concrete attitudes. In her view, abstract attitudes were those that reflected the ideology of dominant United States culture and embodied the ethic that education was a viable avenue to success and social mobility. Concrete attitude reflected material realities in which education could or could not lead to social mobility and were derived from a person's experiences in his/her family and community. Girls with hearing impairments fall within the deaf community which is a minority in Kenya. Similarly, the group stands stiff competition with the majority hearing group for social mobility as well as professional placement which is associated with academic achievement. Their future expectations are dictated by what they become after completing their educational pursuits, that is, being successful academically.

Researchers using three waves of panel data from the National Educational Longitudinal Study (NELS) in the United States of America examined the effects of academic achievement in the 8th grade, on the sense of personal control and self-esteem in the 10th grade and the subsequent effects of personal control and academic achievement in the 12th grade (Ross & Broh, 2000). They present the evidence that the sense of personal control affects subsequent academic achievement and parental support increases self-esteem and the sense of personal control. The authors found evidence that achievement had a larger effect on personal control among adolescents who feel that their efforts shape outcomes and that their successes and failures are a consequence of their own actions.

Personal control and self-esteem are highly correlated but may have different consequences for academic achievement. Some scholars believe that self-esteem improves academic achievement and some programmes aimed at helping adolescents succeed in school focus on boosting the self-esteem (Covington, 1989). He states that in the self-esteem model, adolescents who feel good about themselves do better in school than those who have low self-worth. Similarly, the proponents of this model contend that positive self-esteem leads to academic success. There is strong theoretical reason to think that academic success is more likely of worth as presented by these scholars.

Bray (1996) in Ardail (2005) carried out a study on the influence of academic achievement on a college student's self-esteem. He observed that self-esteem is how people feel about themselves and how much they like themselves, especially socially and academically when it comes to college students. He further observed that through the many pressures and daunting responsibilities of being a student, one learns and understands the importance of having a high self-esteem in college. The original purpose of his study was to see if academic achievement had more of an effect on a college student's self-esteem if that student was an Honors student versus a general student. Participants took the Rosenberg Self-Esteem Scale before and after a scheduled psychology examination. Data were collected from 64 college students in Intermediate Psychology course at Missouri Western State College, which was a college of about 5,000 undergraduate students. All participants were treated in accordance with the "Ethical Principles of Psychologists and Code of Conduct" (American Psychological

Association, 2001). Data were analyzed by a 2 X 2 mixed design factorial ANOVA, which compared the test scores of the Rosenberg Self-Esteem Scale. Conclusion arrived at was that academic achievement had an effect on self-esteem of college students meaning that when self-esteem is high, there is a likelihood of higher academic achievement.

Byrne (1990) carried out a study in Canada on 929 students of Ontario high school. Using Rosenberg self-esteem scale, the study explored the relationship of this scale with the measures of academic self-concept across sex groupings. The findings revealed that Rosenberg self-esteem scale had adequate internal reliability and a test-retest correlation of 0.67.

A number of studies have also been carried out in Africa to investigate relationship between self-esteem, academic achievement, socio-economic status among others, which have some relevance with the present study. Maqsud (1983) carried out a study on relationship of locus of control to self-esteem, academic achievement and prediction of performance among Nigerian secondary school students. The findings revealed that:

- a) Socio-economic background, locus of control, intelligence and self-esteem positively affected academic achievement.
- b) Internal locus of control was positively correlated with intelligence, self-esteem and academic achievement.
- c) Internals (on locus of control) predicted their own academic performance more accurately than externals.

In another study, Maqsud (1991) studied the relationships between socio-economic status, self-concept and academic achievement of Batswana adolescents. Relationships between locus of control, self-concept and academic achievement were explored in secondary school students in the Mmabatho area of Bophuthalswana (Southern Africa).

The analyses of data revealed the following:

- a) Both male and female adolescents were found significantly more externally oriented when compared against the normative data provided by Norwicki-Strickland.
- b) Socio-economic status was significantly positively associated with self-concept and academic achievement in English.
- c) Externality was significantly negatively related to self-concept and achievement in English.
- d) Self-concept was significantly positively correlated to measures of achievement in English and Mathematics.
- e) Mathematics achievement of male students was significantly higher than female ones.

The above-cited studies are similar to the present study in the sense that they sought to establish the relationships that existed between self-esteem, locus of control and academic achievement plus other related factors. However, the difference comes in from the fact that these studies focused on regular students who did not have any disability. My study aimed at investigating specifically girls with hearing impairments in secondary

schools in Kenya to determine the relationship between self-esteem and academic achievement of these girls. Review of studies in Kenya on self-esteem and academic achievement provide further revelation on the subject.

2.4 STUDIES IN KENYA ON SELF-ESTEEM AND ACADEMIC

ACHIEVEMENT

A few studies have been carried out in Kenya to investigate the relationship between self-concept and academic performance. Oliwa (1998) carried out a study to investigate the relationship between achievement motivation, locus of control, and academic performance of class eight pupils in Bondo District. The study sample comprised 172 girls and 190 boys totaling to 362 pupils. The problem of her study was to consider whether locus of control variable would improve the predictability of achievement motivation in relation to academic achievement.

The study aimed at finding out the relationship between pupils' need for achievement and their locus of control orientation. Two principal questions were raised:

1. What is the relationship between locus of control and students' academic performance?
2. Are there gender differences in students' achievement motivation?

To find out the relationship between her variables, she used a correlation design, which attempted to investigate possible relationships among variables without intervention. She used the locus of control instrument referred to as the Internal-External scale (The I-E

scale) constructed by Norwicki and Strickland (1973), Thematic Apperception Test (TAT) as achievement motivation instrument and standardized end-term scores for class seven as a measure for academic performance instrument.

Her findings revealed that there was no significant relationship between locus of control and academic performance because low achievement motivation and external locus of control were negatively related to students' academic performance. It also revealed that there was no significant difference between mean score of boys and girls in achievement motivation. Oliwa's study was related to my study in such a way that it tested the locus of control and achievement motivation on academic performance while my study sought to find the relationship between self-esteem and academic achievement. However, the two studies differed in the sense that the respondents of the former were hearing students while the respondents in my study were girls with hearing impairments among whom other factors related to disability could have greater influence on the results for instance, communication barriers. It was interesting to explore the extent to which Oliwa's findings using hearing students as subjects corroborated with my study using students with hearing impairments as subjects.

Mwathi (1998) conducted a study on the relationship between self-concept and educational aspiration of disabled persons. The study sample comprised students from special secondary schools in Kenya catering for the blind, the deaf and the physically handicapped, totaling to 120 respondents. The purpose of the study was to investigate the

role played by the self-concept of disabled persons in influencing their levels of educational aspirations. Two principal questions asked were:

1. Is there significant correlation between the self-concept and educational aspiration of disabled persons?
2. Is there a significant difference in educational aspiration scores across gender?

The researcher used a correlation design that attempted to find the relationship, which could exist between variables. She used the modified Semantic Differential Scale (SDS) for assessing the self-concept of the subjects. The findings of the study revealed that there was a significant positive correlation between self-concept and educational aspiration of persons with disabilities. Significant differences were also found in both self-concept and aspirations across gender and disability type. For instance, boys with disabilities had higher self-concept mean score than girls with disabilities. The study also generally revealed that persons with disabilities had negative self-concept and low aspirations.

My study differed with Mwathi's study just reviewed. Unlike Mwathi's study, it focused on disability, which was the hearing impairments and specifically on gender (girls). It intended to find out ways in which girls with hearing impairments could be supported to develop positive self-esteem and consequently acquire higher academic aspirations.

Murugami (2002) conducted a study to investigate effects of locus of control on self-concept among learners with special needs. Working with a sample drawn from Central Province of Kenya, her sample population comprised of 162 learners with special needs. One of the of the major problem in her study was that the potential of learners with

special needs was not realized due to external and internal factors which could influence their self-concept. The researcher used a correlation research design to investigate the effects of locus of control on self-concept and their relationship on academic achievement, home background, learners' aspiration and gender among learners with special needs. The principle research questions were:

1. Is there relationship between self-concept and academic achievement?
2. Is there a significant difference between male and female locus of control orientation among learners with special needs?

According to her, the correlation design allowed the researcher to find out whether two or more variables co-varied and also tried to establish the direction of any observed relationship. She also used two standardized instruments namely; I-E scale by Rotter (1966) to assess the learners' locus of control orientation and a Semantic Differential Scale for measuring self-concept.

She observed that there was no significant difference between male and female learners in their locus of control although females had higher mean score than males. She further observed that learners with special needs had internal locus of control and positive self-concept. Murugami's study was similar to my study as both tried to investigate the relationship between self-concept or self-esteem and academic achievement of persons with disability. However, it differed significantly in the way it focused across the disabilities while my study focused on hearing impairment as a specific disability and also on gender (girls).

2.5 SUMMARY

Studies reviewed in this chapter revealed several gaps that existed in relation to the current study. For instance, many studies on relationship between self-esteem and academic performance were carried out on regular students without disabilities yet girls with hearing impairments fall under hearing impairment as a category among the disabilities. Furthermore, the studies were carried out in countries other than Kenya.

Not all the reviewed studies used similar scales for measuring the study variables. Some of the studies used Semantic Differentiated Scale to measure self-concept, Internal-External Scale to measure locus of control and others scales whereas the current study used Rosenberg Self-esteem Scale. Therefore, variations in the findings were bound to occur.

The reviewed studies carried out in Kenya revealed relationships between self-esteem/self-concept, locus of control and academic achievement of different populations, for example, class eight learners in regular schools, persons with disabilities in general and none dealt on girls with hearing impairments. Findings of these studies revealed that: persons with disabilities had negative self-concept and low educational aspiration; low achievement and external locus of control were negatively related but fell short of exhibiting the relationship that occurred between self-esteem and academic achievement. Other trends noted in the reviewed studies were that, self-esteem of females with impairments was not as high as for the males with similar impairments. In addition,

persons with hearing impairments who had parents with hearing impairments too, had high self-esteem yet the actual self-evaluation lacked in all those studies.

Generally, the current study focused on academic achievement of girls with hearing impairments only. It was hoped that the findings would serve a major role in helping parents, teachers, counselors and any other interested stakeholder/party in the education of girls, to give appropriate guidance to girls with hearing impairments and possibly encourage them to aspire for higher achievements in the society in which academic achievement is key and either develop or maintain high self-esteem. The methodology for conducting the study was highlighted in the next chapter.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

In this chapter, a description of the research design and reasons for its choice in the investigation of the research problem was given. This was followed by the identification of the population sampling procedures that were used. Data collection procedures, the instruments, the pilot study, validity, reliability and data analysis were also presented. Issues pertaining to ethics were presented at the end of the chapter.

3.2 RESEARCH DESIGN

The study used a quantitative approach and a correlational design. The decision to use this design was due to the fact that a correlational design enabled the researcher to discover the relationship between variables through the use of correlational statistics (Gall, Borg & Gall 1996; Orodho, 2005). Fraenkel and Wallen (2000) note that in a correlational research, relationships among two or more variables are studied without any attempt to influence them. They contend that a major purpose of correlational research is to clarify our understanding of important phenomena through the identification of relationships among variables. The study investigated the relationships that occurred between self-esteem and academic achievement.

3.3 VARIABLES

A variable is a concept that stands for a variation within a class or group of objects, for example, gender, motivation or achievement (Fraenkel & Wallen, 2000). In this study,

the examined variables were self-esteem, which was the independent variable and academic achievement, the dependent variable. Self-esteem variable was reflected as positive/high or negative/low. These dimensions were arrived at through responses which covered strongly agree, agree, disagree and strongly disagree. These responses were measured using Likert scale. The academic achievement were measured using past examination grade scores indicated as **A** 70-100 marks, **B** 60-69, **C** 50-59, **D** 40-49 and **E** 0-39. These marks were grouped to indicate high or good grades (A and B), Average grade (C) and low or poor grades (D and E). Self-esteem, which was the independent variable was measured using a Likert scale. Finally, the relationship between these variables was measured using Pearson's Product Moment Correlation indicated by the symbol r .

3.4 STUDY LOCALE

Having the scarcity of secondary schools for persons with hearing impairments in Kenya, the researcher decided to conduct the study in two secondary schools out of three that were available. The third school was not chosen because the numbers of girls with hearing impairments who took academic curriculum were quite few to constitute a required sample of between six and twelve. The schools were situated in two provinces of the country namely Western Province and Central Province. The choice of the regions was due to:

- The accessibility of the schools to be studied.
- The availability of girls with hearing impairments at secondary level following only an academic curriculum.

Other schools practiced integration or worked on technical and vocational programmes. The first school was Reverent Muhoro secondary school, which is a mixed secondary school for students with hearing impairments. It was situated in Central Province of Kenya. It was established in 1988 and admitted only ten boys with hearing impairments at that time. To qualify for admission was on the strengths of a student having sat for Kenya Certificate of Primary Education (KCPE). No matter what grade one had attained in KCPE, the presence of a hearing impairment was the determining criterion. It happened so because there was need to offer opportunity to the boys with hearing impairments to pursue secondary education. Concerns for admission of girls with hearing impairments eventually arose and by 1992, the first group of girls with hearing impairments was admitted alongside the hearing students.

In 2007, a second stream of hearing students was created. At the time data were collected, there were three streams in the school, two were for hearing students and one stream was for students with hearing impairments. The school had a total population of 240 students. Girls in the school comprised about 40% of the total number of students. All girls and boys with hearing impairments were boarders. The school had a team of teaching staff employed by Teachers Service Commission (TSC) and two others employed by the Board of Governors (BoG). In total, there were twenty teachers. Half of these teachers had knowledge and skills in communicating with students with hearing impairments but the rest learnt on the job. The school received donor support from organizations such as Seaford and Sevens of United Kingdom (UK) whereas Presbyterian Church of East Africa (PCEA) sponsored the school in terms of supplying hearing aids to students. The

school was equipped with a makeshift laboratory, an audiometry room but not furnished with appropriate equipment and a home science room, which, was also not well equipped. However, the school organized an outreach programme, which enabled students to interact with community members in activities like clean-up, church meetings and youth organizations.

The second school was St. Angela Mumias secondary school for the deaf girls situated in Western Province of Kenya. It was a girls' secondary boarding school. It was established in 1970 by Ursuline Sisters of Holland who followed the rule of St. Angela. Their main mission was to help poor and disadvantaged girls. They were particularly interested in girls with hearing impairments to receive education. They started St. Martins Primary school for the Deaf. With only three girls at primary school, the sisters thought it wise to involve the girls in sewing, stitching and handcraft using papyrus reeds. By 1976, there was need to graduate the girls and move them to secondary section. At that point, they were five in number as pioneers in a secondary school. To date the school has expanded and has a population of 189 girls with hearing impairments. The school coined a "motto" "Education for self-reliance" with a mission to provide education for totality in life for girls with hearing impairments. Girls in the school were all boarders and came from all over Kenya and other countries like Uganda, Tanzania, Somali, Sudan and Mozambique.

3.5 TARGET POPULATION

Target population comprised all girls with hearing impairments in secondary schools for students with hearing impairments in Kenya. A total population of about 300 girls with

hearing impairments in secondary schools was targeted however only about 132 girls from those schools were found to be covering the academic curriculum. The rest were provided with technical and vocational curriculum.

3.6 RATIONALE FOR SAMPLE SELECTION

The two schools were purposively sampled since they were the only secondary schools for girls with hearing impairments that provided an academic secondary school curriculum in Kenya and had adequate number of girls taking academic curriculum. The other girls' secondary schools, which had students with hearing impairments provided an integrated curriculum or technical and vocational training. These were Kambui in Central Province, Nyang'oma and Kuja in Nyanza Province. Although Kuja secondary school provided an academic curriculum to all students, the number of girls who registered for academic curriculum ranged between three to five per class, yet the expected sample was to be between eight to twelve. Therefore Kuja did not qualify to be sampled. Majority of girls with hearing impairments in the school opted for the vocational and technical courses. Karen Technical College in Nairobi Province only provided technical and vocational training. The two principals of the sampled schools were as well purposively sampled since they were the administrators who would provide necessary rich information for the study.

In every school, simple random sampling technique was used to sample girls from forms two, three and four. Unfortunately, the number of girls in every class was not adequate for this technique. Therefore, all girls in every class participated in the study but still they

were not the expected number. For instance, St. Angela Mumias secondary school, the expected number for participants was 32 yet only 30 girls were found who were doing the academic curriculum. Others were taking vocational courses. So the technique was not applicable as it could not work. At Reverend Muhoro secondary school, it was also not possible to find eight girls per class in forms two, three and four as expected. A sample of 23 girls with hearing impairments from Reverend Muhoro and 30 girls with hearing impairments from St. Angela secondary schools participated in the study. In total, a sample of 53 girls with hearing impairments participated in the study constituting a 40% out of the total population of 140 girls with hearing impairments as shown (Table 3.1). It was hoped that the selected sample from the two schools could provide adequate data for the study. The study only focused on relationship between self-esteem and academic achievement of girls with hearing impairments.

Table 3.1: Target population and study sample

School	Number of girls	Sample selected	Percentage
Reverend Muhoro Secondary School	60	23	40%
St. Angela Mumias Secondary School	72	30	40%
Total	132	53	40%

3.7 RESEARCH INSTRUMENTS

The research instruments for the study were three types of questionnaires with an additional complementary interview. One questionnaire was an adaptation from Rosenberg's self-esteem scale to suit the situation on the ground that is, girls with hearing impairments in Kenya. Rosenberg's scale has been used in the United States of America and on different culture hence the need to adapt it. The scale had also been used on

regular students without any disabilities. This data-collection instrument typically inquired about the feelings, motivations, attitudes, accomplishments and experiences of individuals (Gall, Borg and Gall, 1996). The other two questionnaires were self-made. One sought for demographic information from the respondents and the other sought for other school attributes from school principals. Such information was quite important since it enabled the researcher to understand various factors that were personal, such as, aspirations for higher learning and pedagogical attributes like learning resources/methods that were being used if they had an effect on the subject coverage. Examination grades for the last four terms for each participating girl were recorded and analyzed. Grade range was as follows: **E** 0-39 (Very poor), **D** 40-49 (Poor), **C** 50-59 (Average), **B** 60-69 (Good) and **A** 70-100 (Very good).

3.8 CONDUCTING THE PILOT STUDY

It was important to conduct a pilot study before embarking on the main study. Robson (1993) argues that piloting provides opportunity for the researcher to test his/her confidence in identifying difficulties and obstacles that could affect the actual collection of useful data. In summary, the pilot study helped to evaluate the effectiveness and validity of the instruments. The pilot study was conducted in Kambui Secondary School, which had an integrated programme for girls with hearing impairments. Kambui is located in Central Province of Kenya. The school served as a secondary school with an academic programme and also had a technical and vocational section.

It was hoped that simple random sampling technique would be applied to sample the girls but unfortunately, the number of girls was quite small. A sample of six girls with hearing impairments who were the only ones integrated in Kambui secondary school participated in the pilot study. The six girls were explained the purpose of the study and then requested to participate. They were provided with questionnaires to fill. With the assistance of one of their class teachers, they filled the questionnaires. The researcher analyzed the data collected with the help of the supervisors. The findings from Kambui School helped to guide the researcher to adjust the instruments where possible. The piloted school was not used in the main study.

3.8.1 Validity

Validity is the ability of the instrument to measure what it is supposed to measure. Orodho (2005) describes validity as the degree to which empirical measure or several measures of a concept, accurately measure the concept. For purposes of this study, a panel of two judges competent in the area being investigated was requested to assess the relevance of the content used in the adapted questionnaire as well as the self-made questionnaires. They examined the questionnaires individually, and provided feedback to the researcher. Amendments were made on the format of the questionnaires and the content in general. Their recommendations were incorporated in the final questionnaires so as to enable collection of data that were valid for analysis.

3.8.2 Reliability

Reliability refers to the ability of an instrument to produce consistent results (Gall et al., 1996). Orodho (2005), on the other hand, states that reliability of a measurement concerns the degree to which a particular measuring procedure gives similar results over a number of repeated trials. For the purpose of this study, reliability of the instruments was established through the use of test-retest. The procedure for conducting the test-retest was as follows:

- (i) The developed questionnaires were given to six identical subjects (girls with hearing impairments who were not included in the study).
- (ii) The answered questionnaires were scored manually.
- (iii) The same questions were administered to the same group of subjects after a period of two weeks
- (iv) The questionnaire responses were scored manually.
- (v) A comparison between answers obtained in number 2 and 4 above was made.

A Pearson's product moment formula for the test-retest was employed to compute the correlation coefficient in order to establish the extent to which the contents of the questionnaire were consistent in eliciting the same responses every time the instrument was administered. A correlation coefficient of 0.8 was achieved and that was enough evidence to judge the instruments as reliable for the study.

3.9 DATA COLLECTION TECHNIQUES

Data for the study was collected by the researcher with the assistance of class teachers. The researcher made visits to the schools as a familiarization exercise and was also able to introduce the purpose and nature of the study to the concerned authorities. The visits helped the researcher to understand well the schools' schedules. The researcher then made appropriate appointments with the school administrators to fix the most appropriate times for the administration of the questionnaires. Finally, the researcher administered the questionnaires and also carried out observations of school academic records for the same participants involved in the study.

3.10 DATA ANALYSIS

The data for this study were computer analyzed using the Statistical Package for Social Sciences (SPSS) programme. The descriptive statistics, that is, frequency distributions and percentages were used to describe and summarize the data in reference to demographic variables such as age, gender, education level, among others. The statistical hypothesis was tested using Pearson's product moment correlation. Qualitative data collected from the two principals through complementary interviews were presented descriptively and analyzed appropriately.

3.11 LOGICAL, HUMAN RELATIONS AND ETHICAL CONSIDERATIONS

Logistical considerations are paramount in any type of research. The researcher applied for authority to carry out the research from the Government of Kenya, Ministry of Education, Science and Technology through consultation with the School of Post-

Graduate Studies, Kenyatta University. After obtaining the permit, the researcher proceeded to the schools to familiarize herself with school administrators and inform them of the intentions to carry out a study in the respective secondary schools for students with hearing impairments.

As a human relation consideration, the researcher created rapport with teachers in the schools who later assisted in the administration of the instruments. Finally, as an ethical consideration, verbal requests were made to the respondents through their teachers and an assurance of confidentiality was spelt out. The researcher also ensured that the respondents were well informed of the intended reasons for the study. She again assured them about sharing of the findings with them after completion of the study.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.1 INTRODUCTION

The purpose of this study was to establish the relationship between self-esteem and academic achievement for girls with hearing impairments in secondary schools in Kenya. The study was conducted in two secondary schools for girls with hearing impairments that offer academic curriculum. This chapter focuses on the presentation, analysis and discussion of data obtained from the field. The data derived from the instruments were summarized in the form of frequency tables, graphs, charts and percentages.

The presentation was organized in four main sections. The first section presents a description of the demographic variables. In the second section, self-esteem ratings and discussions are presented, while academic scores are presented followed by analysis of the hypothesis in the third section. In each case, statements of the findings follow. The findings on the nature of social relationships among girls with hearing impairments and the findings on pedagogical and structural attributes are discussed in the fourth section.

SECTION ONE

4.2 DESCRIPTION AND CHARACTERISTICS OF INFORMANTS

The information regarding students' demographic data is summarized as follows:

4.2.1 Age of respondents

These data aimed at finding out about the age of respondents. They were organized in four categories and students were to tick the appropriate age bracket ranging from 14-16, 17-19, 20-22 and 23 and above. The responses are shown in the chart below.

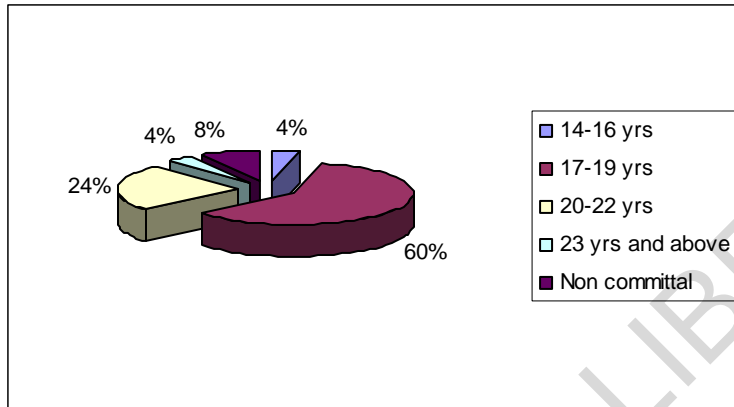


Figure 4.1: Age of respondents in years

A total of 53 girls participated in the study. The majority of the respondents (60%), were aged between 17-19 years, 24% were between 20-22 years. Those who were 14-16 years of age and above 23 years were 4% each. Eight percent were non-committal on revealing their age. The findings revealed that approximately 30% of girls with hearing impairments in secondary schools were actually above secondary school age for hearing students which was usually between 15-18 years. At age 20-23, most hearing girls would be at university level. This finding also revealed that learning of girls with hearing impairments was delayed.

4.2.2 Type of School and School Status

Two secondary schools for students with hearing impairments participated in the study. It was established that 55% of the respondents came from St. Angela Mumias secondary school, which was a boarding school for the girls, while 45% were from Reverend Muhoro secondary school which was a mixed secondary school. This has been summarized in Table 4.1:

Table 4.1: Status and type of school

Type of school	Frequency	Percentage
Girls boarding secondary	30	55
Mixed secondary (Day and boarding)	23	45
Total	53	100

The question on school status was to determine whether the school was boarding or day. It was found that the two secondary schools offered boarding facilities to the students with hearing impairments. However, one school was open for both boarders and day scholars on condition that all girls with hearing impairments were boarders. The finding showed that majority of girls with hearing impairments attended girls secondary school, which was also a boarding school. As a normal trend in most government schools in Kenya, majority of girls at secondary schools attended girls' schools as compared to the minority who attended mixed schools. Among those girls who attended the mixed secondary school that was both day and boarding, all girls with hearing impairments were given priority as boarders. The principal in a mixed secondary school commented, "Girls with hearing impairments will be at risk if we allowed them to be day scholars due to their vulnerability." The comment meant that those girls needed care and protection

based on their impairments. The institution administrators had the obligation to ensure that girls with hearing impairments were safe and secure and so could not allow them to commute.

The current trend in education puts a lot of emphasis on inclusive education. It was a great gesture to find that one school had embraced the practice of inclusion and practically integrated students with hearing impairments with the hearing. Inclusive practice helps students to interact, share ideas and learn from one another as peers irrespective of gender or disability. Lynas (1986) studied the effect of deafness on social grouping and relationships. He concluded that children with hearing impairments formed less adequate social relationships as compared to the hearing. The finding of the current study revealed that it was of great value to strengthen inclusive settings as that promoted adequate social relationships among students of all nature.

4.2.3 Highest Level of Education Expected to Achieve

The higher level of education that one acquires, the better placed one becomes in terms of securing employment or generally making a difference in one's life as concerns cognitive, social and economical wellbeing. Education functions as a variable that transforms peoples' lives and empowers them to make social and economical changes. The researcher sought to find out the highest level of education that girls with hearing impairments expected to achieve in life. Figure 4.2 shows the summary of the distribution of respondents by expectations on highest level of education.

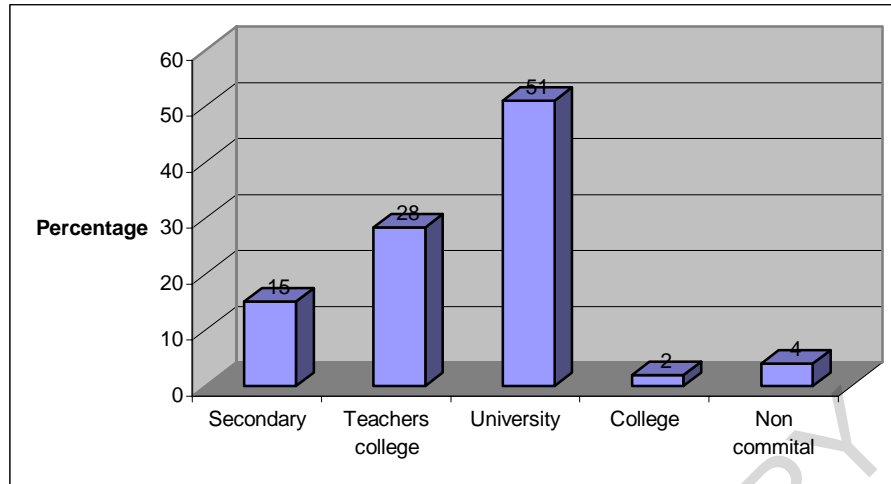


Figure 4.2: Distribution of respondents by expectations on highest level of education

The study established that 51% of the students wished to attain university education and 28% wished to train in teacher colleges. Those who wanted to finish secondary education as their highest level and perhaps engage in other involvements other than furthering their education were 15%. Four percent gave no response and 2% stated other colleges without specifying them. The findings revealed that girls with hearing impairments despite their handicap, aspired to achieve higher levels of education at university.

4.2.4 Respondents' Aspired Occupation

On career choice, respondents were asked to state their aspired occupation, especially after noting their aspired highest level of education. Their responses were summarized in Figure 4.3. Majority of respondents aspired to be in the teaching profession (60%). This was followed by doctor and hair dressing occupations, which were proposed by 8% of the respondents in each case. Perhaps the highest percentage that preferred teaching occurred due to role modeling from their teachers.

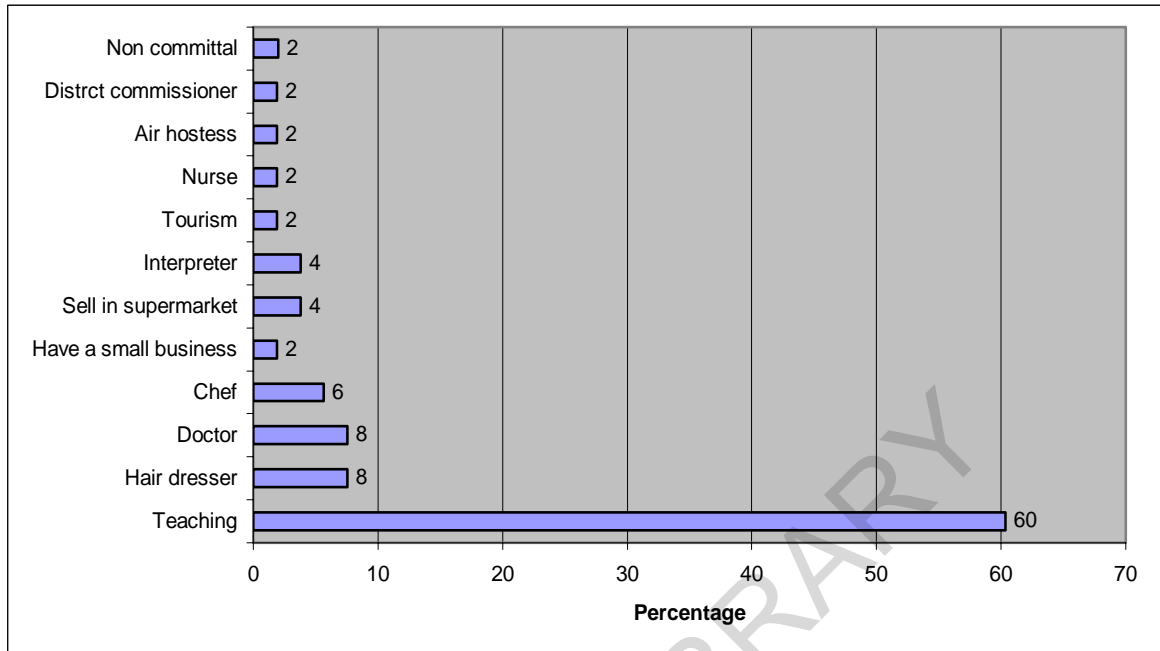


Figure 4.3: Distribution of respondents across their aspired occupations

It was observed that teachers in schools for students with hearing impairments took great initiatives in guiding and protecting girls as well as making intensive follow-up to ensure that girls were happy and satisfied at school. Other professions mentioned included being a chef/cateress, running small-scale businesses, being sign language interpreters, air-hostesses and district administrators.

SECTION TWO

4.3 SELF-ESTEEM RATINGS

This section presents self-esteem scores as rated by girls with hearing impairments on adapted Rosenberg Self-Esteem scale and then the analysis of statistical hypothesis followed by discussions for each area. To determine the relationship between self-esteem and academic achievement, the researcher sought to answer the research question: “What

is the relationship between self-esteem level and academic achievement score of girls with hearing impairments?”

4.3.1 Scores on Self-esteem Scale

Respondents from the two secondary schools were provided with questions on the Adapted Rosenberg self-esteem scale as shown in Figure 4.4. The self-esteem rating was conducted through the use of a four Likert scale. The respondents were asked to indicate how they strongly agreed, agreed, disagreed or strongly disagreed with statements concerning rating on their self-esteem. The responses are presented in the Figure 4.4.

The first statement sought to find out whether girls with hearing impairments felt that they had the ability to do things as well as most other people. The statement basically intended to find out the girl's self-evaluation. The results given showed that 56% of girls strongly agreed that they had the ability while 42% agreed. Only 2% disagreed with the statement. This finding corresponds with Mirowsky and Ross (1989) revelation of peoples' feelings on self-evaluation. They noted that people who feel in control of their lives are more likely to attempt to solve problems; those who feel powerless are more likely to try to forget about problems and hope that the problems will go away with time. According to Mirowsky and Ross (1989) people with little perceived control over their lives have a reactive, passive orientation whereas those with high control have a proactive outlook. Instrumental persons that is, persons who feel capable to do things are likely to accumulate resources and develop skills and habits that prevent avoidable and unavoidable problems.

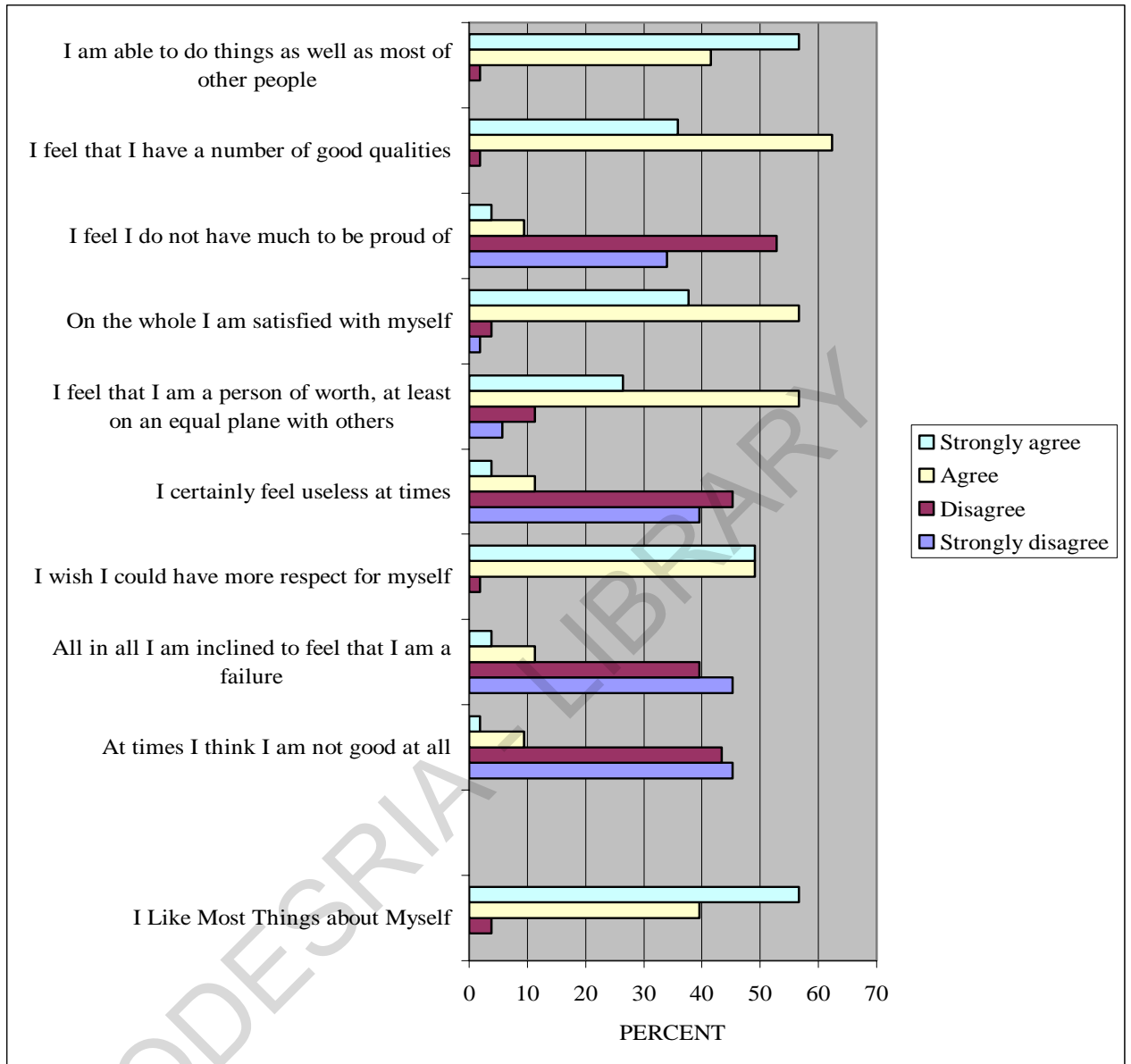


Figure 4.4 Respondents' self-evaluation on self-esteem scale

The second statement dealt with self-affirmation. It sought to establish if girls with hearing impairments felt that they had a number of good qualities. The responses showed that 62% of girls with hearing impairments agreed to possess good qualities while 35% strongly agreed. Only 3% reported that they disagreed. The finding supports Murugami (2003) who observed that learners with special needs had internal locus of control and positive self-concept. Similarly, Brown (1998) reveals that self-esteem develops at an

early age and is characterized by feelings of belonging rooted in social experiences and the feeling of mastery, which is more personal in nature. He further notes that a sense of mastery involves the perception that one has an impact on the world in his day-to-day life. Mastery is used interchangeably with competence. It is a feeling we get when we are immersed in an activity or are striving to overcome some obstacles. Mayer (1967) reveals that an individual's self-concept affects the way s/he interacts with her/his environment seemingly positive or negative depending on the feedback received.

The third statement, which tried to negate the feelings stated "I feel I do not have much to be proud of." The reactions to the statement indicated strong denial of not being proud of the self. Girls' responses demonstrated refusal to accept a desperation move but showed ability to discern, that is, to demonstrate keenness to judge and form opinion. For instance, 53% disagreed with the statement as 32% strongly disagreed. While 10% agreed, 5% strongly agreed. In essence, only 15% of girls with hearing impairments felt that they had nothing to be proud of.

The findings of the study differed with Wheaton's (1980) observation that continued experience of failure in the face of effort leads to a sense of powerlessness and helplessness characterized by passivity and giving up, whereas continued experience of success leads to a sense of personal control, characterized by instrumentalism and an active approach to life. Thus, through accumulated experiences of success or failure, a person learns that his or her own behaviour can or cannot produce desirable outcomes which results in making them not to be proud of. Majority of girls with hearing

impairments in the study demonstrated that they had a lot to be proud of despite the fact that they performed relatively lower in academics. Their feelings could be rooted in other aspects of value rather than studies. This finding supports the results from a research conducted by Mboya (1986) on Black adolescents. He found that these students viewed academic achievement as “a separate activity” which did not influence their global feelings of self. Osbourne (1995) reported that despite maintaining high level of global self-esteem, many African-American students did not perform at high academic levels. He concluded that the diminished influence that academic achievement had on global self-esteem served as a self-worth protection to such students.

The fourth statement sought responses on self-admiration. It was stated as “On the whole I am satisfied with myself.” Respondents who agreed were 56%, 37% strongly agreed that they were satisfied with themselves. A mere 3.5% either disagreed or strongly disagreed with the statement. Responses on this particular statement indicated that a total number (93%) of girls with hearing impairments expressed the need for self-value and admired to be what they were irrespective of the hearing impairments. Their responses were in conformity with the deaf culture. The deaf community is a heterogeneous group that holds on its cultural values as a people who deserve their rights and should be respected (Gregory, Knight, McCracken, Powers & Watson, 1999). However, they only differ in their mode of communication from the larger speaking society. Most girls with hearing impairments are highly influenced by this deaf culture.

The fifth statement required the participants to show appreciation on themselves. They were required to indicate how they felt that they were persons of worth at least on an equal plane just like others. The results were as follows, 57% agreed and 26% strongly agreed to the statement. However, 13% disagreed while 4% strongly disagreed. The result indicated conformity of girls with hearing impairments on their self-worth. The findings support Baumeister (1991) who reveals that people find meaning in life by attempting to satisfy four needs, which are purpose, value, efficacy and self-worth. Purpose (being purposive) involves having particular goals in form of either intrinsic fulfillments which are satisfying in themselves or extrinsic ones aimed at achieving desired goals. Girls with hearing impairments demonstrated that they had goals which they desired to achieve as any other person thus fulfilling their intrinsic needs. Value refers to the desire to justify what we do and to endow it with legitimacy. Efficacy is usually satisfied by performing particular acts or by the understanding that we feel we possess some abilities. Girls with hearing impairments who participated in the study felt that they possessed abilities to perform acts as others. The only hindrance comes in through communication differences. Yet self-worth is derived from a person's sense of confidence in what he or she does and believes in. So girls who participated in the study believed that they had self-worth and should be respected in what they value.

In the sixth statement the respondents were asked to indicate if they certainly felt useless at times. The responses showed that 49% disagreed while 37.5% strongly disagreed. Only 10% agreed as 3.5% strongly agreed. The result established that girls with hearing impairments possessed the ability to form opinions about themselves. A larger

percentage (86.5%) of the respondents denied the fact that they felt useless at times while a smaller percentage (13.5%) conceded to the statement. The majority who denied the statement demonstrated their willingness for independent thinking and right to dispense their opinion. In their opinions, the fact that they possessed a hearing impairment did not make them to be lesser persons. They expressed that they were in control of their lives and had expectations to be met. Mirowski and Ross, (1989) note that perceived control is the belief that one can shape conditions and events in one's life.

The smaller percentage (13.5%) exhibited their right for self-evaluation and assessment, which revealed their honest acceptance of inability to fulfill their dreams. The findings support Higgins (1987) in Brown (1998) who argues that people are prone to feelings of guilty and anxiety when their perceptions of who they are do not coincide with their ideas about who they think they ought to be. Perceptions of who they were as girls with hearing impairments fell short of what they expected to be, that is capable of acquiring a high level of education and securing a good job. Instead, the hearing impairments made them have the feeling of incapability and as such despaired in life, were not committed to studies and rationally engaged in other social activities at school such as grooming and vocational activities at the expense of academic work. The findings also support Schelsinger & Meadow's (1972) view that adolescent girls with hearing impairments have low aspirations as compared to their hearing counterparts.

The seventh statement gave an opportunity to make self-declaration on how the respondents wished to have more respect for them. It was revealed that indeed majority

of girls with hearing impairments wished to obtain respect. The results were as follows: those who agreed and strongly agreed had a similar score of 49%. Only 2% disagreed with the statement. That was an indication that 98% of girls wished to be respected by other people. The finding supports Brown (1998) who reports that attempts to define self-esteem have ranged from an emphasis on primitive libidinal impulses to perceptions that one is a valuable member of a meaningful universe. Similarly, the findings support Rosenberg (1979); Schooler, Schoenbach and Rosenberg (1995) who assert that self-esteem is a function of reflected appraisals of close family members and friends, parents or other close adults like teachers. They concluded that perceptions of self-worth or self-esteem resulted from social attachments to close friends and family members and the respect they offered to the individual member. Schwalbe and Staples (1991) observed that respect reflected positively on a person and provided interpersonal support. These researchers concluded that self-esteem resulted from reflected appraisals in one's immediate social network such as teachers, parents, and friends and not on reflected appraisals in the larger society order.

The eighth statement was stated as follows, "All in all I am inclined to feel that I am a failure". Responses generated from this statement established that 45.2% strongly disagreed, 39.6% disagreed, 11.8% agreed while 3.4% strongly agreed. Acceptance of being a failure is a revelation that one has lost hope in life. Girls with hearing impairments who participated in the study revealed that they did not support the statement. They possessed positive feelings about themselves and were not obliged to feelings of inferiority. The findings support Oglivie (1987) who reports that people also

think of themselves in terms of what they are afraid of becoming or do not want to become. For instance, one fears to be a failure in business or to be dependent on one's children. Oglivie (1987) refers to these images as aspects of undesired self and suggests that they play an important role in how happy and satisfied people are in their lives. He posits that the greater the psychological distance between how we think of ourselves now and what we fear becoming the happier we are in life. The potential negative self-images also serve as important motivational incentives. Such negative self-images can enable people to work hard in an attempt to avoid the negative identities.

The ninth statement was on self-assessment. It sought to find out how the respondents perceived themselves, the responses varied greatly. "At times I think I am not good at all". About 45% of the responses strongly disagreed and 44% disagreed while 9% agreed and 2% strongly agreed. A statement of this nature revealed the ordinary state that every human being operates on day-to-day basis. According to Wheaton (1980), human beings are bound to feel happy at one moment and sad at another moment, feel successful at one instance and face failure at another moment. In most instances, people feel discouraged and awkward when they face failure in whatever they strive to achieve. Wheaton (1980) observes that continued experience of failure in the face of effort leads to a sense of powerlessness and helplessness. Sometimes one would feel not good at all but at the moment one experiences success, the feelings would lead to a sense of personal control, characterized by instrumentalism and an active approach to life (Wheaton, 1980). The respondents in the current study were not exceptional but fell into such categories and nevertheless demonstrated the ordinary state of life.

Majority of the respondents (89%) disagreed while 11% of them agreed that at times they thought that they were not good at all. The findings support Mirowski and Ross, (1989) who note that perceived control and powerlessness represent two ends of a continuum with the belief that one can shape conditions and events in one's life on one end and the belief that one's actions cannot influence events and circumstances on the other end. Indeed, (Mirowsky & Ross, 1989, Seeman & Seeman, 1983) reveal that the sense of personal control is a learned generalized expectation that outcomes are contingent on one's choices and actions. Perceived powerlessness (the opposite of a sense of control) is the belief that outcomes of situations are determined by forces external to oneself such as powerful others, luck, fate or chance and that one has little control over meaningful events and circumstances in one's life. However, it is the cognitive awareness of a discrepancy between one's goals and the means to achieve them that would determine one's choice as demonstrated by the responses for this statement.

The tenth and last statement sought issues to do with self-appraisal. It stated, "I like most things about myself." Responses were as follows, 54.8% strongly agreed, 39.6% agreed, 5.6% disagreed and there was no response for strongly disagree. The findings of this statement contrasts with Yee, Watkins & Crawford (1997) who conducted a study on self-esteem and hearing impairments of secondary school students. They found that the self-esteem of females with hearing impairments was not as high as for the males with hearing impairments in a number of dimensions of the self such as self-worth, capability of performing acts and taking responsibilities. Respondents in my study reported positively about themselves in a number of instances. For example, on self-appraisal,

self-affirmation, self-admiration, self-declaration and so on, they valued themselves positively, an indication that they possess high self-esteem.

4.3.2 Descriptions of Self Esteem Scores

The frequencies of self-esteem scores were presented on a graph as shown in 4.5.

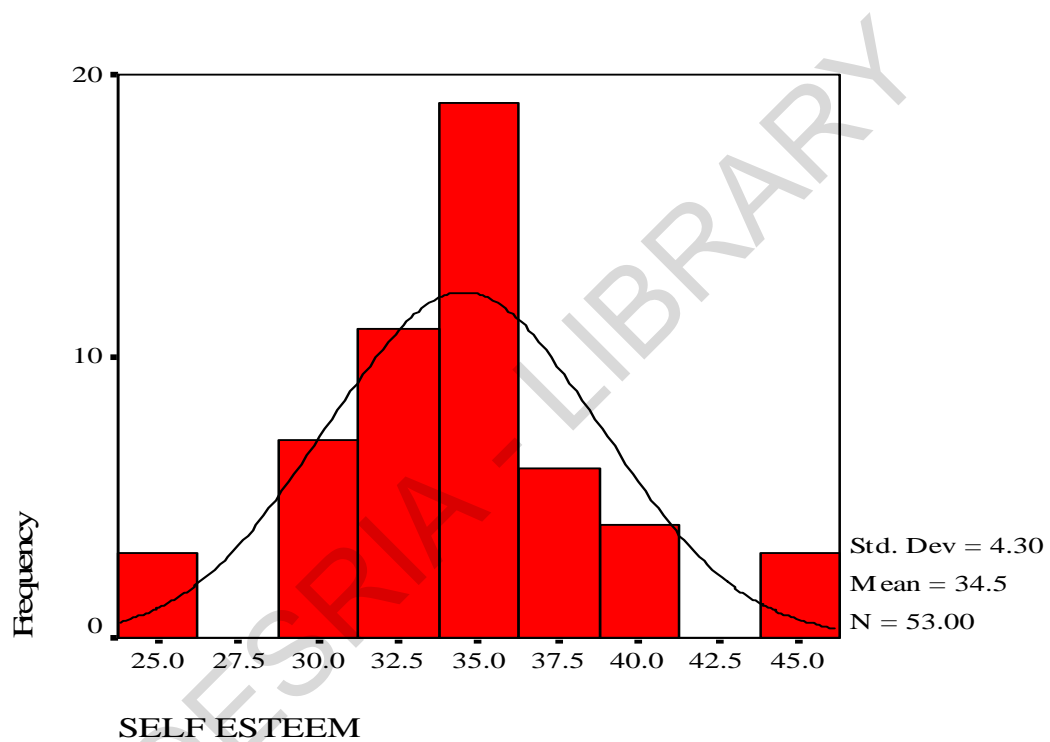


Figure 4.5: Distribution of self-esteem scores

The distribution of self-esteem scores depicted a normal curve which showed that the respondents in the study were a heterogeneous group, that is, they had variations in their rates of self-esteem, with a mean of 34.5 and a standard deviation of 4.3.

SECTION THREE

4.4 ACADEMIC ACHIEVEMENT RATINGS

Observations of the academic records are presented in this section. They feature records of performance for girls with hearing impairments per class per term for the previous four terms. The information was collected from school documents on academic results for individual students every term.

4.4.1 Students' Performance at Reverend Muhoro

Table 4.2: 'Students' Performance in Form Two, term one 2008 and in the previous three terms of 2007 while in form one

Students' Marks per term from Form One to Form Two Term One						
Student's No.	First Term	Second Term	Third Term	First Term	Average Out of 1300	%
	2007	2007	2007	2008		
1	406	0	491	480	344	26%
2	750	647	612	513	631	49%
3	377	296	300	382	339	26%
4	524	552	522	609	552	42%
5	420	394	417	516	437	34%
6	529	462	455	455	475	37%
7	763	794	789	760	777	60%
8	375	324	306	368	343	26%

Form two students in the school took a total of 13 subjects with an average pass mark of 650 marks. In the first term of 2007 while in form one, only two students (2 and 7) in Table 4.2 scored above average mark of 650. Student number 7 is the only one who consistently scored above average mark in terms two, three as well as in the first term 2008.

Form three students at Reverend Muhoro (Table 4.3) while in form two, sat for examination in 13 subjects with an average pass mark of 650 marks (terms one, two and three 2007). In the first term 2008 as form threes, they selected seven subjects out of the thirteen so as to prepare for KCSE registration once they reached form four. It was only one student (Student number 1) who scored consistently above average in all the terms. Two students (1 and 3) managed to score above average of 650 marks in term one of 2008. About 25% of all the scores were above average while 75% were below average yet that was the class that was transiting to form four, a class for candidates in the national Kenya Certificate of Secondary Education (KCSE).

Table 4.3: Students' Performance in Form Three, term one 2008 and in the previous three terms of 2007 while in Form Two

Students' Marks per Term from Form Two to Form Three Term One						
Student's No.	First Term	Second Term	Third Term	First Term	Average Out of 1300	%
	2007	2007	2007	2008		
1	806	800	798	856	815	63%
2	308	246	308	273	284	22%
3	672	643	587	685	647	50%
4	399	245	361	323	332	26%
5	265	227	204	206	226	17%
6	622	605	556	620	601	46%
7	376	306	321	345	337	26%

Table 4.4: Students' Performance in Form Four, term one 2008 and in the previous three terms of 2007 while in Form Three.

Students' Marks per Term From Form Three to Form Four Term One						
Student's No.	First Term	Second Term	Third Term	First Term	Average Out of 1300	%
	2007	2007	2007	2008		
1	168	93	113	94	217	17%
2	81	80	103	48	145	11%
3	195	149	192	119	305	23%
4	42	69	51	42	95	7%
5	167	146	189	126	292	22%
6	219	160	140	102	288	22%
7	245	213	224	145	384	30%
8	144	108	126	68	208	16%

Students in form four were prepared to complete their secondary education level as they sat the Kenya Certificate of Secondary Education examination. KCSE examination results act as the yardstick to determine candidates' transition to higher institutions of learning. Those who pass KCSE do join universities or other middle class colleges but those who fail struggle to find ways and means of survival. The findings on students' performance in form four showed that no student scored any mark that was above the average of 650 marks. The highest average mark was 384 and the lowest was 95. It was quite observable that marks scored during the first term of 2008 which was indeed first term of form four, drastically dropped. For instance, the drop emerged so obviously for students number 6 and 7 with differences in margins of hundred marks (From 219-102 and 245-145) respectively. It was also found that out of eight candidates in Reverend Muhoro secondary school who prepared to sit their final examination, four of them could

only achieve a total mark below 100 thus 42, 46, 68 and 94 out of 700 marks in term one 2008. The other four in class slightly scored above 100 marks but below 200 marks, which was extremely on the lower level and they could not qualify for a pass in KCSE. Their performance revealed a major gap in academic achievement for girls with hearing impairments at secondary school level.

4.4.2 Students' Performances at St. Angela Mumias

Table 4.5: Students' Performance in Form Two, term one 2008 and in the previous three terms of 2007 while in Form One

Students' Marks per Term from Form One to Form Two Term One						
Student's No.	First Term	Second Term	Third Term	First Term	Average Out of 1300	%
	2007	2007	2007	2008		
1	482	339	430	179	387	30%
2	261	331	297	270	314	24%
3	387	223	160	118	241	19%
4	126	110	135	83	123	9%
5	87	99	51	72	84	6%
6	361	243	267	187	287	22%
7	372	271	245	254	309	24%
8	339	284	270	223	302	23%
9	208	147	140	109	164	13%
10	566	357	460	393	481	37%

In St. Angela Mumias secondary school, all students in forms one and two registered for 13 subjects and therefore prepared to sit for examination in all the 13 subjects. The average pass mark was 650 marks. Out of the 10 students in form two who sat examinations, none had scored above average mark (Table 4.5). That meant that the students in the class performed far below average. The highest mark scored was 566 and

the lowest was 51 and none scored the expected average mark of 650 in the whole class of form two.

Table 4.6: Students' Performance in Form Three, term one 2008 and in the previous three terms of 2007 while in Form Two

Students' Marks per Term From Form Two to Form Three Term One					
Student's No.	Second term	Third term	First term	Average Out of 1300	%
	2007	2007	2008		
1	277	301	82	286	22%
2	150	138	82	160	12%
3	181	132	80	170	13%
4	598	366	143	480	37%
5	309	238	146	300	23%
6	382	307	168	372	29%

In the second term of 2007 while at form two, current students in form three sat for examination in 10 subjects with a total of 1000 marks. It happened so because the school had a provision to allow early selection of subjects depending on the abilities or inabilities of students in some subjects like the sciences. Only 1 student (number 4) scored above the average of 500 marks, that is, 598 marks. The rest scored less than the average mark. In third term of 2007 and first term 2008, out of the scores analyzed, no student got above the average mark. The closest mark to the average point was 366 far below the average of 500 marks. The lowest mark for form three was 80 out of 700 marks. It occurred so because at form three students had selected subjects for KCSE and were eligible to sit for seven subjects. It was established that the form three students had not sat for examination in first term of 2007 while in form two because the school was

closed prematurely, due to student disturbances and were sent home as a disciplinary measure.

Table 4.7: Students' Performance in Form Four, term one 2008 and in the previous three terms of 2007 while in Form Three.

Students' Marks per Term From Form Three to Form Four Term One						
Student's No.	First term	Second term	Third term	Fourth term	Average Out of 1300	%
	2007	2007	2007	2008		
1	75	76	88	0	111	9%
2	83	88	0	67	111	9%
3	98	77	0	66	111	9%
4	214	225	194	195	384	30%
5	60	50	47	46	95	7%
6	76	51	49	51	106	8%
7	377	304	357	376	657	51%

In form four, students sat for examination in seven subjects after having done subject selection. It was established that out of the seven students, only one student (Student number 7) had scored above the 350 marks, which was the average mark in her first and third terms of 2007 and also in first term 2008 (Table 4.7). The rest of the students scored less than the average mark, with some scoring as little as 46 out of 700 marks. It was of great concern to note that out of seven girls in form four, five of them consistently scored a total average mark below one hundred (Student numbers 1, 2, 3, 5 and 6) yet they were the candidates for the school who were being prepared to sit for KCSE.

It is important to note that those students who did not sit for examination for at least three terms did not qualify for analysis and so they were not included. There were seven students in total who did not qualify for their grades to be analyzed due to the cited reason. However, a common trend that was established from the findings was that as the level of class increased, academic performance decreased.

Lin, Kaplan and Risser, (1992) found reciprocal relationship between academic achievement and self-esteem among students in grades 7-12. They reported that students who scored high on general self-esteem achieved high grades and high grades in turn were associated with high levels of general self-esteem. They concluded that high self-esteem motivated one to set higher goals in academic undertakings. Despite high ratings on self-esteem, girls with hearing impairmentst in my study scored very poorly in academics. The girls demonstrated that high self-esteem neither leads to high academic achievement nor low academic achievement can lead to low self-esteem. However, the findings of my study revealed a moderately positive correlation between academic achievement and self-esteem.

Osborne (1995) observes that everyone's self-esteem was influenced by a number of factors. Parents, teachers, co-workers, friends, fellow classmates, and the environment were constantly influencing self-esteem. He notes that self-esteem is the product of two internal assessments or judgments, that is, the global judgment and one's self-worth. Osborne (1995) posits that key to self-esteem is the amount of discrepancy between what a person desires and what that person believes he/she has achieved. Moreover, the overall

sense of support that a person receives from people around him/her gives the strengths to operate on. In this case, self-esteem for girls with hearing impairments in the study had a base on the self-assessment or self-judgment as opposed to global judgment. However, we cannot rule out constant influence of parents, teachers, friends, fellow-classmates as noted by Osborne (1995). The findings of my study support Osborne (1995) who found that self-esteem is a product of internal assessment or judgment.

4.5 HYPOTHESIS TESTING

The self-esteem scores that were obtained from the girls' evaluation and their academic scores that were recorded from the school records were correlated using the Pearson's Product Moment Correlation. The results obtained are presented in (Table 4.8):

Table 4.8 Pearson's Product Moment Correlation for self-esteem scores and academic scores

		Academic Performance of Girls with HI	Overall Performance on the Rosenberg Self-esteem scale
Academic Performance of Girls with HI	Pearson Correlation	1.000	.038
	Sig. (1-tailed)		.401
	N	46.000	46
Overall performance on Rosenberg Self-esteem scale	Pearson Correlation	.038	1.000
	Sig. (1-tailed)	.401	
	N	46	46.000

Correlation coefficient = .038

As shown in table 4.8 above, the Pearson's correlation revealed the existence of a moderate correlation ($r = 0.401$) between academic performance and self-esteem for girls

with hearing impairments. That meant that the correlation was positive with a significant level of .05 ($p = .05$). The findings reject the study hypothesis, which stated that there was no significant relationship between self-esteem level and academic achievement of girls with hearing impairments in secondary schools in Kenya.

SECTION FOUR

4.6 NATURE AND SOCIAL RELATIONSHIPS AMONG GIRLS WITH HEARING IMPAIRMENTS

The information regarding the nature of social relationships among girls with hearing impairments was provided by the principals of the schools visited. Generally, they indicated a positive cordial relationship between and among teachers and students. One principal remarked, “Our girls are very friendly particularly if you engage them in a conversation.” She added, “They become quite inquisitive about the mood you portray to them.” That was an illustration how girls with hearing impairments were caring and could take great concern for other people. In addition, students were reported to engage in social activities that fostered their socialization at school such as good grooming, music and movement, dance and drama.

For purposes of recreation and entertainment, particularly for girls with hearing impairments, they enjoyed being entertained by other people in activities that they could observe or watch. Since their lead sense is sight, it can be concluded that they benefited or were stimulated most through watching other peoples’ plays or theatre acts. At occasions where music and movement competitions are held, most people with hearing

impairments become stimulated through vibro-tactile sensations they receive from the beats of the drums on the ground. This stimulates them and guides them to make and change steps or advance any necessary movement in accordance to the rhythm of the music. That stimulates them to participate in extra-ordinary performances that baffle the hearing audience and leave them unbelieving. The principal of St. Angela Mumias secondary school acknowledged that girls in her school had made outstanding performances in “Scottish dance” and had worn several trophies in the National Music Festival competitions. Indeed, she had a display of the trophies in her office as evidence of her girls’ participations in social activities.

In a complementary interview with the two principals carried out by the researcher as a follow-up activity, one principal revealed that girls with hearing impairments had high value for good-grooming. She said,

Our girls like modeling and fashion show activities where they can demonstrate beauty, fashions and catwalk. In fact we organize for inter-house beauty and fashion shows once in a while to promote their interest in this area as part of recreation activity.

It was concluded that girls with hearing impairments had the usual interactive nature of socializing with hearing peers as well as their teachers despite differences in the medium of communication (both oral and manual).

4.7 OTHER UNIQUE PEDAGOGICAL AND STRUCTURAL ATTRIBUTES

THAT INFLUENCE ACADEMIC ACHIEVEMENT AND SELF-ESTEEM

The data on pedagogy and structural attributes were analyzed in two categories under students and principals responses.

(i) Students responses on pedagogy and structural attributes

- **Help from Teachers**

Students with hearing impairments require constructive interaction with teachers who understand possible modes of communication that the students are well-versed with and can have authority to instruct and encourage full participation in class activities. Girls in the study were asked to indicate the magnitude of help that they received from their teachers. Teachers who handle students with disabilities are well-equipped in terms of training and attitude change towards students with disabilities. They take the responsibility of working in collaboration with parents and students with hearing impairments. Their major stake is to possess the ability to adapt to situations that call for modification at all times in order to motivate students and empower them to become responsive.

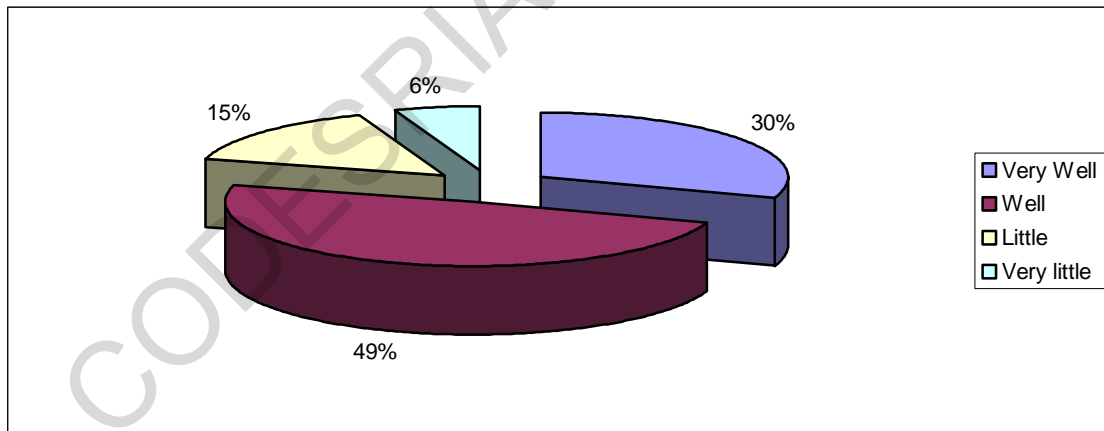


Figure 4.6 Help from teachers

The figure above shows that 49% of the students felt that they were helped well by their teachers while 30% felt teachers helped them very well. About 15% reported to receive little help from teachers and only 6% of them felt that teachers did very little to assist

them. In summary, majority of students revealed that the help they received from their teachers ranged from well to very well (79%) while only 21% showed that the help they received was little or very little. Teachers' help whether moral, emotional or physical is of significance to students especially those with impairments and can be detrimental on the development of self-esteem. The findings of my study support the findings of Shindi (1983) who notes that the public's negative attitude towards children with disabilities often results in loneliness on the part of the person with disability. It usually robs the person's experience that facilitates adjustment and development of positive self-esteem resulting in a situation where persons with disabilities are likely to be maladjusted in behaviour and develop low self-esteem. As a result, low self-esteem deems negatively on academic achievement.

For those girls who reported to receive very little help from teachers, it was evident that teachers made little attempt to support girls with hearing impairments academically, socially and individually. When teachers help is inadequate, it becomes detrimental to students' survival at school both emotionally and academically. Students require full support by teachers as a reassurance of their stay and emotional wellbeing. Teachers in this case, represent the public's attitude towards girls with hearing impairments who should demonstrate responsiveness and ability to empower persons with disabilities. The findings of my study also support Wiggins (1994) in Ross & Broh (2000) who reports that students with low self-esteem tend to be unhappy, less sociable, more likely to use drugs and alcohol, and are more vulnerable to depression which are correlated with lower academic achievement. To avoid such a negative exposure, teachers should take the

initiative to support girls with hearing impairments in order for the girls to receive meaningful learning.

The Government of Kenya through the Ministry of Education (MoE) takes the sole responsibility of training teachers to equip them with knowledge and skills to support learners with disabilities and then hire them for purposes of teaching. The government has taken great initiatives to embrace policies on inclusive education and has widened the training scope for teachers in the area of Special Needs Education. They are trained in management skills, adaptation of the environment to suit the learners' needs, flexibility in their methodologies and in matters to do with improvisation of resources to facilitate meaningful learning. In addition to teachers' help, a variety of facilities would provide an enabling environment for students' growth, learning and development. Boarding is one such facility for consideration.

- **Boarding Facilities in the Schools**

A question was raised for students to suggest how they experienced boarding facilities in their respective schools. Although boarding facility was not directly a pedagogical aspect, it gave students the assurance of safety and security. Human beings feel secure under a safe roof; the students would feel secure if they obtained a boarding school. Both schools offered boarding facilities to all girls with hearing impairments. This was a gesture that schools for students with hearing impairments undertook for purposes of taking care and ensuring protection for such a vulnerable group of students. Boarding facility included

permanent structures that were well equipped with beds and mattresses and had adequate space for laundry work.

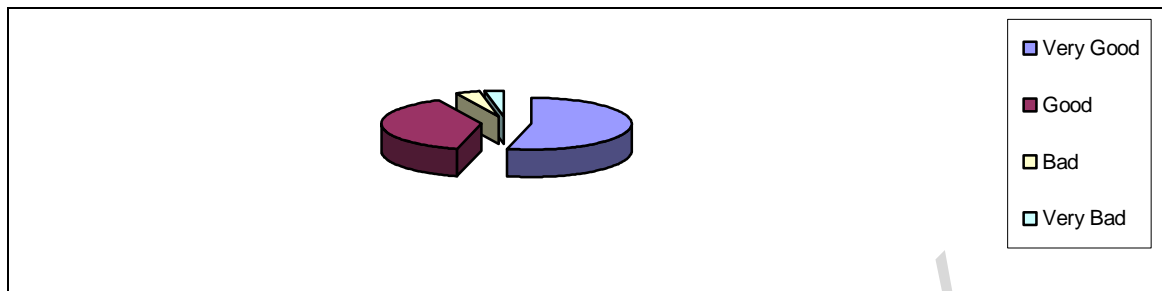


Figure 4.7 Boarding facilities in schools

The findings showed that majority of the students, (49%) found the boarding facilities to be good, 30% experienced the facilities as very good while 15% viewed them to be bad with only 6% of students finding the facilities to be very bad. This finding suggests that most girls with hearing impairments in secondary boarding schools found boarding facilities to be adequate for their use. With the understanding that the girls had a safe place to live in and learn, there was no doubt that they were psychologically aware of the protection they enjoyed and could forge ahead to embark on academic pursuits to higher levels. It was evident that both secondary schools had permanent infrastructure furnished with beds and mattresses for girls' boarding use. However, despite the fact that girls with hearing impairments received good accommodation to enable them to embark on studies uninterrupted, their academic performance was dismal. They were not able to achieve to the expected levels yet they were all boarders with all necessary boarding provisions.

The finding of my study is supported by Harter (1998); Kloomok and Cosden (1994) who reveal that if a student considers his/her ability to be low in the particular area of academic functioning (low self-esteem in the domain of academic self-concept), less

importance may be attached to academic success in order to preserve overall or global self-esteem. Consequently, such a student may focus on or put more emphasis on other behaviours that conform with his/her interests such as engagement in socialization, sports and games. Their revelation was in line with domain-specific models of self-esteem, which recognize the concept as having various subcategories (examples, general intellectual ability, physical appearance, peer likeability) rather than consider it as global, monolithic entity.

This conceptual framework has allowed researchers to suggest that individuals attach greater levels of importance to various subcategories of self-esteem. Girls with hearing impairments in my study were found to attach less levels of importance on academic pursuits and greater levels of importance on physical appearance such as good-grooming. As evidenced in the study conceptual framework, when students possess low self-esteem, it may lead to low academic achievement but with intervention of positive pedagogical attributes, the trend can change and lead to high academic achievement. The reverse trend may also occur such that when the student possess high self-esteem, it could lead to high academic achievement but if she receives negative pedagogical attributes then that could lead to low academic achievement.

- **Modes of Communication Used in School**

Girls in the study were asked to indicate the communication mode each one of them preferred to use while at school. Responses revealed that 68% of the students used total communication while 32% used sign language as shown in Table 4:11.

Table 4:9 Response on modes of communication used in school

Response	Percentage
Total communication	68%
Sign language	32%
Total	100%

The findings revealed that the preferred mode of communication by girls with hearing impairments at secondary schools was Total Communication. The current trend in the education of persons with hearing impairments emphasizes the use of Total Communication which is a philosophy that encourages incorporation of manual communication, oral communication and component such as gestures, body language, writing, pointing, drawing, pantomime and mimicry.

(ii) Principals responses on pedagogy and other structural attributes

Indeed, pedagogical and structural attributes play a great role in influencing the performance of girls in any school either positively or negatively. For purposes of this study, the Principals Questionnaire (PQ) sought to collect information related to pedagogy and other structural attributes. The questionnaire aimed at finding out from the two principals the pedagogical and other structural attributes as shown in Table 4:5 that could in a way be influencing the academic achievement and self-esteem of girls with hearing impairments.

Table 4.10 Principals' responses on pedagogical attributes

Information	School A	School B
Total No. of teachers	20	34
Teachers' qualification		
Untrained	1	4
P1	1	1
S1	0	3
Diploma	3	9
Graduate	14	15
Post graduate	1	2
Mode of communication	T.C	T.C
Availability of loop induction system	None	Yes, out of use
Availability of group hearing aid	None	Yes, out of use
Students' use of hearing aids	Yes	Yes
Provision of hearing aids	Parents & donors	Parents & friends
Learning & teaching resources	Adequate	Adequate
Parental support and contributions	Pay fees	Pay fees

- **Teachers' qualifications**

Out of the questionnaires submitted to the principals, it was established that Reverend Muhoro secondary school which had student population of about 240 had 20 teachers. Out of this number, one teacher had a Masters degree in Special Needs Education, fourteen had Bachelor of Education degrees, three teachers had diploma in Special Needs Education, one teacher was S1 while only one was untrained. From St. Angela Mumias secondary school which had a population of 189 students, it was established that the total number of teachers was 34. In summary, two teachers had Masters degrees in Special Needs Education, fifteen had Bachelor of Education degrees, nine teachers had diploma in Special Needs Education, one was S1, one was P1 and four were untrained. This finding is a proof that teachers for students with disabilities in the two secondary schools that participated in the study were highly qualified and possessed knowledge and skills to work favourably with those students. However, the findings of my study revealed that despite the high qualifications teachers in the two schools possessed, girls' academic achievement was low and self-esteem high. This depicts a situation whereby teachers in

the two schools have to search for possibilities that could arouse girl's interest in academic work.

The finding of my study corroborates with Ardail (2005) who claims that women lack strong expectations of their own personal efficacy in a number of occupations particularly in natural sciences, engineering and mathematics. Their observations reveal that there is a gap in women's self-esteem and achievement. The gap widens as a hearing impairment acts as an added disabling condition to the girls/women.

Girls with hearing impairments in my study showed that they lacked efficacy in academic work. They demonstrated willingness to embrace socialization at the expense of academic performance. Another support for my study was Mickelson's (1990) study (in Sirin & Jackton, 2001) that examined the "attitude-achievement paradox" among African-American learners. She reported that the low achievement of those students was partly due to the "accurate perception that for people like them educational efforts and credentials were not rewarded in the opportunity structure in the same way as for the whites. She based her argument on the societal view that people of colour, women, and low working class individuals received less pay, fewer job opportunities and inequitable opportunities for promotions when compared to middle-class white-males. There was a possibility for the girls in my study to experience similar feelings since they had a disability and could view themselves as girls with disability against the majority-hearing people.

- **Modes of Communication Used in Schools**

The two principals of the schools were asked to state the mode of communication that was commonly used by both teachers and students with hearing impairments while at school. They indicated that Total Communication (TC) philosophy was preferred as opposed to manual (sign and fingerspell) mode of communication.

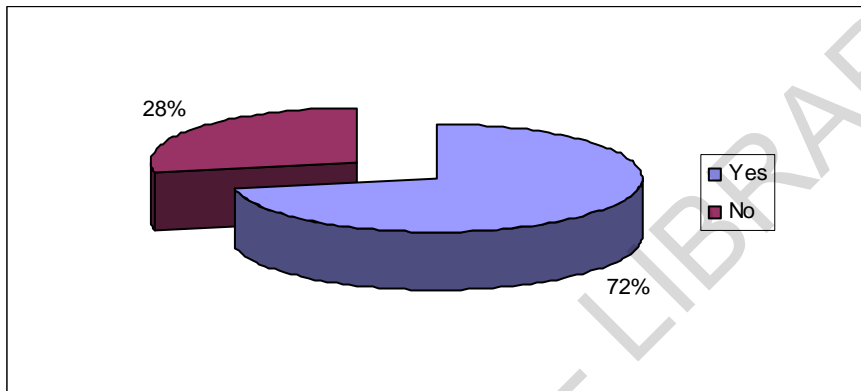


Figure 4.8 Communication modes used in schools

The findings (Figure 4.8) revealed the preferred mode of communication by teachers at the schools as Total Communication (72%). The manual (sign and fingerspell) mode was scored at 28%. The current trend in the education of learners with hearing impairments as earlier stated emphasize the use of Total Communication as a philosophy that encourages incorporation of manual communication, oral communication and other components such as gestures, body language, writing, pointing, drawing, pantomime and mimicry. The finding of my study is supported by Desselle (1992) in her study for doctoral dissertation, *Navigating two Cultures: Deaf children, self-esteem and parent's communication patterns*, sought to determine the effect that parents' communication methods have on the self-esteem of their deaf children. Her results show that a relationship exists between the

parents' communication methods and the deaf adolescent's self-esteem. She concludes that parents who use Total Communication philosophy (speech, finger spelling and sign language) have adolescents whose self-esteem score are higher than parents who use speech (oral only) communication. For purposes of my study, teachers used Total Communication as a preferred philosophy and the results achieved had high ratings on self-esteem by the students.

Similarly, Desselle (1992) revealed that parents whose sign language skills were more proficient had children whose self-esteem scores were higher than those of parents who were less skilled in sign language. If teachers could have proficiency in sign language as a component of Total Communication philosophy, they could easily interact, stimulate and motivate students with hearing impairments to engage in constructive dialogue and as such boost their self-esteem as well as academic achievement. However, the results for my study showed that despite high rating on self-esteem by girls with hearing impairments, their teachers' proficiency in the component of sign language was inadequate. One principal when asked about the challenges, they experienced that hampered their service delivery, she said,

“Teachers require constant refresher courses in sign language because it is a language as any other language and it grows with time. Now we are introducing Kenya Sign Language (KSL) in our curriculum yet not all teachers are good at it.”

Revelations of this nature indicated how desperate teachers for persons with hearing impairments needed in-service courses to revamp their skills in sign language lest they lag behind their students. Findings of my study corroborate with Kamonya (2008) who

carried out a study on factors hindering teaching and learning activities for hearing impaired students at Karen Technical Institute for the deaf. On communication mode preference, she found that majority of teachers in the institute preferred to use Total Communication during teaching and learning activities as opposed to Kenya Sign Language (KSL). She further revealed that most teachers were not more conversant with KSL as compared to students with hearing impairments. She confirmed that students with hearing impairments preferred the use of KSL for purposes of interacting with one another outside the classroom. It served as their mother-tongue and so they found it simple to communicate using it during interaction (Kamonya, 2008). Teachers' incompetence particularly in KSL could have adverse effect on learners with hearing impairments and could contribute heavily towards their low academic performance as shown in my study.

- **Assistive devices in schools**

The question on assistive devices was meant to find out from the two principals the availability of assistive technological devices used in both schools. Technological devices for persons with disabilities vary in their modes and use depending on the specific disability. In the area of persons with hearing impairments, commonly used devices for purposes of learning in the school or classroom environment include loop-induction system, group hearing aids, individual-hearing aids (Nyakado, 2003).

Loop-induction system is a device that supports learners with hearing impairments by amplifying sounds in the class whenever the teacher carries out the teaching/learning

activity. The loop is fixed in such a way that the sound produced by teachers during teaching time is detected, picked and amplified. The amplified sound is then picked by the students' individual hearing aids and each student is able to receive the sound. The sound can be controlled at individual level depending on student's level of hearing loss. However, the use of the device is diminishing in Kenyan schools for persons with hearing impairments due to lack of spare parts. It was evident that in one school the device was unavailable except in the other school where it was available but not functional because of breakages. One principal was quoted,

“We have the loop induction device but it broke down long ago and it is no longer in use. The spare parts are expensive and can only be purchased from abroad. We don't have the money unless we get a donor”.

Whenever such a device lacks in schools then, students who could benefit from its use suffer from unfulfilled pedagogy. Inability to provide for such a device in school denies students opportunity to benefit from it yet it is a worthy device that promotes accessibility to education in schools for students with hearing impairments.

Group hearing aids are devices that support learners with hearing impairments who function more or less at similar levels of hearing loss. The device is usually fixed on a table in a horse-shoe form with some kind of switches for each student to control. The student is supposed to wear headphones and switch on the aid. When the teacher is teaching, he/she uses a microphone which amplifies the sound and each student receives information through the aid. Individual students can also respond to the teacher through their microphones. Such a device is ideal for general teaching and in particular, teaching of group speech. It was unfortunate that in both schools the use of the device was not

evident. Lack of such devices in teaching and learning for students with hearing impairments is a great setback in achieving educational goals for this group of students.

Individual hearing aids are support devices for students with hearing impairments. The aids assist in the amplification of sounds preferably for the hard of hearing (those with slight, mild, moderate and severe hearing losses). Those with profound hearing losses commonly referred to as the deaf, may least benefit from amplification and therefore resort to the use of manual communication. Manual communication comprises the use of signing and finger-spelling with exclusion of speech and speech-reading which are also components of Total Communication. Assessment of each individual student is done to ascertain the hearing level and then advised on the use of the hearing aid suitable for his/her case. There are varieties of individual hearing aids to support hard of hearing persons such as Body-worn, Behind-The-Ear (BTE), In-The-Ear (ITE) and the eye-glass hearing aids.

Carmen (1997) in Nyakado (2003) reveals other modern support devices for persons with hearing impairments such as the Contra-lateral Routing of Signs (CROS), Electro-Acoustic Stimulation (EAS) and digital hearing aids. According to Carmen (1997) cited in Nyakado (2003), the digital hearing aid provides listening comfort, feedback control, elimination of occlusion and is flexible to adjust to the needs of the user. This type of hearing aid can be used in a noisy environment and can screen out all unwanted background noise, while tuning in one-to-one conversation. However, the Cochlea Implant can also be performed as an operation to install hearing loss. It is a surgical

operation whereby a specialist doctor replaces the damaged cochlea by fixing a garget in the inner ear that connects and sends signals to the auditory nerve.

From the schools that participated in the study, most students had Behind-The-Ear hearing aids. These are the most commonly found hearing aids in Kenya. The principals were asked if the students used hearing aids in school and they agreed that hearing aids were available and were being used by students. Meanwhile, students in the study were also asked the same question.

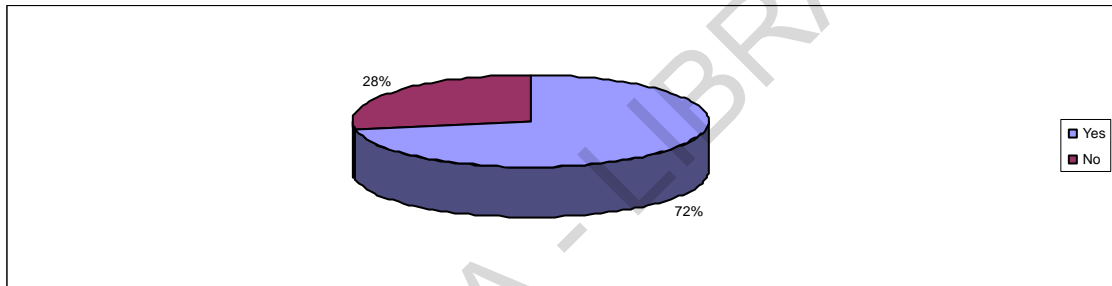


Figure 4.9 Use of Hearing Aids

Seventy-two percent of the students as shown in (Figure 4.9) said that they used hearing aids while 28% did not. There is high possibility that the high percentage of girls were hard-of-hearing since they admitted to possess the aids. However, the percentage that reported failure to use the hearing aids could be as a result of inability to purchase one. Indeed, hearing aids are very expensive equipment and it could be impossible for the ordinary parent to afford. They cost at a tune of between Kenya shillings (Ksh 25,000 – 35,000) and above. Many families/parents however, find it a great financial challenge to acquire one for their daughters. So the girls with hearing impairments may be forced to survive without a hearing aid. Whenever a student has been advised to use a hearing aid and cannot afford to purchase one, she stands to be disadvantaged and miss a lot of

information in class. This would result in lack of interaction with the teacher, poor communication with peers in class and generally poor performance as concerns academic achievement. The findings revealed lack of adequate assistive devices for students with hearing impairments in secondary schools thus creating a gap in terms of provision for appropriate learning resources.

- **Funding**

The question on funding intended to find out how the schools were financially supported and physically maintained. The findings showed that the majority of students, 53.7%, were provided with hearing aids by the school while 46.3% were bought by their parents. Provision of hearing aids by schools was an indication that schools took great initiative to ensure support for students with disabilities. However, many schools depended on donations from well-wishers, churches and Non-Governmental Organizations. The principal of Reverend Muhoro secondary school admitted that the school received great support as concerns donation of hearing aids from Seaford and Seven Oaks of United Kingdom and Presbyterian Church of East Africa was their major sponsor for the school development. The principal of St. Angela Mumias secondary school reported to receive great financial help from well-wishers and friends from abroad while the Ministry of Education, Science and Technology gave grants for construction of physical facilities.

It was noted that parents paid fees for their daughters although majority never paid on time and they ran into arrears. The issue was a great setback that led to challenging monetary deficits in school administration budget. One principal revealed that sometimes

students take a long time to report back to school from holiday due to lack of school fees and therefore miss quite a lot in their studies. Such a factor could contribute towards low performance in academics because of missing curriculum coverage during her absenteeism and could also lead to low morale towards learning.

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CHAPTER FIVE SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The purpose of this study was to establish the relationship between self-esteem and academic achievement of girls with hearing impairments in secondary schools in Kenya. The study focused on the following research questions: “What is the relationship between self-esteem level and academic achievement score of girls with hearing impairments? What is the nature of social relationships among girls with hearing impairments? and What are the other unique pedagogical and structural attributes that are influencing academic achievement and self-esteem for girls with hearing impairments?” This chapter presents the summary of the findings, conclusions and recommendations of the study and further research.

5.2 SUMMARY OF THE FINDINGS

The findings of the study are summarized based on demographic data and research questions that guided the study.

5.2.1 Summary of Findings on demographic variables

- (i) Majority of the respondents (60%) were aged between 17-19 years, 24% were between 20-22 years. Those who were 14-16 and years of age and above 23 years were 4% each. Eight percent were non-committal on revealing their age. The findings revealed that approximately 30% of girls with hearing impairments

in the two secondary schools were actually above secondary school age for hearing students which was usually between 15-18 years.

- (ii) It was established that 55% of the respondents came from St. Angela Mumias secondary school which was a boarding school for the girls, while 45% were from Reverend Muhoro secondary school which was a mixed secondary school.
- (iii) The study found out that the two secondary schools offered boarding facilities to the students with hearing impairments. However, one school was open for both boarders and day-scholars on condition that all girls with hearing impairments were boarders.
- (iv) The findings showed that majority of girls with hearing impairments attended girls secondary school, which was also a boarding school.
- (v) The study established that 51% of the students wished to attain university education and 28% wished to train in teacher training colleges. Fifteen percent of the girls wanted to finish secondary education as their highest and perhaps engage into other activities like dressmaking, saloon work and beauty therapy profession.

5.2.2 Summary of Findings on Self-esteem Rating

Research question 1: What is the relationship between self-esteem level and academic achievement score of girls with hearing impairments?

Figure 4.4 shows the respondents' self-evaluation ratings on adapted Rosenberg self-esteem scale. The self-esteem rating was conducted through the use of a four Likert scale. The respondents were asked to indicate how they strongly agreed, agreed, disagreed or

strongly disagreed with statements concerning rating on their self-esteem. In a statement on self-evaluation, majority of girls with hearing impairments (56%) reported that they had the ability to do things as well as other people. They showed that they did not need sympathy as persons with disability but opportunity to demonstrate their abilities.

Another statement sought to establish if girls with hearing impairments felt that they had a number of good qualities. The responses showed that 62% of girls with hearing impairments possessed good qualities, meaning that they were positive towards themselves. The findings concur with Murugami (2003) that learners with special needs have internal locus of control and positive self-concept.

A statement which sought to negate their feelings stated “I feel I do not have much to be proud of” received reactions indicating strong denial of not being proud of the self. The girls’ responses demonstrated refusal to accept a desperation move and revealed their ability to discern and demonstrate keenness to judge and form opinions by themselves. It meant that girls with hearing impairments felt they had a lot of qualities to be proud of.

Another statement, which sought responses on self-admiration “On the whole I am satisfied with myself.” The responses for this particular statement indicated that 93% of girls with hearing impairments expressed the need for self-value and admired to be what they were irrespective of the hearing impairments. They were quite satisfied as people who deserved dignity and passion as any other human being.

A statement which required the participants to show appreciation on themselves by indicating how they felt that they were persons of worth at least on an equal plane just like others, had the majority conveying acceptance of their self-worth. Girls with hearing impairments believed they possessed what it takes to be a worthy person. They can interact with other people and socialize freely. They can perform physical duties as others except in oral communication where they face challenges. Baumeister (1991) supports this finding as he notes that self-worth is derived from a person's sense of confidence in what he or she does and believes. Since the girls believed in their worth as equal partners in the society, it revealed the positive spirit they possessed. They only need encouragement by the hearing people in areas they face challenges like in audition and speech. The hearing society can adapt modes of communication to accommodate the ideal situation in which both groups can appreciate and be able to interact freely.

In a statement where the respondents were asked to indicate if they certainly felt useless at times, majority (86.5%) were able to deny that fact. Instead, they demonstrated their willingness for independent thinking and the right to dispense their opinions. They revealed that they could not succumb to the feeling of inferiority. However, the smaller percentage (13.5%) exhibited their right for self-evaluation and assessment, which revealed their honest acceptance of inability to fulfill their dreams. They agreed that they certainly felt useless at times. Higgins (1987) in Brown (1998) observes that people are prone to feelings of guilt and anxiety when their perceptions of who they are at present do not coincide with their ideas about who they think they ought to be. Perceptions of who they were as girls with hearing impairment demoralized them and denied them what they

expected to be in life. Hearing impairments made them to feel incapable and as such resolved to despair in life, not being committed to studies and rationally engaged in other social activities at school such as grooming and vocational activities at the expense of academic work. Schelsinger and Meadow (1972) observe that adolescent girls with hearing impairments have low aspirations as compared to their hearing counterparts but findings in my study revealed high self-aspiration although the respondents had low academic performance.

On self-declaration statement where the respondents were expected to indicate how they wished to have more respect for themselves, 98% of girls wished to be respected by other people. Respect enables an individual to feel accepted and it eventually develops mutual understanding between two parties. It must be reciprocal because it has to blossom from both sides in order to create meaningful results. Girls with hearing impairments wished to be respected by those members whom they interacted with on daily basis in order to form a firm foundation of the self. Brown (1998) reports that attempts to define self-esteem ranges from an emphasis on primitive libidinal impulses to perceptions that one is a valuable member of a meaningful universe, that is, he/she is respected by others. Similarly, Rosenberg, (1979); Schooler, Schoenbach & Rosenberg (1995) note that self-esteem is a function of reflected appraisals of close family members and friends, parents or other close adults like teachers. They conclude that perceptions of self-worth or self esteem results from social attachments to close friends and family members and the respect they offer to the individual member. Schwalbe and Staples (1991) also observe that respect reflects positively on a person and provided interpersonal support. These

researchers conclude that self-esteem results from reflected appraisals in one's immediate social network such as teachers, parents and friends. Therefore my study is supported by all these cited studies that the subjects wanted to be respected by other people for them to be able to achieve self-respect.

A statement stating that "All in all I am inclined to feel that I am a failure" elicited about (84.8%) disagreement responses and 15.2% agreement responses. Acceptance of being a failure is a revelation that one has lost hope in life. Girls with hearing impairments who participated in the study revealed that they possessed positive feelings about themselves and were not obliged to feelings of inferiority. Oglivie (1987) observes that people think of themselves in terms of what they are afraid of becoming or do not want to become. For instance, one fears to be a failure in business or to be dependent on one's children. Oglivie (1987) refer to these images as aspects of undesired self and suggests that they play an important role in how happy and satisfied people are in their lives. He posits that the greater the psychological distance between how we think of ourselves now and what we fear becoming, the happier we are in life. The potential negative self-images also serve as important motivational incentives. Such negative self-images could enable people to work hard in an attempt to avoid the negative identities.

A statement on self-assessment or self-perception "At times I think I am not good at all" The results showed that the minority (11%) who agreed would have experienced failure at sometime and that had led them to despair in life and became powerless and helpless. The ones who disagreed (89%) had experienced success which had provided them with

power of control indicating their ability to succeed in life. Wheaton (1980) observes that continued experience of failure in the face of effort leads to a sense of powerlessness and helplessness. He notes that sometimes one would feel not good at all but the moment one experiences success, then, his/her feelings lead to a sense of personal control, characterized by instrumentalism and an active approach to life. Mirowsky and Ross, (1989), Seeman and Seeman, (1983) note that perceived powerlessness (the opposite of a sense of control) is a belief that outcomes of situations are determined by forces external to oneself such as powerful others, luck, fate or chance and that one has little control over meaningful events and circumstances in one's life. Powerlessness is the cognitive awareness of a discrepancy between one's goals and the means to achieve them determines one's choice of action. The majority of my subjects did not acknowledge the feeling of being powerless or helpless.

The last statement on self-appraisal stated, "I like most things about myself". Responses were that the majority (94.4%) agreed to the statement and only (5.6%) disagreed. The findings contrasted with the findings of Yee, Watkins and Crawford (1997). They conducted a study on self-esteem and hearing impairments of secondary school students. They found that the self-esteem of females with hearing impairments was not as high as for the males with hearing impairments in a number of dimensions of the self such as self-worth, capability of performing acts and taking responsibilities. Majority of the subjects in my study were girls and demonstrated that they liked most things about themselves.

5.2.3 Summary of Findings on Academic Achievement Rating

To understand the performance for girls with hearing impairments from the two schools, the researcher used documentary method and observed academic records for the previous four terms that is term one, two and three of 2007 and term one of 2008. Classes that were involved in the study were forms two, three and four. Form one students were exempted because they had sat for examination in only one term and so they did not qualify to be included in the study. Academic records for form two in Reverend Muhoro secondary school during term one of 2007 revealed that out of eight girls in the class only two had scored above average mark of 650. The other six scored below average as shown in (Table. 4:2). Only one student consistently scored above average mark in terms two and three of 2007 as well as in term one of 2008.

In Reverend Muhoro secondary school, form three class had seven students who participated in the study. Out of the seven students only one student consistently scored above average mark of 650 in all the three terms in 2007. In term one of 2008 the same student scored above average mark of 650. During the term, all students sat for examination in seven subjects because they had undertaken subject selection in preparation for Kenya Certificate of Secondary Education (KSCE) registration at form four level. For purposes of uniformity in analysis of marks, the marks for seven subjects that were attempted in term one of 2008 were averaged at 1300 (Table 4.3).

Eight form four students from Reverend Muhoro secondary school participated in the study. It emerged that no student at form four managed to score an average mark of 650.

The highest average mark was 384 and the lowest was 95. It was quite obvious that marks scored during 2008 which was first term of form four, drastically dropped. The drop could be associated with the higher level of knowledge skills expected at that class level such as synthesis and application that were quite challenging for girls with hearing impairments.

It was also noted that out of eight candidates in Reverend Muhoro secondary school who prepared to sit their final KSCE examination, four of them could only achieve a total mark below 100 thus 42, 46, 68 and 94 out of 700 marks in term one 2008. The other four in class slightly scored above 100 marks but below 200 marks which was extremely on the lower level and they could not qualify for a pass in KCSE. Their performance revealed a major gap in academic achievement for girls with hearing impairments. From the records, none of the candidates could qualify to join university despite their strong desire and will to do so.

Academic records for form two in school St. Angela Mumias secondary school during term one of 2007 revealed that out of the 10 students who sat examinations, none scored above average mark of 650 (Table 4.5). That meant that the students in the class performed far below average. The highest mark scored was 566 and the lowest was 51. General performance for form two was low in the school. Form three of St. Angela Mumias secondary school did not sit for examination during their first term in 2007 because of school disturbances that led them to be sent home. However, in the second term of 2007, students sat for examination in 10 subjects and only 1 student (number 4)

scored above the average 500 marks that were 598 marks (Table. 4.6). The rest scored less than the average mark. In third term of 2007 and first term 2008, out of the scores analyzed, no student got above the average mark. The closest mark to the average point was 366 marks and the lowest was 80 out of 500 marks. Form three performance in the school was lower than form two. For instance, if transition to form four could be pegged on pass-mark at form three then, no student would move to form four in St. Angela secondary school.

Form four students in the same school were seven in number and sat for examination in seven subjects. The records indicated that only one student managed to score above average mark of 350 marks in first and third terms of 2007 and also in first term 2008 (Table 4.7). The rest of the students scored less than the average mark, with some scoring as little as 46 out of 700 marks. It is important to note that out of seven respondents in form four, five of them consistently scored a total average mark below one hundred (Student numbers 1, 2, 3, 5 and 6) yet they were the candidates for the school who prepared to sit for KCSE. According to the records of performance in the school, no candidate at form four could qualify for university entry. Form four candidates performed lowest in the three classes that participated in the study. A trend was established indicating that the higher the class levels, the worst the academic performance for girls with hearing impairments at secondary schools. A common trend was established from the findings, which showed that as the level of class increased, academic performance decreased.

The distribution of self-esteem scores depicted a normal curve, which showed that the respondents in the study were a heterogeneous group, that is, they had variations in their rates of self-esteem, with a mean of 34.5 and a standard deviation of 4.3. The findings showed that the respondents had generally high levels of self-esteem. The academic performance of the respondents was slightly below average. The Pearson's correlation revealed moderately positive correlation between academic performance and self-esteem with a significant of .05 level ($r = 0.401$, $p = 0.038$).

5.2.4 Summary of Findings on the Nature of Social Relationship

Research question 2: What is the nature of social relationships among girls with hearing impairments?

The nature of social relationships among girls with hearing impairments was found to be a positive cordial relationship between and among teachers and students. One principal reported that girls were friendly particularly when they were engaged in conversations. She further added that girls with hearing impairments focus on the mood that one portrays. They become inquisitive and demand to know why one would appear sad or unhappy and they would wish to know the reasons. They preferred to see someone happy and jovial as opposed to being unhappy.

It was also established that students were reported to engage in social activities that fostered their socialization at school such as good grooming, music and movement, dance and drama. They enjoyed being entertained by others in activities that they would observe or watch in theatres. Since their lead sense is sight, it could be concluded that they

benefited or were stimulated most through watching other peoples' drama or themselves performing theatre acts.

Acknowledgement of the girls' outstanding performance in "Scottish dance" was confirmed as the principal of one school had displays of magnificent trophies won during the national music and dance competitions in 2007. It was also reported that girls with hearing impairments made tremendous demonstrations during inter-house competitions for modeling and fashion shows. They enjoyed such shows as part of good grooming and beauty therapy shows/activities.

5.2.5: Summary of Findings on Other Pedagogical and Structural Attributes

Research question 3: Are there other unique pedagogical and structural attributes that are influencing academic achievement and self-esteem for girls with hearing impairments?

The results of the findings established that there were indeed other unique pedagogical and structural attributes that influenced academic achievement and self-esteem of girls with hearing impairments. Starting with help from teachers to students, 79% acknowledged to receive good help while 21% reported little help. Teachers' help would vary from moral, emotional and or physical support. Students who reported to receive teacher's help become accepted and are empowered to act independently focusing on the guidance given. Teachers function as a reflection of the public's attitude towards students with disabilities. When teachers are positive, the students gain but if negate then students

lose. Shindi (1983) notes that negative attitude towards children with disabilities often results in loneliness on the part of the person with disability. It usually robs the person's experience that facilitates adjustment and development of positive self-esteem resulting in a situation where persons with disabilities are likely to be maladjusted in behaviour and develop low self-esteem.

Majority of the students, 54.7%, found the boarding facilities to be good, 39.6% experienced the facilities as very good while 3.8% viewed them to be bad with only 2% of students finding the facilities to be very bad. Despite the high ratings on boarding facilities found in schools, the respondents performed dismally in academic work. It is important to note that the respondents in the study were found to attach less levels of importance on academic pursuits and greater levels of importance on physical appearance such as good grooming. Harter (1998); Kloomok and Cosden (1994) note that if a student considers his/her ability to be low in the particular area of academic functioning (low self-esteem in the domain of academic self-concept), he/she may attach less importance to academic success in order to preserve overall or global self-esteem.

On teachers' qualifications, it was established that Reverend Muhoro, which had student population of about 240 had 20 teachers. Out of this number, one teacher had a Masters degree in Special Needs Education, fourteen had Bachelor of Education degrees, three teachers had diploma in Special Needs Education, one teacher was S1 while only one was untrained. In school St. Angela Mumias, there were 189 students and a total number of 34 teachers. Two teachers had Master Degrees in Special Needs Education, fifteen had

Bachelor of Education degrees, nine teachers had diploma in Special Needs Education, one was S1, one was P1 and four were untrained. Majority of teachers in schools that participated in the study had necessary knowledge and skills to support the students academically. They were highly educated in the area of special needs and had acquired diplomas, Bachelor of Education degrees and even Masters in special education. Their educational background would enable them to work quite well with students with disabilities especially those with hearing impairments.

Assistive technological devices such as loop-induction system and group hearing aid were available in one school but were reported to be defective and non-functioning. In the other school, such devices were unheard of. In summary, the two schools did not make any use of the devices revealing a gap in provision and use of technological devices in schools for persons with hearing impairments.

Both schools received adequate funding to run their activities. Majority of the respondents (71.7%) were using individual hearing aids known as Behind-The-Ear (BTE) hearing aids which are fairly expensive. One principal acknowledged support from non-governmental organizations such as Seaford and Seven Oaks of United Kingdom for provision of hearing aids to students in the school and Presbyterian Church of East Africa as their major sponsors for the school development. The other principal also acknowledged financial support from the government commonly known as Constituency Development Fund (CDF) which had financed an on-going construction of a classroom block alongside the assistance from parents. She also reported that apart from a few

students who received little assistance on donations of hearing aids from Little Sisters of Mercy in Britain, parents bought hearing aids for their daughters.

5.3 CONCLUSIONS OF THE STUDY

The findings from this study revealed that self-esteem of girls with hearing impairments was high but the academic achievement was very low. The Pearson's correlation coefficient resulted to 0.401 ($r = 0.401$) and was significant at .05 level ($p = .05$). It was therefore concluded that there was a moderate correlation between self-esteem and academic achievement.

The fact that majority of students performed poorly in academics, there were six students who managed to score above average throughout the terms. One student stood outstanding in her performance and this was an indication that despite hearing impairments as a disability, a student could still beat the odds and achieve highly in academics. The particular students could be used as role models for others with hearing impairments to emulate their effort and work equally hard. They could as well be paired with other students who were low achievers so as to practice peer tutoring as a strategy to increase participation in class activities.

More findings revealed a trend which indicated that girls with hearing impairments placed more value on relational aspects (grooming), as well as music and dance, much more than the will to score high in academic work despite the help they received from teachers and support from schools. It was a clear indication that the respondents' interest

and value focused on other relational aspects other than academic activities. It could be concluded that since the respondents placed more emphasis on good grooming, they should be supported in ways to strengthen their abilities in the subjects like Home Economics. Perhaps be guided to pursue studies relevant to their specific interest other than insist on them to do academic work without adequate assistive devices yet they faced stiff competition from their hearing counterparts.

Other findings revealed that despite the availability of support as concerns learning resources in schools, specialized technological devices (Loop-induction, Group hearing aid) were either non-functional/faulty or not there at all. The finding itself was a revelation that students with hearing impairments were not catered for adequately as concerns provision of resources in schools. They lagged behind in terms of provision of quality education as compared to their hearing counterparts or other students with different disabilities (visual impairments, physical impairments) and that could result in poor performance. It was also found that students were expected to be provided with hearing aids by their parents for individual use yet parents were unable to fulfill these due to financial constraints. Parents were also reported to cause students delays in reporting back to school for lack of raising school fees in time. As students delayed in reporting back after holidays, it meant that they missed a lot in curriculum coverage and as such led them to perform poorly in academics.

5.4 RECOMMENDATIONS

5.4.1 Recommendations to teachers on self-esteem and academic achievement

It was evident that girls with hearing impairments rated themselves positively on self-esteem. They expressed concern that they could do everything as well as other people. It is important to think of possibilities such as making education for them to look achievable and admirable, something they should strive to achieve and not stressful that they would try to avoid. Teachers should make deliberate use of positive reinforcement that will encourage girls' participation and promote their esteem towards academic performance. They should ensure that they put in place all necessary learning and teaching devices that would support each girl to receive information in the simplest and easiest way without much difficulties. Each girl's individual differences should be addressed and their strengths utilized to the maximum in order to help them overcome their weaknesses. They should be given opportunities to demonstrate creativity and imagination into activities and courses of their interest like Home Economics e.g. grooming, beauty therapy and the like.

Another point of consideration is the possibilities for teachers to strengthen peer/group support learning among students themselves. It was noted that one girl in form two scored good grades (Student No. 7 in Form Two at Reverend Muhoro secondary school) and one in form three (Student No. 1 in Form Three in the same school) also managed to score above average grades. The two students could be used for peer tutoring and they would serve as models for others to emulate.

It was also evident from the findings of the study that principals of secondary schools for girls with hearing impairments took responsibilities to offer quality education and provided care and security to girls under their jurisdiction. The study recommends for active collaborations with parents, teachers, students and other interested partners in initiating constructive projects that will actively engage girls' participation and bring change in attitude towards their education outcomes. Projects in beauty therapy and good grooming (in Home Economics) and modeling and drama (in Creative and Performing Arts) should be initiated to promote potentials and create exposure to the outside world.

Finally, it seems that good academic performance may not be admirable to girls with hearing impairments which creates a great task for educators to worry about. I therefore recommend that educators/teachers, counselors, parents, hearing peers and other stakeholders to encourage girls with hearing impairments and give moral support so that they work hard to improve on academic work at school on the understanding that education is key to upward mobility and job security particularly in courses like Home Economics. Girls with hearing impairments demonstrated that they had no threats when it came to the way they should socialize with other peers as well as with their own teachers. It is important for teachers to promote dialogue and interactive activities within schools as well as inter-school activities that would allow for more socialization. Collaboration with the wider society for purposes of learning from one another, exchanging ideas and sharing diverse experiences mostly in local community activities is an example. In that way, girls with hearing impairments will be understood for who they are and what abilities they possess rather than being perceived differently.

5.4.2 Recommendations to teachers on social relationships

Girls with hearing impairments demonstrated that they had no threats when it came to the way they should socialize with other peers as well as with their own teachers. It is important for teachers to promote dialogue and interactive activities within schools as well as inter-school activities that would allow for more socialization. Collaboration with the wider society for purposes of learning from one another, exchanging ideas and sharing diverse experiences mostly in local community services such as church activities, local dispensary activities are such examples. In that way, girls with hearing impairment will be understood for who they are and what abilities they possess rather than being perceived differently.

5.4.3 Recommendations to the Government/Policy Makers on Pedagogy

5.4.3.1 Curriculum Adaptation

Due to communication difficulties, persons with hearing impairments face challenges ranging from long periods of time spent on perceiving concepts to a lot of repetitions in classes needed for them to assimilate the concepts taught at that level before they transit to the next class. It is recommended that the government should make curriculum flexible in terms of time-frame to give girls with hearing impairments more time for syllabus coverage since they require proficiency in one skill area before transition to the next higher level. It was evident from the findings that as the level of classes increased, the academic performance decreased. For girls with hearing impairments to polish up before proceeding to a higher level, a competency of skills in a curriculum is highly

recommended and not just mere transition from one class level to another on yearly basis for the sake of it.

The current curriculum for secondary students is quite wide and rigid, it is examination oriented and has fixed timeframe for completion of the set syllabi. Girls with hearing impairments have potentials in certain areas other than academic engagements. The study recommends that the government and particularly the curriculum developers that is, Kenya Institute of Education (KIE) reconsiders curricula adaptation to suit the potentials and abilities of girls with hearing impairments. Provision for a diversified curriculum that gives alternative choices should be available at all times in schools in order to motivate low achievers in academics who may prove to be higher achievers in other areas of proficiency.

5.4.3.2 Evaluation and Assessment Strategies

On formal school assessment, a duty that is carried out by Kenya National Examinations Council, the study recommends that the council to rethink practical assessment or evaluation whereby candidates with hearing impairments could be exposed to strategies like observations and demonstrations on concrete aspects as opposed to applications and synthesis on theory or abstract work which may require too much reading and cramming notes for purposes of passing examinations. Evaluation on practical skills learnt and a variety of choices on what to embark on would support girls in decision making and forming opinions. An alternative strategy would be the use of Kenya Sign Language for

examinations on subject content or rather, sign language interpreters for all required examinations.

5.4.3.3 Provision of Resources and Assistive Devices

Provision of assistive devices is paramount for students with hearing impairments for their academic pursuits. Without the devices, their effort to learn could be quite challenging and unbearable. Devices such as Body worn hearing aids, Behind-the-Ear hearing aids, Group hearing aids, eye-glass hearing aids, and modern devices such as digital hearing aids, and Electro-Acoustic Stimulation should be provided to lessen the burden of struggling to fit into the hearing society where all learning is through the auditory channels. The government should ensure that all schools for learners with hearing impairments receive adequate supplies of the devices to cater for their needs. Provision of Government fund (Constituency Development Fund) to all schools which admit learners with disabilities should be increased to cater for girls' exceptional needs as a very vulnerable group of learners.

5.4.3.4 Opportunities for Capacity Building

The government should provide opportunities for capacity building particularly in the area of assistive-device-technicians because such devices should be handled and maintained by professionally trained technicians to ease the non-functionalities as observed in the two schools. The technicians should be trained locally through government grants or awarded scholarships to study abroad then come back and serve in

every special school. Teachers that are already serving in the schools should be given first consideration.

5.5 FURTHER RESEARCH

The main objective for this study was to establish the relationship between self-esteem and academic achievement for girls with hearing impairments in secondary schools in Kenya. The findings using the Pearson's Product Moment Correlation revealed the existence of a moderate correlation between academic performance of the students and their self-esteem. However, .038 was neither low nor high correlation. Therefore the study recommends for further intensive research to investigate the crucial emerging issues that could contribute to such a moderate correlation yet self-esteem was high and academic achievement was low.

Another concern from the findings revealed that despite the high qualifications that teachers in schools for persons with hearing impairments had, there still existed a gap in sign language proficiency by the teachers yet the Kenya Sign Language was the catchment language for the students and it had also been approved as a subject area in the curriculum. The students with hearing impairments used KSL for interaction with one another and for socialization in terms of creating rapport or engaging in dialogue. It was also being taught as an examinable subject in the National examination. However, poor communication would lead to misunderstanding of information or major concepts and as a result poor performance in academics. I therefore recommend further research in the area of communication proficiency in KSL by teachers in schools for students with hearing impairments beginning from primary to secondary schools so as to determine the

required levels and put in place corrective measures such as constant in-service courses for improvement in manual communication skill.

Finally, there is concern for further research to find out whether other components of Total Communication such as speech, phonetics and phonology are used in schools for students who are hard of hearing so as to come up with findings to support them in their diverse communication needs.

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REFERENCES

- APA, (2006). *Publication manual of the American Psychological Association*.
Washington DC: American Psychological Association.
- Ardail, R. H. (2005). *Self-esteem and academic achievement in African American Students with learning disabilities*. A Masters Degree Research Project. College of William and Mary, Williamsburg, VA
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman
- Bandura, A. (1986). *Social foundations of thought and action*. Englewood Cliff, NJ: Prentice Hall.
- Baumeister, R. F. (1991). *Meaning of life*. NY: The Guilford Press.
- Branden, N. (1969). *The psychology of self-esteem: A revolutionary approach to self-understanding*. Jossey-Bass, NY: Willey.
- Brown, J. D. (1998). *The Self*. NY: McGraw-Hill.
- Byrne, B. (1990). Self-concept and academic achievement investigating their importance as discriminators of academic track membership in high school. *Canadian Journal of Education*, 15, 173-82.
- Cloninger, S. (2004). *Theories of personality: Understanding persons*. NJ: Pearson Prentice Hall.
- Covington, M. (1989). *Self-esteem and failure in school; The social importance of self-esteem*. Berkley, CA: U. C Press.
- Davis, W. L. & Phares, E. J. (1967). Internal-external control as a determinant of information seeking in social influence situation. *Journal of Personality*, 34, 547-561.
- De Brabander, B. & Boone, C. (1990). Sex difference in perceived locus of control. *Journal of Social Psychology*, 130, 271-272.
- De Mann, A.; Leduc C. & Labreche-Gauthier, L. (1992). Parental control in child rearing and multidimensional locus of control. *Psychology Reports*, 70, 320-322.
- Desselle, D. (1992). *Self-esteem, Family climate and communication patterns in relation to deafness*. A doctoral Dissertation, University of New Orleans. Dissertation Abstracts International, 53, 27634 University Microfilms No. 92-30595.

- Downey, G. & Moen, P. (1987). Personal efficacy, income and family transitions: A longitudinal study of women heading households. *Journal of Health and Social Behaviour* 28: 320 – 333.
- Dunnifon, R. & Duncan, G. J. (1998). Long-run effects of motivation on labour market success. *Social Psychology Quarterly*, 61,33 – 48.
- Elder, S & Liker, G. (1982). Relation between self and other acceptance and its moderation by identification . *Journal of Personality and Social Psychology*, 54, 309-315.
- Engler, B. (1999). *Personality theories: An introduction (5th Edition)*. Boston: Houghton Mifflin.
- Ezeilo, B. N. (1990). The self-concept and psychology. In A. A. Olowu (ed) *Contemporary issues in self-concept studies*, 34-35. Ibadan: Shaneson C. I Limited.
- Finch, M. D.; Shanahan, M. J.; Mortimer, J. R & Seongryeol, R.(1991). Work experience and control orientation in adolescence. *American Sociological Review*, 56, 597-611.
- Fraenkel, J. R. & Wallen, N. E. (2000). How to design and evaluate research in education. NY: McGraw-Hill.
- Gall, M. D.; Borg, W. R, & Gall, J. P. (1996). Educational research. An introduction. NY: Longman.
- Garner, W. C. & Cole, C. G. (1986). The achievement of students in low SES settings. An investigation of the relationship between locus of control and field dependence. *Urban Education*, 21, 189-206.
- Gaskin-Butler, V. & Tucker, C. (1995). Self-esteem, academic achievement and adaptive behaviour in African American children. *The educational Forum*, 59 (3), 234-242.
- Gecas, V. (1989). The social psychology of self-efficacy. *Annual Review of Sociology*, 15,291-316.
- Gregory, S.; Knight, P.; McCracken, W.; Powers, S. & Watson. L. (Eds) (1999). *Issues in Deaf education*. Londo: David Fulton.
- Harter, S.; Whitesell, N. & Junkin, L. (1998). Similarities and differences in domain-specific and global self-evaluation of learning disabled, behaviourally disordered and normally achieving adolescents. *American Educational Research Journal*, 35, 653-680.

- Heward, W L. (2006). *Exceptional children. An introduction to special education*. NJ: Pearson Prentice Hall.
- Holly, W. J. (1987). *Student self-esteem and academic success*. Eugene, OR: Oregon School Study Council.
- Hughes, M. & Demo, D, H. (1989). Self-perceptions of Black America: Self-esteem and personal efficacy. *American Journal of Sociology*, 95, 132-59.
- Juma, N, M. (1994). *Determinants of female participation in primary education. A study of Kwale and Taita-Taveta districts in Kenya*. Unpublished Ph.D Thesis. Nairobi: Kenyatta University.
- Kamonya, C, K. (2008). *Factors hindering teaching and learning activities for hearing impaired students at Karen Technical Institute for the deaf in Nairobi*. Unpublished M. Ed Thesis. Nairobi: Kenyatta University.
- Kloomok, S. & Cosden, M. (1994). Self-concept in children with learning disabilities; The relationship between global self-concept, academic “discounting”, non-academic self-concept and perceived social support. *Learning Disability Quarterly*, 17(1), 140-155.
- Lefcourt, H. M. (1991). Locus of control. In J. P Robinson; P. R. Shaver, & L. S, Wrightsman (Eds), *Measures of personality and psychological attitudes (vol 3)* New York: Academic Press.
- Lerner, J. (ed.) (2003). *Learning disabilities: theories, diagnosis and teaching strategies*. Boston, MA: Houghton Mifflin Company.
- Lewis, S. K.; Ross, C. E. & Mirowsky, J. (1999). Establishing a sense of personal control in the transition to adulthood, *Social Forces* 77, 1573 – 1599.
- Lin, X.; Kaplan, H. B. & Risser, W. (1992). Decomposing the reciprocal relationships between academic achievement and general self-esteem. *Youth and Society* 24, 123 – 148.
- Lynas, W. (1986). *Integrating the handicapped into regular schools; A study of hearing impaired pupils*. London: Groom Helm.

- Maqsud, M. (1983). Relationship of locus of control to self-esteem, academic Achievement and prediction of performance among Nigerian secondary school Pupils. *British Journal of Educational Psychology*, 2, 215-221.
- Maqsud, M. (1991). Relationship between socioeconomic status, locus of control, Self-concept and academic achievement of Botswana adolescents. *Journal of Youth and Adolescence*, 20, 16-22.
- Marschark, M. (1993). *Psychological development of deaf children*. NY: Oxford University Press.
- Marsh, H. W. (1986). Global self-esteem: Its relation to specific facets of self-concept and their importance. *Journal of Personality and Social Psychology* 51, 1224 – 1236.
- Mayer, C. L. (1967). Relationship of self-concepts and social variables in retarded Children. *American Journal of Mental Deficiency*, 72, 267-27.
- Mboya, M. (1986). Black adolescents: A descriptive study of their self-concepts and Academic achievement. *Journal of Adolescence*, 21, (83), 689-697.
- Meadow, K. P. (1976). Personality and social development of deaf people. *Journal of Rehabilitation of the Deaf*, 9, 1-12.
- Meadow, K. P. (1980). *Deafness and child development*. Berkeley CA: University of California Press.
- Mirowsky, J. & Ross, C. E. (1989). *Social causes of psychological distress*. NY: Aldine de Gruyter.
- Mirowsky, J. & Ross, C. E. (1989). Explaining the social patterns of depression. Control and problem solving – or support and talking. *Journal of Health and Social Behaviour* 30, 206 – 219.
- Mone, M. A.; Baker, D. D. & Jeffries, F. (1995). Predictive validity and time dependency of self-efficacy, self-esteem, personal goals and academic performance. *Educational and Psychological Measurement*, 55, 716 – 727.
- Murugami, M. W. (2002). *Effects of locus of control on self-concept among secondary school learners in special schools in Central Province*. Unpublished M.Ed Thesis. Nairobi: Kenyatta University.

- Mwaniki, M. (1973). *The relationship between self-concept and academic achievement in secondary schools in Kenya*. Unpublished Ph. D Dissertation. CA: Stanford University.
- Mwathi, B. (1998). *Relationship between self-concept and academic aspirations among disabled persons*. Unpublished M.Ed Thesis. Nairobi: Kenyatta University.
- Nyakado, J. A. (2007). *Effectiveness in the use of audiological equipment in the Audiological rehabilitation of primary school pupils with hearing impairment In Nyanza Province, Kenya*. Unpublished M.Ed Thesis. Nairobi: Kenyatta University.
- Norwicki, S. & Strickland L, (1973) *Locus of control Scale for children*. Washington D.C: Hancourt Brace Inc.
- Oliwa, B. N. (1998). *A study on relationship between achievement, motivation locus of control and academic performance of class eight pupils in Bondo District*. Unpublished M. Ed Thesis. Nairobi: Kenyatta University.
- Orodho, J. A. (2005). *Elements of Education and social science research methods*. Nairobi: Masola.
- Oglivie, D. M. (1987). *The undesired self: A neglected variable in personality research. Journal of Personality and Social Psychology, 52, 372-388.*
- Osbourne, J. W. (1995). *Academics, self-esteem and race: A look at the underlying Assumptions of the disidentification hypothesis. Personality and Social Psychology Bulletin, 21, 449-455.*
- Pearlin, L. I.; Menaghan, E. G.; Lieberman, M. A. & Mullan, J. T. (1981). *The stress process. Journal of Health and Social Behaviour, 22, 337-356.*
- Phares, E. J. (1971). *Internal and external control and the attribution of blame under neutral and distractive conditions. Journal of Personality and Social Psychology, 70, 285-288.*
- Powell, F.; Finitzo-Hieber, T.; Friel-Patti, S. & Henderson, D. (1985). *Education of hearing impaired child*. San Diego:College-Hill Press.
- Powell, F & Luzzo, G. R. (1998). *Focus on behaviour analysis in education: Achievement, challenges and opportunities*. NJ: Merrill/Prentice Hall.

- Robson, C. (1993). *Real world research: A resource for social scientists and practitioner researchers*. Oxford: Blackwell.
- Rogers, C. R. (1951). *Client-centered theory*. Boston: Houghton Mifflin.
- Rojewski, S. (1996). The imaginary audience, self-consciousness and public individual in Adolescence. *Journal of Personality*, 62,219-238.
- Rosenberg, M. (1979). *Conceiving the self*. NY: Basic Books.
- Rosenberg, M.; Schooler, C. & Schoebach, C. (1989). Self-esteem and adolescent problems: Modeling reciprocal effects. *American Sociological Review*, 54: 1004-10018.
- Rosenberg, M.; Schooler, C.; Schoebach, C. & Rosenberg, F. (1995). Global self-esteem and specific self-esteem: Different outcomes. *American Sociological Review*, 60: 141-156.
- Rosenberg, M. & Simons, R. G. (1979). Self-esteem and adolescent problems. Modelling reciprocal effects. *American Sociological Review*, 54: 1004- 78.
- Ross, C. E. & Broh, B. A. (2000). The roles of self-esteem and the sense of personal Control in academic achievement process. *Sociology of Education*, 73 (4), 270-284.
- Rotter, J. B. (1982). *Development and application of social learning theory: Selected papers*. New York.
- Rotter, J. B (1966). Generalized expectancies for internal verses external control reinforcement. *Psychological Monographs*, 80. whole No. 609.
- Rotter, J. B.; Chance, J. E. & Phares, E. J. (Eds) (1972). *Application of a social learning theory of personality*. Holt, NY: Rinehart and Winston.
- Schlesinger, H., & Meadow, K. (1972). Development of maturity in deaf children. *Exceptional Children*, 38, (6), 461-467.
- Seeman , M. & Seeman, T. E. (1983). Health behaviour and personal autonomy. *Journal of Educational Psychology*, 71, 46-53.
- Schooler, Schoenbanch, & Rosenberg, M (1995)
- Shindi, R. (1983). Self-concept of orthopedically handicapped children: *International Journal of Social Psychiatry*, 16, 135-140.
- Shwalbe, M. L. & Staples, C. L. (1991). Gender differences in sources of self-esteem. *Social Psychology*. 54, 158 – 168.

- Sirin, S. & Jackson, L. (2001). Examining school engagement of African American Adolescents. U.S Massachussetts. (ERIC Document Reproduction Service No. 454378).
- UNESCO, (1998). Women literacy in developing countries. Paris: UNESCO.
- UNICEF, (2001). On www.sahaya.org/deaf.html, August 2006.
- Van Laar, C., & Weiner, B. (1998). Attributions and expectancies as determinants of achievement in Black students. Paper presented at the annual convention of the American Psychological Association. San Fransisco. CA.
- Wade, T. J.; Thompson V.; Tashakkori, A. & Valente, E. (1989). A longitudinal analysis of sex by race differences in predictors of adolescent self-esteem. *Personality and Individual Differences*, 10, 717 – 729.
- Woolfe, P. & Smith, M. (2001). The self-esteem and cohesion to family members of deaf children in relation to hearing status of their parents and siblings. *Journal of Deafness and Education International*, 3 (2), 203-234.
- Wheaton, B. (1980). The sociogenesis of psychological disorder: An Attributional theory. *Journal of Health and Social Behaviour*, 21, 100 – 124.
- Yee, F. W.; Watkins, D. & Crawford, N. (1997). Self-Esteem and hearing impairment: An investigation of Hong Kong secondary school students. *In a Journal of Social Behaviour and Personality*, 25 (4), 367-374.

APPENDICES

APPENDIX 1: STUDENT'S QUESTIONNAIRE (SQ1)

PART A

Instructions:

This research aims at finding out some of the things that make an individual to have confidence in herself as she forges ahead with her academic pursuits in education. Your school is one of the few schools in Kenya, which have been selected for this study. You are also one of the few students selected in your school to participate in this important exercise.

You are requested to complete the questionnaire as accurately as you can. It is not an examination. It only needs your VERY HONEST opinion as concerns your self-evaluation. All information that you supply will be treated as confidential and used only for the purpose of this study.

The researcher wishes you a successful time as you pursue your education in this school. I look forward to your cooperation in this exercise.

APPENDIX 2:

DEMOGRAPHIC/PERSONAL DATA (PART B)

Please respond to each question by ticking appropriate information or providing requested information.

1. Your name.....

2. How old are you? (*Put a tick*)
- i) 14-16 years
 - ii) 17-19 years
 - iii) 20-22 years
 - iv) 23 years and above

3. Name of your school.....

4. School type (*Put a tick*)
- i) Girls secondary
 - ii) Mixed secondary

5. School status (*Put a tick*)
- i) Day school
 - ii) Boarding
 - iii) Both day and boarding

6. Which communication method do you use in school?
- i. Sign language
 - ii. Speech
 - iii. Total communication
 - iv Any other (Please specify)
-
-

7. Do you use a hearing aid?
- I) Yes
 - ii) No

8. If yes who bought you the hearing aid?
- i) Parent
 - ii) Guardian
 - iii) School
 - iv) Any other

Please specify

APPENDIX 3:

AN ADAPTED ROSENBERG SELF-ESTEEM SCALE (SQ2)

The Rosenberg (1965) Self-Esteem Scale is a questionnaire that helps you to evaluate yourself. It has four options as illustrated below. Please tick the most appropriate number from the following choices.

		0	1	2	3
		Strongly Disagree	Disagree	Agree	Strongly Agree
1.	I like most things about myself	0	1	2	3
2.	At times I think I am no good at all	0	1	2	3
3.	All in all I am inclined to feel that I am a failure	0	1	2	3
4.	I wish I could have more respect for myself.	0	1	2	3
5.	I certainly feel useless at times	0	1	2	3
6.	I feel that I am a person of worth, at least on an equal plane with others	0	1	2	3
7.	On the whole, I am satisfied with myself	0	1	2	3
8.	I feel I do not have much to be proud of	0	1	2	3
9.	I feel that I have a number of good qualities	0	1	2	3
10.	I am able to do things as well as most other people	0	1	2	3

APPENDIX 4: PRINCIPALS' QUESTIONNAIRE (PQ)

Instructions:

Please respond to the following questions by giving most accurate information.

1. Name of school.....
- 2a. Type of school.....(Day, Boarding).
- 2b. Nature of school.....(Girls, Boys, Mixed).
3. Number of teachers in the school.....
4. Teachers' qualifications: How many teachers for each level:
 - Untrained.....
 - P1.....
 - S1.....
 - Diploma.....
 - Ist Degree.....
 - 2nd Degree.....
5. Which mode of communication is used in the school?
6. Do you have loop induction system?.....(Yes/No)
7. Do you have group hearing aids?.....(Yes/No)
8. Do your students use hearing aids?.....(Yes/No)
9. Who provide these hearing aids? Please specify.....
.....
10. Does the school have adequate teaching/learning resources?(Yes/No)
11. Do you receive any kind of support from parents?..... (Yes/No)
Please specify.....
12. What kind of social activities do students engage in?
13. How is teacher-teacher and teacher-student relationship in the school?
Please give more details.....

**APPENDIX 5: COMPLEMENTARY INTERVIEW SCHEDULE FOR
PRINCIPALS**

1. From the data collected, girls seem to have high self-esteem but very low academic performance, what would be the cause for the low performance?
2. Is there anything that majority of girls express to value most in the school?
3. Is there a possibility of communication barriers between students and teachers?
4. What would you wish the government to do in order to encourage good academic performance?
5. Which types of hearing aids are commonly used by students?
 - ⇒ In the ear
 - ⇒ Behind the ear
 - ⇒ Body worn
 - ⇒ Loop induction
 - ⇒ Group hearing aid
 - ⇒ Any other, please specify

APPENDIX 6: A letter seeking permission to conduct research in school.

Beatrice Bunyasi Awori,
Kenyatta University,
P.O. Box 43844,
Nairobi.
26/06/2008.

The Principal,
St. Angela Secondary School,
Mumias.

Dear Sir/ Madam

RE: PERMISSION TO CONDUCT RESEARCH IN YOUR SCHOOL

I am a lecturer at Kenyatta University. I am currently pursuing my doctoral degree in Special Needs Education and a research project is a requirement for this course.

My area of interest is to study relationship between self-esteem and academic achievement of girls with hearing impairment in secondary schools. The Ministry of Higher Education Science and Technology has already granted me authority (See attached copy). May I also assure you that all the information gathered will be treated with confidence.

Thanking you in advance for your co-operation and assistance.

Yours Faithfully,



Beatrice Bunyasi Awori.
Student Researcher.

APPENDIX 7: A letter seeking permission to conduct research in school.

APPENDIX 7: A Letter Seeking Permission to Conduct Research in School

Beatrice Bunyasi Awori,
Kenyatta University,
P.O. Box 43844,
Nairobi.
26/06/2008.

The Principal,
Reverend Muhoro Secondary School,
Nyeri.

Dear Sir/Madam,

RE: PERMISSION TO CONDUCT RESEARCH IN YOUR SCHOOL

I am a lecturer at Kenyatta University. I am currently pursuing my doctoral degree in Special Needs Education and a research project is a requirement of this course.

My area of interest is to study relationship between self-esteem and academic achievement of girls with hearing impairment in secondary schools. The Ministry of Higher Education Science and Technology has already granted me authority (see attached copy). May I also assure you that all the information gathered will be treated with confidence.

Thanking you in advance for your co-operation and assistance.

Yours faithfully,



Beatrice Bunyasi Awori
Student Researcher

APPENDIX 8: Letter of authority from Ministry of Education

**MINISTRY OF HIGHER EDUCATION
SCIENCE AND TECHNOLOGY**

Telegram: SCIENCE TECH, Nairobi
Telephone: Nairobi 318581
Email: ps@science andtechnology.go.ke
When replying please quote



JOGOO HOUSE "B"
HARAMBEE AVENUE
P.O. BOX 9583-00200
NAIROBI

Ref.No: MOHST13/32C 85/8

24th June, 2008

Beatrice Bunyasi Awori
Kenyatta University
P O Box 43844
NAIROBI

Dear Madam

RESEARCH AUTHORIZATION

Following your application for authority to conduct research on *Relationship between self-Esteem and Academic Achievement of Girls with Hearing Impairment in Secondary Schools for the Deaf in Kenya*, I am pleased to inform you that you have been authorized to conduct research in Mumias and Nyeri Districts for a period ending 30th August, 2008.

You are advised to report to the District Commissioners and the District Education Officers, Mumias District before embarking on your research.

On completion, you are expected to submit two copies of your research findings to this office.

Yours faithfully

A handwritten signature in black ink, appearing to be 'M.O. Ondieki', written over a horizontal line.

**M.O. ONDIEKI
FOR PERMANENT SECRETARY**