THE ROLE OF SELF-CONCEPT IN ACADEMIC PERFORMANCE AMONG GRADE ELEVEN PUPILS

By
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Dedication

Dedicated to my mother and father, Zulekha and Aboobakr Suliman, and to my husband, Taahir Khan.

For all your patience and enduring support during my most trying and difficult moments.

I love you.

Dedicated also to my future bundle of joy, due sometime in November...

Copyright Declaration

Declaration

I, Safiyé Suliman, do hereby declare that this dissertation represents my own work, and that it has not been previously submitted for a degree, diploma or other qualification at this, or any other University.

Signed:.....

Date: 16 : 12 : 2005

Approval

This dissertation of Safiyé Suliman has been approved as fulfilling the requirements for the award of the degree of Master of Education in Educational Psychology by the University of Zambia.

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ABSTRACT

The purpose of this study was to explore the role of self-concept in academic performance among Zambian grade eleven pupils. The primary objective was to examine self-concept and academic performance in order to show how they contribute to the academic success and healthy personality development of students in Zambia.

By means of purposive sampling, four schools were selected from Lusaka city. From each school, grade eleven pupils constituted the sample for the study. The sample consisted of 147 males and 106 females, yielding a total of 253 participants in the study.

Data collection primarily involved the use of questionnaires and school records. The instrument used to measure self-concept was a modified version of the Canadian Self-Esteem Inventory. The inventory was answered using the 1-to 6 Likert-type scale, which also formed the basis for scoring. Pupils' academic performance was gauged from their performance in the grade ten final examinations. The school subjects of interest in this study were English, Physics, Chemistry and Mathematics. In addition, a test of Raven's non-verbal cognitive ability was administered to two classes.

Through statistical analyses, the following findings were revealed: (1) Boys were found to have a higher self-concept than girls, (2) Self-concept seems to be stronger related to academic performance more among girls than among boys, and (3) Raven's non-verbal cognitive ability revealed no statistically significant correlations with either self-concept or academic ability.

In view of the above findings, the following recommendations were made:

a. Teachers should emphasize fostering a positive self-concept in students from the onset of their academic years. The curriculum for teacher training in Zambia could include courses whereby teachers are taught how to instill positive attitudes in their students. It might be advisable that the curriculum for students includes "lifestyle education" whereby students are emotionally prepared for the

challenges that they will encounter in the course of their development, with particular emphasis on adolescence.

b. Educators should move away from promoting traditional stereotypes wherein males are encouraged to pursue academic goals and females are encouraged to pursue domestic goals. Teachers should engage in equal student interaction between boys and girls.

c. Parents should complement teachers' efforts in eradicating the negative attitudes that girls have towards themselves. Since the self-concept of an individual begins to develop as soon as the individual interacts in society, parents should treat boys and girls equally. Girls should be encouraged as much as boys to excel academically, in an effort to produce positive role models for female students.

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CHAPTER 1: INTRODCTION

Self-concept is a significant personality trait. It is the view of oneself and how others view the self (Bassett, 1978). Self-concept is the image created by an individual, and the value emanating from this image has been found to affect academic performance. A high self-concept has been linked to better performance in school as opposed to a low self-concept.

Self-concept has been recognized as a crucial aspect in achievement. The term "self-concept" was coined in the twentieth century, although the idea of the self-concept has appeared in history for centuries, albeit in different terms (Child, 1973). A positive or high self-concept is one in which the individual perceives himself/herself as capable and important, thereby enabling him/her to perform at a superior level. A negative or low self-concept is one in which the individual perceives himself or herself as incapable and unimportant to such a degree that he/she is unable to perform at a normal level (Quandt, 1972).

An understanding about children's perceptions of their own abilities and their academic performance should be important to educationists since it impacts on curriculum design and instructional behavior. Research conducted outside Zambia has established a relationship between self-concept and academic performance. This study tried to explore whether a similar relationship existed for grade eleven pupils in Zambia. In traditional Zambian communities, a person was seen to be 'other' persons - you are only but what the community says you are. The self-concept of the individual is determined by the

demands of society in terms of development of cognitive skills, personality and morality (N. Ngulube, Personal communication, 2003). Culture permeates the daily life of a people and plays a pivotal role in development. The study therefore aims at exploring the role of self-concept in academic performance among Zambian pupils, while considering the deep cultural trends of "commitment to community" embedded in the people of Zambia. Self-concept in this study will be examined within the Zambian context, and not evaluated against the exclusive standards of western values, customs, traditions and characteristics.

Theoretical Framework

Self-concept influences many aspects of behavior related to learning. Bandura (1989) proposed the idea that individuals develop certain beliefs about their ability to deal with situation specific constructs. Students' perceptions about what leads to success in school influences their behavior, for example, how long they persevere and how well they perform in school (Stetsenko, Little, Gordeeva, Grasshof and Oettingen, 2000).

If we apply Bandura's theory to students' beliefs about learning, the logical prediction is that students with a high self-concept are likely to perform better at school than students with a low self-concept. Students with a high self-concept employ diverse strategies when solving problems and persevere at tasks. In contrast, students who doubt their own abilities tend to abandon tasks quickly when their efforts do not indicate perceived success (Jinks and Morgan, 1999).

In Maslow's hierarchy of needs, great importance is given to self-esteem and self-

actualization. Intellectual advancement is enhanced by the confidence that one has in oneself, and the need for respect from others (Child, 1973). Ausubel gives prominence to self-enhancement and affiliation, stating that we gain prestige by performing well in school, and that we are dependent on others' recognition and approval of our academic achievements (Child, 1973).

Statement of the Problem

Many studies have linked a high self-concept to better performance in school as opposed to a low self-concept. The topic has been very scarcely explored in Zambia. The relationship between self-concept and academic performance was seen to be worthy of further investigation in the Zambian context.

Purpose of the Study

The aim of this study was to explore the role of self-concept in academic performance among grade eleven pupils in Lusaka-city.

Objectives

The main objectives of this study were to:

(1) Establish the relationship between academic performance and self-concept for Zambian pupils.

(2) Determine the status of self-concept among Zambian pupils.

(3) Determine whether girls have a lower self-concept than boys.

Research Hypotheses

In view of existing research, this study aims at finding out whether self-concept is related to academic performance for grade eleven pupils in Zambia. It was therefore hypothesized that

H1: "Academic performance is significantly related to self-concept among Zambian grade eleven pupils"

H2: "Pupils with a high self-concept perform academically significantly better than pupils with a low self-concept"

H3: "Girls will exhibit a lower self-concept than boys"

Ethical Considerations

With any research undertaken, one cannot escape the issue of ethics. The nature of this study posed some threat to participants since the researcher had access to personal information, namely, school grades and the self-concept questionnaire. Some participants were reluctant to provide accurate information because they perceived the questionnaire as an invasion of their privacy. However, all participants were assured that only the researcher would know their names. They were also informed that the results of this study would be used purely for academic purposes. A summary of the main findings would be disclosed to interested pupils who participated in the study.

Limitations and Delimitations of the Study

A longitudinal study would have been beneficial to investigate the interplay between

self-concept and academic performance. Due to the limitation of time and resources, a longitudinal design could not be employed to explain the reciprocity between the variables. Secondly, a larger sample, including rural areas and other provinces, would have added to the generalizability of findings. Once again, the limitation of time and resources prevented a bigger scale study.

Significance of the Study

There is ample psychological evidence (Burns, 1979; Rogers, 1983) that by focusing on the uniqueness and dignity of the learner, his or her ability to perform and to contribute is enhanced. Human beings learn more effectively and perform tasks more confidently if they perceive themselves as worthy of unconditional respect and dignity (Mcguiness, 1998). The educational climate should therefore be one in which individuals are encouraged to believe in themselves in order to reach their highest potential. This would lead to a positive self-concept, and might allow the learner to pursue academic objectives more successfully.

If a relationship between self-concept and academic performance exists, the emerging recommendations from the study might stimulate healthy personality development for students in Zambia and improve their academic performance. Findings will add to the existing body of knowledge on the relationship between self-concept and academic performance.

Operational Definition of Terms

- SELF-CONCEPT: The image we create of ourselves and the self- value or esteem generated from this image that affects our level of *performance" (Child, 1973. p. 53)*

- SELF- ESTEEM: Feeling of acceptance or self-respect that a student has for himself or herself.

- ACADEMIC PERFORMANCE: Knowledge and skills developed in school subjects. The school subjects of interest in this study were Mathematics, Physics, Chemistry and English.

CHAPTER 2: LITERATURE REVIEW

This chapter is comprised of three parts. First, self-concept is explained for the purposes of clarification, as it has been defined by a number of researchers. Second, self-concept is explored in the Zambian cultural context. And third, a critical analysis of relevant literature on the relationship between self-concept and academic performance is presented.

Definitions of Self Concept

According to Burns, self-concept is: "The individual's percepts, concepts and evaluations about himself, including the image he feels others have of him and of the person he would like to be, nourished by a diet of personally evaluated environmental experience" (Child, 1973: 244).

Burns differentiates between self-concept and self-esteem, which is the end product of the experiences of self-evaluation and self-worth (Child, 1973).

Self-esteem is a component of self-concept, as is self-efficacy, mastery and self-identity. It refers to an overall evaluation of one's self-worth or value as a human being, and may encompass a positive or negative orientation towards oneself. According to Rosenberg (1989), the social structural statuses of race and ethnicity, and the institutional contexts of the family or school, all impact on self-esteem. The self-concept is thus shaped through the individual's interpretations of experiences coming from social forces. Furthermore, the formation of the self-concept is governed by four fundamental

principles, namely, reflected appraisals, social comparisons, self-attributions and psychological centrality.

Lefrancois (1973: 297) defines self-concept as 'the self that an adult eventually comes to possess is a conglomerate of the way he thinks the significant others in his life perceive him'. Significant others refer to people considered important to an individual, namely, parents, teachers, peers etc. Self-concept therefore encompasses not only how an individual perceives himself/herself, but also how others perceive the individual (Mwamwenda & Mwamwenda, 1986).

As the self-concept develops over time, it is dependent on the attitudes of significant others. From as early as infancy, there is a need for positive regard and approval from others. For an individual trapped by a negative self-concept, there is little hope of positive change, unless their psychological environment improves. For example, a child who is abused and ignored at home may find, to her surprise that her teacher respects and admires her. The child will then acquire the courage to accept this acceptance of her abilities, and thereby gain reassurance from her teacher's approval of her (Dryden, 1996).

The self-concept is shaped and influenced by various conditions of significant others. Parents have the greatest influence over the self-concept of their child, firstly in terms of *inborn traits,* for example shyness, conscientiousness or self-sufficiency, which predispose the individual to determine, interpret and react to events; and secondly, in terms of *external events* like child-rearing practices. The methods employed by parents

are observed and assimilated by children, generating structures needed for the self-concept valuing process (Child, 1973).

Charles Cooley is well known for his concept of the 'looking-glass self'. Like Lefrancois, Cooley believed that a person's idea of the self is strongly related to other persons. The individual is a reflective image of what he sees about himself in other peoples' eyes, "there is no sense of 'I' without its correlative sense of you, or he or they" (Ganter & Yeakel, 1980: 13).

It is thus clear that self-concept develops from the experiences that individuals encounter through interaction with others in their environment. As they engage in social interaction, they evaluate their behavior in terms of the recognition and respect that they receive from those around them. If they receive praise from others, they will develop a positive self-concept and perceive themselves as beings of worth. However, if they are continuously criticized and ridiculed by others, they will develop a negative self-concept and perceive themselves as worthless.

Individuals are by nature forward moving towards creativity and productivity. However, they may be constrained from reaching their highest possible potential by environmental factors including, most powerfully, interaction with significant others (Ganter & Yeakel 1980). With this in mind, it is important to note that 'the child who perceives himself as unworthy, insignificant or unacceptable in the eyes of others as a result of parental or teacher statements or actions is unlikely to develop the measure of positive self-concept that will contribute to his functioning as a learner' (Mwamwenda; et al, 1986: 6).

Information and understanding about self-concept is important for people involved in working with children, especially teachers, for it helps in guiding individual behavior. If we know what causes people to perceive themselves as worthy we can enhance those conditions that give rise to positive self-regard. If we respect the notion that individuals have the potential to think positively of themselves, to have confidence in their abilities, and to believe in their worth as human beings, then we can theorize about what makes people lose faith in themselves (Ganter & Yeakel, 1980).

Self-Concept in the Zambian Cultural Context

The cultural connotations of self-concept are going to be addressed in this section. Cultural assumptions regulate how one sees the self, a self that is associated with role-playing, gender, choice, risk and the realm of consumption. One of the most important ways in which we think about our selves as identities has to do with the extent to which we are involved in shaping personal and cultural experiences (Elliot, 2001).

In every day interaction, individuals routinely immerse themselves in processes of self-shaping and self-cultivation, acting on the world and others in an attempt to give meaning to the sense of self. We thereby extract resources from the larger cultural and social realms in shaping the self. Thus the self cannot be separated from the social, cultural, political and historical contexts in which it is embedded (Elliot, 2001).

Many and diverse values and beliefs exist in different societies with regard to the self, influencing how the individual constructs his or her self-concept. Some societies stress *individualism* while others emphasize the importance of *collectivism* for the

advancement of all in that society. Within western culture, emphasis is on individual characteristics and achievement, promoting an individualistic self-concept. In contrast, people from non-western cultures think about themselves in collectivist terms rather than as an individual (Markhus and Kitayama, 1991).

Within the Zambian culture, cultural forms in the larger society shape one's sense of self. The notion of the self is thus built up as a "social construction", central to the reproduction of societal norms. The self-concept can be seen as a symbolic project, wherein language, images and signs are used to interpret behavior. Social forces therefore precede 'the individual' in conceptualizing the self (N. Ngulube, Personal Communication, 2003).

Self-concept in the Zambian cultural context does not develop through the actions of the individual. Rather self-concept develops through the design of other people, the impact of cultural conventions and social practices, and the force of social processes and political institutions. Society fashions and regulates the self so that broader cultural forces and social symbolic interaction shape the concept of the self (Elliot, 2001).

In addition to culture and its role in the development of the self-concept, characteristics of age and gender have a universal physiological basis (Munsaka, 2001). Children of all cultures and societies experience similar changes when going through the period of adolescence. They undergo numerous changes in their physical, cognitive, psychological and moral development and experience unfamiliar and confusing thoughts as they begin to adapt to their bodily changes (Berger, 1980). These thoughts are internalized and

promote self-discovery and self-awareness. Self-awareness itself influences the quality and extent of interactions that the adolescent experiences in the social world. An adolescent who perceives himself/herself as incapable and inadequate is likely to withdraw from interaction with real life into fantasy, and to develop a false or negative self-concept. The self-concept is crucial to the dynamics of growth, and is usually well developed and stabilized by the end of adolescence, although it can still be modified through strong experiences (Pringle and Varma, 1972).

Relationship between Self-Concept and Academic Performance

Self-concept has been found to influence academic performance. Since this aspect of personality affects learning and performance, it should be recognized that diversity in academic performance is as much a function of students' personality as it is of their intellect. Confidence in oneself and the need for recognition from others are important in pursuing academic goals. A student who persistently fails, or is continuously told that he or she is stupid will ultimately form a depressing self-concept. Some studies indicate that the higher the self- concept of the student, the better his or her achievement and a change in self-concept results in a corresponding change in achievement (Brookover, Erikson and Joiner cited in Child, 1973).

Purkey studied existing research on the relationship between self-concept and school achievement, and made the following comment: "For generations, wise teachers have sensed the significant and positive relationship between a student's self-concept of himself and his performance in school. They believed that the students who felt good about themselves and their abilities are the ones who are most likely to succeed"

(Quandt, 1972: 4).

Snygg and Combs (1959) have stated that, "the single most important motivator of all human behavior is the establishment, the maintenance, and the enhancement of self-esteem" (cited in Mcguiness, 1998, p. 12). The path to gaining self-esteem is to develop feelings of competence for achieving tasks. This depends to a large extent on the micro-system of the school, which can make children develop more confidence in their abilities. Students, whose teachers are supportive and encourage autonomy in the classroom, will feel more confident and competent at tasks than students whose teachers continuously criticize and punish them. Teachers who offer praise to each student for his or her efforts can enhance the self-concept of their learners. The organization of the classroom influences students' self-esteem. This refers to whether competition and comparison is stressed in the classroom as opposed to cooperation and diversity. In addition, the school that offers other opportunities for success (like art, drama and sports, besides regular classes) develops a greater sense of competence in its students. The school is thus 'a social frontier' that profoundly affects the self-concept of its learners (Berger, 1980).

Research over the last 25 years has established a strong relationship between students' academic performance and their self-concept. Some of these studies will be reported here.

Lecky, in 1945, first proposed the idea that students' achievement is related to the perception that they have about themselves. Lecky's work paved the way for research

into the possibility that students' feelings about their abilities may affect their performance - either consciously or unconsciously. Students' perceptions of their abilities may be positive, making them feel competent and confident; or negative, making them feel uncertain and indecisive (cited in Hamachek, 1995).

The role of self-concept in education has been given considerable importance by Burns (1979). He identified five aspects of self-concept that are significant to the educational sector. First is the relationship between pupil self-concept and academic performance. This interaction has been well established over recent years. Purkey (1970) and Bloom (1976) conducted numerous surveys and research in the city of Brookover, America. Correlations of between +.3 and +.4 were frequently obtained between self-concept and academic performance (Child, 1973).

Second is the role of feedback, reinforcement and expectations in modifying self-concept and attainment. The role of the teacher in providing feedback is crucial for students to discover their competencies. The self-esteem of the student is enhanced by the teacher's recognition, praise and the tactful use of student's strengths and weaknesses (Child, 1973).

Third is the effect of different forms of school organization on pupil's self-concept. The arrangement of the school and the organization of the classroom (such as streaming, special education, single-sex or mixed) have been examined for their effects on student self-concept. It has been concluded that the greatest influence in an institutional setting is attributed to the attitudes, values and expectations of those operating within the

organization (Child, 1973).

Fourth is the relationship between the teacher's self-concept and his or her classroom style. Every teacher has a unique personal style that generates a certain ethos in transacting with others, as well as evoking certain responses from students. These are important to both learning and teaching. However, it is worthy to note that the most effective aspects of teaching style have been unresolved (Child, 1973).

Fifth is the modification of pupil and teacher self-concepts, and their effect on the classroom performance of students and teachers. This is possible through counseling, intensive group work and regular workshops (Child, 1973).

Waltenberg and Clifford (1964) conducted a study involving 53 preschool children and found that self-concept scores were a better predictor of reading achievement than intelligence test scores. Findings revealed that children who had a high regard for themselves spent more time working with tasks related to school, than did children with a low self-concept. It is thus clear that a positive self-concept is fundamental to good academic performance (Hamachek, 1995). Furthermore, Lawrence (1973) convincingly argued that a major block to first steps in reading is not primarily related to intellect but to self-esteem. He demonstrated that the reading age of children exposed to "esteem enhancement" activities instead of traditional, remediation responses, increased to a significantly greater degree than that of children receiving only remediation responses (Mcguiness, 1998).

Studies by Heyneman (1979: 182) in Uganda further strengthened the link between self-concept and academic performance. He hypothesized that 'children who felt more confident and more self assured would perform better on the primary leaving examination'. The sample consisted of 2 293 randomly chosen standard seven pupils from five Ugandan districts. Self-concept was a better predictor of academic performance than social status in Heyneman's study. Therefore, for Ugandan pupils, academic performance is affected by students' self-confidence rather than by their home backgrounds.

In another study conducted by Maqsud (1983) in Nigeria, self-concept was significantly related to better performance in Mathematics and English. The sample comprised of 80 boys selected from secondary schools in Nigeria. A further study conducted by Hansford and Hattie (1987) is particularly significant because they included 128 studies in their meta-analysis comprising a sample of 202 823 participants. They produced a database of 1 136 correlations between self-ratings and performance measures. Although some of the correlations were small, the relationship between self-concept and academic performance proved to be statistically significant in most of the studies and not just a figment of imagination created by research tools or designs (Hamachek, 1995).

Brookover, Erikson and Joiner (1967) looked at those aspects of school life that impinge directly on self-concept and academic achievement. Results show a positive relationship: the higher the self-concept of academic ability, the higher achievement; and a change in self-concept corresponds with a change in achievement (Child, 1973). According to the self-enhancement model, self-concept is a fundamental determinant of academic

achievement. Hence, to improve academic performance, self-concept of the learner should be enhanced (Kenny, 1991). Although the relationships are not strong, they support evidence that teachers can play a prominent role in establishing positive but realistic self-concepts in students (Child, 1973).

Many studies, for example Mwanza, (1990) and Dorsey (1989) suggest that there are marked differences between girls' and boys' self-concept and their academic performance, especially in Mathematics and Science. Girls have been found to lag behind boys. Coming closer to home, Kelly (1994) conducted a study on the performance of girls and boys from selected schools in Zambia. He found that boys perform better than girls, particularly in Mathematics and Science.

A recent study conducted by Munsaka (2001) among grade twelve Zambian students investigated the relationship between girls' and boys' self-concept and their performance in Mathematics and Science. The sample size consisted of 114 students (56 females and 58 males) from four selected coeducational schools in Lusaka. Statistical analyses revealed that girls have a low self-concept with regard to Mathematics and Physics. Furthermore, a positive correlation was found between self-concept and performance in Mathematics, Physics and Chemistry.

Song and Hattie (1984) studied the self-concept of boys and girls randomly selected from schools in Korea. Their sample comprised of 537 boys and 611 girls, whose ages ranged between 14 and 15 years. Findings revealed that the relationship between self-concept and academic performance was greater for boys than for girls. However, studies

by Marsh, Relish, Smith and Ezeilo (1983) suggest that no significant differences were observed between boys and girls in single-sex schools, whereas in co-educational schools, sex differences were the result of traditional sexual stereotypes.

Wolf and Blix (1981) have added another dimension to the relationship between self-concept and academic performance. Their findings reveal that one's attitude towards a subject is also a predictor of performance in that subject. If one has a positive self-concept, one has a higher probability of having a positive attitude towards that subject, leading to better performance in the subject. Hence, attitude towards a subject plays an important role in determining performance in that subject.

It is worth noting that some studies have failed to support the relationship between self-concept and academic performance. For example Reck (1980) states that educators have been *inevitably* led to conclude that a positive self-concept consistently relates with better academic performance (Mwamwenda and Mwamwenda, 1986). Smith, Sapp, Farrell and Johnson (1998) investigated the relationship among psycho educational variables, including self-esteem, locus of control and academic achievement in a group of 35 high school students from a private Catholic school. No significant relationship was found between self-esteem and academic achievement. These results may have been due to the limited sample size, differences in the population sample used, the instruments used to measure the variables and other extraneous variables. However, studies that support the relationship between self-concept and academic achievement far outweigh studies that do not support this relationship.

From the above studies that have been reported, it is evident that self-concept is crucial to the academic performance of the learner. These findings have important implications for educators. It is important to help students to do better in school by finding ways to make them feel good about themselves as learners, and to make them feel confident in their abilities. The difficulty is that we cannot 'see' self-concept, since it is private to the individual concerned and often involves hidden feelings. What we can see however, are the behaviors that reflect inner feelings (Hamachek, 1995).

Thus, the challenge for educators is to nurture a pervasive uniqueness in children. Most schools still seem to be far removed from a philosophy that places the uniqueness of the child at the center of its activity (Mcguiness, 1998).

CHAPTER 3: METHODOLOGY

Research Design

This study employed a descriptive survey design. A survey provides the researcher with a quantitative or numeric description of a fraction of the population, known as the sample (Creswell, 1994). In survey research, many people are asked questions in a short period of time. A small group of selected people participate in a survey. The results are then generalized to a larger group from which the smaller group was chosen (Neuman, 1997).

The survey was chosen for data collection in this study because of the economy of the design, as well as enabling the researcher to identify attributes of grade eleven pupils in Zambia. The survey in this study is cross-sectional, that is, information was collected at one point in time across different school settings.

A 2x2 (gender x level of self-concept) factorial design was employed to investigate the main effects and interaction of gender and level of self-concept on academic performance.

Sample

Through a process of purposive sampling, four secondary schools in Lusaka were selected. All grade eleven pupils of the schools constituted the targeted sample for the study. The total sample comprised 253 pupils, of whom147 were male and 106 were female.

Pupils in grade eleven have been used for two reasons: firstly, it takes time for self-concept to develop into a stabilized component of one's personality. Research on the development of self-concept points to its stability by age 15 (Bloom, 1964; Stanford, 1962). Secondly, students at this age have developed adequate verbal facility to comprehend written and spoken instructions.

The four schools that participated in the study were: Kabulonga Girls High School (82 pupils), Kabulonga Boys High School (127 pupils), Makeni Islamic Secondary School (14 pupils) and Baobab College (30 Pupils).

Kabulonga Girls High School and Kabulonga Boys High School are both single-sex government schools, following the curriculum proposed by the Ministry of Education. The majority of the students are fortunate in that they come from middle-class socio-economic backgrounds, with above-average parental educational levels. The schools themselves have ample facilities including biology and science laboratories, art rooms and resource centers. Despite the large number of students in classrooms, every child has a desk and a chair. Kabulonga Girls High School and Kabulonga Boys High School were selected because of their rich historical backgrounds. The schools were opened in the 1950's and pride themselves on the achievements of their students.

Makeni Islamic is a private school, relying primarily on donor support. Although resources are available, these are sparse. Classes are small in number and adequately furnished, providing each child with a desk and a chair. The school was selected because many of the students come from low socio-economic backgrounds. Students have to set

off early and walk long distances to get to school on time. Often, students leave home without having eaten anything. The researcher was interested in whether these circumstances result in a low self-concept, and if so, its effect on academic performance.

Baobab College is a private school offering students the opportunity to engage in many extramural activities. Resources are readily available, including library books and computers. Classes are small in number and facilities are adequate. Baobab College was selected because of its ideal contrast to Makeni Islamic School. Most students come from upper middle-class socio-economic backgrounds, and enjoy the luxuries that it affords.

Instrumentation and Materials

The survey instrument used in this study was a modified version of the Canadian Self-Esteem Inventory developed by Battle (1976). The test consists of 30 items for which pupils are required to respond by placing a tick in the appropriate column: *"yes"* or *"no"*. The test was applied for the first time in the Zambian context. A Likert-scale was adopted in order to provide options for less extreme responses than "yes" and "no", and thereby generating more variance for the quantitative analysis. The Likert-scale also enabled a more detailed examination of the responses to the specific items. Pupils were required to respond by placing a tick in the appropriate column: *'strongly agree'*, *'agree'*, *'somewhat agree'*, *'somewhat disagree'*, *'disagree'*, or *'strongly disagree'*. Other questions asked for factual information, such as *name, date of birth* and *sex.* The internal consistency reliability of the modified Canadian Self-Esteem Inventory in the study sample as expressed by Cronbach Alpha was .72. A reduced self-esteem scale was

calculated based on the most inter-correlated items. Those items also loaded on the first factor in a Principal Component Analysis and were related to self-esteem, which is based on achievement. The internal consistency reliability of the reduced scale was 0.8.

The inventory was administered to grade eleven pupils during class time and took about twenty minutes to complete. In order to ensure comprehension and clarification of test items, the researcher supervised the testing session. Since the instrument has never been applied in the Zambian context, its validity has not been evaluated.

Academic performance was gauged from pupils' performance in the grade ten final examinations for Mathematics, Physics, Chemistry and English. Results of pupils were obtained from school records. Comparability of the grade ten final examinations among the different schools was limited because the schools do not write a common examination. However, comparisons between Kabulonga Girls and Kabulonga Boys could be made, as the standards of tests are similar.

In order to control for effects of non-verbal cognitive ability on self-concept and academic performance, Raven's non-verbal cognitive ability, a non-verbal assessment of meaning making, was administered to pupils of two classes from Kabulonga Girls High School and Kabulonga Boys High School. Raven's non-verbal cognitive ability assesses the ability to draw meaning out of confusion. A split-half reliability coefficient of .86 has been the best estimate found for the internal consistency of Raven's non-verbal cognitive ability. Test-retest reliability ranges from .71 to .93. Adequate concurrent validity has also been established by correlating Raven's non-verbal cognitive ability

with intelligence and achievement tests. Validity coefficients are between .50 and .80 with intelligence tests, and between .30 and .60 with achievement tests (Kamphaus, 1993).

Due to minimal requirements and language involvement of this test, Raven's non-verbal cognitive ability is particularly useful in assessing the non-verbal cognitive ability of individuals who are hearing impaired, who have language disabilities, and children whose native language is not English (Kamphaus, 1993).

Variables in the Study

The main independent variables in the study were the *level of self-concept* and *gender*. Further, non-verbal cognitive ability as measured by Raven's Progressive Matrices was intended to be used as a possible control variable between self-concept and academic performance. The dependent variables were related to pupils' academic performance, and consisted of grades in Mathematics, Physics, Chemistry and English. A summary variable representing the average performance in all four subjects, and a natural sciences performance variable representing the average performance in Mathematics, Physics and Chemistry were also calculated.

In this study, the time points of measurement for academic performance technically preceded self-concept. Pupils' performance in the grade ten final examinations constituted a measure of their academic performance. The justification for this is that firstly, students' earlier test scores in a given domain remain fairly stable to their later performance in that domain (Woolfolk, 1995). Hence, students' performance at a later

stage can be predicted from their earlier performance. Secondly, the ongoing argument about whether self-concept or academic performance comes first is probably more of an academic debate than a practical one. Instead, one should recognize their interactive and reciprocal dynamics, and appreciate the fact that each is mutually reinforcing to the other. Hence, a positive or negative change in one facilitates a subsequent change in the other (Hamachek, 1995). And thirdly, the reciprocal nature of the relationship between academic performance and self-concept is particularly evident by adolescence and the middle school years when children are more capable of interpreting feedback from their academic performance (Hamachek, 1995).

Data Analysis

Data analysis was done by means of the statistical package for social sciences (SPSS). A descriptive analysis of the independent variable and all the dependent variables was conducted to summarize the data. The results are presented in the form of tables.

Correlational analysis was conducted in order to investigate the relationship between academic performance (i.e. overall performance in natural science subjects and performance in the single subjects) and self-concept.

A factorial 2x2 analysis of variance with level of self-concept and gender was conducted to determine the main effects of and possible interactions between Self-Concept and Gender with relation to Academic Performance. For this purpose the pupils were ranked according to their self-concept level. The highest and the lowest third formed two groups - one with high self-concept and one with low self-concept.

Principal component analysis, a form of factor analysis, was conducted in order to test the unidimensionality or the underlying structure of the modified Canadian Self-Esteem Inventory in the Zambian context, but also to explore the structure of the Canadian Self-Esteem Inventory in the Zambian context for an evaluation of the test's construct validity. The logic of factor analysis is that it makes it possible to statistically manipulate the empirical relationships among several indicators to reveal a common unobserved factor or hypothetical construct. The results of factor analysis tell the researcher how well items relate to an underlying factor (Neuman, 1997).

The modified Self-Esteem Inventory used to measure self-concept in this study consists of 30 Likert-scale items. Principal component analysis revealed that the thirty items are explained by three constructs or components related to self-esteem, namely, self-esteem based on (1) personal achievement, (2) being comfortable with oneself, and (3) personal moral strength. This result could be taken as evidence for a reasonable construct validity of the Canadian Self-Esteem Inventory in the Zambian Context. Further research however is necessary to confirm this finding since the study sample does not represent for example rural areas.

Limitations of the study

Although the present study has been found to support existing propositions, certain limitations need to be addressed. First, students' academic performance was limited to performance in the school examination. Grade eleven pupils did not write a common examination from which comparisons among schools could be made. Second, the measure of self-concept was limited to students' reports of themselves. Although the

face validity and the construct validity of the Canadian Self-Esteem Inventory seem to be reasonable, its content or criterion validity in the Zambian context has never been evaluated. Self-ratings are seen to reflect inaccuracies due to calibration effects. Students tend to overestimate or underestimate their abilities. When people are asked to report how they expect to perform in the future, or to evaluate and explain their past performances, males have been found to reveal more positive views of themselves than females. Males tend to overestimate their performance while females tend to underestimate theirs. For example, in a study by Crandall (1969), college students were asked to predict their grades for the next semester. Evidence indicates that males gave higher figures than females (Kaplan & Sedney, 1980).

However, despite these limitations, findings of the present study complement previous studies that examine the relationship between self-concept and academic performance.

CHAPTER 4: RESULTS

The purpose of this study was to explore the role of self-concept in academic performance among grade eleven pupils in Zambia. A number of statistical tools were used in order to test each of the hypotheses.

H1: "Academic performance is significantly related to self-concept among Zambian grade eleven pupils"

Descriptive statistics were employed for hypothesis one. Table 1 provides means, standard deviations, minimum and maximum scores, skewness and kurtosis for all measures. Self-concept scores for pupils at Kabulonga Girls yields a mean of 123.8, while pupils at Kabulonga Boys obtained a mean of 130.1. For pupils at Makeni Islamic School and Baobab College, means for self-concept scores were 127.0 and 128.6 respectively. From these scores, pupils at Kabulonga Boys seem to have the highest self-concept.

Table 1: Descriptives of the variables by school

	N	M	SD	Min.	Max.	Skewness	Kurtosis
Kabulonga Girls[a]							
Overall Performance	70	43.31	17.38	11.00	75.00	-0.13	-1.01
Natural Science Perf	73	40.56	19.09	8.33	77.67	-0.15	-1.04
Self-Concept	82	123.85	17.48	73	158	-0.27	-0.27
English	79	52.05	15.75	16	84	-0.28	-0.75
Physics	79	32.09	16.96	3	73	0.30	-0.63
Chemistry	81	44.32	22.33	8	87	-0.12	-1.20
Mathematics	76	40.50	23.64	0	88	0.26	-1.10
Raven	13	29.92	3.68	24	34	-0.48	-1.43
Kabulonga Boys[a]							
Overall Performance	109	45.37	13.73	14.00	81.25	-0.03	-0.23
Natural Science Perf	111	42.63	15.84	10.67	83.00	0.15	-0.24
Self-Concept	126	130.20	13.31	93	164	0.05	0.07
English	121	53.10	13.46	16	83	-0.32	-0.20
Physics	117	36.74	21.22	2	90	0.59	-0.16
Chemistry	122	49.29	18.09	0	85	-0.57	0.12
Mathematics	122	41.55	25.01	4	100	0.64	-0.40
Raven	26	30.31	3.03	24	34	-0.61	-0.76
Makeni Islamic							
Overall Performance	15	58.80	13.65	43.25	83.00	1.13	1.25
Natural Science Perf	15	58.91	16.62	32.33	97.33	0.72	0.57
Self-Concept	15	127.07	10.22	106	144	-0.41	-0.06
English	15	58.47	10.27	41	80	0.61	0.45
Physics	15	59.87	17.28	32	98	0.55	0.31
Chemistry	15	62.07	15.48	40	98	0.75	0.64
Mathematics	15	54.80	22.19	0	96	-0.65	1.96
Baobab College							
Overall Performance	30	54.93	11.47	21.50	74.00	-0.77	1.18
Natural Sciece Perf	30	53.53	13.13	17.00	73.67	-0.74	0.69
Self-Concept	30	128.63	13.02	101	157	-0.21	-0.02
English	30	59.10	14.13	35	95	0.27	0.04
Physics	30	61.13	15.65	17	97	-0.46	1.64
Chemistry	30	55.30	14.29	22	84	-0.37	0.57
Mathematics	30	44.17	16.16	12	77	0.00	-0.24

Note: [a]The results of school performance can only be compared between Kabulonga Girls and Kabulonga Boys. The other schools used different examinations.

Table 2 presents means and standard deviations on all variables between males and females. The mean for self-concept scores is 130.0 for males

and 124.6 for females. Although males have been found to have a higher self-concept than females, there is no significant difference in the overall academic performance between boys and girls.

Table 2: Descriptives of the variables by gender

		N	M	SD.	Min.	Max.	Skewness	Kurtosis
Female								
	Self-concept	106	124.61	16.27	73.00	158	-0.37	0.00
	English	103	54.20	15.54	16.00	95	-0.24	-0.30
	Physics	103	39.17	20.37	3.00	78	0.10	-1.05
	Chemistry	105	47.67	21.42	8.00	87	-0.35	-0.95
	Mathematics	100	42.95	22.36	0.00	88	0.08	-1.01
	Raven	13	29.92	3.68	24.00	34	-0.48	-1.43
Male								
	Self-concept	147	130.05	13.26	93.00	164	0.03	0.00
	English	142	53.55	13.36	16.00	83	-0.28	-0.21
	Physics	138	40.07	22.46	2.00	98	0.49	-0.29
	Chemistry	143	50.27	18.02	0.00	98	-0.47	0.34
	Mathematics	143	41.95	24.50	0.00	100	0.58	-0.36
	Raven	26	30.31	3.03	24.00	34	-0.61	-0.76

Table 3 presents the correlations between variables. For pupils at Kabulonga Girls, a significant correlation emerged between self-concept and each of the subjects: English, Physics, Chemistry and Mathematics. Furthermore, the relationship between self-concept and overall performance was positive and significant at the 0.05 level [$r = .267$, $p < 0.05$].

Among the pupils at Kabulonga Boys, there did not seem to be a relationship between self-concept and academic performance. However, there was a statistically significant and negative relationship between self-concept and Chemistry [$r = -.183$, $p < 0.05$], which is difficult to interpret.

At Makeni Islamic School, self-concept and performance in English were significantly correlated [$r = .617$, $p < 0.05$]. No other significant correlations emerged.

For pupils at Baobab College, no significant correlations were found between self-concept and performance in any of the subjects.

Table 3: Pearson product moment correlation coefficients between the variables

		Self-Concept	Overall Perform.	Perf Nat. Sciences	English	Physics	Chemist.	Maths
Kabulonga Girls (n=82)	Overall Perform	.27*						
	Nat. Sciences	.25*	.99**					
	English	.25*	.81**	.71**				
	Physics	.30**	.90**	.91**	.65**			
	Chemistry	.25*	.93**	.93**	.70**	.79**		
	Maths	.26*	.90**	.92**	.60**	.77**	.77**	
	Raven (n=13)	-.11	-.25	-.38	.35	-.27	-.12	-.60
Kabulonga Boys (n=127)	Overall Perform	-.09						
	Nat. Sciences	-.09	.98**					
	English	-.03	.62**	.43**				
	Physics	-.18	.71**	.74**	.25**			
	Chemistry	-.18*	.76**	.76**	.39**	.53**		
	Maths	.12	.68**	.70**	.32**	.15	.27**	
	Raven (n=26)	.12	.07	.12	-.10	.05	.31	.05
Makeni Islamic (n=14)	Overall Perform	.15						
	Nat. Sciences	.04	.98**					
	English	.62*	.54*	.38				
	Physics	-.02	.96**	.98**	.33			
	Chemistry	.23	.89**	.85**	.63*	.87**		
	Maths	-.06	.85**	.89**	.16	.81**	.53*	
Baobab College (n=30)	Overall Perform	.08						
	Nat. Sciences	.17	.96**					
	English	-.23	.58**	.32				
	Physics	.11	.85**	.88**	.33			
	Chemistry	.02	.88**	.86**	.46*	.70**		
	Maths	.28	.73**	.83**	.06	.55**	.54**	

Note: * Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 level (2-tailed)

Raven's Progressive Matrices were used as a control variable. However, the influences of Raven's non-verbal cognitive ability revealed no significant correlations or interactive effects with the variables measuring either self-concept or academic performance (Table

3). In addition, results indicate that there were no gender differences on Raven's non-verbal cognitive ability. Since this finding emerged early in the data collection process, Raven's Progressive Matrices were only applied to two classes.

An analysis of *skewness* and *kurtosis* of the variables in the whole sample revealed that the variables were sufficiently normally distributed to meet the assumptions for parametric tests.

Analysis of variance was calculated to explore gender differences in self-esteem and academic performance between pupils in Kabulonga Girls and Kabulonga Boys High Schools. Results indicate that boys seemed to have a statistically significant higher self-concept than girls $F\ (1,206) = 10.25$, $p < .05$ (Table 4). Generally no significant differences in academic performance between boys and girls emerged. Only in Chemistry boys performed significantly better than girls, if a less stringent significance level of .1 is applied $F\ (1,201) = 3,037$, $p < .1$.

For the reduced self-concept items, Kabulonga Boys had the highest mean of 130.1 while Kabulonga Girls had the lowest mean of 123.8.

Table 4: Differences between boys and girls

	M Girls	M Boys			Sig.
Self-Concept Whole Scale	*123.85*	*130.20*	*F (1,206)* =	*8.783*	*0.003*
Self-Concept Reduced Scale	*72.24*	*77.05*	F (1,206) =	10.254	*0.002*
Overall Performance	*43.31*	*45.37*	*F (1,182)* =	*0.777*	*0.379*
Performance in Natural Sciences	*40.56*	*42.63*	*F (1,182)* =	*0.638*	*0.425*
Performance in English	52.05	53.10	F (1,198) =	0.253	0.615
Performance in Physics	*32.09*	*36.74*	F (1,194) =	2.644	*0.106*
Performance in Chemistry	44.32	49.29	F (1,201) =	3.037	0.083
Performance in Mathematics	40.50	41.55	F (1,196) =	0.086	0.770
Raven Progressive Matrices	29.92	30.31	F (1, 37) =	0.121	0.730

Note: Statistically significant F-values are underlined.

Analysis of Variance was further conducted in order to test H1: "Pupils with a high self-concept perform academically significantly better than pupils with a low self-concept". By using the higher third and the lower third of the whole sample, students were divided into those who have a high self-concept and those who have a low self-concept. For the whole sample, students with a high self-concept performed significantly better in Mathematics than students with a low self-concept: $F(1,146) = 7.271$, $p < .05$.

Girls with a high self-concept performed significantly better than girls with a low self-concept in the following subjects: Physics $F(1, 67) = 6.064$, $p < .05$; Chemistry $F(1, 69) = 6.448$, $p < .05$ and Mathematics $F(1, 66) = 6.988$, $p < .05$.

No significant differences in academic performance emerged between boys with a high self-concept and boys with a low self-concept.

An interesting statistically significant interaction emerged between gender and level of self-concept ($F(1,105) = 5.999$, $p < .05$). This indicates that while girls in the higher third of the sample perform academically better than girls in the lower third of the

sample, the opposite was true for boys (Figure 1). Boys who have a low self-concept seemed to perform academically better than boys who have a high self-concept. This could be attributed to the fact that because boys in the lower third have a low self-concept, they tend to work harder and achieve better in an attempt to overcome their feelings of inferiority. Justification for this assumption is strengthened by research findings of FAWE, which states that boys are encouraged more often than girls to pursue academic goals (1997:2). On the other hand it might be that boys with a higher cognitive ability become more aware that self-concept should not be related solely to being male.

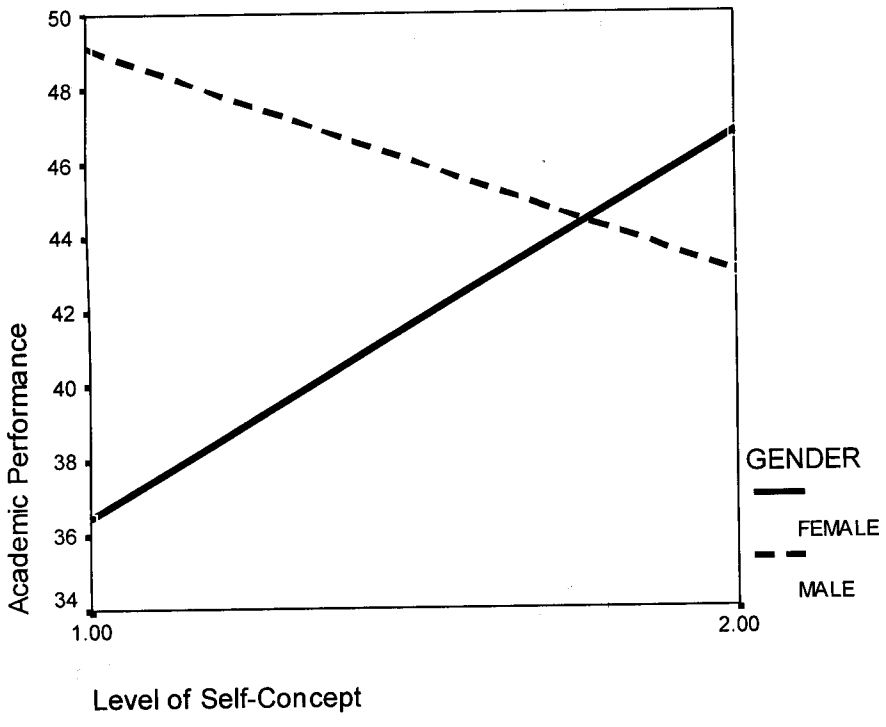

Figure 1: Interaction between gender and level of self-concept

In order to test hypothesis 2 and hypothesis 3 (as well as hypothesis 1) principal component analysis and item analysis were used.

H2: "Pupils with a high self-concept perform academically significantly better than

pupils with a low self-concept"

H3: "Girls will exhibit a lower self-concept than boys"

Principal component analysis was used to explore the underlying structure of the modified Canadian Self-Esteem Inventory items. The analysis proceeds by identifying sets of underlying latent factors that are best implied by the intervariable correlations. Underlying composite variables are generated and then identified and interpreted by observing their correlations with each variable included in the analysis. Factor analysis treats the correlation matrix as a ball of intervariable variance, extracting chunks of variance, which represent each underlying factor sequentially (Breakwell, Hammond and Fife-Schaw, 1995).

A correlation matrix was generated, and a principle component analysis was performed on the modified Canadian Self-Esteem Inventory. A three-factor solution emerged when the criteria of Eigen-values over 1 or the screeplot-test were applied. The three factors were rotated using Varimax and explained 27.4 % of the total variance of the scale. The resulting rotated factor structure is reported in Table 5. F*actor one* seems to comprise items in which self-esteem is associated with *achievement. Factor two* has high loadings from items relating self-esteem to *being comfortable with oneself,* while *factor three* appears to be associated with the *moral* aspect of self-esteem. The underlying components or constructs of the Canadian Self-Esteem Inventory seem to be realistic and it would be justifiable to assume a sufficiently high construct validity for the instrument in the Zambian context.

Table 5: Rotated Component Matrix of the Canadian self esteem inventory items

	Component		
	1	2	3
Q1	0.193	-0.331	-0.169
Q2	-0.059	0.580	-0.190
Q3	0.524	0.062	-0.024
Q4	-0.008	0.570	0.174
Q5	0.007	-0.010	0.399
Q6	0.067	0.418	0.181
Q7	0.186	0.318	-0.134
Q8	0.005	0.388	-0.218
Q9	0.406	-0.012	-0.212
Q10	0.466	0.125	-0.164
Q11	0.491	0.161	0.187
Q12	-0.006	-0.041	0.460
Q13	0.586	-0.148	0.045
Q14	0.157	-0.098	0.102
Q15	0.597	-0.024	0.195
Q16	0.509	-0.019	0.094
Q17	0.568	0.141	-0.082
Q18	-0.076	0.205	0.475
Q19	0.464	0.029	-0.155
Q20	0.269	-0.319	-0.220
Q21	0.555	-0.084	0.096
Q22	0.331	-0.090	-0.123
Q23	0.515	0.100	0.239
Q24	0.080	0.095	0.545
Q25	0.322	0.542	0.379
Q26	0.082	0.566	0.023
Q27	0.407	-0.016	0.267
Q28	0.453	0.184	-0.199
Q29	0.067	0.069	0.639
Q30	0.509	0.079	0.071

Note: Underlined items were attributed to the corresponding components.

I shall now proceed to interpret individual items on the modified Self-Esteem Inventory, beginning with items that load high on factor one (items in which self-esteem is associated with *achievement*), then move on to items that load high on factor two (items relating self-esteem to *being comfortable with oneself*), and finally to items that load

high on factor three (items associated with the *moral* aspect of self-esteem). Due to findings, which reveal that the relationship between self-concept and academic performance might be a gender related issue; results of the item analysis will be compared by gender.

Girls reported to feeling ashamed of themselves more often than boys $F(1,206)=3.65$, $p<0.01$; and usually seem to feel that they were less worthy than boys $F(1,206)=18.47$, $p<0.001$. In traditional African communities the female is socialized into being submissive, serving the needs of her husband and children. Girls build up their self-confidence around such negative beliefs as: "Girls are not as bright as boys. It is not worth giving girls secondary or university education" (FAWE, 1997:2). In view of these findings, it is not surprising that girls seem to have such feelings.

Considering the above assertions, girls therefore show a higher indication of wanting to quit school than boys $F(1,206)=15.50$, $p<0.001$. Once again, this is due to the cultural norms and beliefs that contribute to the poor performance of girls in most academic endeavors. In the Zambian culture, girls are required to spend a great amount of time on domestic chores (Munsaka, 2001). Their attendance and performance at school therefore suffers. They often feel that they cannot cope with schoolwork because of the many household tasks that need to be attended to.

Females usually quit when their schoolwork is too hard $F(1,206)=10.97$, $p<0.001$. Because girls feel like failures at school, and usually feel that they fail when trying to do important things, they do not persevere as much as boys do. These findings could be

explained in terms of the *'self-fulfilling prophecy'*. According to this, an individual comes to behave in a way consistent with how others, and the individual, perceives himself/herself (Rosenthal and Jacobson cited in Woolfolk, 1995). Thus, because girls are viewed as not being as bright as boys, and not being interested in school, they come to fulfill these assumptions about themselves.

With the additional burden of domestic work being placed on the shoulders of the girl-child, females have been found to worry more than males $F(1,206)=17.47$, $p<0.001$. Great emphasis is placed on how one should behave in society, with female behavior governed by many "oughts" and "shoulds". Females *should* dress appropriately, they *should* exhibit lady-like behavior, and they *should* not become aggressive. Males, on the other hand, are given more opportunities and freedom to express themselves. A male is said to be *assertive* when he insists upon his rights, while a female, exhibiting the same behavior, is said to be *aggressive*. Thus, the constant reminder to abide by societal norms places an additional strain on females, resulting in higher levels of stress and worry.

Girls feel more often than boys that their parents dislike them $F(1,206)=2.48$, $p<0.1$. This result is only marginally significant; however girls sometimes seem to believe that their parents think of them as failures. If we examine the family dynamics, it is obvious that male children are held more in esteem than female children. According to Freud, all mothers have a subconscious desire to have a male child (Weiten, 1995), and all fathers desire to have an heir - a male child - to continue their legacy. Boys are also given more freedom than girls - boys are allowed to stay out much longer than girls, and begin

driving at an earlier age than girls. It is these differences in child-rearing practices adopted by parents that lead girls to have these feelings of inadequacy and failure.

Females tend to exhibit more regrets than males about getting older $F(1,206) = 4.34$, $p<0.05$. Girls wish that they were younger, whereas boys seem to be comfortable with where they are. These differences are probably due to adolescence and the changes that accompany it. During adolescence, females experience physical changes much earlier and more rapidly than males. Their bodies are transformed almost overnight from "child" to "woman" (Brown and Pate, 1983). With these physical and biological changes comes responsibility and conformity to the demands of society. Females therefore wish that they were younger, hoping to hold onto their childhood forever, in an attempt to escape what society demands of them.

Despite the negative opinion that girls have about their parents' feelings towards them, girls report to having more fun with their parents than boys do $F(1,206)=6.83$, $p<0.01$. This might be so because girls spend more time at home with their families than boys. Boys spend more hours away from home, resulting in less time being spent with their parents.

Girls feel more often than boys that they would like to run away from home $F(1,206)=8.08$, $p<0.01$. Because girls are given more restrictions at home than boys, they often feel smothered. They feel that the only solution is to get away from home and their parents. Since their teachers provide them with the recognition and acceptance they desire, females feel more worthy outside home.

CHAPTER 5: DISCUSSION

The purpose of this study was to explore the role of self-concept in academic performance among Zambian grade eleven pupils. Most research conducted outside Zambia has found evidence for a moderate to strong relationship between self-concept and academic performance. The proposition for this study is therefore based on previous findings of research conducted outside Zambia.

The findings of this study supported a relationship between self-concept and academic performance among pupils at Kabulonga Girls. Analysis of variance revealed a statistically significant difference between the self-concept of boys and girls. Boys were found to have a higher self-concept than girls.

For pupils at Kabulonga Girls, self-concept correlated with all academic subjects, and there was a positive and significant relationship between self-concept and academic performance. However, at Makeni Islamic School, there was a significant correlation between self-concept and performance in only English. These differences are probably due to characteristics of the school and their teachers. Teachers play an important role in facilitating the self-concept of students. If a teacher has a favorable attitude towards himself or herself, then such a teacher is likely to inculcate the same positive feelings in his or her students (Child, 1973).

An interesting finding at Baobab College yields no correlation between self-concept and each of the subjects: English, Physics, Chemistry and Mathematics. This could be due to

the principles and objectives that the school adopts. The school profoundly affects the self-concept of its learners. Baobab College is the type of school that offers *other* opportunities for success, for example art, drama and sports. Performance in these realms is given as much importance as academic performance in the traditional core subjects. Thus, the child who excels at sport is just as important as the child who excels academically.

Another reason why no statistically significant relations were found between self-concept and academic performance for students at Baobab College might be because self-concept does not *exclusively* affect performance. According to Maimbolwa-Sinyangwe (1985), a child with a low self-concept might achieve well because of high motivation, while a child with a high self-concept might achieve poorly because the motivation to achieve is lacking. Achievement is therefore influenced by a number of variables; and *how many* or *which* variables influence performance may differ from child to child.

The reason why pupils at Kabulonga Boys have been found to have a higher self-concept than pupils at Kabulonga Girls is because there is growing evidence of gender stereotyping of roles and tasks. Mura (1997) suggests that the gender-type of a task will affect performance in that task. Mathematics, physics, spatial tasks, technical subjects and computers are all regarded as masculine gender-typed areas. Females are least confident while males are most confident in these endeavors. Furthermore, FAWE (1997: 2) indicates the stereotypes held against girls in schools: "Girls are not as bright as boys. Girls simply lose interest in school in general after a few years. It is not worth

giving girls secondary or university education". Females are thus surrounded by such negativity, building up their self-confidence around these beliefs.

Another reason why boys have been found to have a higher self-concept than girls is because boys seem to attract more of the teacher's attention than girls. According to Gill (1982), inexperienced teachers indicate higher levels of teacher - male student interaction. Spender (1982) observed that teacher - male student interaction was more common in the classroom because of the reluctance of girls to express their opinion in the presence of boys.

In view of the above findings, the following was confirmed:

H1: "Academic performance is significantly related to self-concept among female Zambian grade eleven pupils".

Although the magnitude of association is small (i.e., r between overall performance and self-concept = .27; which is 7.3% of shared variance), it is still statistically significant.

H2: "Pupils with a high self-concept perform academically significantly better than pupils with a low self-concept".

This was evident only for pupils at Kabulonga Girls' High School, where self-concept correlated with all four academic subjects.

H3: "Girls will exhibit a lower self-concept than boys".

Boys have been found to have a higher self-concept than girls, which is probably due to gender stereotyping.

Findings of the present study reflect what has been found by Munsaka (2001) in Zambia. He investigated the relationship between girls' and boys' self-concept and their performance in Mathematics and Science. Munsaka found that girls have a lower self-concept than boys in Mathematics and Science, and that there is a positive correlation between self-concept and performance in Mathematics and Science. The findings of this study are therefore partially in line with the above-mentioned findings, but did not exhibit differences in academic performance between girls and boys. Similarly, present findings are in agreement with what has been found in the west with regard to self-concept and academic performance, that is, that students with a high self-concept perform academically better than students with a low self-concept.

One cannot look at the self-concept of Zambian pupils without looking at the social, cultural, political and historical contexts in which it is found. Within the Zambian culture, identities are shaped primarily through involvement in personal and cultural experiences. In everyday interaction, Zambians shape the "self" by immersing themselves in processes of self-cultivation, extracting resources from the larger cultural and social realms. This might be partially reflected through the significant interaction between gender and self-concept with regard to academic performance.

Cultural norms contribute to the poor performance of girls in most academic endeavors. In African culture, traditional norms, attitudes and expectations govern female achievement, progress and opportunity (FAWE, 1997). The attendance, performance and achievement of girls are affected because of the great amount of time they are required to spend on domestic chores, thereby restricting the time they have to spend on school

work (Munsaka, 2002).

Within the Zambian culture, males usually assume traditional stereotypical roles. The male is the authoritative figure, the breadwinner and the protector of the family. Females are more submissive, engaging in household chores. This could be attributed to why males have been found to have a higher self-concept than females in the present study. Furthermore, males are encouraged to pursue academic goals, whilst females usually leave school before reaching secondary level.

Findings of this study might have implications for psychologists, educators and parents. The education system is still far removed from a philosophy that places emphasis on the uniqueness of the learner as its priority. Education, according to Mcguiness (1998: 9), 'takes place in an ugly "dog-eat-dog" climate. We cannot be surprised that we are creating an ugly "dog-eat-dog" society'. He forces us to reflect on the fact that fifteen thousand hours in the care of teachers still produces wife batterers, child abusers, murderers and rapists. This leaves no choice but to question the education system that allows this to happen. Bear in mind that the school does not bear sole responsibility for its products, but that this is a *human* question and a question for teachers.

A fundamental area of education, which needs urgent attention, has not been adequately addressed. It involves the "emotional" preparation of the learner, enabling him/her to deal effectively with life situations. Educators should concern themselves with developing the total health and well being of students, by preparing them for processes and events that are likely to occur during their growth and development. This includes

the development of a positive self-image. Self-concept is not an inborn trait, but is acquired through the process of learning (Bandura, 1989).

Teachers' beliefs about themselves therefore become important in facilitating the self-concept among students. For this reason, the training of teachers in Zambia needs to be addressed. The curriculum for teacher training should include courses in which teachers are taught to prepare students emotionally for dealing with life's situations. This will include fostering a positive self-concept in students by focusing on the uniqueness and dignity of the learner. In so doing, the learner's ability to perform and to contribute is enhanced.

The findings of this study are hoped to be important because firstly, they add to the existing body of knowledge concerning studies that examine the relationship between self-concept and academic performance. Secondly, because self-concept impinges directly on academic performance and personality development. The findings are in agreement with other studies, which state that boys have a higher self-concept than girls. For pupils in Zambia, as in other African countries, the link between self-concept and academic performance has been strengthened, as evidenced by pupils in Kabulonga Girls High School. Heyneman's (1979) study in Uganda found that for Ugandan pupils self-concept was a better predictor of academic performance than socio-economic status. Maqsud's (1983) study in Nigeria revealed that self-concept was significantly related to better performance in Mathematics and English for Nigerian pupils.

CHAPTER 6: SUMMARY CONCLUSION AND RECOMMENDATIONS

Summary

The purpose of this study was to explore the role of self-concept in academic performance among Zambian grade eleven pupils. What follows is a summary of the significant general findings from the study.

a. Pupils at Kabulonga Boys have a significantly higher self-concept than pupils at Kabulonga Girls.
b. There is no significant difference in academic performance between boys and girls in the whole study sample.
c. Despite perceived inaccuracies in self-rating by students, a positive correlation was found between self-concept and academic performance among pupils in Kabulonga Girls High School. As hypothesized, students with a high self-concept performed significantly better than students with a low self-concept.

Conclusion

It is hoped that this study has created incentives for future research on self-concept in Zambia. Hopefully, the findings of the study will be valuable to psychologists, educators, parents and students alike. It is also hoped that all those concerned in the educational sector will consider the recommendations offered. Ultimately, it is hoped that this study will lead to the provision of quality education and stimulate healthy personality development for students in Zambia.

Recommendations

In view of the findings of this study, some recommendations could be made in an attempt to contribute ideas for promoting quality education for students in Zambia:

a. Although academic performance preceded the assessment of self-concept in this study, studies within the school domain suggest that prior academic achievement may influence an adolescent's self-concept (Marsh and Yeung, 1995). Hence, the relationship between self-concept and academic performance seems to be reciprocal in nature, with each affecting the other. Teachers should begin fostering a positive self-concept in students from the onset of their academic years. The curriculum for teacher training in Zambia should include courses whereby teachers are taught how to instill positive attitudes in their students. The curriculum for students should include "lifestyle education" whereby students are emotionally prepared for the challenges that they will encounter in the course of their development, with particular emphasis on *adolescents*.

b. As it has been found that girls exhibit a significantly lower self-concept than boys, teachers should move away from traditional stereotypes wherein males are encouraged to pursue academic goals and females are encouraged to pursue domestic goals. Teachers should engage in equal student interaction between boys and girls. The public should be made aware about the importance of girl-child education and their contribution

to society.

c. Parents can complement teachers' efforts in eradicating the negative attitudes that girls have towards themselves. Since the self-concept of an individual begins as soon as one interacts in society, parents should treat boys and girls equally. Girls should be encouraged as much as boys to excel academically, in an effort to produce positive role models for female students.

d. Many parents should take an active role in their child's school life. Brookover; et al (1985) suggests that by realistically enhancing the academic expectations and evaluations that parents hold of their children's abilities, self-concept and academic achievement is improved (cited in Quandt, 1972). Thus by holding regular meetings with parents, teachers can explain the nature of self-concept as well as the value of using positive approaches in the home.

e. Self-concept building should become a standard part of the curriculum. Four conditions are suggested for improving the self-concept of students and thereby improving their academic performance:

- Establish a positive atmosphere in the classroom
- Make the child feel accepted

- Provide the child with opportunities for success
- Encourage a positive environment at home (Quandt, 1972).

Suggestions for Future Research

a. Future research could investigate why boys have a higher self-concept than girls. It would be useful to determine which factors contribute to such differences in self-concept between males and females.

b. A comparative study investigating the differences between the self-concept of students in co-educational schools and the self-concept of students in single-sex schools will be valuable.

c. It would also be enriching to conduct a comparative study between private schools and government schools on the development of the self-concept of their students. One could investigate whether the *type* of school contributes to the enhancement of self-concept.

d. Further research could look at how teacher characteristics affect the self-concept of their students.

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NAME: DATE OF BIRTH:

SCHOOL: SEX:

Please mark each statement by placing a tick (√) in the column of your choice. Tick only one column for each of the statements.

Remember, this is not a test and there are no "right" or "wrong" answers.

	STRONGLY DISAGREE	DISAGREE	SOMEWHAT DISAGREE	SOMEWHAT AGREE	AGREE	STRONGLY AGREE
1. I wish I were younger.						
2. Boys and girls like to play with me.						
3. I usually quit when my schoolwork is too hard.						
4. I have lots of fun with my parents.						
5. My parents never get angry with me.						
6. I am happy most of the time.						
7. I have only a few friends.						
8. I like being a boy/ girl.						
9. I am a failure at school.						
10. I usually fail when I try to do important things.						
11. My parents make me feel that I am not good enough.						
12. I have never taken anything that didn't belong to me.						
13. I often feel ashamed of myself.						
14. Most boys and girls play games better than I do.						
15. I often feel that I am no good at all.						
16. Most boys and girls are smarter than I am.						
17. My parents dislike me because I am not good enough.						
18. I like everyone I know.						
19. Most boys and girls are better than I am.						
20. I like to play with children younger than I am.						
21. I often feel like quitting school.						
22. I would change many things about myself if I could.						
23. There are many times when I would like to run away from home.						
24. I never worry about anything.						
25. I am as happy as most boys and girls.						
26. I can do things as well as other boys and girls.						
27. My teacher feels that I am not good enough.						
28. My parents think that I am a failure.						
29. I always tell the truth.						
30. I worry a lot.						