

**AN EVALUATION OF PROGRAMME PLACEMENT FOR  
LEARNERS WITH VISUAL IMPAIRMENTS IN RELATION TO SELF-  
CONCEPT AND ACADEMIC ACHIEVEMENT IN SPECIAL PRIMARY  
SCHOOLS, KENYA**

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## ABSTRACT

Self-concept is very crucial in determining pupils' achievement. In special needs education programmes, this is more crucial because children with special needs such as visual impairment tend to be influenced by the learning environment in which they are. Placements for children who are visually impaired have been done haphazardly without any consideration of their self-concept thus leading to low achievement. There are three programmes of placement namely, special school programme, integrated programme and inclusive programme. However, prior to the placement, no study is ever done to determine suitable placement criteria. The purpose of this study was to evaluate programme placement for learners with visual impairment in relation to self-concept and academic achievement in special primary schools in Kenya. Specific objectives of the study were to: determine the relationship between self-concept and academic achievement for learners who are visually impaired; determine which of the programmes most enhanced self-concept for learners who are visually impaired; find out if learners with low vision had a higher self-concept than those who are totally blind, find out if there was gender difference in self-concept and achievement among learners who are visually impaired and to find out teachers' attitude on programme placement. The Conceptual framework for this study was based on Anderson's Evaluation Model. A survey and correlation research designs were used in the study. The study was conducted in 10 public primary schools which comprised: six special school programmes for learners who are visually impaired; three integrated school programmes; and one inclusive project in Kenya. The population of the study was 291 class eight pupils and 54 class eight teachers. A stratified sampling was used to select schools incorporating integration, inclusive and special programmes and saturated sampling was used to sample 262 class eight pupils while purposive sampling was used to select 38 class eight teachers, focusing on those who were teaching English, Kiswahili, Science and Social Studies only. Four instruments were used for data collection, namely; pupils' questionnaire on academic self-concept for learners who are visually impaired, pupils' academic achievement test, teachers' inventory. The instruments were piloted at one of the special primary schools (not part of the sample) to establish their validity and reliability. Data analysis was done at  $p \leq 0.05$ . The t-test was used to measure level of significance between self-concept and achievement and Pearson's  $r$  was used to measure the correlation between self-concept and academic achievement. The data was analyzed using procedures based on the analysis of variance structure for each programme separately. Analysis of variance (ANOVA) was conducted to determine the interaction effect within and between the programmes in order to eliminate the confounding variables; academic self-concept, sex and visual impairment were the independent variables, achievement being dependent variable. The study established that there was a significant relationship between self-concept and achievement, respondents who scored high in self-concept also scored high in achievement, pupils with low vision scored higher in self-concept as compared to those who were totally blind, girls performed better in self-concept as compared to boys, and pupils placed in Inclusive programme had higher scores followed by Integrated programme and then special schools programmes. The study recommended the expansion of more inclusive programmes in Kenya to cater for more pupils and an enhancement of academic self-concept to boys who are visually impaired in order to improve their academic performance.



## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background to the Study

Self-concept is very crucial in determining pupil's achievement. In special needs education programmes this is more crucial because children with special needs such as visual impairment tend to be influenced by the learning environment in which they are placed. Policy makers and curriculum practitioners have all endorsed the importance of a positive self-concept as an important goal for educational programmes. This importance is evident in the heated debate about whether children with special needs are best educated in special classes developed for these pupils, in regular, integrated classes or some combination. Proponents of different approaches to this issue in special education have all claimed support for their favoured approach in terms of enhancing self-concept (Fox & Fung, 2009). While the inclusion of pupils with visual impairment in regular classes continue to gain international momentum, no study has been done to determine which of the three types of placement programme, namely integrated, special school or inclusive programme most enhances self-concept among visually impaired pupils.

The word "self-concept" according to Craven (1997), is "the total sum of all that he can call his". He further described the constituents and appetites, love of home, the social self, desire to please, to be noticed, and the spiritual self, the intellectual, moral, religious, and conscientious self. The self encompasses both the "I" and the "me" both the subject and the object of experience, both the knower and the known. However, the formation of the self-concept begins in infancy and continues throughout life. The physical self is the first component of the self-concept to emerge in infancy. Most children use the vision to observe their own body and bodily actions as well as the

objects, people, and actions within their social and physical environment. As a result, they normally begin to realize they are unique, distinct, and separate from that which is "not me." Later the child learns to place value judgments on the "good me" and the "bad me".

Although the sequence of growth and development is essentially the same for the visually impaired and the sighted, some of the developmental tasks are learned more slowly or at a later age by children who are visually impaired. Awareness of the varied objects and persons both near and far, refinement of motor proficiency, locomotion, hand-ear coordination, bonding between mother and child, stimulation of exploration, and establishment of object and person permanence will develop later in the child who is visually impaired (Marsh, Byrne & Yeung, 1999).

Although adaptations or modifications may be required for maximum development, the process of differentiating oneself as a distinct and autonomous being and the process of differentiating objects, animals, persons, or events from each other are more difficult for the congenitally visually impaired child. Referring to a child who is visually impaired acquiring body image primarily through tactile and verbal means, Marsh (2002) concluded that "these avenues are inferior in providing information concerning his body as compared to the bodies of others. Therefore the formation of a body image is delayed".

Self-concept is also frequently posited as a moderating variable that facilitates the attainment of other desired outcomes. For example Marsh (2002) suggest that the attainment of a positive academic self-concept is linearly related to subsequent academic efforts and persistence, course work selections, educational aspirations,



attributions for one's own behaviour, academic achievement, completion of high school, and subsequent university attendance.

Self-concept theory and practice indicate that the formation of academic self-concept requires students to compare their self-perceived academic accomplishment to some standard or frame of reference. Because individuals have different frames of reference, the same academic accomplishment can lead to different academic self-concepts. Marsh (2002) hypothesized that pupils compare their own academic ability to the academic abilities of their classmates and use this social comparison impression as one basis for forming their own academic self-concept. The problem occurs when pupils have lower academic self-concept as a result of comparing themselves to more able pupils and higher academic self-concept as a result of comparing themselves to less able pupils. Although the psychological principles involved in the dynamics of the development of one's self-concept among the sighted are equally applicable to persons who are visually impaired, the potentially negative direction of the interaction on self-concept, both the external and internal sources of self-concept need to be clearly understood. Marsh (2002) held the conviction that understanding the development of self-concept is fundamental for the professional who works with visually impaired persons. An individual's perception of his world and demands, coupled with perceptions of his own abilities to cope with those demands are determinants of his behaviour. In other words, one's self-concept helps to determine how a person adapts to his environment. The way in which a man conceives of himself will influence both what he chooses to do and what he expects from life.

Bandura (1989) states that performance accomplishment, or direct involvement with a given challenging task, have repeatedly been found to provide people with potent feedback about their ability to cope by providing concrete evidence of their abilities.

The social status of learning of children who are visually impaired among their sighted peers has been of major interest and concern over the past few years. This can be attributed to the convergence of a number of influences. First, numerous correlational studies have examined the relationship between children's social competence and later life adjustment. Socially incompetent children have been found to have a high incidence of school adjustment. Conversely high social status on children has been related to superior academic achievement and adequate inter personal adjustment later in life (Marsh, Byrne & Yeung, 1999).

Visual impairment covers a wide range of children, as stated by (Scholl, 1995). Included are those children who have never had any visual functioning, those who had normal vision for some time before becoming gradually or suddenly partially or totally blind, those with handicaps in addition to the visual loss, those with selective impairments of parts of the visual field, and those with a general degradation of acuity across the visual field. Therefore it is misleading to think of children who are visually impaired as being all alike, with the implication that they may all be treated alike with uniform success in education or other settings. There are at least three major sources of heterogeneity in this population, with the varying implications for treatment of children who are visually impaired. The first source results from other impairment conditions, either minor ones or ones that are major to the extent that the individual is considered to be multiple impaired.



Second, there are several important stated factors related to visual impairment itself. These include the degree of impairment, the age of its onset, and the etiology of impairment. It should be noted that these factors are not under the control of the child or those who work with the individuals and so while their effects should be understood they cannot be changed by intervention.

The third category, by contrast, consists of factors which can potentially be influenced. These include the vast array of environmental circumstances in which children who are visually impaired are raised and educated (Griffin-Shirley, Almon & Kelly, 2007). They are such factors as the nature of the physical environment, the sensory and learning environment, and particularly the social setting, including patterns of family interactions. Foremost among these environmental factors is the nature of the educational setting. However the social stigma of being disabled is learned. According to Nzewgu (2005) the various attitudes and patterns of behaviour that characterize people who are visually impaired are not inherent in their condition but, rather, are acquired through ordinary processes of social learning.

Increasingly in recent years, it has become prevailing practice to educate children who are visually impaired in the public school setting rather than in the residential schools for pupils who are visually impaired. Education of the visually impaired was totally ignored until the eighteenth century. However, asylums for children who are visually impaired were established during the renaissance years. In those days, visually impaired persons were viewed at best, as useless, and in many cases were felt to be unfit to live. Unable to understand why they had to be visited in their household, parents sometimes took their visually impaired infants to the wilderness where they were left to die. When allowed to live, a life of beggary was the best to be hoped for.

The visually impaired beggars were often beaten, stoned or caused to run so as to provide amusement for the sighted. The asylum period of the renaissance was a step in the direction of more human treatment of the visually impaired, but did not provide for any degree of self- realization of individuals so “unprotected”. Some asylums were virtual prisons, with inmates unable to leave even if they wished to do so. Asylums were welcomed by sighted individuals who wanted to demonstrate that they truly were “their brothers’ keeper” and served to realize the general population of daily confrontation with the reality of visual impairment (Kef, 2002).

During the ensuing years a number of factors; including changing social values and improvements in educational theory and technology, began to cause some educators and researchers to question the validity and appropriateness of special class placement (Marsh, 2002). The decisions rendered in several court cases and mounting professional and parental opinion opposed to segregated education. These factors culminated in the passage of Public Law (PL) 94-142, in United States of America (USA) mandating education in the least restrictive environment (LRE). However the mandates of PL 94-142 have not answered the question: What is the most effective and appropriate placement for visually impaired persons? PL 94-142 established as a matter of law that the least restrictive environment was the optional educational setting. However what the least restrictive environment is, as a matter of fact remains controversial. There is therefore an increasing emphasis on how most effectively to educate pupils who are visually impaired. The appropriate education for pupils who are visually impaired can be argued on the basis of excellence and equity issues, of enriching the intellectual climate of society and of maximizing the academic potential of pupils who are visually impaired. However, policy and practice are often based on political consideration.



Selection and placement of children with visual impairment seems to follow historical precedents as well as professional traditions (Ndurumo,1993). For many years educational services to these children in Kenya were limited to residential schools. These residential schools were first established as boarding schools, similar to other private, residential boarding institutions for sighted pupils. As missionaries and non-governmental organizations built residential facilities, they were built based on the model of boarding schools within the country. These special schools used selectivity mode of method for enrollment. Children who attended special schools were expected to be ready for academic learning. Emphasis was placed on learning Braille or listening skills as the means of information gathering. Strong emphasis was placed on learning to live within socially acceptable roles as defined for persons who were visually impaired. However, to date, the enrolment of children who are visually impaired in special schools is still likely to be more than those children with visual impairment in day school programmes in local communities, known as integrated programmes, but the key issues are still the same. Whether pupils would learn print or braille, pupils who do not have academic potential are not to be contained in school (Ndurumo,1993).

Those persons who do not benefit from academic instruction are usually grouped into a category called the learning disabled visually impaired or 'retarded blind', meaning that they are not capable of academic achievement to the degree that permits them to be retained in the special schools for pupils who are visually impaired. However, it must be emphasized that enrolment for pupils who are visually impaired into special schools is not automatic. Certain criteria have to be met, for school admission. There must be assessment done and the doctor must certify the cause of visual impairment. It is not unheard of, to have a child denied admission or excluded from school just because of an inadequate lack of potential as measured on a single test (Were, 2003).

Often children who are visually impaired are tested with instruments that are totally inappropriate for use by the blind. As a result these children who are visually impaired are excluded from school because of no chance available at the school of choice. There is lack of any assertive policy to see that practices from the field of education (that is the assessment teachers, the itinerant teachers) are applied to pupils who are visually impaired. The curriculum followed by this population comes from the curriculum used by children who are sighted. There is no active programme to see that aids and devices used by pupils who are visually impaired are made available. Often, lenses are not provided freely to pupils who are visually impaired. Most teachers in classrooms serving pupils who are visually impaired do not have information or training regarding why it is necessary for these pupils to wear glasses. Until recently, there were few instructional programmes for use of residual vision for pupils who are visually impaired. Technology that is voluntarily used in programmes for pupils who are visually impaired has not been made available in most of Kenya's special schools (Ndurumo, 1993).

Another factor regarding pupils who are visually impaired is lack of assessment devices that details strengths of the learner. Most assessment instruments come from a background of highlighting disability rather than academic strengths. However, with the emphasis on free primary education (FPE) and on appropriate education for all children (EFA), there should be a movement towards assessment that establishes abilities rather than disabilities. This study therefore evaluated placement programme for pupils who are visually impaired in relation to self-concept and academic achievement in special primary schools in Kenya, this study focused on their abilities and achievement rather than their disabilities.



## **1.2 Statement of the Problem**

As noted in the background to the study, placement for learners who are visually impaired has been done haphazardly without any consideration to their self-concept and all decisions made have been based on the opinions of the assessment teacher. As a result, the school dropout is high among this group of learners. While the Government is providing Free Primary Education for all Kenyan children, lack of clear guidelines for programme placement for learners who are visually impaired is not in place and this makes them to take long before being admitted in school. Therefore early stimulation for their self-concept is delayed. There has been no studies done to evaluate to what extent the programme placement enhances self-concept and academic achievement among these pupils. This study therefore evaluated programme placement for learners with visual impairment in relation to self-concept and academic achievement in special primary schools in Kenya so as to establish their abilities for effective educational provision.

## **1.3 Purpose of the Study**

The Purpose of this study was to evaluate programme placement for learners with visual impairment in relation to self-concept and academic achievement in special primary schools in Kenya.

## **1.4 Objectives of the Study**

Specific objectives of the study were to:

- i. determine the relationship between self-concept and achievement for learners who are visually impaired.
- ii. determine if learners with low vision had a higher self-concept than those who were totally blind.

- iii. determine if there was any differences in achievement scores among learners who are visually impaired.
- iv. determine differences in terms of self-concept enhancement for learners who are visually impaired when placed in different programmes.
- v. find out if there was gender difference in self-concept and achievement among learners who are visually impaired.
- vi. Assess the attitude of teachers in special needs education (SNE) towards teaching learners who are visually impaired in their programme placement.

### **1.5 Research Hypotheses**

The study was based on the following research hypotheses:

- i. There is no significant relationship between self-concept and achievement for learners who are visually impaired.
- ii. Learners with low vision do not have a higher self-concept than those who are totally blind.
- iii. There is no difference in achievement scores among learners who are visually impaired.
- iv. There is no difference in terms of self-concept enhancement for learners who are visually impaired when placed in any of the three educational programmes, namely special, integrated and inclusive.
- v. There is no gender difference in level of self-concept and achievement among learners who are visually impaired.
- vi. Teachers of special needs education (SNE) do not have a positive attitude towards teaching learners who are visually impaired in their programme placement.



## **1.6 Basic Assumptions of the Study**

This study assumed that:

- i. self-concept was not influenced by different cultural background of the learners;
- ii. learners who are visually impaired needed conducive environment to enhance their self concept;
- iii. academic achievement was directly proportional to self-concept;
- iv. there was no gender bias in programme placement for learners who are visually impaired in Kenya.

## **1.7 Scope of the Study**

The study was done within the schools for learners who are visually impaired in Kenya. These included special schools, inclusive, and integrated programmes for learners who are visually impaired as coordinated by itinerant teachers in the districts where the programmes are active. Special schools for learners who are visually impaired were St. Oda school for the visually impaired, Kibos school for the visually impaired, the Salvation Army primary school for the visually impaired, Thika. St. Francis school for the visually impaired, Kapenguria, Likoni school for the visually impaired, Mombasa and St. Lucy school for the visually impaired, Meru. Integrated programmes included in this study were Kilimani Integrated programme, Kajiado Integrated programme and Kitui Integrated programme. This study used Oriang inclusive education project in Nyanza province.

## **1.8 Limitations of the Study**

Findings of this study may have been influenced by possible unreliability of researcher made tools which was used as a measure of pupils' achievement scores. Lack of control

of extraneous factors which might have contributed to the performance of pupils such as intelligence and school environment may have caused limitations. The researcher, in a bid to reduce the above stated limitations, therefore used each respondent to act as his or her own control. The test was done on the same day to avoid history or maturation effect.

### 1.9 Conceptual Framework

The conceptual framework of this study was based on Anderson's evaluation model. Most programme evaluators agree that a programme evaluation can play either a formative purpose (helping to improve the programme) or a summative purpose (deciding whether a programme should be continued). Anderson & Ball (1978) further described the capabilities of programme evaluation in terms of six major purposes. They are:

- i. to contribute to decisions about programme modifications,
- ii. to contribute to decisions about programme continuation, expansion or certification,
- iii. to contribute to decisions about programme modifications,
- iv. to obtain evidence to rally support for a programme,
- v. to obtain evidence to rally opposition for a programme,
- vi. to contribute to the understanding of basic psychological, social and other processes.



The relationship among the six purposes of evaluation procedures in relation to self-concept is illustrated in figure 1.

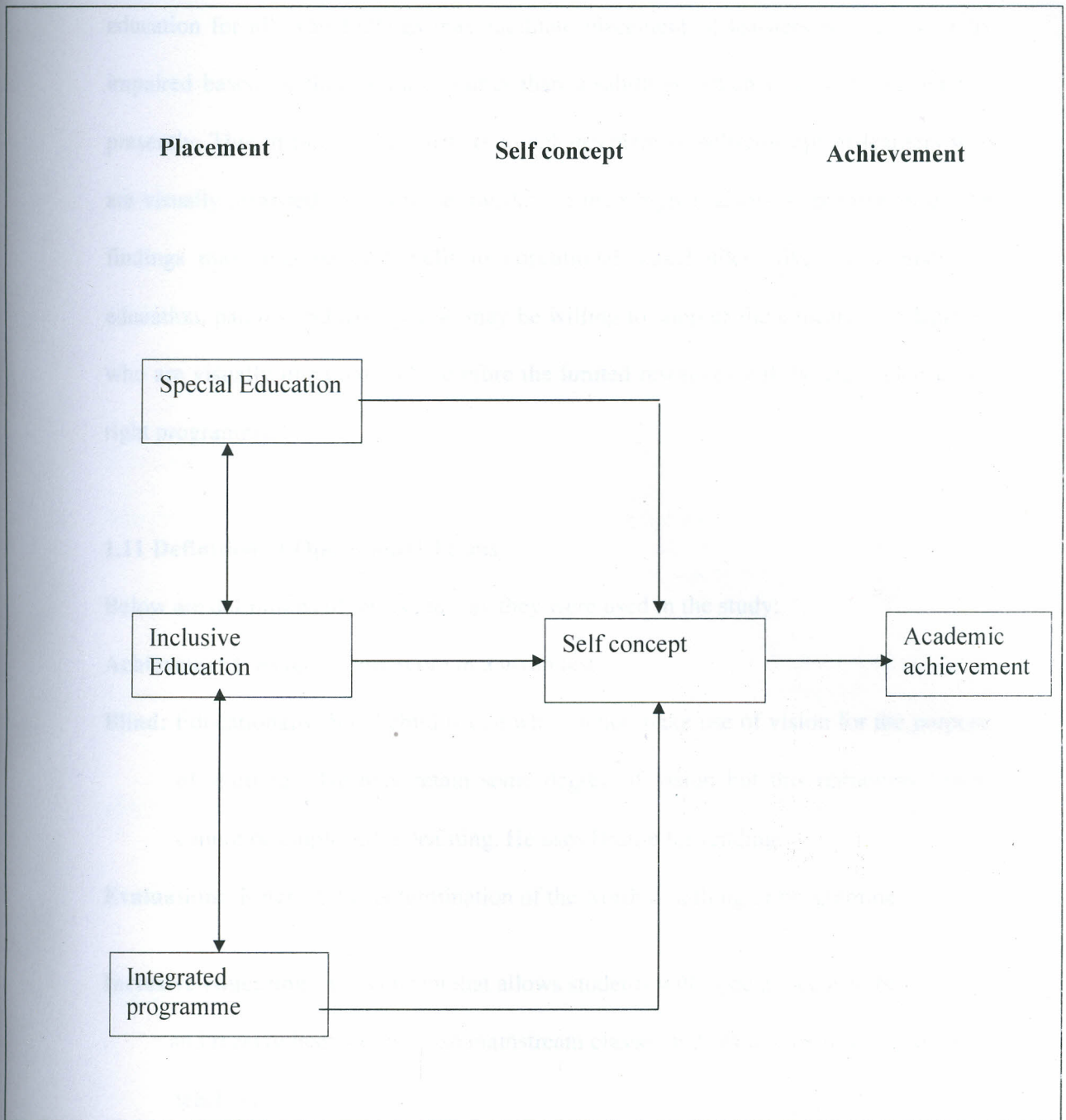


Figure1: Conceptual framework on evaluation of programme placement as it affects self-concept and academic performance, (Anderson & Ball 1978 ).

### 1.10 Significance of the Study

The findings of this study will contribute to theories and practices in the provision of education for all. The findings may facilitate placement of learners who are visually impaired based on their abilities rather than disabilities which is a common practice presently. This in turn will contribute to enhancement of self-concept of learners who are visually impaired and likewise translate to their higher academic performance. The findings may also be of benefit to educational stakeholders like the ministry of education, parents and donors who may be willing to support the education of learners who are visually impaired and therefore the limited resources will be channeled in the right programme.

### 1.11 Definition of Operational Terms

Below are definitions of terms the way they were used in the study:

**Achievement:** Refers to any score in a given test .

**Blind:** Educationally, blind child is one who cannot make use of vision for the purpose of learning. He may retain some degree of vision but this remaining vision cannot be employed in learning. He uses Braille for reading.

**Evaluation:** Refers to the determination of the worth of a thing or programme

**Inclusive education:** is a concept that allows students with special needs to be placed and receive instruction in the mainstream classes and being taught by ainstream teachers



**Inclusive education programme:** Refers to education for all children, regardless of disability, with a vital and integral part of the general education system. Special needs services addressing the goals and objectives of children with disabilities may be rendered in or out of the general education classroom..

**Integration:** Placement of individuals with disabilities in the same facilities as their peers with no disabilities.

**Low vision:** A low vision child can do tasks involving vision only at a close range, or with the aid of high powered optical devices.

**Placement:** Assignment of a learner to a specific programme.

**Programme evaluation:** Any educational enterprise aimed at the solution of a particular educational problem or the improvement of some aspect of an educational system.

**Pupils:** referred as learners in this study and sometimes used interchangeably.

**Self :** The self in humanistic psychology is roughly the equivalent of the “ego” in psychoanalytic psychology. It refers to conscious of its identify over time.

**Self-concept:** Is a person’s self-perceptions formed through experience with and interpretation of his or her environment.

**Self-esteem:** How well a person likes him/her self, how well he/she deems her/himself to be.

**Self-image:** The self a person believes himself to be.

**Special Education:** Refers to the education, including instructional methods, curricular materials that teachers provided to children who have disabilities.

**Special Education programme:** A subsystem of regular education, responsible for the education of learners with disabilities.

**Special Needs Education:** Refers to the education, including instructional methods, curricular materials that teachers provide to exceptional children that is the gifted and talented, children living under difficult circumstances, those with disabilities and among others.

**Special Schools:** Specially designed institutions to give instruction which meets the unique needs of an impaired child, special materials, teaching techniques, equipment and or facilities that may be required.

**Totally blind:** A child whose visual acuity for distance vision is 20/200 or less in the better eye, with best correction, or visual acuity of more than 20/200 if the widest of field of vision subtends an angle no greater than 20 degrees.

**Visually impaired:** Are children whose visual condition has a problem to the extent it requires special provisions if they are to succeed in their education development and life adjustment.



## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1. Introduction

In an attempt to address the variables on programme placement for visually impaired pupils in relation to self-concept and academic achievement in special primary schools in Kenya, based on its objectives , content , methodology and outcomes , a review of related studies was based on the six specific objectives to give this study direction,

#### 2.2 Relationship between self-concept and achievement for learners

##### **who are visually impaired.**

The link between self-concept and academic performance has provided a constant source of intrigue for researchers as evidenced by a number of studies devoted to the topic over the past 30 years or so (Fok & Fung, 2004). Questions raised by the present study have been:

- i. what is the relation between academic self-concept and academic achievement?
- ii. is there evidence of causal predominance between self-concept and academic achievement?
- iii. what are the social referents that underlie the formation of self concept as it relates to academic achievement?

Fok and Fung (2004) argues that self-concept is one of the most popular ideas in psychological literature, unfortunately, self-concept is also an illusive and often poorly defined construct. Reviews of literature have found at least 15 different "self" terms used by various authors. Terms such as "self-concept," "self-esteem," "self-worth," "self-acceptance," are often used interchangeably and inconsistently, when they may relate to different ideas about how people view themselves. In this study, definition is

the first consideration in the assessment of self-concept. Before attempting to assess self-concept, counseling practitioners or researchers must first clarify for themselves what they mean by "self-concept" and then choose a method or instrument consistent with that definition.

Perhaps the most important distinction that differentiates various conceptualizations is whether self-concept is viewed as a global characteristic of the person, or as a set of self-evaluations specific to different domains of behavior. The global view, sometimes conceptualized as "self-esteem" or "general self-concept," is the older and probably the more common view among counselors and therapists (Fok & Fung, 2004). Items comprising the "Rosenberg Self-Esteem Scale" (Campbell, 2005) capture the essence of the global self-concept idea, and continue to be used frequently in research. "The Piers-Harris Children's Self-Concept Scale" (Campbell, 2005) and the "Tennessee Self-Concept Scale" (Campbell, 2005) both commonly used instruments, are also rooted in the global tradition, although each also provides domain-specific scales. In contrast to the traditional model of global self-concept, multifaceted models stress self-evaluations of specific competencies or attributes, for example, physical self-concept, and so on. Although some theoretical models are hierarchical, with global self-concept at the apex, most of these models stress the distinctiveness of various self-concept facets. Extensive empirical research in developmental and educational psychology over the years has strongly supported the multifaceted view. Consistent with research findings, most published self-concept measures now emphasize domain-specific self-concepts. The clearest example of measures based on the multifaceted view is Marsh (2002) set of scales ("Self-Description Questionnaire I, II, or III") covering ages seven to young adult. However this study focused on academic self-concept and thus defined self-



concept as a person's self-perceptions formed through experience with and interpretation of his or her environment.

Marsh (2002) one of the leading scholars in this field argues that self-concept is inherently phenomenological, that is, it refers to the person's own view of him or herself. He further argues that comparisons to external events are not particularly relevant in the assessment of self-concept. According to him, self-concept is almost always assessed through self-report. Four commonly self-report methods used by him are described below:

"Rating scales" as the most frequently used type of instrument. Most of his currently published instruments are of this type. His rating scales typically are composed of a set of statements to which the respondent expresses a degree of agreement or disagreement. Seven-point Likert scales are common. Typical items are "I am good at maths" or "On the whole, I am satisfied with myself." Responses were then summed to form a score for a specific scale, for example, maths self-concept or a measure of global self-concept.

"Checklists" involve having respondents check all of the adjectives that they believe apply to themselves. Because the adjectives had been assigned to a category, such as "self-favorability," based on either rational or empirical criteria, the person's choices were then tabulated to form a self-concept measure. Checklists provided interesting qualitative information, but had two shortcomings. First, responses were dichotomous (yes/no); there was no way for the respondent to indicate degree of agreement. Second, the categorization of the adjectives was done by an external party, without knowing what exact meaning the adjective had for the individual.

"Q-sorts" had been used extensively in his self-concept research but can rarely be used by practicing counselors because they are time-consuming and require considerable commitment from the client. In brief, the Q-sort technique involves having the person sort cards that contain self-descriptors as "I am strong" into a pre-defined number of piles ranging from "most like me" to "least like me." Typically, 100 or more cards would be of use and each pile could contain only a pre-determined number of cards. Both quantitative and qualitative methods were used to evaluate the results of the sorting task.

In "free-response" methods respondents typically completed partial statements as I feel best when.... Although some sets of these sentence-completion tasks had been published formally, complete with quantitative scoring schemes, responses more frequently evaluated qualitatively. Free-response methods were seldom used in self-concept research but had favor with many counselors because of the open-ended, qualitative nature of the task which lended itself to facilitating discussion with the client. The rather low reliability of such methods, however, argued against interpreting the results as a "measure" of self-concept.

Although most of the self-concept measures compared the person's response against some set of norms, Marsh (2002) successfully used a "criterion-referenced approach" in which the child's self-efficacy beliefs were assessed repeatedly in reference to an external criterion of accuracy. Marsh argued that this assessment approach integrated self-concept with mastery learning more effectively than does the traditional norm-referenced self-concept scale. Although this is a promising idea, it has remained undeveloped.



Counselors or others who wish to assess self-concept must keep several considerations in mind, including demand characteristics of self-report measure, technical adequacy of the assessment procedure, and whether the assessment is being used for research or clinical purposes. Self-report measures make several requirements of the respondent (Marsh, 2002). First, the person must have a sufficient level of self-awareness. Young children may lack confidence but may not be consciously aware of their own perceptions. Second, self-report measures also require substantial verbal competence, a skill that can not be assumed. Third, even children are aware that some responses are more socially acceptable than others. The accuracy of self-reports is often decreased by this "social desirability" response tendency.

Self-concept at school seemed to be affected by the image that other significant persons (teachers, parents, peers) had of the pupils (Craven,1997) and by social comparison with others in the same setting. Different social environments would therefore be expected to influence an individual's self-concept in different ways. In reviewing Rohner's theory, Wallander (2002) postulated that feeling accepted or rejected by one's significant others affects the way a person views and evaluates oneself and the world. Feelings rejected by others leads to greater hostility, low self-respect, emotional instability and unresponsiveness, and a negative view of the world. However, feeling accepted by others leads to lower feelings of hostility, higher self-concept, emotional stability and responsiveness and a positive view of the world. This therefore implies that recognizing the mechanisms of mutual functioning of the teacher on students' self-concept and achievements is extremely important for the success of integrated students with special needs (Tracey & Marsh, 2003). Enhancing the self-concept of students with special needs that are included in regular primary school classes has positive impact on their academic achievements as well as on their personal and social

development. Based on the forgoing, the present study attempted to establish which special education programme (inclusive, integrated, special school programmes) enhanced most self-concept among the visually impaired pupils in Kenya. Again the argument has only been based on the sighted students but no conclusive research had been done on children who are visually impaired.

Specifically, the range of self-concept and achievement correlations reported has been a function of several factors. First, the operationalization of self-concept and academic achievement has varied widely across studies. In the case of self-concept, for example, some studies used general self-concept measurements as indicators of self-concept, whereas others used global self-concept measurements (Tracey & Marsh, 2003). Further complicating the issue has been the use of diverse "self" terms (for example, self-concept, self-esteem, self-regard, self-attitude), with no guarantee that the construct, as termed, was actually operationalized as such (Craven, 1997). In a similar manner, achievement has been operationalized variously as subject grades, standardized achievement scores, self-reported grades, grade-point averages, teacher ratings of perceived competence, self-reports of grades, and the like. This study focused on academic self-concept rather than self-concept in general and in relation to academic achievement.

Other factors which appear to influence self-concept of students with special needs include the following: severity or degree of disability; age of onset of disability; acceptance of the disability by parents; type of schooling (education in regular school or special school) and special support, labeling; and identification group adherence. (Wallender, 2002; Jambor & Elliott, 2005). In his study of self-concept of children with learning disabilities and who were receiving support in regular classes, Montgomery



(1994) report shows that those children had a lower academic self-concept than their peers without disabilities, but the two groups did not differ in global self-concept or in their global self worth. The present study attempted to determine whether there was a significant difference in self-concept between low vision and totally blind pupils enrolled in the three different programmes in primary schools in Kenya.

Although it has been generally assumed, and particularly so by educators (Marsh, 2002), that academic achievement and perceptions of self within an academic context are strongly related, and a review of findings from this research is generally consistent in reporting a positive relation between the two constructs; however, the strength of the relation between the two constructs has been widely discrepant. For example, in their review of the literature, (Wallander, 2002; Jambor & Elliott, 2005) reported correlation coefficients that ranged from 0.18 to 0.50 between general self-concept and achievement, and from 0.27 to 0.70 between academic self-concept and achievement. Likewise, Hattie, (1992) found general self-concept and achievement correlations to average around 0.20, and self-concept and achievement correlations around 0.40. In a meta-analytic study of 128 studies, Hattie (1992) reported 944 of the 1,136 correlations to be positive, 22 to be zero, and 170 to be negative; the average correlation between self-concept and performance was 0.21.

When drawing conclusions from these reviews, at least one important consideration should be the time frame in which the studies were conducted. Indeed, all the studies reviewed in the earlier investigations and most likely, those reviewed by Hattie (1992) were conducted prior to the new millennium (Marsh, 2002). In light of limited knowledge of self concept structure, and generally inferior self-concept instrumentation at that time (Marsh, 2002). It is not surprising that the findings are somewhat confusing,

ambiguous, and lower than might be expected. However with the improvement of research since that time, this study has adopted Marsh's (Marsh,2002) set of scales ("Self-Description Questionnaire I, II, or III") covering all ages to young adult for the visually impaired and it is similar to the Shavelson model of 1990.

In a review of the aforesaid literature it should be noted that most studies only tested self-concept scores, but there has been no comparison between self-concept and academic achievement, neither has any study been done to assess self-concept scores for learners who are visually impaired. This study however analyzed the relationship between self-concept of learners who are visually impaired and their academic achievement.

### **2.3 Determining if pupils who are low vision had a higher self-concept than those who are totally blind.**

Although the sequence of growth and development is essentially the same for the visually impaired and the sighted, some of the developmental tasks are learned more slowly or at a later age by children who are visually impaired (Scholl,1995). Awareness of the varied objects and persons both near and far, refinement of motor proficiency, locomotion, hand-ear coordination, bonding between mother and child, stimulation of exploration, and establishment of object and person permanence will develop in the child who is visually impaired but gradually. However, adaptations or modifications may be required for maximum development.

The concepts of person's permanence and object permanence are essential for the development of a self-concept. Through person and object permanence, the baby learns to differentiate himself from his parents and from the surrounding environment, he begins unconsciously to comprehend that he is a separate being who can act on the world in which he lives. (Scholl, 1995).



The process of differentiating oneself as a distinct and autonomous being and the process of differentiating objects, animals, persons, or events from each other are more difficult for the child who is congenitally blind. Wallander (2002) studied infants who were congenitally blind and found delays in the establishment of a unique and distinct "I". However with intervention, the child who was born blind performed almost as near as the sighted. Referring to a visually impaired child's acquisition of a body image primarily through tactile and verbal means, Scholl (1995) concluded "these avenues are inferior in providing information concerning his body as compared to the bodies of others. Therefore the formation of a body image is delayed". Jambor and Elliott (2005) developed a body image test for deaf children and found that, with systematic intervention, these lags could be remediated. A good body image is the core of a healthy self-concept, while a poor body image can only result in a distorted self-concept.

There is a direct correlation between feelings about the self. When the body is physically impaired as with blindness, the individual is frequently placed either by himself or by others in an inferior position, viewed as less competent and adequate. According to Scholl (1995), this causes the individual to strive for superiority by maximizing special abilities as demonstrated for example in musical, athletic, or intellectual achievements. It should be noted that the inferior position is not inherent in blindness, but is frequently the status conferred on the person who is blind.

Scholl (1995) did a longitudinal study of infants who were congenitally visually impaired and found delays in the establishment of a unique and distinct "I". However with intervention, "in those areas of development where comparative data were available, the educationally advantaged infants who were visually impaired came closer

to sighted-child ranges than blind-child ranges". This finding was more less the same to a study which was later done by Wallander (2002). In contrast, other studies have suggested that children who are visually impaired are not at more risk of developing low self-concept than sighted counterparts (Alexander,1996;Griffin-Shirley,Almon,&Kelly, 2007; Pierce & Wardle, 1996). However comparative studies of visually impaired and sighted adolescents found no significant differences in self-concept and established that the relations with friends contribute significantly to the improvement of visually impaired young people's self-concept.

Hurre, Komulainen and Aro (1999) carried out research in India with a sample of 100 adolescents aged between 13 and 14 years (50 females and 50 males, visually impaired and sighted, respectively), the results revealed no differences in the self-concept of both groups. In the same direction Fok and Fung (2004) did a study in the University of Hong Kong in which 115 subjects (52 visually impaired and 63 sighted) participated, the results showed that, in general, both visually impaired and sighted persons present similar levels of self-concept. However Griffin-Shirley and Nes (2005) in their study did not find significant differences between the 71 students with visual impairments and 88 sighted in their levels of self-concept. In Spain, some studies done by Lopez – Justicia, Pichardo and Chacon (2005) reported that visually impaired young persons present lower levels of physical self-concept and are less self-critical than are sighted persons, but no differences were observed in the other dimensions (social, moral, family, and personal). In another study Hurre, Komulainen and Aro (1999) carried out a study with 34 subjects, aged 18 and above, 17 of whom were congenitally visually impaired and 17 were sighted, they found no differences in the global self-concept of both groups. In all the sighted studies, there are contradictory findings and this may be due to the comparison of the impaired against the non impaired, however this study



focused on pupils who were all visually impaired except the severity of impairment is what varied.

With regard to other personality traits, Scholl (1995) stated that visually impaired youths manifest some difficulties in their social behaviour, such as more dependence on others, lack of initiative, less aggressiveness, or more anxiety. Some studies have shown a relation between neurotic symptoms and people with some impairment, concluding that behaviour problems in children who are visually impaired and adolescents are mostly the product of external factors such as family environment, institutionalization, and sighted peoples' reaction to the visually impaired.

In another study carried by Lopez –Justicia, Pichardo and Chacon (2005) with a sample of 100 students in a school for the visually impaired (59 males and 41 females, males' mean age 17.3 years, and women's 19 years), some of them displayed neurotic characteristics, Specifically, 27 students (11 males and 16 females) had developed a complete neurotic clinical syndrome. The youngest pupil was 9 years old, and the oldest 30. The symptoms presented were: excessive anxiety, palpitations, sweating palms, trembling, insomnia, headaches. The women had twice the percentage of neuroticism as the men (39% against 18.6%). In a study of the Institute of Technology of Finland Hurre and Aro (2000) in a sample of 79 visually impaired adolescents from 18 to 21 years of age, analyzed the relations between socio-emotional adjustment and several personality variables .The results revealed that socio- emotional adjustment correlated significantly and negatively with stress, behaviour problems, withdrawal behaviours, and lack of attention, and positively with self –concept.

From the foregoing review, it is worth noting that very few studies have been done in Africa and more so Kenya, again most studies by researchers like Wallander (2002), Fok and Fung (2004), had very few respondents as compared to this study with 291 respondents, Their studies was done in one setting while this study focused on different programmes.

#### **2.4 Determining the differences in achievement scores among pupils who are visually impaired.**

Educational programming for pupils who are visually impaired combines basic approaches and practices. In general such programming includes accurate diagnosis of strengths and weaknesses, special education services for deficits, accommodation of handicapped and development of self-concept. Byrne (1996) argues that self-concept has been used very frequently as a variable; self-concept theory offers some premise in explaining important facets of children's achievement, motivation and their social behaviour in school and for evaluating the merits of various programming approaches to teaching pupils who are visually impaired. It is widely accepted that an individuals' self-concept is related to school adjustment, satisfaction and achievement (Marsh, 2002). It is also widely accepted that academic achievement is more strongly related to academic self concept and general components of self-concept. In general, research indicates that specific academic self-concepts, such as mathematics and verbal expressions are strongly positively correlated to their respective academic achievements, but are nearly uncorrelated with each other. In contrast academic achievement in various areas is moderately to highly correlated (Marsh, 2002). However, there has been heated debate as to whether self-concept has a casual impact on academic achievement (the self-concept enhancement model) or whether academic achievement causes self-concept (the skill development model). However in this study



support for the self-concept enhancement model would provide a strong justification for self-concept enhancement intervenes in contrast; support of the skill development model implies that the best way to enhance academic self-concept is to develop stronger academic skills. In her initial classic review of research in this area, Byrne (1996) could only identify three studies: that is, testing the direction of causality of self-concept and achievement with paradoxical results. Potential limitations of these three studies were discussed by Marsh and Craven (2001) who concluded that the findings varied depending on how academic achievement was inferred.

It is also likely that the relationship between self-concept and academic achievement is reciprocal where by changes in academic achievement affect academic self-concepts and vice versa. Marsh and Yeung (1997) found that prior achievement in specific subject areas affect subsequent academic related facets of self-concept and prior self-concept affects subsequent achievement after controlling for the effects of prior achievement. These results are critical as they suggest prior self-concept has significant effects on subsequent achievement beyond the effects of prior achievement alone.

Marsh, Byrne and Yeung (1999) updated previous reviews of this research area and emphasized that based on the existing research using strong methodology there was clear support for a reciprocal effects model in which the largest paths were from prior academic self-concept to school grades. These results imply that intervention that successfully produce changes in the appropriate area of self-concept and achievement are more likely to have long lasting effects studies that focus exclusively on academic self-concept or academic achievement alone. Marsh and Craven (2001) emphasized that short term gains in achievement are also unlikely to be maintained unless there are corresponding gains in academic self-concept and concluded that enhancing a child's

academic self-concept is not only desirable goal but it is likely to result in improved academic achievement as well.

Relations between academic self-concept and achievement have not been examined fully from a developmental perspective. Skaalvik and Hagtret (1990) found support for a reciprocal effects model for older students (sixth and seventh grades) but found support for a skill-development model for younger students (third and fourth grades). Skaalvik (1997) also reported support for a skill development model during elementary school years and reciprocal influences during the high school years. However, Skaalvik and Vales (1999) did not provide support for this developmental perspective. Hence, their research suggested stronger support for a skill development model during the early elementary school years, whereas support for a reciprocal effects model became stronger in later years.

Although scores on achievement tests are increasingly being used to make decisions that have important consequences for examinees and others. Some of these "high-stakes" decisions are for individual students such as for, promotion, and graduation Linn (2000) argues that some countries and school districts also are using test scores to make performance appraisal decisions for teachers and principals and to hold schools and educational programs accountable for the success of their students. Although the policymakers who design and implement such systems often believe they lead to improve instruction, there is a growing body of evidence which indicates that high-stakes testing programs can also result in narrowing the curriculum and distorting scores (Linn, 2000). Consequently, questions are being raised about the appropriateness of using test scores alone for making high-stakes decisions. However in this study, we examine score gains on academic test in an effort to assess the degree to which they



provide valid information about pupil achievement in relation to self-concept and hence about improvements in achievement on a given programme.

There are also concerns that score trends may be biased by a variety of formal and informal policies and practices. For example, policies about student retention in grade may affect score trends (Fok & Fung 2004). States may vary in the extent to which their schools promote students who fail to earn acceptable grades or national examination test scores. Eliminating these so-called "social promotions" would most likely raise the average scores at each grade level in subsequent years while lowering it at each age level. This is likely to occur because although the students who are held back may continue to improve, they are likely to do so at a slower rate than comparable students who graduate with their classmates (Fok & Fung 2004).

Another concern is inappropriate test preparation practices, including outright cheating. There have been documented cases of cheating across the nation, including National exams in Kenya. If widespread, these behaviors could substantially distort inferences from test score gains (Murphy, Hatton & Erickson, 2008). The pressure to raise scores may be felt most intensely in the lowest-scoring schools, which typically have large populations of low-income and minority students. Students at these schools may be particularly likely to suffer from overzealous efforts to raise scores. For example, Murphy, Hatton and Erickson (2008) found that teachers in low-performing schools reported greater frequency of test preparation than did teachers in higher-performing schools. This could lead to a superficial appearance that the gap between minority and majority students is narrowing when no change has actually occurred.

Evidence regarding the validity of score gains on the National exams can be obtained by investigating the degree to which these gains are also present on other measures of

labour skills. Specifically, do the score trends on the National exams correspond to those on the highly job market? The National exam tests are generally recognized as the "gold standard" for such comparisons because of the technical quality of the procedures that are used to develop, administer, and score these exams, but still we can not say that it is the best, however, it is currently the best indicator available.

There are several other reasons why score gains on the National exams are not likely to have a one-to-one match with those on job market if these tests assess different skills and knowledge. However, the specifications for the National exams are based on a consensus of a national panel of experts, including educators, about what students should know and be able to do. Hence, National exam provides an appropriate benchmark for measuring achievement and improvement. As Linn (2000) notes, "Divergence of trends does not prove that National exam body is right and the school assessment is misleading, but it does raise important questions about the generaliability of gains reported on a teacher's own assessment, and hence about the validity of claims regarding student achievement". It is worth noting that since the introduction of 8-4-4 system of education, the child who is visually impaired has been at a disadvantage and hence this study tries to find out which programme enhances self-concept and thus academic achievement.

It is worth noting that most studies cited had only used achievement scores to make decisions on students' performance. In a study by Skaalvik and Hagtret (1990) they found support for a reciprocal effects model for older students (sixth and seventh grades) but did not do any study on relations between academic self-concept and achievement.



## **2.5 Differences in terms of self-concept enhancement for pupils who are visually impaired when placed in different programmes.**

Self-concept has always played an important role in special education, perhaps more so than in any other area of education. Policy makers and curriculum practitioners have all endorsed the importance of a positive self-concept as an important goal for educational programmes. This importance is evident in the heated debate about whether children with special needs are best educated in special classes developed for these students, or in regular (mainstream) classes, or some combination. Proponents of very different approaches to this issue in special education as in Byrne (1996) have all claimed support for their favoured approach in terms of enhancing self-concept.

Self-concept research continues to emphasize that self-concept cannot be adequately understood if the role of frames of reference is ignored. The same objective characteristics and accomplishment can lead to disparate self-concepts depending on the frames of reference or standards of comparison that individuals use to evaluate themselves. Whereas this phenomenon is evident in many different domains, the focus of the present study was to establish which programme enhanced most self-concept among the visually impaired pupils in special education primary schools in Kenya in order to place them in relevant special education programme for their better academic achievement.

Marsh and Craven (2001) argues that theoretical models of the relations among self-cognitions, behavior, and subsequent attainment suggest that changes in academic self-perceptions may affect academic choices, academic effort, and subsequent achievement. Whereas researchers recognize academic self-concept as an important outcome variable in its own right, much of the interest in the self-concept and achievement relation stems

from the belief that academic self-concept has motivational properties such that changes in academic self-concept will lead to changes in subsequent academic achievement. According to the self-enhancement model, self-concept is primarily a determinant of academic achievement, thus supporting self-concept enhancement interventions that are explicit or implicit in many educational programmes. Based on the forgoing, the present study attempted to determine whether there was a significant difference between self-concept and achievement scores among visually impaired pupils in special primary schools in Kenya.

Whereas most research done previously have been on sighted children attending classes in regular schools, this research will test self-concept on children who are visually impaired and compare their achievement in different programme placement. The impetus for the current investigation started from one of the most formerly disputed debates in education, whether students with visual impairments should be educated in segregated special classes with students who are visually impaired or in regular classes with their peers who are sighted. However, an evaluation of the literature suggests that this debate has been based primarily on philosophy and presumptions rather than empirical research evidence (Tracey & Marsh, 2003). There has been recommendation that many disability labels be abolished and students with mild disabilities be maintained in regular classes, however the validity of these studies has been questioned, with regard to the appropriateness of instruments employed, the degree of experimental control and the inability to replicate results (Kaufman, Agard & Sammel, 1985). The present study therefore employed researcher made tools on achievement which could take into consideration the background of the pupils in special education Kenyan's primary schools. This is because, the previous studies done employed tools which were



developed elsewhere and might have not considered the setting within which pupils live. The researcher standardized the tools using Z scores as  $t = (10z + 50)$ .

The Least Restrictive Environment (LRE) clause of the United States Education for all Handicapped Children Act (1975) also known as Public law 94-142 and subsequent amendments Act (now known as the individuals with Disability Education Act of 1990, IDEA) extended the right to a free public education to all children, regardless of disability, in the least restrictive environment possible. The United states Department of Education office of Special Education and rehabilitative Services issued the Regular Education initiative (Wang & Borner, 2008) as a result of the normalization principle, proponents of the regular Education initiative argued that there was no place for segregated settings and that these students had a right to be educated not just in a regular school, but in a regular class with other students.

Special educators, academicians, and advocacy groups have argued that the concept of integration and least restrictive environment and the Regular Education initiative do not go far enough and that a fully inclusive educational approach was required (Stainback, Stainback and Ferest, 1989). They argued that to continue to maintain some students, in special schools and special classes, was discriminatory and inequitable. They argued for a full inclusion initiative. The inclusive schooling policy was given increased momentum with the publication of the recommendation made at the world conference on special education: Access and Quality held in Salamanca in 1994 (UNESCO, 1994). What has become known as the Salamanca Statement is now a powerful document guiding policy making on the placement of students with disabilities. The primary aim of the statement was to make the regular class the only option for the placement of students with disabilities, regardless of the student's level of need or educational history

(UNESCO, 1994). Although the forgoing proposes a general placement of pupils in schools regardless of their disabilities, the present study attempted to determine which programme in Kenya enhances most self-concept among pupils who are visually impaired in order to place them in effective programme that would enhance their academic achievement.

Inclusive educational practices in Australia have developed from international legislation that is based on ensuring the rights of all students to receive an equitable education. The Disability services Act (Australian commonwealth Government, 1986) and the Disability Discrimination Act (Australian commonwealth Government, 1992) are federal legislation that ensures that educational services are provided to students with visual impairment and other disabilities. The Disability Services Act (1986) was designed to ensure that the services provided “further the integration of persons with disability in the community and compliment services available generally to persons or the community”. Although these acts effectively guarantee the provision of educational services to all students, they do not specify the way in which these services should be delivered (Foreman, 2000). Although all agree that students should be placed on the least restrictive environment, not surprisingly, the interpretation of what constitutes the least restrictive environment varies (Forlin, 1998). In this respect, the present study intended to find out the least restrictive environment (programme) that would enhance self-concept among the Kenyan pupils in Kenyan setting.

In response to the UNESCO Salamanca world statement, the United Kingdom (UK) government produced a particular paper titled “Excellence for All Children, meeting special Education Needs (Department for Education and Employment, 2003). This paper highlights the promotion for inclusion of children with Visual impairment within mainstream schooling wherever possible. By 2002 the UK. government already had a



growing number of mainstream schools willing and able to accept children with a range of special educational needs: as a consequence, an increasing proportion of these children with statements of Special Education Needs (SEN) were placed in special schools. National and local programmes in place also support increased inclusion. Although the UK government placed most pupils in the special schools, enough evaluation was not done to ensure which programme enhances most self-concept among such pupils. The present study therefore intended to establish the programme which enhanced most self-concept among the pupils in order to make correct placement choices for visually impaired children in Kenya within academic programmes.

Norwich (1997) interviewed 19 pupils with Mild Learning Disabilities (MLD) attending special schools on what they thought other people might think about going to a special school, to see if they were aware of the stigma associated with special schooling. Specifically pupils were asked what their parents, mainstream school pupils, other special school pupils and their siblings view would be about attending a special school. They were found to perceive both parents and siblings as having mainly positive views about attending special schooling, while they saw both special school peers and mainstream school peers as having a higher proportion of negative views regarding attendance of special schools. It would therefore seem that these pupils were aware of the stigmatization attached to attending a special school; they were able to express the negative views of special schooling held by both their special and mainstream school peers. The forgoing study only collected views of special needs pupils regarding what their opinions were however, the study did not look into self-concept in relation to academic achievement which was the focus of the present study.

Correspondingly, in a study conducted by Johada, Markowa and Cattermole (1988) individuals with a "mild mental handicap" displayed an insight into being stigmatized and had experienced both abuse and rejection from others. While these individuals appeared very aware of their stigmatization and had experienced its effects, only a very small number saw themselves as being essentially different. They had not internalized a handicapped view of themselves. This finding, as with that of Norwich (1997), offers evidence to the contrary of social constructivist theories of Bandura (1997) on the development of self-concept. The individuals included in these studies have not simply assimilated the views of important others in the formation of their self-concept. It would appear that individuals with learning disabilities employ other mechanisms in the development of their self-concept that function to maintain a relatively positive self-concept despite the stigmatized views others hold about them. However the present study focused on visually impaired pupils when placed in different programmes.

One of the key points of recent educational policy (Department for Education and Employment, 1997) is that inclusion into mainstream schooling of children with special educational needs is likely to reduce the stigma that is associated with attending a special school. For example, Purkey (1997) suggested that ability grouping might be more humiliating for students than remaining in the regular classroom. If children who attend special schools experience the stigma that educational policy makers perceive them to experience, then it is likely that this stigma will have a negative effect on their self-concept. Indeed, psychologists (Kef, 2002) and the lay public have generally assumed that members of stigmatized groups, such as people with learning disabilities, should have low self-esteem and a poor sense of self-worth. Various social psychological theories (namely; social constructivist theory, social identity theory; symbolic interactions theory) have predicted that members of stigmatized groups should



have lower levels of self-concept than non stigmatized individuals. For example, Bandura (1997) social constructivist theory, postulates that an individual's self-concept is formed through the internalization of the views that others hold regarding that individual, hence if an individual is stigmatized, the individual will internalize the stigmatized views resulting in a negative self-concept. Nevertheless, research comparing the self-concept of stigmatized and non-stigmatized groups has rarely found great differences between these groups. It would therefore appear that objective levels of disadvantage and discrimination are often poor predictors of self-concept. Alternatively, the lack of observed difference between self-concept of stigmatized and non-stigmatized groups in previous research may be due to the methodological weakness of the research, such as viewing self-concept as a unidirectional construct and employing poor measurement instruments.

Research examining and comparing the self-concept of students with learning disabilities (L.D.) against students without L.D. has provided some what conflicting and inconclusive results. A number of studies have revealed L.D children to have lower levels of self-concept than normally achieving students (Kef, 2002). While other studies have not found such differences to exist (Purkey, 1997). Several explanations have been given for these contradictions, including a lack of consistency in the definition of both learning disability populations and the construct of self-concept. Also methodological difference between self-concept measures, have all contributed to the mixed findings (Silverman & Zigmond, 1983).

Other studies that have directly compared the self-concept of individuals with and without learning disabilities have found smaller than expected differences in levels of self-concept (Chapman, 1988). For example; Jambor (2005) studied hearing impaired

children and non hearing impaired children aged between 10 and 13 and found a significant difference between the two groups of children only on the cognitive subscales of the Hattie (1992) Perceived competence Scale for children (PCSC). In contrast, on the other three subscales of the measure (Social competence, physical competence and self-esteem), no significant differences were found between individuals with hearing impairment and those without hearing impairment.

More research on the self-concept of children with LD has generally found those children display relatively positive feelings of general self-concept that differ little from that displayed by children without LD (Bear & Minke, 1996; Champan, 1988; Cooley & Ayres, 1988, Gronlick & Ryan, 1990; Kistner & Osbourne, 1987).

Therefore, although early research relating to children with LD using unidimensional measures of self-concept suggested that they had lower self-concept than their peers without disabilities, there appears to be as much variation in self-concept among students with LD as there is between students with and without LD. These findings have implications for both theories of self-concept formation and theories relating to self-concept structure. First, LD students cannot be simply internalizing others' stigmatized views of them, as their self-concept is not generally negative. This indicates that other processes are important in the formation of their self-concept. Second, self-concept would appear to be best described as being multidimensional as LD students have been found to have differing perceptions of themselves in different domains, their self-concept is not generally negative or positive across all domains.

The previous research discussed here would suggest that it is correct to assume that individuals with learning difficulties suffer poor self-concept as a result of being labeled



or by receiving special educational treatment. Although their labels may be seen to be stigmatizing and special school attendance may be stigmatized, research shows this to have little negative effect on special school students' perceptions of their school or themselves. These findings could arise if LD students are not aware of the stigma attached to their learning problem or attending a special school. However, it would appear that this is not the case as previous research suggests that individuals with learning difficulties are very aware of the stigma attached to their learning problems and also aware of the stigma attached to their special schooling.

Research in the area of, mainstreamed schools has focused largely on the impact of social comparison processes on the general and academic self-concepts of children with learning and mental disabilities. Typically, studies of children with learning disabilities (LD) have examined self-concept differences between students placed in special remedial programs within the schools and those who are "mainstreamed" (share the same classroom as non-disabled children). Studies of children who are mentally retarded have typically compared students who attend special segregated schools with those who have been integrated into a regular school and share the same classroom with normally-achieving children.

In a meta-analytic review of 21 studies of general self-concept, and 20 of academic self-concepts, Chapman (1988) reported that while students with LD, overall, tend to have lower self-concepts than their normal achieving peers, this decrement is more consistent and dramatic for academic self-concept than general self-concept. For example, it is not that general self-concept scores for LD children tend to be lower than for those non-LD children. In contrast, results related to academic self-concept were unequivocal;

students with LD consistently reported substantially lower academic self-concept scores than their non-LD peers.

Findings related to children with mental retardation, however, tend to be more variable. Regardless of whether placed in special classes or integrated into regular classes, children with LD tend to compare themselves with normally-achieving students, whereas mentally-retarded children most often compare themselves with other retarded children (Szives-Bach, 1993; Renick & Harter, 1989). On the other hand, Renick and Harter (1989) reported that when children with LD were requested to compare themselves with their LD peers, they perceived themselves as being much more academically competent.

As a consequence of measuring multiple facets of self-concepts, Renick and Harter (1989) found that perceptions of academic competence for children with LD placed in regular classrooms were more highly correlated with feelings of general self-worth than they were with perceptions of either social acceptance or athletic competence. The results suggest that, for children with LD at least, perceptions of how well they perform academically may have an overriding effect on the extent to which they like themselves as persons in general. Developmental differences related to children with LD were somewhat inconsistent across the Chapman (1988) and Renick and Harter (1989) studies. Whereas Renick and Harter found that academic self-concepts decreased with increasing age for children with LD in regular classrooms. Chapman (1988) review did not conclude academic self-concepts and teacher's feedback and level of academic achievement. Chapman further determined that decrements in academic self-concept consistent with other work in this area were found to be established by grade three.



Two interesting and consistent findings that evolved from both the Chapman (1988) review and the work of Renick and Harter (1989) are important for further research on children with learning disabilities. First, both studies revealed the importance of measuring multiple domains of self concept for children with LD. Chapman reported more consistent results when a multi-dimensional instrument was used to measure multiple facets of academic self-concept. Boersma and Chapman (1992); found that whereas children with LD felt inadequate in terms of their academic competence, they exhibited relatively higher perceptions of their social acceptance, athletic competence, and global self-worth. Second, both studies reported the Piers-Harris Children's Self-Concept Scale (Piers & Harries, 1984) to be an inadequate measure of academic self-concept.

There seems to be little doubt that social comparison processes play a vital role in self-concept development (Tracey & Marsh, 2003). In particular in achievement-related environments such as schools, social comparison processes bear importantly on the formation of self-perceived academic competence. Social comparison theory argues that people use significant others in their environment as frames of reference in forming self-assessments. Because students spend most of their time within the school environment, teachers and fellow students serve as important significant others in the formation of their self-conceptions.

Historically, investigations of this comparative practice have focused, for the most part, on the academic self-concept of low-ability students within one of two school contexts: (a) the academically tracked high school in which high and low-track students share the same school milieu (Kulik & Kulik, 1982), or (b) the mainstreamed school in which learning- and/or mentally-disabled children share the same school milieu with normally

achieving children (Chapman, 1988). Marsh (2002) however, developed an area of research that has investigated the effects of social comparison processes on the formation of academic self-concepts within the school environment. Marsh's approach considered the student body as a whole, rather than particular student subgroups.

Schools that practice ability group processes. This is particularly so at the high school level, where such practices have been shown to segregate students into distinct within-school societies. Each school-based society has its own social structure and norms (Purkey (1997) and the unique characteristics of each group are readily recognized by students and teachers alike (Forlin, 1998). The salience of these ability groups then makes them effective social referents for adolescents in their development of perceptions of self (Purkey, 1997).

Over the years, ability grouping in high school, commonly known as "academic tracking," has sparked considerable controversy regarding its relative advantages and disadvantages. Attention has swung from the nineteen fifty's focus on positive aspects of ability grouping for high-track students, to its negative effects on low-track students – especially with respect to their academic self-concept (Kulik & Kulik, 1982). Although these concerns have precipitated numerous investigations of track differences in academic self-concept, findings have largely been inconsistent and indeterminate.

In reviews of this literature (Byrne, 1996; Marsh & Craven, 2001) it is notable that most research had focused on only the general and academic facets of self-concept and had not considered the programme placement, they had also focused mainly on learning disabled learners and mild mentally retarded learners but not on visually impaired



pupils. This study focused more so on programme placement that enhanced most self-concept of visually impaired pupils.

Special education policy in the United Kingdom has undergone a major change in direction in the last decade. It is now a general policy, not just in the United Kingdom but in the majority of countries around the world, to aim for inclusion of pupils with special educational needs (SEN) into main-stream schooling. The United Nations Educational Scientific and Cultural Organization (UNESCO) Salamanca World Statement on Special Educational Needs Education (1994), called on all governments to adopt the principle of inclusive education. It was proposed that all children should be enrolled into mainstream education, unless there are compelling reasons for not doing so (UNESCO, 1994). (UNESCO gave the following reasons for proposed mover towards inclusive education:

Regular schools with the inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building in inclusive society and achieving education for all: moreover, they provide effective education to the majority of children and improve the efficiency and ultimately the cost effectiveness of the entire education system (UNESCO, 1994).

In response to the UNESCO Salamanca World Statement the U.K government produced a parliamentary paper title "Excellence for all children. Meeting Special Education Needs" (Department for Education and Employment, 1997). This paper highlights the promotion of inclusion of children with SEN within mainstream schooling wherever possible. By 2002 the government aimed that ' a growing number of mainstream schools would be willing and able to accept children with a range of special educational needs as a consequences, an increasing proportion of those children were to be educated in mainstream schools" (Department for education and Employment, 1997). It also intended that "national and local programmes was to be in

place to support increased inclusion' (Department for Education and Employment, 1997).

Research which has specifically investigated the social comparison used by individuals who belong to stigmatized groups, such as individuals with learning disabilities, has had mixed findings. The proposition that a special classroom environment provides the opportunity to engage in positive social comparisons has been demonstrated in two related studies conducted by Towne and Joiner, 62 students placed in special classes were given the General Self-concepts of Ability (GSCA) measures to complete. It was found that their GSCA scores increased over the period of a year. In the second study, Schurt found that if the students remained in the special classes for a second year their GSCA scores continues to rise, whereas if they were placed back in mainstream classes their GSCA scores were reduced.

McGaha and Farran (2001) also found that part-time and full-time special class placement had the effect of enhancing the self-esteem of children with learning disabilities compared to those who were placed in mainstream classes. This was despite the prediction made by the students' mothers that special class placement would reduce their self-esteem. In the three studies conducted by Tracey, Marsh and Craven (2003), the making different social comparisons to those who are placed in mainstream classrooms. The social comparisons made by the students are not directly assessed in any of the studies, leaving the possibility open for other factors to account for the observed differences in self-esteem. For example, in all their studies, all those students with higher levels of self-esteem attended special classes. Therefore, it may have been some supportive element of these special classes that promoted a positive self-esteem, rather than the opportunity for them to make social comparisons with students of similar ability.



In a study by Tracey, Marsh and Craven, (2003) an attempt was made to directly manipulate the social comparison group used by academically handicapped children (aged between 8 years and 3 months and 11 years) when completing a measure of self-concept. The children either had a comparer their abilities with normally achieving peers or complete the measure without any explicit reference to a comparison group. It was found that those children asked to compare themselves with normally achieving peers had significantly lower perceptions of themselves than those children who had not been specifically told to compare themselves with another group. While this study appears to clearly show that social comparison with a more able group reduces self-perceptions, it is not without problem. A criticism of this study is that it is unclear against whom the group that was given not explicit instructions regarding social comparison group were comparing themselves. This is particularly significant because in other research it has been found that learning disabled children as a social comparison group (Renick & Harter, 1989).

Both McGaha and Farran (2001) and Stainback and Forest (1989) used the Piers Harris scale to measure the self-perceptions of the children involved in their studies. A criticism of this measure made by Renick and Harter (1989) is that, although this scale includes items from a diverse range of areas, it provides only a global measure of self-esteem. Harter (1982) and others (Marsh & Shavelson, 1988) have found, though, that children make clear distinctions between specific domains of their lives when evaluating themselves differently in different domains of their lives.

Reinick and Harter (1989) conducted a study investigating the effect of altering the social comparison groups used by learning disabled students on their self-concept. The learning disabled students were placed in mainstream schools but attended learning disabilities resources rooms for certain period of time each day. This provided the students with two possible social comparison groups other learning disabled students and mainstream students with learning disabilities. The students completed the Harter Self-Perception Profile for Children (SPPC), initially spontaneously choosing one of the available comparison groups. The students then completed the SPPC again, this time using the comparison group they had not used previously. It was found that the LD students perceived themselves to be more academically able in the learning disabled classroom compared to the regular classroom.

Unexpectedly, 84% of the learning disabled students spontaneously compared themselves with their regular classroom peers. This result is contradicts Bandura (1997), social comparison framework, which theorizes that individuals are more likely to make comparison wit similar rather than dissimilar others, which in turn should result in more positive self-evaluations than comparison with more able out-groups. If this were the case then the vast majority of learning disabled students should have spontaneously chosen their learning disabled peers in the recourse facility they attended as their special comparison.

Self-concept-one's knowledge about oneself including personal awareness of one's competencies (Sherrill, 1998) has been a central construct in academic and sport settings largely because of its persistent relationship to achievement (Weiss & Duncan, 1992). Researchers have studied self-perceptions of ability within the framework of Harter (1992) theory of competence motivation. Perceived competence is a



multidimensional, dynamic, and interactional concept that influences both the initiation of mastery attempts in the cognitive, social, or physical domains and the development of such achievement behaviors as effort and persistence (Kosma, Cardinal, & Rintala, 2002; Sherrill, 1998).

Perceptions of competence can vary across domains. Children may perceive themselves as having high ability in the social domain but low ability in the athletic domain. Within a given domain, an individual's goal is to develop skills, learn new skills, and demonstrate mastery at a task. Each successful mastery experience increases their perceptions of ability. Children with high perceptions of competence exert more effort, persist longer, feel more in control, experience pride, and are intrinsically motivated to continue to participate in areas in which they feel competent. Conversely, experiencing failure to master a task leads to lower perceptions of competence, avoidance of participation, little effort, increased anxiety, and low levels of achievement and results in withdrawal from attempts to achieve (Beverly, Bathe & Booth, 2004). Perceptions of competence also can affect the way people cognitively construct their identities. For example, in childhood, athletic competence is difficult to separate from physical appearance as early feelings about the body and its capacity for movement form the basis for self-concept (Sherrill, 1998). In addition, perceptions of competence become more stable and resistant to change with age, an outcome that supports the need to intervene early in the development of self-perceptions of competence.

Participation in physical education and sport is a primary environment for teaching children physical competencies (Weiss & Duncan, 1992). Many physical educators emphasize that all children, including those with a disability, need positive self-concepts to feel competent enough to participate in the common games and sports of childhood in a variety of physical activity (Lieberman & McHugh, 2001). Children with

visual impairments generally have fewer opportunities and incentives to engage in physical activities that provide the amounts and kinds of stimulation that are typical of other children (Longmuir & Bar-Or, 2000). As a result, the health-related physical fitness and motor and functional skills of young people with visual impairments is typically lower than those of their peers (Shapiro & Rebecca; Longmuir & Bar-Or, 2000; Kef, 2002; Lieberman & McHugh, 2001). Children who experience difficulty in movement often have lower self-perceptions. Poor physical self-perceptions lead to reduced confidence in movement that often extends beyond the athletic domain and results in adverse psychosocial consequences (Douglas, Corcoran & Pavey, 2006).

Engaging in sport and physical activity is a social activity involving groups of children such as teams, friends, and clubs and serves as a primary socializing agent for teaching interpersonal skills. Research has shown that children with visual impairments tend to have less extensive social networks and fewer friendships compared with other children. In public school settings, children who are visually impaired often remain close to their teachers during social and recreational activities and seldom socialize with other children. They tend to have low levels of perceived control over their ability to make and retain friendships (Hendlish, 2008) and tend not to be included in groups or to withdraw from group activity; these factors contribute to increased feelings of loneliness and social dissatisfaction (Thame, 2005 ). The physical and emotional support of friends is essential to one's willingness to try unfamiliar activities or to meet new challenges (MacCuspie, 1996; Kef, 2002) found that children with low vision had fewer friends than others in their peer group; their parents were their most important source of support. Frazer (2005) and Moore, (2000) reported that lonely children were significantly less physically active than children who did not express feelings of loneliness and social dissatisfaction.



Because perceived competence provides one of the best perspectives for helping people understand and change their behaviors, it is a central construct in teaching, in either the academic or in the sport context (Sherrill, 1998). New initiatives are necessary to develop effective intervention strategies to improve the perceptions of competence among children and youth with visual impairments and to increase their motivation to participate in sport and physical activity (Longmuir & Bar-Or, 2000). The challenge is to promote strategies that teachers of the visually impaired, orientation and mobility instructors, parents, and general and adapted physical education teachers can use.

In this section, we suggest two strategies for increasing perceptions of athletic competence and some suggested teaching techniques. Teachers, parents, or therapists often tell children with visual impairments not to participate in certain activities because of their disability. Although their advice is well intentioned, judging a person on the single attribute of disability reinforces the centrality of disability over the potentiality of athletic competence with the result that the children set lower expectations for their sport performance.

Sherrill (1998) emphasizes the importance of two components of self-concept: I can do, which reflects perceived competence; and I am (for example, I am female, I am an athlete), reflecting perceived identity. Sherrill found those two components equally important in affecting the attitudes, intentions, and behaviors that in turn influence domain-specific perceptions of the self. Participating and competing in sport provides the ideal type of mastery challenge to help individuals develop positive perceptions of athletic competence and view themselves as an athlete beyond the limitations that their disability may offer.

Teachers and parents of children with visual impairments should profile these individuals when discussing what people who are blind can do in sport and physical activity. Such a discussion and the use of role models can improve I can and I am attitudes and perceptions of both present and future athletic competence.

When students with visual impairments understand that they are good at a sport and physical fitness skills and can participate partially or fully in sport or recreation activities, perceptions of athletic competence and consequently motivation to participate are likely to increase. One way to accomplish this goal is to assess and compare the motor performance and fitness scores of children with visual impairments with those of other children. There are only a handful of motor assessments designed specifically for use with children and youth with visual impairments. The Brockport Physical Fitness Test (Winnick & Short, 1999) is an example of a criterion-referenced, health-related fitness test that was validated for youth with visual impairments. The BPFT also provides criterion-referenced standards for students without disabilities so teachers can compare a student who is visually impaired either with similar students or with students without disabilities of the same age and gender.

Other instruments, although not developed for children with visual impairments, can be used successfully to enable students with visual impairments to acquire competencies in skills common to everyday sports and games played in physical education class. To assess fundamental gross motor skills, teachers or therapists can use the Test of Gross Motor Development Lieberman (2010) a norm- and criterion-referenced assessment instrument examining performance of children on six locomotor skills (run, gallop, hop, leap, horizontal jump, and slide) and six object control skills (strike, stationary dribble, catch, kick, overhand throw, underhand roll). These skills reflect those commonly performed in elementary physical education classes and motor development clinics. The



test provides 3 to 5 criteria for each of the 12 skills, making possible the identification of strengths and weaknesses for specific gross motor skills. Measuring mastery or non mastery of specific behavioral criteria within each skill can help teachers or therapists to design programs that facilitate maximum learning (Thetford, Robinson, Knox, Mehta & Wong, 2009).

When standardized assessment instruments are not available, the instructor can use rubrics, checklists, or rating scales to document progress. Sharing the improvement in skill with the children can make a tremendous difference in their perceived athletic competence. An example of rubrics for sport-related skills of students with visual impairments is the Camp Abilities Activity Analysis Checklist (Lieberman, 2010). The checklist contains sport-specific assessments for gymnastics, track and field, goalball, beep baseball, tandem biking, swimming, and judo. The checklist for each sport contains a list of tasks with performance criteria ranging from simple to more complex and documents the level of independence for each item.

In a recent study, Liberman (2010) found that children with visual impairments had lower levels of self-determination particularly in the area of physical education. That means that someone other than the student makes many of the decisions in physical education about curriculum, equipment, class structure, and rules. Such lack of control over variables in the learning environment may lead to a lack of opportunity for children with visual impairments to participate in physical education and to their experiencing lower levels of perceived athletic competence, (Tracey, Marsh & Craven, 2003)). One way to increase a student's involvement in the learning process is to use a teaching technique called guided discovery, in which students are encouraged to discover movement solutions to meet a predetermined criteria posed by the teacher (Nzegwu & Dooley, 2008). For example, the teacher asks all students who are working

on a throwing unit "to throw as far as you can." "Throw as far as you can" used in guided discovery often elicits the proper throwing motion as opposed to command style instruction. Guided discovery allows children to make their own decisions about pace, form, equipment, and space and often with whom they want to work. It allows them to explore different movement options within a safe environment with occasional feedback and provides many opportunities to try different things. When teachers permit students with visual impairments to learn at their own pace and do not hold them to the same standard as the other students, their perception of their athletic competence is likely to improve.

In a class that may contain 20 or more students without disabilities a teacher may not feel comfortable allowing students with visual impairments to learn on their own and at their own pace. The use of a peer tutor can ensure that the student who is visually impaired has opportunities for skill development, adequate individual instruction, and feedback (Lieberman, 2010 ). A peer tutor is a student either the same age or older who works one-on-one with the student with the disability on individual skills and activities. The instruction can be one-way from the peer tutor to the student, or it can be reciprocal with the student with the disability equally instructing the peer tutor. Experience has shown that trained peer tutors can increase the amount of academic learning time in physical education, thus improving skill level and the perceptions of ability to participate in sport and games (Thame, 2005).

Social competence is another domain in which students with visual impairments have lower levels of perceived competence than do their peers without disabilities. In this section, we discuss some strategies for enhancing perceptions of social competence and suggest a teaching technique.



In a study of the percentage of children with and without visual impairments who could accomplish independent living skills, the number of children with a visual impairment who could walk independently to a friend's house was alarmingly low (Thomas, 2008). Being able to walk independently to a friend's house can open doors to socialization, recreational activities, and inclusion. Not being able to walk independently to a friend's house or around the school building can lead to dependence, lack of social inclusion, and isolation.

Several strategies can help increase opportunities for independent mobility. First, allow the student to choose the preferred destinations for their mobility class. Incorporate into the student's mobility class destinations such as a favorite park, an after-school job, a friend's house within walking distance or on a bus line, or a place in school to which the student wants to travel independently. For example, knowing how to walk to the place where the student council meets after school enables the student to be a part of that organization. If the student does so independently, other students view him or her as being more competent.

The situation in which another student acts as a sighted guide provides an opportunity for trying another strategy. Without some instruction, the student sighted guide often tends to walk in front rather than alongside the student who is visually impaired. The tendency of the sighted guide to assist the student being guided creates a dynamic of unequal relationship and increased dependence on others for assistance with independent walking. It is important to teach sighted guides how to walk next to a student who is visually impaired and how to maintain a balance between good navigational skills and social conversation.

The use of a cane offers another strategy. The cane may act as a physical barrier between the student with a visual impairment and his or her peers, one that limits opportunities for social interaction in the hallway, playground, or classroom. Other students need to learn how to walk beside a student using a cane. An increased understanding that students with visual impairments need to move around the school independently should lead to increased opportunities for children with visual impairments to socialize and increase friendships with other peers, thereby decreasing isolations and loneliness. The more competent students are in travel skills the more able they will be to make friends in the schoolyard, at home, or in the lunchroom. This competence will carry over to other areas in life such as employment, recreation, and family life.

Lunchtime can be a wonderful opportunity to increase socialization and friendships, but many children with visual impairments do not always look forward to this period. Students with visual impairments may have a hard time locating their friends in the noisy, crowded lunchroom. Caring teachers can ensure that the student is in a well-lit, less crowded environment close to his or her friends. The logistics of this may be difficult as students do not often want teachers interfering with friends, and they may see help as unnecessary and juvenile. If students accept the help of a teacher to set up a conducive social environment at lunch, the depth of friendships and social competence of children with visual impairments is likely to increase. Children should learn independent mobility skills to arrive on their own at the determined place and with their lunch tray. An accessible location coupled with the ability to get there will empower students with social opportunities during lunchtime that may extend beyond the school day.



Students with visual impairments may not take full advantage of opportunities to make their own choices. They may be too shy, scared of rejection, unsure of themselves, or they may simply not take the initiative. Here is an example of what can happen: Jeffery's third grade teacher had a science club after school. Jeffery, a student with a visual impairment, was excited about this group but did not say anything to his parents because he was not sure how the teacher would accommodate him, how he would get home, or if his friends would take the time to be partners with him. Jeffery said nothing to his parents until the 6th week when he heard his friends talking about how much fun science club was and how much they learned. By the time Jeffery communicated his interest only 2 weeks remained in the program. Children with visual impairments must be taught how to take initiative. This includes learning skills in problem solving and how to overcome barriers and fears.

One of the key points of recent educational policy (e.g., Department for Education and Employment, 1997) is that inclusion into mainstream schooling of children with special educational needs is likely to reduce the stigma that is associated with attending a special school. For example, Purkey (1997) suggested that ability grouping might be more humiliating for students than remaining in the regular classroom. If children who attend special schools experience the stigma that educational policy makers perceive the to experience, then it is likely that this stigma will have a negative effect on their self-concept. Indeed, psychologists for example, Tracey, Marsh and Craven (2003) and the lay public have generally assumed that members of stigmatized groups, such as people with learning disabilities, should have low self-esteem and a poor sense of self-worth.

Various social psychological theories (e.g social constructivist theory, social identity theory; symbolic interactions theory) have predicted that members of stigmatized

groups should have lower levels of self-concept than non stigmatized individuals. For example, Bandura (1997) social constructivist theory, postulates that an individual's self-concept is formed through the internalization of the views that others hold regarding that individual. Hence if an individual is stigmatized, the individual will internalize the stigmatized views resulting in a negative self-concept. Nevertheless, research comparing the self-concept of stigmatized and nonstigmatized groups has rarely found great differences between these groups. It would therefore appear that objective levels of disadvantage and discrimination are often poor predictors of self-concept. Alternatively, the lack of observed difference between self-concept of stigmatized and non stigmatized groups in previous research may be due to the methodological weakness of the research, such as viewing self-concept as a unidirectional construct and employing poor measurement instruments.

Research examining and comparing the self-concept of students with learning disabilities (1.1) against students without L.D. has provided some what conflicting and inconclusive results. A number of studies have revealed L.D children to have lower levels of self-concept those normally achieving students (Lopez-Justicia, Pilchard & Carren, 2005). While other studies have not found such differences to exist. Several explanations have been given for these contradictions, including a lack of consistency in the definition of both learning disability populations and the construct of self-concept. Also methodological difference between self-concept measures, have all contributed to the mixed findings (Silverman & Zigmond, 1983).

Other studies that have directly compared the self-concept of individuals with and without learning disabilities have found smaller than expected differences in levels of self-concept (Chapman, 1988). For example; Shapiro and Rebecca (1999) studied LD



and non-LD children aged between 10 and 13 and found a significant difference between the two groups of children only on the cognitive subscales of the Hattie (1992) Perceived Competence Scale for Children (PCSC). In contrast, on the other three subscales of the measure (Social competence, physical competence and self-esteem), no significant differences were found between individuals with learning disabilities and those without learning disabilities.

More recent research on the self-concept of children with LD has generally found those children display relatively positive feelings general self-concept that differ little from that displayed by children without LD (Bear & Minke, 1996; Champan, 1988; Cooley & Ayres, 1988; Gronlick & Ryan, 1990).

Thus, although early research relating to children with LD using unidimensional measures of self-concept suggested that they had lower self-concept than their peers without disabilities, there appears to be as much variation in self-concept among students with LD as there is between students with and without LD. These findings have implications for both theories of self-concept formation and theories relating to self-concept structure. First, LD students cannot be simply internalizing others' stigmatized views of them, as their self-concept is not generally negative. This indicates that other processes are important in the formation of their self-concept. Second, self-concept would appear to be best described as being multidimensional as LD students have been found to have differing perceptions of themselves in different domains, their self-concept is not generally negative or positive across all domains.

The previous research discussed here would suggest that it is correct to assume that individuals with learning difficulties suffer poor self-concept as a result of being labeled or by receiving special educational treatment. Although their labels may be seen to be

stigmatizing and special school attendance may be stigmatized, research shows this to have little negative effect on special school students' perceptions of their school or themselves. These findings could arise if LD students are not aware of the stigma attached to their learning problem or attending a special school. However, it would appear that this is not the case as previous research suggests that individuals with learning difficulties are very aware of the stigma attached to their learning problems and also aware of the stigma attached to their special schooling.

It has been proposed that individuals with learning disabilities are vulnerable to poor self-concepts due to their academic failure, the stigmatizing nature of their learning problems, and the segregation from mainstream schooling that many learning disabled students experience (Bear & Minke, 1996; Champan, 1988; Cooley & Ayres, 1988, Gronlick & Ryan, 1990). In contrast more recent research that has investigated the self-concept of students with learning disabilities has often found fewer differences than expected (Foreman, 2000). The lack of any major difference in self-evaluation between adolescents with learning disabilities and non disabled individuals suggests that adolescents with learning disabilities may develop strategies to maintain positive self-evaluations. Indeed, Douglas, Pavey and Corcoran (2006) outlined three mechanisms or processes by which stigmatized individuals may protect their self-concept (a) attributing negative feedback to discrimination against the group; (b) selectively comparing outcomes with those of the in-group rather than with a relatively advantaged out-group, and (c) strategically devaluating those dimensions of comparison on which their group typically performs poorly and valuing those attributes on which their group excels.

The selective comparison of outcomes with in-group members rather than with members of relatively advantaged out-groups identified mechanism. Identified by



Croker and Major (1989) that is main focus of this current investigation. The tendency of individuals to make in-group social comparison as a means of buffering the self-concept has been noted by various psychologists (Bear & Minke, 1996; Champan, 1988; Cooley & Ayres, 1988, Gronlick & Ryan, 1990). For example, Purkey (1997) found that "mainstreamed" children with a mental handicap perceived their scholastic ability as equal to that of "normal IQ" children, whereas "mainstreamed" children with a learning disability (but "normal IQ") perceived their scholastic competence as lower than that of "normal IQ" non learning disabled children. Purkey explained this paradox by examining the comparison groups that each group reported using when making their self-perceptions. Children with a mental handicap regularly compared themselves with their mentally handicapped peers, whereas children with a learning disability reported comparing themselves consistently with "normal IQ" children without a learning disability.

It has been suggested by McGaha and Farran (2001) that the school environment emphasize social comparison. It would appear that from the very start of their school career, children experience some form of evaluation with reference to the ability of other children that surround them. This is initiated through practices such as the grading of students, ability-level class grouping and the various forms of praise that are given to students. Therefore, this is a particularly pertinent issue for children with learning disabilities, as they are a minority group who generally have low levels of academic achievement amongst a majority group of children without learning disabilities who generally display higher levels of academic achievement.

Research which has specifically investigated the social comparison used by individuals who belong to stigmatized groups, such as individuals with learning disabilities, has

had mixed findings. The proposition that a special classroom environment provides the opportunity to engage in positive social comparisons has been demonstrated in two related studies conducted by Towne and Joiner, 62 students placed in special classes were given the General Self-concepts of Ability (GSCA) measures to complete. It was found that their GSCA scores increased over the period of a year. In the second study, Schurt found that if the students remained in the special classes for a second year their GSCA scores continued to rise, whereas if they were placed back in mainstream classes their GSCA scores were reduced.

Liang, Krause and Bonnet (2001) also found that part-time and full-time special class placement had the effect of enhancing the self-esteem of children with learning disabilities compared to those who were placed in mainstream classes. This was despite the prediction made by the students' mothers that special class placement would reduce their self-esteem. In the studies conducted by (MacCuspie, 1996; McGaha & Farran, 2001), the making of different social comparisons to those who are placed in mainstream classrooms. The social comparisons made by the students are not directly assessed in any of the studies, leaving the possibility open for other factors to account for the observed differences in self-esteem. For example, in all three studies, all those students with higher levels of self-esteem attended special classes. Therefore, it may have been some supportive element of these special classes that promoted a positive self-esteem, rather than the opportunity for them to make social comparisons with students of similar ability.

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children either had a comparer their abilities with normally achieving peers or complete the measure without any explicit reference to a comparison group. It was found that those children asked to compare themselves with normally achieving peers had significantly lower perceptions of themselves than those children who had not been specifically told to compare themselves with another group. While this study appears to clearly show that social comparison with a more able group reduces self-perceptions, it is not without problem. A criticism of this study is that it is unclear against whom the group that was given not explicit instructions regarding social comparison group were comparing themselves. This is particularly significant because in other research it has been found that learning disabled children as a social comparison group (Renick & Harter, 1989).

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and mainstream students with learning disabilities. The students completed the Harter Self-Perception Profile for Children (SPPC), initially spontaneously choosing one of the available comparison groups. The students then completed the SPPC again, this time using the comparison group they had not used previously. It was found that the LD students perceived themselves to be more academically able in the learning disabled classroom compared to the regular classroom.

Unexpectedly, 84% of the learning disabled students spontaneously compared themselves with their regular classroom peers. This result is contrary Bandura (1997) social comparison framework, which theorizes that individuals are more likely to make comparison with similar rather than dissimilar others, which in turn should result in more positive self-evaluations than comparison with more able out-groups. If this were the case then the vast majority of learning disabled students should have spontaneously chosen their learning disabled peers in the recourse facility they attended as their special

The review of related studies showed that the social comparisons made by the students were not directly assessed in any of the studies, leaving the possibility open for other factors to account for the observed differences in self-concept. Citing studies by McGaha and Farran (2001) it is worth noting that most studies used Piers Harries scale in analyzing data which is mostly open ended questions. This study however used Likert scale and analyzed data using Pearsons Product moment correlation.

## **2.6 Gender difference in self-concept and achievement among learners who are visually impaired.**

Some investigations have attempted to determine whether there are gender differences in the self-concept of visually impaired men and women. (Paulinelli & Tamayo, 1986), the results of 52 adolescents, mean age of 16 years (23 female and 29 male, 25 blind



and 27 sighted, were analyzed, revealing that the sighted males scored higher in self-confidence than the females, but there were no differences in the blind subjects as a function of gender in any of the self-concept factors. However, in another investigation carried out with visually impaired adolescents, ages between 12 and 17 years (Lopez-Justicia & Pichardo, 2003). The results showed that the females scored lower in the social self-concept dimensions and higher than the males in physical self-concept. A previous study of Rasonabe (1995), which compared gender differences in blind men and women, concluded that the women obtained higher scores in self-identity, physical, family, and social self-concept, and the men scored higher in self-satisfaction and moral-ethical self-concept.

Maritim (1979) in a sample study of 432 standard seven Kipsigis pupils in 13 schools, reported that parents, peers, and teachers' comments significantly influenced the pupils' academic self-concept. Maina (1998) in her studies: "Sex Differences in Self-Concept and academic achievement", reported that self-concept varied across subjects, gender being an insignificant variable. It is worth noting that Maritim (1979) study was more less a replication of Olowu (1982) study, based on cultural difference among the Kipsigis adolescence of class seven. Maina's study was based on subject specific (English). The issue of self-concept has arisen due to the fact that there is no agreement among researchers and authors in the conceptualization of the self-concept. However, Muthoni (1998) argues that this problem of conceptualization of the self-concept can be reduced by the recognition among researchers and scholars that self-concept consists of various dimensions. She postulates six dimensions or self areas, namely, physical self, character self, emotional self, academic self, social self and family self. This was done in replication of a study by Olowu (1983). Olowu had obtained these self- areas after categorizing the characteristics that were most frequently used by his Yoruba and

English adolescent subjects to describe themselves. His aim was to construct a self-concept scale for cross-cultural use. Olowu's scale now known as the Semantic Differential Scale (SDS) has also been used by Odin (1986) and Ezeilo (1987) and was found to have a test-retest reliability co-efficient of 0.71 and concurrent reliability co-efficient of 0.55 with the Pier-Lorries self esteem scale.

As suggested by Byrne (1996) psychological processes may be different across cultural groups, and he gave examples as school motivation and achievement for an individual as the products of a complex set of interacting motivational goals, sense of self and self-concept variables. Motivational goals may therefore, be differently salient to individuals from different cultural backgrounds, and sense of self, including academic self-concept. However this study will cover a wide range of children from different cultural, social and economic backgrounds, as most special schools are more or less national rather than regional based in their catchment's areas.

A review of self-concept studies conducted in Kenya shows that the results are not consistent, this could be due to the fact that there are no standardized instruments to measure general self-concept or it may be due to the way different researchers conceptualize the self-concept. Of late, African researchers namely Ezeilo (1990), Iwawaki (1990), Olowu (1990), Shindi (1990), have done research and scholarly work on self-concept. As stated by Muthoni (1998), the contemporary issue that is common in their studies is the problem of self-concept assessment. Although assessing the relationship between self-concept and gender is common, conclusions should be made pertaining to both sexes unless it can be consistently demonstrated that gender contributes sufficient variance to the assessment of self-concept (Hattie, 1992). There have been many options as to the basis of the differences between male and female self-concepts. Hattie (1992) noted that:



Arguments for differences in self-concept between the sexes are that females are in a minority group status, females fulfill societal expected roles, females have more role conflict than males, females are more socially and economically dependent, and cultural ideology calls for women to be regarded as inferior. These arguments are post-hoc justifications. Moreover, it is not obvious that these reasons necessarily will translate into females having lower self concepts.

Although many theorists have used these arguments to explain observed differences in self-concept, there is little empirical evidence to support these arguments. Indeed, much of the literature on differences between boys' and girls' self-concepts is ambiguous, inconsistent, and methodologically inadequate.

However, the differences in domain-specific self-concepts might well have been veiled because of past reliance on uni-dimensional measures. Most of the research to date suggests that boys have only slightly higher global self-concept and "esteem" scores (as measured by variations of the 10-item Rosenberg scale) than do girls. However, because research since the mid-1980s has tended to utilize multidimensional instruments to assess self-concept, more recent conclusions can be drawn regarding gender differences, and these will be the focus of this study.

Purkey (1997) have concluded that an accumulating body of evidence suggests that there are gender differences in domain-specific self-concepts. For example, she reported that boys systematically report less anxiety and more problematic behavior than girls on the Piers-Harris Children's Self-concept Scale (Purkey,1997). Although Purkey found no gender differences in total self-concept using the cluster scales' normative sample (N = 485), consistent with Marsh (2002) conclusion, he found

significant gender differences on 33 of the 80 items that appeared consistent with sex stereotypes. Applying Marsh (2002) conventions for magnitudes of small, medium, and large effect sizes, however, he reported that none of the P-H items indicated a large difference (effect sizes greater than 0.8) between genders, and only 5 of the 33 items indicated medium effects (effect sizes greater than 0.5). For example, the items "I have pretty eyes" (yes) was endorsed more frequently by girls, and "I cry easily" (no) was often endorsed by boys (Purkey, 1997).

Marsh and colleagues, using the SDQ series of instruments and encompassing the age range from preadolescence to the adolescence, have found consistent gender differences in domain-specific self-concepts of Australian students, although the direction of the differences varies by domain (and although the factor structure for boys and girls is relatively invariant across the age range (Byrne & Shavelson, 1988; Marsh, 2002). Most notably, these studies have revealed that preadolescent boys (Grades 2-5) have higher self-concepts than girls in the areas of math, general self, physical appearance, and physical abilities, whereas girls have higher self-concepts in the areas of reading and general school (Marsh, 2002).

During the adolescent years (Grades 6-10), girls tend to score higher than boys in the SDQII domains of Verbal, Honesty-Trustworthiness, and Same-Sex Relations, whereas boys tend to have higher scores in Physical abilities, Physical Appearances, and Math. Smaller differences have been found in General School and Academic scales (favoring girls), and General Self and Emotional Stability scales (favoring boys) (Byrne & Shavelson, 1988; Marsh, 2002). Interestingly, these studies showed no differences between boys and girls in math and reading self-concepts during the primary school years suggesting that expectations of significant others (parents, teachers, peers) in



addition to subtly transmitted gender stereotypes (through various forms of media) may reach an apex during the adolescent years that contributes to the beginning of the divergence between girls and boys on these measures of self-concept.

Because self-perceptions of young girls and boys tend to run along traditional sex stereotype lines, we may be tempted to believe that gender is a major moderator of self-concept responses among children. However, a cautious view of this hypothesis is necessary. Marsh (2002) noted that, for responses of 3,562 Australian students who made up the normative sample of the SDQI, observed gender effects were very small and accounted for only 0.66% of the variance in total self-concept scores and for less than 2% of the variance of any one subscale score that showed gender differences. Only the sex effect in Physical Abilities accounted for more than 3% of the variance. Similar percentages were reported in Purkey (1997) (also utilizing the SDQI) and in Marsh, Craven and Mainerney (2003), a study that utilized the SDQII with adolescents.

The limited meaningfulness of gender as a moderating variable in self-concept also was illustrated in our study using the Multidimensional Self-concept Scale (Crain & Bracken, 1994). Boys and girls did not differ in their total self-concept or on any of the domain-specific subscales except for the Physical scale. Here, as in other studies, boys rated their Physical self-concepts significantly higher than did girls, albeit by about one-third standard deviation (4 raw score points). This small difference indicates only minor clinical significance and may reflect the large sample size.

Other studies have found gender effects in domain-specific self-concepts. Osborne and LeGette (1982), using the Piers-Harris, the Self-concept of Ability Scale, and the Coopersmith SEI, found that adolescent boys and girls did not differ in global self-

concept. However, boys had significantly higher domain-specific self-concepts on the Piers-Harris clusters of physical appearance and attributes and anxiety (higher scores indicating lower anxiety), whereas girls had better self-concepts in the behavior and social domains than did boys (consistent with conclusions made in Piers, (1984). These differences occurred across grade levels (Grades 7, 9, 11), racial/ethnic characteristics (white and African American), and social class characteristics.

Mboya (1994), using the Self-Description Inventory (Mboya, 1994), found that adolescent boys had higher self-concepts than girls in the domains of family, physical abilities, physical appearance, music ability, and health, while girls had higher self-concepts than boys in general school and emotional stability domains. Boys also reported higher levels of global self-concept than did girls. Again, these differences occurred irrespective. Gender differences in young children's domain-specific self-concepts also have been examined. Marsh and Craven (2001) , using an individually administered version of the SDQI with children between the ages of 5 and 8 years, found results strikingly similar to those Marsh and colleagues have obtained with older children. Young girls had substantially lower self-concepts of physical ability, and modestly higher self-concepts in physical appearance and reading than did boys. There was also an Age X Sex interaction for physical ability. Whereas boys had higher self-concepts in this domain t all three ages, the sizes of the gender differences increased with age. Marsh and Craven (2001) noted that only this difference accounted for more than 2% of the variance in any of the individually administered SDQI scores. Interestingly, it appears from this study that young girls have a slight advantage over young boys in the physical appearance realm that seems to disappear as children get older.



Many studies, some previously noted, have found differences in domain-specific self-concepts of boys and girls that tend to run along gender stereotype lines. The physical abilities domain appears to reflect the largest difference between the sexes; this is perhaps not surprising in view of the much greater emphasis on boys' participation in sports and games (and the greater variety of sports activities available to boys) during the school years. Physical appearance also is an area in which boys tend to have higher self-concepts than girls, albeit beginning only during early adolescence. Harter (1992) has suggested that girls consider physical attractiveness to be more important than do boys, yet girls become more dissatisfied with their appearance during adolescence than do boys. She concludes that there is a group of related perceptions among girls that contribute to their lower self-concept in this area, including a less favorable body image, greater self-consciousness, feelings of unattractiveness, more negative attitudes toward their own gender, and recognition of the value society places on appearance. Harter noted that the relationship between perceived appearance and self-concept is not confined to adolescence but is extremely robust across the life span, a finding corroborated by Pliner, Chaiken, and Flett (1990) in their life-span study of gender differences in concern with body weight and physical appearance. In this study, females across the entire age span from 10 to 79 years were much more concerned than were males about eating, body weight and physical appearance and thus had lower appearance self-concept.

It is important to remember; however, that the divergence between boys and girls in these self-concept domains is not very great and thus, has limited educational settings should embark immediately on developing programs to improve adolescent girls' physical appearance and ability self-concepts in an effort to bring them more "up to par" with boys' perceptions in these domains. It appears from the literature that, by and

large, boys and girls are clinically more similar than different on measures of domain-specific self-concept. The small differences that exist tend to be consistent with gender stereotypes.

Gender historically has been as one of the most important contributors to the variance in children's and adolescents' self-concepts, and undoubtedly will continue to be examined (as well it should be) in future research. However, gender as a moderator of multidimensional self-concept should perhaps receive less emphasis than other variables such as effects of pubertal changes or societal attitudes that contribute to gender differences. As female members of our society continue to experience expanded roles and success in the workplace and in the recreation/sports arena, we may see interesting changes over time in the self-concept formation of young girls.

For gender, the largest and the most consistently found difference is the divergence between boys' and girls' perceptions of their physical ability self-concept. Boys consistently report higher self-concepts in this area across all age groups. Physical appearance self-concept, when it is measured separately, presents a somewhat more complex phenomenon. Boys and girls tend not to differ in their physical appearance self-concepts during the primary school years; however, boys consistently rate themselves more positively than girls in this area with the advent of adolescence. A number of possible explanations exist, with the most likely being different societal expectations placed on male and female appearance of which children do not become completely cognizant until the advent of adolescence (concurrent with pubertal changes and the beginning of opposite-sex relationships). For example, both men and women tend to view physical attractiveness as more important for women as a means of attracting a mate, but focus on other qualities such as financial status for men (Pliner, Chaiken & Flett, 1990). Again, however, the magnitude of these differences in both



boys' and girls' self-perceptions in these areas do not necessitate a call for action on the part of educational and clinical personnel. Boys and girls tend to be much more similar than different when it comes to multidimensional self-concept.

In contrast, other studies have suggested that visually impaired children are not at more risk of developing low self-esteem than sighted counterparts (Alexander, 1996; Griffin-Shirley & Nes, 2005; Pierce & Wardle, 1996). Comparative studies of blind and sighted adolescents found no differences in self-esteem and established that the relations with friends contribute significantly to the improvement of visually impaired young people's self-esteem (Huurre, Komulainen, & Aro, 1999) carried out in India with a sample of 100 adolescents aged between 13 and 14 years (25 females and 25 males, blind and sighted, respectively), the results revealed no differences in the self-concept of both groups. In the same direction, a study from the University of Hong Kong (Fok & Fung, 2004) in which 115 subjects (52 blind and 63 sighted) participated, showed that, in general, both visually impaired and sighted people present similar levels of self-esteem and self-concept. Griffin-Shirley and Nes (2005) did not find significant differences between 71 students with visual impairments and 88 sighted in their levels of self-esteem. In Spain, some studies (Lopez-Justicia, Fernandez de Haro, Amezcua & Pichardo, 2000) reported that visually impaired young people present lower levels of physical self-concept and are less self-critical than are sighted people, but no differences were observed in the other dimensions (social, moral, family, and personal). In subsequent studies (Lopez -Justicia, Pichardo & Chacon, 2005) carried out with 34 subjects, ages between 8 and 11 years, 17 of whom were congenitally blind and 17 were sighted, found no differences in the global self-concept of both groups.

Some investigations have attempted to determine whether there are gender differences in the self-concept of visually impaired men and women. In Portugal (Paulinelli & Tamayo, 1986), the results of 52 adolescents, mean age of 16 years (23 female and 29 male, 25 blind and 27 sighted), were analyzed, revealing that the sighted males scored higher in self-confidence than the females, but there were no differences in the blind subjects as a function of gender in any of the self-concept factors. However, in another investigation carried out with visually impaired adolescents, ages between 12 and 17 years (Lopez-Justicia & Pichardo 2005), the results showed that the females scored lower in the social self-concept dimensions and higher than the males in physical self-concept. A previous study of Rasonabe (1995), which compared gender differences in blind men and women, concluded that the women obtained higher scores in self-identity, physical, family, and social self-concept, and the men scored higher in self-satisfaction and moral-ethical self-concept.

With regard to other personality traits, Scholl (1995) stated that visually impaired youths manifest some difficulties in their social behaviour, such as more dependence on others, lack of initiative, less aggressiveness, or more anxiety. Some studies have shown a relation between neurotic Symptomatology and people with some impairment, concluding that behaviour problems in blind children and adolescents are mostly the product of external factors such as family environment, institutionalization, sighted peoples' reaction to the blind, Scholl (1995).

In another work carried out Skaalvik and Vales (1999) with a sample of 100 students in a school for the blind (59 males and 41 females, males' mean age 17.3 years, and women's 19 years), some of them displayed neurotic characteristics. Specifically, 27 students (11 males and 16 females) had developed a complete neurotic clinical



syndrome. The youngest student was 9 years old, and the oldest 30. The symptoms presented were: excessive anxiety, palpitations, sweating palms, trembling, insomnia, headaches, etc. The women had twice the percentage of neuroticism as the men (39% Vs. 18.6%). Another study of the Institute of Technology of India, (Satapathy & Singhal, 2001), in a sample of 79 visually impaired adolescents from 13 to 21 years of age, analyzed the relations between socio-emotional adjustment and several personality variables. The results revealed that socio-emotional adjustment correlated significantly and negatively with stress, behaviour problems, withdrawal behaviours, and lack of attention, and positively with self-esteem.

The review of related studies reveals that the findings have not been consistent due to the instruments used; however the Shavelson model used in this study has been described as reliable and valid in the results given. Also previous studies mainly analyzed the differences of achievement scores and self-concept between the sighted learners and visually impaired, however this study compared gender differences among the population of learners who are visually impaired.

### **2.7 Special needs education (SNE) teachers attitude towards teaching pupils who are visually impaired in their programme placement.**

The importance of teacher attitudes toward inclusion is reflected by the numerous studies conducted in that area (Gage, 2003). Teachers must believe that their behaviors can effect the education of their students. They must recognize that they have the capacity and power to make key decisions which will affect their role and their students' production. Bandura (1997) posited that even when individuals perceive that specific actions will likely bring about the desired behavior, they will not engage in the behavior or persist after initiating the behavior, if they feel that they do not possess the

requisite skills. Scruggs and Mastropieri (1996) did meta-analysis of 28 studies conducted from 1958 to 1995 and found that, overwhelmingly, teachers endorse the general concept of providing support to students with disabilities. In spite of that, only one third of the teachers felt that they had the time, preparation, resources, and skills needed for successful instruction. However in another study done by Van, Shoho and Barker (2001) their finding was that teachers liked classes to be inclusive but the realities of every day school life dictate otherwise various studies also show how teacher attitudes have a direct bearing on instructional decision.

The shaping of positive attitudes toward students with disabilities is an important aspect of the education of pre-service teachers. Teacher training in the awareness of disabilities and appropriate strategies for teaching students with disabilities has a positive impact on academic success. Teachers who feel negatively toward students with disabilities or have not been trained in the appropriate strategies are less likely to be successful.

Teachers also influence the facilitation of inclusion programs based on their own philosophies and willingness to include students with disabilities in their classrooms. Although there is no doubt about the importance of examining the attitudes of teachers, one must be aware of the reality that attitudes are also being formed in the teacher education experiences of pre-service teachers. Teachers' own cognitions and beliefs, in part, may have their sources in their experiences while they were students. It may be the product of their teacher training (Gage, 2003), or it may be a combination of their training and falling in line with the prevailing ideas or beliefs within the context of the school (Acker, 1990). Accordingly, if pre-service teachers are appropriately trained in strategies and interventions for working with students with disabilities as well as being



exposed to different types of disabilities, they may exhibit more positive attitudes toward inclusion (Gage, 2003).

Inclusive education is a concept that allows students with special needs to be placed and receive instruction in the mainstream classes and being taught by mainstream teachers. Supporters of inclusive education believe that students with Special Needs Educational (SNE) can and should be educated in the mainstream education classroom with the provision of supplementary aids and services. This study, as well as practical experience has demonstrated that teacher's perceptions are important in determining the effectiveness of inclusion, as teachers are the school workforce and mostly responsible for implementing inclusive service delivery models.

The present study is perhaps the first one exploring teacher's attitude towards programme placement for pupils who are visually impaired when placed in different settings in Kenyan's primary schools. The purpose of the study was find out if teachers of special needs education (SNE) have a positive attitude towards teaching pupils who are visually impaired in their programme placement.

According to the World Health Organisation (WHO) about 10% of any populations have disabilities. It is therefore estimated that Kenya with a population of 38 million (2009) census has about 3.8 million persons who have disabilities. Of the total population with disability, 942,400 (24.8 percent) are of school-going age (5-15 years) that is according to the task force report ( MOEST, 2003) A survey of the special needs children indicated that 10 percent of the population had some sort of disability, such as visual impairment, hearing impairment, mental retardation, physical disability, learning disability or multiple disabilities. Of these, only two percent had access to institutional facilities. There are very few published texts concerning SNE in Kenya. The National

Special Needs Education Policy Framework just came out recently that is in May, 2009, but still there is no clear guide line to be used in placement. .

The students with disabilities such as Hearing Impairments, Visual impairments, Intellectual Challenged and Physical disabilities enroll in Special Classes or Integrated programmes. The students with special needs educational such as learning difficulties (LD) sometimes enroll in mainstream public schools. However, without any training in special needs, teachers often cannot involve them in the class and, hence, such students tend to become demoralized and take extra classes after school as parents are worried about anything that might hold their child back. Children who are visually impaired are mostly enrolled in special schools.

(Stainback & Stainback, 1992) defined Inclusion as educating all students in the mainstream for all of the day. All students, regardless of disability, are educated in the integrated, general education class. Regular teachers are asked to provide experiences that are appropriate for all of their students. The special education teacher provides support in the regular classroom (Stainback & Stainback, 1992). The resource room is at least partially replaced with the special education teacher consulting from room to room.

Inclusion originated in New Zealand, England, and Canada where it is currently being implemented (Gage, 2003). There are also a number of schools in Italy, Australia, and the United States that are successfully implementing inclusion (Stainback & Stainback, 1992). In Kenya Inclusion education started as a project at Oriang' in 2003. Inclusion differs from mainstreaming in that in the inclusive program the children with disabilities are the shared responsibility of the classroom teacher and other support



professionals. In mainstreaming programs the children were seen as the primary responsibility of the resource teacher (Stainback & Stainback, 1992).

Some groups such as the Association for Retarded Citizens, United Cerebral Palsy, and the Association for Persons with Severe Handicaps have been strong advocates for the inclusion movement. These groups want to eliminate segregated classrooms as well as pullout special educational programs. They hope to create a better social environment at school by bringing services for children with handicaps into the regular classroom (Gorman & Rose, 1994). Although opinions vary widely, one key advocate for the inclusion movement has been the National Association of State Boards of Education (NASBE) which argues that current practices in special education have not been effective (Gorman & Rose, 1994). For example, Cartwright, Cartwright, and Ward (1985) reported that research showed students in special education classes did not achieve any better than their counterparts in regular education classes. In fact, children with mild handicaps made greater academic gains in the regular classroom than children with similar handicaps in segregated classrooms (Madden & Slavin, 1983). The NASBE also has called for the integration of general and special education into one system with flexible instruction on and curricula. The single system would offer student centered classrooms where a variety of professionals would meet the needs of all students (Gorman & Rose, 1994). Those in support of inclusion believe that inclusion provides more effective education for all students, not only those with handicapping conditions (Gage, 2003).

As with any significant change there are also those who strongly hold differing opinions. Opponents of inclusion have argued that it does not save money and actually probably costs more to implement than old pull-out approach (Woelfel, 1994). The two most prominent opponents of inclusion, The Council for Exceptional Children (CEC) and the Learning Disabilities Association (LDA), have urged schools to keep service

options available to students (Gorman & Rose, 1994). The LDA has also argued that inclusion is a violation of the 1990 Individuals with Disabilities Education Act (1993). The Individuals with Disabilities Education Act mandated that a free and appropriate public education in the least restrictive environment based on the individual needs of the students be provided to individuals with disabilities. Inclusion may not be appropriate for all students. Other groups also have resisted inclusion. One is the American Federation of Teachers (AFT; Sklaroff, 1994). AFT has called for a moratorium on full inclusion policies by state and local school boards (Gorman & Rose, 1994). The action by the AFT has made it clear that some teachers are strongly concerned with the movement toward inclusion. Teacher attitude is one of the most important variables in determining the success of innovative programs in special education (Pace, 2003). Although inclusion is recognized as an important recent innovation, few studies have been done to judge how teachers feel about it.

In a review of the related literature for this study, it can be noted most cited literature were only in the areas of teachers' attitude on general special education concept, however this study explores teachers attitude towards programme placement for learners who are visually impaired when placed in different settings in Kenyan's primary schools.



## CHAPTER THREE

### METHODOLOGY

#### 3.1 Introduction

This chapter describes the methods that were employed to test the hypotheses postulated in chapter one. The chapter is divided into five sections, dealing with research design, sampling techniques, data collection procedures and analysis. Description of the research instruments and the data collection procedures are outlined. Details on data analysis technique are also given alongside postulated hypotheses

#### 3.2 Research design

The main objective of this study was to evaluate programme placement for learners who are visually impaired in relation to self-concept and academic achievement in special primary schools in Kenya. A survey and a correlation design was used. The intervening effects of sex and visual impairment relationship was of interest, since the independent variable had occurred already. Independent variables were academic self-concept, sex and visual impairment. The dependent variable was academic achievement. Sex had two levels that is male and female, visual impairment, two levels namely low vision and totally blind. Academic self-concept also had two levels; that is high achievers and low achievers. Using different categories of pupils the survey research design enabled an investigation of the interaction effects of between and within of sex, academic self-concept and achievement.

#### 3.3 Study Area

The study was conducted in special school programmes, integrated school programme and an inclusive programme in Kenya, all are for the learners who are visually impaired. In Kenya there are six special school programmes for primary pupils which are distributed almost equally in all the provinces in Kenya except North Eastern

province. These were Kibos school for the visually impaired, and St. Oda school for the visually impaired both located in Nyanza province, St. Francis school for the visually impaired, Kapenguria in Rift Valley province, St. Lucy school for the visually impaired in Eastern province, Likoni school for the visually impaired in Coast province and Salvation army primary school for the visually impaired in Thika, Central province. The most established integrated programmes in Kenya were Kajiado Integrated programme for visually impaired in Rift-Valley province, Kitui Integrated programme for visually impaired in Eastern province, and Kilimani Integrated programme for visually impaired in Nairobi. There was one inclusive education programme at Oriang' school in Nyanza province. The special schools and integrated schools catered for those who were visually impaired and this include the totally blind and learners with low vision while inclusive programmes catered for all children with special needs. They were all co-education.

### 3.4 Study Population

The population of the study consisted of 291 Class eight pupils who were visually impaired, of which 168 were boys and 123 girls. This number included 168 pupils in special school programme, 92 pupils in integrated programme, 31 pupils in inclusive programme. Of the population, there were 210 with low vision and 81 totally blind. There were also 54 Class eight teachers, all participants were therefore 345. The population distribution is shown in Table 1.



**Table 1: Population distribution**

Sex	Special Programme	Integrated Prog.	Inclusive Prog.	Total
Male	98	48	22	168
Female	70	44	9	123
Teachers	31	17	6	54
<b>Total</b>	<b>199</b>	<b>109</b>	<b>37</b>	<b>345</b>

### 3.5 Sample and Sampling Techniques

A stratified sampling technique was used to select schools practicing Integration, Inclusive and Special Programmes. Saturated sampling was used to select 262 class eight pupils for the study while purposive sampling was used to select 38 class Eight Teachers, focusing on those who were teaching English, Kiswahili, Science and Social studies only. This translated to 152 pupils in special programme of which 90 pupils were low vision and 62 totally blind. Integrated programme had 73 pupils who were low vision and 9 totally blind. Inclusive programme had a sample of 26 pupils who were low vision and 2 who were totally blind. Of the 262 class eight pupils sampled, there were 123 girls and 168 boys.

The population and sampling frame showing programme and gender strata is shown in Table 2 and 3.

**Table 2: Population and sample frame for Programme strata**

Category	Population	Sample	Percentage
Class 8 Pupils	291	262	90
Special.	168	152	90
Integrated	92	82	90
Inclusive	31	28	90
Teachers	54	38	70

**Table 3: Population and sample Frame for Gender strata**

Category	Population	Sample	Percentage
Pupils	291	262	90
Girls	123	110	90
Boys	168	152	90
Teachers	54	38	70

Learners with low vision were tested for visual acuity using the Snellen chart.

The following was the selection criteria for the pupils:

- i) those aged twelve years and above at the onset of the study;
- ii) consent from parent/guardian;
- iii) child willingness to participate in the study;
- iv) visual acuity of 20/200 or less with a correction of glasses in the better eye.

### **3.6 Research Instruments**

Instruments used to collect data were pupils' academic achievement test, pupils' questionnaire for academic self-concept. Each of the instruments is described below.

#### **3.6.1 Pupils' Academic Achievement Test**

Achievement was measured by researcher made Academic Achievement Test which covered the following subjects: Mathematics, English, Social Studies, Kiswahili and Science. Each subject had five items. In total there were 25 questions of multiple choice type to be answered and for each item answered correctly, 4 marks were awarded. The results were then standardized to z scores using  $t = 10z + 50$ . A score of 50 out of 100 was considered a pass while a score of below 50 was fail. The achievement test is attached as Appendix C for print and appendix F for Braille.



### 3.6.2 Pupils' Academic Self-concept Questionnaire

This was defined as the Student's Self Description Questionnaire Individual evaluation tool (SDQI) measuring various domains of academic competence. The three facets of self-concept: general, academic and subject specifics were measured by Shavelson Evaluation Model Instrument (Shavelson, 1990). The instrument consisted of fifty items, which required the respondent to tick or mark the appropriate answer. Each item used a 5-point likert type scale format that ranged from strongly agree to strongly disagree, indicating the extent to which the respondent agreed or disagreed with self-descriptive statements related to their academic competence. With the realization that this instrument had not been used so far, for pupils who are blind, a pilot study was done in order to identify and change those items that could appear to be unclear or difficult for the pupils to answer. The self-concept was therefore measured by percentage scores.

According to Shavelson (1990), this test is easy to administer, self-explanatory and can easily be understood by pupils of all grades. A score of strongly agree was marked 5 and strongly disagree marked 1. In some items, this was reversed to avoid dishonesty in answers given. The results were then standardized to z-scores using  $T = (10z + 50)$ . The total score was marked 100 and any score of fifty and above was considered high (L1) and below fifty considered low (L2). Psychometric properties relative to the multi component have revealed predictive validity co-efficient of 0.68 (grade 5) and 0.72 (grade 11), test re-test reliabilities of 0.64 (grade 5) and 0.72 (grade 11) over a 2 week lag. And Kuder Richardson 20 internal consistency reliabilities of 0.59 and 0.66 for grades 5 and 11 respectively (Shavelson, 1990). The pupils Questionnaire on Self-concept is attached as appendix D in print and appendix G in Braille.

### **3.6.3 Teachers' Questionnaire**

The original inventory for teachers is a recommendation by Anderson (1978) based on Anderson's evaluation model. It is suitable in probing classroom teacher's experience, qualification and assessing facilities without any prejudice. In the present study, the inventory had been adapted to evaluate the school facilities in each programme. The adapted inventory consisted of 25 items on demographic information (like sex, age and grade) about the teachers, pupils, classrooms and school facilities arranged in Likert type format from strongly agree, agree, undecided, disagree and strongly disagree. The teachers Questionnaire is attached as appendix G.

### **3.7 Validity of the Research Instruments**

According to Shavelson (1990), Psychometric properties relative to the multi component have revealed predictive validity co-efficient of 0.68 (grade 5) and 0.72 (grade 11) for the self-concept instruments. For face validity, all instruments were given to three experts in the area of study to establish if they captured what the study was intended to do. The instruments were then corrected by incorporating the views of these experts.

### **3.8 Reliability of the Research Instruments**

A pilot study was undertaken in one of the schools not included in the study and this included 29 pupils of which 18 were totally blind and 11 had low vision. These children had a wide range of abilities and visual impairments, and were of the same age range and from similar background as those that were used in the study. After the pilot study it was possible to determine which researcher made items pupils answered with ease and which ones they found confusing. The items found confusing were restructured to reduce the ambiguity and therefore enhanced the suitability and reliability of the study. Split-half approach was then employed in order to establish the



level of reliability which was computed using Pearson's Product Moment method. A correlation coefficient ( $r$ ) of 0.787 and 0.873 were found for self-concept and achievement tests respectively.

### **3.9 Data Collection Procedures**

Permission was first granted by the ministry of education to carry out research in the public schools. A visit was made to the schools by the researcher and rapport was established between the researcher and the class teachers. During the administration of the research instruments, the researcher was assisted by the head teachers and the class teachers. All information given was treated with confidentiality. Explicit instructions were given verbally to ensure that the respondents understood the questions. There were sample questions in the form of examples which were read to all respondents and answered verbally before beginning the test. During the administration of the test, totally blind pupils used Braille writing, while low vision respondents used large print. For those who could not read, the class teacher assisted them in reading.

### **3.10 Data Analysis Procedures**

All procedures based on the analyses of variance structure were conducted. In order to facilitate interpretation, negative items were reversed such that high scores represented high positive perception. On the basis of these analyses, latent correlation on academic self-concept and achievement was tested. Academic self-concept was described best by three factors namely, general self-concept, academic and subject specific. A score of fifty out of one hundred for Self-concept was considered a pass, while a score below fifty out of one hundred failed. The pass mark for achievement scores was also fifty out of one hundred, any score below fifty was considered as fail. Pearsons' product-moment correlation was used to establish the relationship between Self-concept and

achievement scores. The mean and standard deviation was used to indicate how widely spread values are from the mean. Data analyses at  $p \leq 0.05$  level of significance were tested. F test was used to test the statistical significance of the postulated null hypotheses. Simple frequencies and percentages were calculated to enable an investigation of comparison on the responses of various groups for each question or item. Analyses of Variance (ANOVA) were used to measure the interaction effect of the dependent and independent variables.



## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### 4.1 Introduction

This chapter presents the study results obtained through an interactive process of data collection and analysis involving both qualitative and quantitative methods. The data analysis and interpretation was based on the following objectives:

- i. determine the relationship between self-concept and achievement for learners who are visually impaired.
- ii. determine if learners with low vision had a higher self-concept than those who are totally blind.
- iii. determine if there was any differences in achievement scores among learners who are visually impaired.
- iv. determine differences in terms of self-concept enhancement for learners who are visually impaired when placed in different programmes.
- v. find out if there was gender difference in self-concept and achievement among learners who are visually impaired.
- vi. Assess the attitude of teachers in special needs education (SNE) towards teaching learners who are visually impaired in their programme placement.

Four instruments which included; pupils' academic achievement, pupils' questionnaire on academic self-concept. The questionnaires used were designed on a 5 points likert scale. A score of strongly agree was marked 4, agree 3 and strongly disagree 1, while disagree was marked 2 those who scored undecided were awarded 0. In some items this was reversed to avoid dishonesty in answers given. The total score was marked 100 and any score of 50 and above was considered high and below fifty considered low. For

analysis purposes, responses at points 4 and 3 were considered positive while those at points 1 and 2 were considered negative responses.

#### **4.2 Determining the relationship between self-concept and achievement for learners who are visually impaired**

The study attempted to determine if there was any difference in relationship between self-concept and achievement among pupils who are visually impaired by testing the following hypothesis:

*H01 There is no significant relationship between self- concept and achievement for learners who are visually impaired.*

Pearson's Product-Moment Correlation coefficient, or Pearson's "r" was used to calculate the value for "r" and using the table to determine the critical value (cv). In this case the number of pairs n was 189 for partially sighted and 73 for totally blind. Taking (n-2) as the df being 187 for partially sighted and 71 for the totally blind. Where n referred to the number of pairs of scores that is self-concept and achievement. The calculated value was found to be 0.771 for partially sighted and 0.638 for those who were totally blind. In the table of critical value for Pearson's "r", two critical values of  $p \leq 0.05$  and  $p \leq 0.01$  was 0.195 and 0.164 respectively. The calculated value was found to be greater than the two critical values at  $p \leq 0.05$ .and  $p \leq 0.01$  on the table of values, therefore the null hypothesis was rejected and the alternative hypothesis taken, that is there was a significant relationship between self-concept and achievement for pupils who are visually impaired.

This findings is also summarized on Table 4.



**Table 4 Relationship between self-concept and achievement**

SOURCE	Sample n	df.	Calc.Value	Critical value
Partially sighted	189	187	0.771	0.195 /0.164
Totally Blind	73	71	0.638	0.195/0.164
Total	262			

A look at Table 5 also shows that pupils who scored high in self-concept also performed better in achievement scores.

**Table 5. Comparison of self concept scores and achievement among the low vision and totally blind learners.**

SELF- CONCEPT	VISION		ACHIEVEMENT SCORE	VISION	
	Low vision	Totally blind		Low vision	Totally blind
10-19	0	2	10-19	0	2
20-29	8	2	20-29	8	2
30-39	12	4	30-39	12	4
40-49	21	10	40-49	21	10
50-59	34	8	50-59	32	8
60-69	32	19	60-69	34	11
70-79	53	11	70-79	21	19
80-89	21	15	80-89	53	15
90-99	8	2	90-99	8	2
<b>TOTAL</b>	<b>189</b>	<b>73</b>		<b>189</b>	<b>73</b>

Results of the data analysis showed that there is indeed a relationship between self-concept and achievement for learners who are visually impaired. Those who had higher scores in self-concept were also high achievers in academic achievement scores. The finding is also supported by Somerset (1971) and Mwaniki (1973), which indicated a strong correlation between self-concept and mathematics achievement. It is also shown that those who scored low in self-concept also scored low in academic achievement, the one that has been the most perplexing and illusory has been the question of whether academic self-concept causes academic achievement, or whether instead, academic achievement causes academic self-concept. In reviewing such claims of casual predominance, (Byrne, 1984) found that for every study that argued for the impact of academic self-concept on academic achievement, there was a comparable one that claimed the reverse to be true. Of the 23 studies, 11 argued for casual self-concept flow, and one was unable to determine direction. Following a review of published studies and 18 doctoral dissertations concerned with the impact of intervention programmes on the self-concept and academic achievement of school children. Scheir and Kraut (1979) reported no evidence of casual connection between the two constructs; these same conclusions were drawn earlier by Rubin, Dorle, and Sandidge (1977). In sharp contrast, however, the West et al. (1980) review concluded, "Findings are now sufficient to indicate that school achievement is casually predominant over self-concept of academic ability.

One major limitation of the preceding studies and therefore failed to meet the necessary criterion of temporal precedence in the determination of cause (Cook and Campbell, 1979). This criterion demands that to assess, for example, whether self-concept influences academic achievement, self concept must precede academic achievement in time.



### 4.3 Determining if pupils who are low vision have a higher Self-concept than learners who are totally blind

The study attempted to determine if there was any significant difference in self-concept among pupils who are visually impaired by testing the following hypothesis.

*H02 Pupils with low vision do not have a higher self-concept than those*

*Who are totally blind*

From the results, the computed mean scores of the pupils based on their level of visual impairment; partially sighted pupils had higher mean score (66.61) compared to pupils who were totally blind who had a mean score of 60.32. The computed standard deviation (sd) for partially sighted was 1.8 while the calculated standard deviation (sd) for the totally blind was 2.06. The calculated value on Pearson's  $r$  also showed that partially sighted pupils scored 0.627 and those who were totally blind scored 0.537.

The scores were summarized as shown on the Table 6.

**Table 6: Relationship of Pupils Self-concept Scores with Degree of Impairment**

Self-concept Scores	Low Vision	Totally Blind	Total
10-19	0	2	2
20-29	8	2	10
30-39	12	4	16
40-49	21	10	31
50-59	34	8	42
60-69	32	19	51
70-79	53	11	64
80-89	21	15	36
90-99	8	2	10
<b>Total</b>	<b>189</b>	<b>73</b>	<b>262</b>

The results showed that pupils with low vision had a higher self-concept than totally blind pupils. A look at the table for critical value at  $p \leq 0.05$  and  $p \leq 0.01$ , for partially sighted pupils was (0.195) and (0.164) respectively. Pupils who were totally blind had a critical value of 0.195 at  $p \leq 0.05$  and 0.164 at  $p \leq 0.01$ , therefore taking the calculated value of 0.627 for the partially sighted pupils, the null hypothesis was rejected and the alternative hypothesis accepted.



This result can be summarized on Table 7:

**Table 7 A summary of the calculated value and the critical value for V.I. pupils**

SOURCE	Sample n	$\bar{x}$	df.	Calc.Value	Critical value
Partially Sighted	189	66.1	187	0.627	0.195 /0.164
Totally Blind	73	60.32	71	0.537	0.195/0.164
<b>Total</b>	<b>262</b>				

Results of the study showed that pupils with low vision scored higher in self-concept than pupils who were totally blind. This is in support with the study done by Kamau (1986), which indicated that there was significant differences in educational aspirations across disability type. Two relevant issues in relationship between self-concept and other psychological disorders, conditions, or disabilities are the causative dimension of self-concept problems and the generality or specificity of the self views. Although some models have been proposed by Harter (1989) that suggested directionality between global self-worth and other psychological variables, however, this issue remains largely unresolved. When self-concept problems are apparent and coexist with another disorder, disability, or problems, it may be difficult to determine whether diminished self-concept is a result of the disability or caused by the disability.

Harter (1992) observes that self-concept problems are reactive in individuals with disabilities. Therefore when pupils with visual impairment are also faced with self-perceptions of academic difficulties they too react. The second issue addresses the generality versus specificity of self-concept problems. Although self-concept is multidimensional and many scales assessing self-concept may be realistic reflection of some personal situation or condition. Marsh (1992), in a meta-analysis of self-

reported personality characteristics showed more deviance from the norm than trends on global measures. This finding is not surprising since loss of vision is an inherent to failure in environmental adjustment. Similarly, Dunn (1982) discussed the role of body image and physical limitations among persons with visual impairment. Therefore, it would not be surprising for individuals with visual impairment to show indexed of self-concept problems in body image areas. Therefore more specific self-concept problems need to be viewed in the context of the other conditions and disorders, and their overall contribution to more global self-concept needs to be assessed.

#### **4.4 Determining if there is any difference in achievement scores among learners who are visually impaired**

The study attempted to determine if there was any difference in achievement between pupils who are totally blind and partially sighted pupils by testing the following hypothesis:

*H03 There is no difference in achievement among learners who are  
visually impaired*

The results were computed and mean average compared between pupils who were totally blind and those who were partially sighted.

The results showed that pupils who are low vision performed better in achievement scores compared to pupils who were totally blind. For pupils who are low vision, 148 out of 189 scored 51 and above in achievement scores, this translates to 78.31% compared to 55 out of 73 for pupils who were totally blind which translates to 75.34%.

From the results, the computed mean scores of the pupils based on their level of visual impairment; partially sighted pupils had higher mean score (78.31) compared to pupils who were totally blind who had a mean score of 75.34. The computed standard



deviation (sd) for partially sighted was 1.677 while the calculated standard deviation (sd) for the totally blind was 1.962. From the results it was noted that there was indeed a difference in achievement scores. The null hypothesis was therefore rejected and the alternative hypothesis accepted, it was therefore concluded that there was significant difference in achievement scores among pupils who are visually impaired. The partially sighted pupils having done better in achievement scores as compared to pupils who are totally blind. The results are summarized on Table 8 on how the pupils performed.

**Table 8: Relationship of Pupils Achievement Scores with Degree of Impairment**

Achievement Scores	Low Vision	Totally Blind	Total
10-19	0	2	2
20-29	8	2	10
30-39	12	4	16
40-49	21	10	31
50-59	32	8	40
60-69	34	11	45
70-79	21	19	40
80-89	53	15	68
90-99	8	2	10
<b>Total</b>	<b>189</b>	<b>73</b>	<b>262</b>

The small variance of percentage scores suggests relatively a variation in the educational outcomes among schools, which provides empirical evidence to support generalization of the research findings across different school settings.

Psychologists suggest that self-concept has two major aspects, “the self as a doer” and “the self-as-object” (Hamachek, 2000; James, 1890). From the doer’s perspective, Hamachek (2000) gathered “Pupils’ self-perceptions about usually doing well in academic subjects. Regarding the self as an object, pupils had a chance to express their feeling of getting bored in academic. In addition, pupils reported the importance of learning as perceived by self, friends, and parents, and thus, the push for achievement. To facilitate interpretation of the research findings,

#### **4.5 Determine differences in terms of self-concept enhancement for learners who are visually impaired when placed in different programmes**

The study attempted to determine if there was any difference in terms of self-concept for pupils who are visually impaired when placed in any of the programmes by testing the following hypothesis.

*HO<sub>4</sub> There is no significant difference in terms of self-concept enhancement for learners who are visually impaired when placed in any of three educational programmes, namely special, integrated and inclusive.*

Mean of self-concept for pupils enrolled in the three different programmes were computed. The study found that pupils enrolled in inclusive programme had the highest (74.6%) mean score followed by those in integrated programme with a mean score of 69.1% and those in special programme trailed behind with a mean score 61.7%. Level of significance was calculated using Pearson’s Product-Moment Correlation coefficient. The calculated value of the respondents in special programme was 0.77. Integrated programme, 0.84 and Inclusive programme was 0.99. The sample population for respondents in special programme was 152, Integrated programme 82 and Inclusive



programme was 28. Taking (n-2) for special programme, the df being 150, Integrated programme, df being 80 and Inclusive, df being 26. The critical value at  $p \leq 0.05$  and  $p \leq 0.01$  on the table of values was found to be (0.195) and (0.254) for special programme, 0.250 and 0.325 for Integrated programme and 0.423 and 0.537 for Inclusive programme. In all cases the calculated value was greater than the critical value both at  $p \leq 0.05$  and  $p \leq 0.01$ , hence "r" being significant, therefore the null hypothesis was rejected and the alternative hypothesis accepted. One-Way ANOVA was also computed and an F value of 5.24 with a degree of freedom of between groups and 160 within the groups. The computed F value was found to be larger than the critical value at  $p \leq 0.05$  and  $p \leq 0.01$  level of significance. This was found to be 0.195 and 0.254 respectively. The results showed that pupils gained higher self-concept when enrolled in inclusive programme followed by Integrated programme and then Special programme. This can therefore be summarized on Table 9.

**Table 9 Differences in self-concept enhancement per programme**

SOURCE	Sample (n)	$\bar{x}$	df.	Calc. Value	Critical value
Special Programme	152	61.7	150	0.771	0.195 /0.164
Integrated Prog	82	69.1	80	0.84	0.195 /0.164
Inclusive Prog.	28	74.6	26	0.99	0.195/0.164
<b>Total</b>	<b>262</b>				

Results showed that pupils who were in Inclusive programme performed better in self-concept and hence in achievement test scores as compared to integrated programme, followed by special programme.

Self-concept has played a critical role in placement debate about whether pupils should be taught in special, segregated classrooms or in regular classes. Opponents of special class placement typically argue that the identification, isolation and segregation of these students tend to foster a negative self-concept (known as labeling theory). As consequences, in the past decade, there has been a strong movement towards the inclusion of pupils with disabilities into more heterogeneous educational environments based on the beliefs that the inclusion of pupils with disabilities will enhance their self-concept as they become more involved with the mainstream activities of the school (Sczivos-Bach, 1993). Research does not support the assumption that placing pupils with disabilities in regular classes with non disabled peers' results in enhanced self-concept (Chapman, 1988; Renick and Harter, 1989).

Proponents of special class placement argue that the environment of the special class, which is generally less competitive and consists of pupils with similar difficulties, reduces the anxieties and frustrations of pupils with disabilities, and as a consequence, fosters the development of a positive self-concept. Marsh and Johnston (1993) expanded this theoretical basis to include the effects of special class placement on children with learning difficulties. According to their findings, the academic self-concepts of pupils with mild intellectual disability should increase when placed in segregated educational environments as their reference group experiences similar difficulties, and when these pupils make social comparison they evaluate themselves for more favourable. These results can be supported by (Dunn (1968) who recommended that many disability labels be abolished and pupils with mild intellectual disabilities be maintained in regular classes with special educators serving them within this environment.



**4.6 Find out if there was gender differences in self-concept and achievement among learners who are visually impaired.**

Of the 262 subjects who participated in the study, males were 152 (58.02%) and females 110 (41.98%). The findings showed that females performed better in self-concept as compared to male pupils. Taking a score of fifty and above as high, female respondents were (62) translating to 56.5217% against males of (74), translating to 48.7179%. This is supported on Table 10.

A look at Table 9 still shows that girls performed better in achievement scores as compared to boys. Scores of 50 and above in column one, are 87 subjects (females) compared to 108 (males). This translates to 79.4872% and 71.1111%, females and males respectively.

**Table 10: Relationship of achievement scores by sex**

ACHIEVEMENT SCORES	SEX				TOTAL
	MALE	%	FEMALE	%	
10 – 19	5	3.3	0	0	5
20 – 29	9	5.9	3	2.7	12
30 – 39	12	7.9	6	5.4	18
40 – 49	18	11.8	14	12.7	32
50 – 59	32	21.1	26	23.6	58
60 – 69	25	16.4	27	24.5	52
70 – 79	39	25.7	26	23.6	65
80 – 89	11	7.2	6	5.4	17
90 – 99	1	0.6	2	1.8	3
<b>TOTAL</b>	<b>152</b>		<b>110</b>		<b>262</b>

The study further attempted to determine if there was any gender differences in self-concept and achievement among visually impaired pupils by testing the following hypothesis:

*H0<sub>5</sub> There is no gender difference in self-concept and achievement among learners who are visually impaired.*

The study computed mean self-concept scores and achievement for each sex; female. Females were found to have higher self-concept scores (64.73) compared to males who attained a mean score of 62.27. Value of F was computed and found as (0.85) and this was found to be less than the critical value both at  $p \leq 0.05$  and  $p \leq 0.01$  level of significance, which was 4.00 and 7.08 respectively. On computation of Pearson "r" values of 0.734 and 0.866 were obtained for female and male pupils respectively. A look at the table showed that the critical value at  $p \leq 0.05$  and  $\leq 0.01$  for female, was (0.288) and (0.372), male was (0.325) and (0.418). The null hypothesis was therefore rejected and the alternative hypothesis accepted. This is summarized on Table 11.

**Table 11 Gender difference in self-concept and achievement scores**

Sex	Sample n	$\bar{x}$	df.	Calc. Value	Critical value
Male	152	64.73	150	0.734	0.195 /0.164
Female	110	62.27	108	0.866	0.195 /0.164
<b>Total</b>	<b>162</b>				

Results of the data indicated that there was sex differences in self-concept among visually impaired pupils. Girls scored higher than boys in self-concept and hence in achievement test.



The results contradict the study by Maritim (1984) and Kamau (1986) whose studies indicated that boys have higher aspiration than girls. Muthoni (1998) in her studies indicated that in Kenya the education for girls lagged behind those of boys due to traditional gender- role stereotypes.

Many studies, some previously noted found differences in domain specific self-concept of boys and girls that tend to run along gender stereotype line. The physical abilities domain appears to reflect the largest difference between sexes; this is perhaps not surprising in view of the much greater emphasis on girls' participation in class and school. Physical appearance also is an area in which girls tend to have higher self-concept than boys. Harter (1990) has suggested that the girls consider physical attractiveness to be more important than do boys, yet girls become more dissatisfied with their appearance during adolescence than do boys. She concludes that there is group of related perception among girls that contribute to their higher self-concept in this area, including a more favorable body image, greater self consciousness, feelings of attractiveness, more positive attitude towards their own gender, and recognition of the values society places on appearance.

It is important to remember, however, that the divergence between boys and girls in these self-concept domains is not very great and therefore has limited clinical significance. However it does appear warranted, for example, that educational settings should embark immediately on developing programmes to improve adolescent boys physical appearance and ability self-concepts in an effort to bring them more up at par with girls' perception in these domains. It appears from the literature that, by and large, boys and girls are clinically more similar than different on measures of

domains-specific self-concept. The small differences that exist tend to be consistent with gender stereotypes.

Gender historically has been lauded as one of the most important contributors to the variance in children's and adolescents' self-concepts, and undoubtedly will continue to be examined in future research. However, gender as a moderator of multidimensional self-concept should perhaps receive more emphasis than other variables such as effects of pubertal changes or societal attitudes that contribute to gender differences. As female members of our society continue to experience expanded roles and success in the work place and in recreation arena, we may see changes in sex roles.

#### **4.7 Teachers attitude towards teaching learners who are visually impaired in their programme placement.**

Of the twenty eight teachers who were sampled, 22 were in special schools, 12 in integrated programme and 4 in inclusive programme. The findings showed that most teachers were in support of inclusive programme, and this is supported by their responses analyzed on Tables 12-20.



**Table 12: Teachers' Views on availability of Teaching and Learning Resources  
in Inclusive Schools**

Statement on Resources	Agree f (%)	Disagree f (%)
i. You have sufficient teaching and learning resources	1(25.0)	3(75.0)
ii. The resources materials in my classrooms are effective in meeting the needs of my pupils.	1(25.0)	3(75.0)
iii. The school has enough facilities to cater for Vocational training	0(00.0)	4(100.0)

As shown in table 3, teachers in inclusive schools felt that they did not have sufficient teaching and learning resources in their schools. This was supported by 3(75.0%) of the teachers who reported that resource materials in their classrooms were not sufficient to be effective in meeting the needs of their pupils. They also refuted that schools have enough facilities to cater for vocational training. On pupils' placement, teachers had the following views as shown in Table 13.

**Table 13: The view of Teachers engaged in Inclusive Programme on Pupils' Placement**

Statement on Resources	Agree f (%)	Disagree f (%)
i. In my class there are no repeaters who are Visually impaired	0(00.0)	4(100.0)
ii. For pupils placements referrals must be done by the assessment teacher	4(100.0)	0(00.0)
iii. The strategies used in pupils' placement in Kenya are responsive to objectives of special education.	3(75.0)	1(25.0)
iv. The objectives of special education are feasible.	4(100.)	0(00.0)
vi. Those who fail to join secondary education do join vocational training	0(00.0)	4 (100.0)

From Table 12, the results indicate that all of the teachers in inclusive setting disagreed that no repeaters who are visually impaired are in their classes. However, they agreed that for pupils placement referrals must be done by the assessment teacher as 4(100.0%) of teachers reported positively on this fact. On whether the strategies used in pupils' placement in Kenya are responsive to objectives of special education, 3(75.0%) of the teachers agreed. All 4(100.0%) teachers agreed that objectives of special education are feasible. They however disagreed that pupils who fail to join secondary education do join vocational training as 4(100.0%) of them felt this was not happening. Teachers' views on payment of school fees by parents were as shown in Table 14.



**Table 14: View of Teachers engaged in Inclusive Programme on Payment of School fees by Parents**

Placement Statement on Resources	Agree f (%)	Disagree f (%)
i. Majority of pupils in my school are sponsored and therefore school fees is not a problem	4(100.0)	0 (00.0)
ii. Parents /Guardians still pay school fees despite the education of free primary education	0(00.0)	4(100.0)
iii. Although school fee is not a problem, no pupils join secondary school from my school	0(00.0)	4(100.0)

As shown in table 13, 4(100.0%) of the teachers reported that majority of pupils in their school were sponsored and therefore school fees is not a problem. 4(100.0%) also disagreed that parents, guardians still pay school fees despite free primary education, this is due to the fact that the majority of learners with disabilities are sponsored. Most pupils do join secondary education after class eight, 4(100.0%) supported this.

#### **ii. Views of Teachers engaged in Integrated Programme**

The study sought views of teachers engaged in integrated programme on condition of teaching and learning resources, placement of the pupils in the programme and payment of fees by the parents. The results were as shown on Tables 15, 16 and 17 respectively.

**Table 15: Views of Teachers engaged in Integrated Programme on availability of Teaching and Learning Resources in School**

Statement on Resources	Agree f (%)	Disagree f (%)
i. You have sufficient teaching and learning resources.	9(75.0)	3(25.0)
ii. The resources materials in my classrooms are effective in meeting the needs of my pupils.	5(41.7)	7(58.3)
iii. The school has enough facilities to cater for vocational training.	2(16.6)	10(83.4)

As shown in Table 15, teachers engaged in integrated programme agreed that they 9(75.0%) had sufficient teaching and learning resources in schools. However, they 7(58.3%) denied the fact that the resource materials in their classrooms were effective in meeting the needs of their pupils. They also reported that the schools did not have enough facilities to cater for vocational training since. 10(83.4%) of them responded negatively on this.



**Table 16: Views of Teachers engaged in Integrated Programme on learners****Placement**

Statement on Resources	Agree f (%)	Disagree f (%)
i. In my class there are no repeaters who are visually impaired	11(91.6)	1(8.4)
ii. For pupils placement referrals must be done by the assessment teachers	7(58.3)	5(41.7)
iii. The strategies used in pupils' placement in Kenya are responsive to objectives of special education.	9(75.0)	3(25.0)
iv. The objectives of special education are feasible.	8(66.7)	4(33.3)
v. Those who fail to join secondary education do join vocational training	10(83.3)	2(16.7)

On Table 16, 11(91.6%) of teachers reported that they have no repeaters in their classes who were visually impaired. On whether pupils' placement referrals must be done by the assessment teacher, 7(58.3%) of them agreed while 5(41.7%) reported that this was not a must. Teachers' views were sought whether strategies used in pupils' placement in Kenya are responsive to special education objectives; 9 (75.0%) of them agreed that the strategies were responsive. They also agreed that the objectives of special education were feasible as 8(66.7%) of them admitted this fact. Teachers also admitted that pupils who fail to join secondary education do join vocational training since 10 (83.3%) of them agreed with this fact.

**Table 17: Views of Teachers engaged in Integrated Programme on Payment of School Fees by Parents**

Statement on Resources	Agree	Disagree
	f (%)	f (%)
i. Majority of pupils in my school are sponsored And therefore school fees in not a problem	4 (33.3)	8(66.7)
ii. Parents/Guardian still pay school fees despite free primary education.	8(66.7)	4(33.7)
iii. Although school fees is not a problem, no pupils join secondary school education from my school.	3(25.0)	9(75.0)

As shown in Table 17, 8(66.7%) of teachers reported that majority of pupils in their schools are not sponsored and therefore school fees is a problem to them. They also reported that parents/guardians still pay fees despite the fact that there is free primary education as 8(66.7%) of them admitted this. They reported that parents/guardians still pay fees despite the fact that there is free primary education as 8(66.7%) of them admitted this. They denied that although school fee is a problem, no pupils join secondary school education from their schools as 9(75.0%) disagreed with this statement.



#### iv. Views of Teachers engaged in Special Schools

**Table 18: Teachers' views on availability of Teaching and Learning Resources in Special Schools.**

Statement on Resources	Agree f (%)	Disagree f (%)
i. You have sufficient teaching and learning resources	14 (63.6)	8 (36.4)
ii. The resources materials in my classroom are effective in meeting the needs of my pupils	14(63.6)	8(36.4)
iii. The school has enough facilities to cater for vocational training.	18(81.8)	4(18.2)

As shown in Table 18, teachers in special schools said they had sufficient teaching and learning resources as 14(63.6%) of them admitted this. However, an equal number 14(63.6%) of them felt that they had sufficient teaching and learning resource materials in their classroom and are effective in meeting the needs of their pupils while 8(36.4%) of them disagreed with this. On the issue of resources, 18(81.8%) reported that that schools have enough facilities to cater for vocational training.

**Table 19: Special Education Teachers' views on learners Placement**

Statement on Resources	Agree f (%)	Disagree f (%)
i. In my class there are no repeaters.	4(18.2)	18(81.8)
ii. For pupils placement referrals must be done by the assessment teacher	20(90.9)	2(9.1)
iii. The strategies used in pupils' placement in Kenya are responsive to objectives of special education.	18(81.8)	4(18.2)
iv. The objectives of special education are feasible	18(81.8)	4(18.2)
v. Those who fail to join secondary education do join vocational training.	16(72.7)	6(27.3)

As shown in Table 19. 4(18.2 %), teachers engaged in special schools reported that they do not have repeaters who are visually impaired in their classes as 18(81.8%) of them admitted this. However the same number 18(81.8%) agreed that for pupils placement, referral must be done by the assessment teacher. An equal number 18(81.8%) also admitted that the strategies used in pupils' placement in Kenya are responsive to objectives of special education, however 18(81.8%) admitted that objectives of special education are feasible. While 16 (72.7 %) teachers admitted that pupils who fail to join secondary education do join vocational training, 6(27.3%) of them denied this.



**Table 20: Special Education teachers' views on Payment of School Fees by Parents**

Statement on Resources	Agree f (%)	Disagree f (%)
i. Majority of pupils in my school are sponsored and therefore school fees is not a problem	4(18.2)	18(81.8)
ii. Parents/Guardians still pay school fees despite the education of free primary education.	20(90.9)	2(9.1)
iii. Because school is a problem, many pupils do not join secondary school education from my school.	15(68.2)	7(31.8)

From Table 20, the majority of pupils in special schools are not sponsored as this was reported by 18(81.8 %) of the teachers. Parents/ guardians therefore still pay fees as this fact was reported by 20(90.9%) of the teachers. Majority of pupils in special schools do not join secondary schools as 15(68.2%) reported this. Only 7 (31.8 %) answered against this.

*HO6 Teachers of Special Needs Education (SNE) do not have a positive attitude towards teaching learners who are visually impaired in their programme placement.*

The results showed that more teachers are in support of inclusive programme. The present study also showed that special schools have better facilities than mainstreamed classes and inclusive programmes. Placement in all the programmes is done by the assessment teacher.

Based on the results of the study, in general, the efforts to implement the inclusive programme received a positive response from the teachers. Moreover, the present study shows that experience in working with children with SNE did differentiate between teachers' attitudes towards inclusion..

Studies have shown that the success of the inclusive education depends, to a large extent, on the willingness and the ability of teachers to make accommodations for individuals with special needs. It is likely that teachers with no special training did not have the chance to benefit from proper training, which could make them less resistant to inclusive practices



## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

The purpose of this study was to examine the evaluation of programme placement for pupils who are visually impaired in relation to self-concept and achievement in special primary schools in Kenya. The study was guided by the following research objectives:

- i. determine the relationship between self-concept and achievement for learners who are visually impaired.
- ii. determine if learners with low vision had a higher self-concept than those who are totally blind.
- iii. determine if there was any differences in achievement scores among learners who are visually impaired.
- iv. determine differences in terms of self-concept enhancement for learners who are visually impaired when placed in different programmes.
- v. find out if there was gender difference in self-concept and achievement among learners who are visually impaired.
- vi. Assess if teachers of special needs education (SNE) have a positive attitude towards teaching pupils who are visually impaired in their programme placement.

#### 5.2 Summary of the Findings

The findings of the study included the following:

- i. There was a positive correlation between self-concept scores and achievement scores among learners who are visually impaired.

ii. learners with low vision were found to have scored higher in self-concept test than their totally blind counterparts.

iii. Partially sighted learners scored higher in achievement test than those who were totally blind.

iv. The results showed that learners enrolled in inclusive programme had the highest mean score followed by integrated and lastly the special school programme.

v. Female pupils had higher self-concept than their male counterparts.

vi. Assess the attitude of teachers in special needs education (SNE) towards teaching learners who are visually impaired in their programme placement.

### 5.3 Conclusions

This chapter attempted to make conclusions based on the findings of the study in order to answer the following research hypotheses:

*H01 There is no significant relationship between self concept and achievement for learners who are visually impaired.*

Results of the data analysed showed that there was a positive correlation between self-concept and achievement for pupils who are visually impaired. The study therefore concluded that self-concept positively influences the pupils' academic achievement.

*H02 learners with low vision do not have a higher self-concept than pupils who are totally blind.*



Since learners with low vision showed a higher self-concept than pupils who were totally blind, it may be concluded that self-concept depends to a certain degree of the severity of the disability. That is, the more severe the disability, the lower the self-concept.

*H03 There is no difference in achievement among learners who are visually Impaired.*

Since pupils who are low vision scored higher in achievement tests than those who were totally blind, this suggests that level of visual impairment negatively influences academic achievement. That is, the more severe the impairment, the lower the achievement.

*HO<sub>4</sub> There is no difference in terms of self-concept enhancement for learners who are visually impaired when placed in any of the three educational programmes, namely special, integrated and inclusive.*

Although inclusive programme had fewer respondents compared to either integrated or special programme, pupils enrolled in the inclusive programme still performed better than those enrolled in the other two followed by integrated and then special programme.

*H0<sub>5</sub> There is no gender difference in self-concept and achievement among learners who are visually impaired.*

Girls tended to show a higher self-concept which influenced their performance in achievement tests than their male counterparts among pupils who are the visually impaired.

*HO<sub>6</sub> Teachers of Special Needs Education (SNE) do not have a positive attitude towards teaching pupils who are visually impaired in their programme placement.*

Overall teachers of SNE hold a positive attitude towards inclusion of pupils who are visually impaired in their classes.

Results from this study provide evidence that there is a relationship between self-concept and achievement.

Visually impaired pupils with higher self-concept will likely have a higher achievement.

Pupils who are totally blind have a lower self-concept than pupils who are low vision; they also tend to perform poorly in achievement as compared to pupils who are low vision.

Among pupils who are visually impaired, girls generally have a higher self-concept than boys.

#### **5.4 Recommendations**

A number of questions have been raised in this study. Consequently, the following recommendations are made.

- i. Self-concept should be developed to a greater extent among the learners who are totally blind in order to enhance their academic performance at school.
- ii. The study recommends that there is a need for learners who are visually impaired and more so those who are totally blind to start school as early as possible in the schools next to their homes so as to have early intervention, this would enhance their self-concept.
- iii. The study recommends that learners who are partially sighted should be left to study in regular schools if not integrated programme in order to improve



on their academic performance. Those who are totally blind could only learn in inclusive programme with the support of specially trained teachers in that programme. Inclusive programme should be supported with specialized equipments like Braille machines reading glasses and lenses and other non optical devices to support visual acuity for the learners in those programmes.

iv. This study recommends that more inclusive programmes should be expanded in order to find placement for more pupils who are visually impaired. Schools practicing inclusive education programme should be supported.

v. This study recommends that teachers of special education programmes should develop more self-concept among the boys in order to enhance their academic achievement scores since they seem to despair early in life. The lower self-concept observed among visually impaired boys should be enhanced by giving counseling to the boys with a view to helping them accept their capability.

Inclusion requires support by school headteachers, parents, teachers and pupils.

Provision of adequate resources to inclusive classes is also recommended.

### **5.5 Suggestions for further Research**

The study finally made the following suggestions for further research:

i. The study found out that teachers play a very significant role in enhancing pupils' Self-concept and thereafter their academic achievements in school. More research therefore should be done on the teachers' attitudes towards teaching pupils who are visually impaired.

ii. Tools used in measuring self-concept were developed in developed countries. However, they may not be effective in judging pupils in under developed world since they have a different setting. Standardized tools for measuring self-concept should therefore be developed locally to provide validity and reliability.

iii. Family background seems to have a greater influence on self-concept building. A study should therefore be conducted on the factors that influence self-concept specifically on familial related factors.

iv. Age was not tested as a variable in this study. Further research should be carried out in this area.



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