RELATIONSHIPS OF ACADEMIC SELF-CONCEPT, SOCIOECONOMIC STATUS, PARENTAL INVOLVEMENT TO ACADEMIC ACHIEVEMENT OF STANDARD 7 STUDENTS IN THE MMABATHO/MAFIKENG AREA OF BOPHUTHATSWANA

SOLOMON PATRICK MATHANE

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SUPERVISOR: Prof. M.Maqsud

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1 Samuel 3 : 9

Speak Lord; for thy servant heareth.

SOLOMON PATRICK MATHANE

DECLARATION

I declare that relationships of academic self-concept, socioeconomic status, parental involvement and achievement motivation to academic achievement of standard 7 students in the Mmabatho/Mafikeng area of Bophuthatswana is my own work. It is being submitted for the award of the degree of Master of Education to the University of Bophuthatswana, Mmabatho. It has not been submitted before, for any degree or examination at any other University.

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ABSTRACT

The purpose of this study was to examine relationships of socioeconomic status, parental involvement, achievement motivation and academic self-concept to academic achievement in English, mathematics and second language of standard 7 pupils in the Mmabatho/Mafikeng area of Bophuthatswana.

From the literature review, it was understood that socioeconomic status, parental involvement, achievement motivation and academic self-concept are generally positively associated with academic attainment of middle and secondary school pupils. Hence it was hypothesized that these variables would significantly positively associate with academic attainment of the subjects of this study.

A sample of 306 subjects was chosen from three schools where standard 7 pupils were being educated in Mmabatho/Mafikeng. Since these three schools were located in different parts of Mmabatho/Mafikeng areas, socioeconomic backgrounds of the subjects varied greatly. All subjects completed four scales to take measures of socioeconomic status, parent-child relationship, achievement motivation and academic self-concept. Their academic achievement scores were collected from the school records.

The data analysis revealed that the nature of relationships of socioeconomic status, achievement motivation and academic self-concept to academic attainment of standard 7 children depend on the character of the population of each school; no consistent relationships for all the three schools were seen. It was, however, found that mother-involvement in education of less affluent children seems associated with academic achievement in all three academic subjects.

CHAPTER ONE

1. THE PROBLEM AND ITS BACKGROUND

1.1 INTRODUCTION

After Bophuthatswana had gained her independence from the Republic of South Africa in 1977, the Government appointed a Commission to assess the educational system that had been in operation till then. The main purpose of the appointment of the Commission was to rid the educational system of the stigma of inferiority attached to it as a result of the apartheid system of education which the R.S.A. Government had designed and imposed on homelands. The Commission had to make recommendations which would place the educational system of Bophuthatswana on an educationally and psychologically sound basis. The Commission achieved its task and this can be deduced from Bophuthtswana Department of Education's Annual Report (1978:5); the report heralded the Commission's work in these words:

"The Department wishes to place on record its gratitude to the members of the Commission for producing what has been recognised by Educationists far and wide as a brilliant professional document of high standard. The practical nature of the recommendations have been a great inspiration and no doubt the year 1979 will see the foundations of a sound educational system limited only by financial resources."

The same report gave the following percentages of passes in Senior Certificate and Standard 5 examinations:

Senior Certificate	66.30%
Standard 5	75.00%

With reference to the curriculum and examinations, the Second National Education Commission (1985-86:70) comments on the recommendations of the First National Education Commission (also known as the Lekhela Commission) with these words: "Most of the Lekhela recommendations have been implemented, except for that concerning the JMB Examinations." From the foregoing, it would be reasonable to assume that the success rate in examinations was expected to improve. This was not the case with the std. 7 examinations as the statistics in Table 1.1 taken from the Annual Report of Department of Education (1991:65) indicate:

TABLE 1.1: STD 7 EXAMINATIONS : National Pass Percentages

Year	No. wrote	Pass	% Pass
1987	34 770	23 983	68.9
1988	35 750	26 483	74.08
1989	36 841	25 754	69.9
1990	40 362	28 737	71.2
1991	40 444	29 060	71.8

It can be concluded that there has been no marked improvement in national pass percentages for the last five years.

In contrast, the Std 10 examination results had improved as evidenced by the following statement: "Unlike with Std 7 examinations, there is a marked improvement in terms of quality of Std 10 results" (Department of Education, 1991:68).

The tendency of a relatively high failure rate in Std 7 at the end of each year, and a satisfactory pass rate in the Std 10 examinations may be a matter for concern and exploring justifiable reasons.

1.2 IDENTIFICATION OF VARIABLES FOR INVESTIGATION

The question arises: "Why are scholastic achievements of Std 7 students in Bophuthatswana schools below the expectations of teachers and parents?" The answers to this question may not be straight forward, but one could forward a number of hypotheses, such as, (a) teacher qualifications are not adequate to teach middle school children effectively; (b) middle schools in Bophuthatswana are lacking the necessary teaching facilities (Science laboratories etc.); and (c) the school administrators are not effective in providing conducive learning environments. If one turns to the attributes of learners, there are several individual and personal factors which could contribute to educational attainments. Cohen and Manion (1981) listed the following personal factors that play significant roles in scholastic achievement of school children: ability, personality, achievement motivation and self-concept.

Earlier researchers (Douglas, 1964; Douglas ***et al.***, 1968) drew the attention of teachers to the relationship between social factors and children's school attainment. These researchers showed that home background (family size, father's occupation, and economic facilities at home) is associated with pupils'

literacy and numeracy in primary schools and this relationship persists throughout secondary schooling. Recent researchers (Laosa, 1984; White, 1982) pointed out that when estimates of socioeconomic status are taken solely in terms of parents' education, income and occupation, the relationship between socioeconomic background and school achievement is weaker, but when socioeconomic measures include family atmosphere variables, the relationship emerges stronger (Woolfolk, 1993).

Psychologists suggested that achievement motivation is a trait which varies within the population. Individuals with high need achievement tend to be ready to undertake achievement related tasks and they tend to have stronger desires to have successes and avoid failures (Atkinson, 1964). Research also indicated that achievement motivation measures relate more closely to school children's educational attainment than to their reasoning ability (Entwistle, 1972).

Brookover ***et al.*** (1967) suggested that self-concept of ability is a threshold variable; it is necessary but not a sufficient condition for achievement (Cohen and Manion, 1981:74). This statement implies that students with lower self-concepts of ability do not achieve at a high level, but some students with high self-concepts of ability may achieve at a relatively low level. Recent research (Marsh, 1990) has lent support to the idea that students with higher self-esteem tend to be more successful in school. It has also been observed that students with higher self-esteem tend to hold more favourable attitudes toward school and they demonstrate more positive behaviour in classroom situations (Cauley and Tyler, 1989; Reynolds, 1980).

1.3 FORMULATION OF HYPOTHESES

As discussed above, the relevant research literature suggests that in addition to the factor of ability, there are other social and psychological variables which directly or indirectly influence school children's academic attainment. Among these variables, family background, achievement motivation and self-concept are the ones which attracted the attention of researchers in Western countries. Their findings showed that the estimates of these variables are significantly positively associated with scholastic achievement of school children. Can similar findings be found in African educational situations? In order to find the answer to this question and to explore reasons for relatively lower academic achievements of Std 7 students in Bophuthatswana, the following hypotheses were formulated:

1. There is a significant positive relationship between socioeconomic background and academic achievement of standard 7 pupils in Bophuthatswana middle schools.

2. There is a significant positive association between parent-child relationships and academic achievement of standard 7 pupils in Bophuthatswana middle schools.

3. There is a significant positive association between achievement motivation and academic achievement of standard 7 pupils in Bophuthatswana middle schools.

4. There is a significant positive relationship between academic self-concept and academic achievement of standard 7 pupils in Bophuthatswana middle schools.

1.4 VARIABLES TO BE MEASURED

To test the above four hypotheses of this study, the estimates of the following variables were needed:

1. Socioeconomic background
2. Parental involvement
3. Achievement motivation
4. Academic self-concept
5. Academic achievement

1.5 DEFINITIONSOF TERMS

1.5.1 Socioeconomic Background

Socioeconomic background, often referred to as socioeconomic status, generally refers to relative standing in society based on income, power, background and prestige (Woolfolk, 1993:161). For this study, education as well as occupation of parents, home ownership, means of transport and some chosen economic facilities were the selected characteristics of socioeconomic background to take estimates of socioeconomic background of school children.

1.5.2 Parental involvement

For this study, parental involvement refers to the extent the parents (father and mother) of standard 7 children in Bophuthatswana schools involve themselves in encouraging and supervising their educational activities.

1.5.3 Achievement Motivation

Achievement motivation refers to a desire to excel and to an impetus to strive for excellence and success. People who strive for excellence in a field for the sake of achieving and not for some reward are regarded as having a high achievement motivation (Woolfolk, 1993:350).

1.5.4 Self-Concept

The term, self-concept, generally refers to "the composite of ideas, feelings, and attitudes people have about themselves" (Hilgard, Atkinson and Atkinson, 1979:605). School children can have several concepts of themselves. In this study, measures of academic self-concept, not general self-concept, were taken.

1.5.5 Academic Achievement

For this study, the term, academic achievement, refers to performance of standard 7 Bophuthatswana school children in tests of mathematics, English and another language for their last promotional examinations.

1.6 DESIGN OF STUDY

The dependent variable in this study was scholastic achievement in selected academic subjects (mathematics, English and another language - Setswana or Afrikaans), while there were four independent variables (socioeconomic background, parental involvement, achievement motivation and academic self-concept). The data were analyzed by computing coefficients of product-moment correlation and doing multiple regression analyses.

1.7 *SIGNIFICANCE OF STUDY*

This study will assist teachers and educational administrators in Bophuthatswana to understand whether or not academic achievement of standard 7 children in Bophuthatswana schools is related to their family background and two psychological constructs, namely achievement motivation and self-concept. If it is confirmed that the relationships between the studied variables exist, teachers could devise some strategies to exploit these links with a view to enhancing their students' level of attainment. The data of this study would provide some cross-cultural evidence because a great deal of empirical research in relation to these variables was undertaken in Western countries.

1.8 *ASSUMPTIONS*

It was generally assumed that the present level of academic attainment among standard 7 pupils of Bophuthatswana middle schools is relatively low and it can be enhanced by identifying factors responsible for their underachievement. It was also assumed that by randomly selecting a few middle schools and standard 7 children studying at these schools would yield a representative sample of standard 7 children in Bophuthatswana schools. In addition, it was assumed that the technique of random sampling would greatly nullify the influence of a host of extraneous variables on academic achievement.

CHAPTER TWO

2. *REVIEW OF RELATED LITERATURE*

In this study, relationships of self-concept, socioeconomic status, parental involvement and achievement motivation to academic achievement were examined. Hence, the review of literature focused on theoretical ideas and empirical works of theorists and researchers to ascertain the nature of these relationships.

2.1 SELF-CONCEPT

2.1.1 Theoretical Explanations of Self-Concept

Rogers (1951:21) defined the term in this manner:

"The self-concept or self-structure may be thought of as an organized configuration of perceptions of self which are admissible to awareness. It is composed of such elements as the perceptions of one's characteristics and abilities; the percepts and concepts of self in relation to others and to the environment, the value qualities which are perceived as associated with experiences and objects; and goals and ideals which are perceived as having positive or negative valence".

Recently, Child (1981:53) explained self-concept as the image we create of ourselves and the self-value or esteem generated from this image. Several researchers (Marsh, 1984; Shavelson and Bolus, 1983; Song and Hattie, 1984) suggested the multidimensionality of self-concept. In addition to a global self-concept, there are academic and non-academic self-concepts. Academic self-

concept can then be differentiated into self-concepts of various academic subjects. In their review of theoretical and empirical research on self-concept, Shavelson ***et al.*** (1976) concluded that self-perceptions are formed through one's experience with and interpretation of one's environment, and are influenced especially by reinforcement, evaluation by significant others, and one's attributions for one's own behaviour. (Shavelson and Bolus, 1982:3). The development of self-concept is associated with age. Marsh ***et al.*** (1985:422) reported a quadratic age effect on self-concept.

2.1.2 Gender Variations in Self-Concept

There are some studies (Chiam, 1987; Skaalvik, 1986) which found boys scoring higher on self-concept scales than girls while some studies (Brookover ***et al.***, 1962) found girls scoring higher than boys. However, some researchers (Chapman and Boersma, 1983; Marsh ***et al.***, 1985) did not find any significant sex differences in measures of self-concept. Wylie (1979) concluded that there is no substantial evidence of sex differences in overall self-concept at any level, but several Australian studies (Connel ***et al.***, 1975; Smith, 1975, 1978) reported that boys tend to have higher self-concepts than girls. Marsh ***et al.*** (1985) explained that gender variations in self-concept depend on age, the component of self-concept and the instrument used to take measures of self-concept. In a recent study, Maqsud (1993) found significant gender variations in academic self-concepts of Batswana primary and middle school children.

2.1.3 Relationships between Self-Concept and Academic Achievement

Numerous studies (Brookover ***et al.***, 1964; Byrne, 1984; Coopersmith, 1959; Marsh ***et al.***, 1983; Purkey, 1970) reported a significant positive association between self-concept and academic attainment, but some studies (Hart, 1985; Thomas, 1973) found no association between the two variables. Some recent studies (Chapman ***et al.***, 1990; Marsh, 1985) suggested that academic self-concept is significantly linked to school related achievement behaviours. In a study conducted in a South African context, Du Toit (1985) reported that measures of academic self-concept were significantly positively related to academic achievement of standard 8 White Afrikaans-speaking children. The findings of Du Toit's study were supported by Maqsud and Rouhani (1991) who reported a significant positive association between academic self-concept and academic achievement of Batswana high school adolescents. In another study (Maqsud, 1993), it was reported that estimates of academic self-concept significantly positively associated with achievement scores of primary and middle school children in Bophuthatswana. Bester (1988) conducted a study to ascertain the association between subject specific self-concept and the achievement in that subject. He found that a higher correlation was indicated between mathematics self-concept and mathematics achievement than that indicated where a general self-concept test was used.

2.2 ACHIEVEMENT MOTIVATION

2.2.1 Theoretical Aspects

McClelland ***et al.*** (1953) introduced the concept of achievement motivation. They explained that individuals who make efforts for excellence in a certain

field just to achieve and not for any reward are regarded as having a high need of achievement. In simple words, achievement motivation means a desire to excel. McClelland and Pilon (1983) suggested that a desire to achieve originates from family and cultural setups. In those homes and cultures where achievement, initiative and competitiveness are encouraged children are more likely to develop a high need for achievement. These ideas suggest that parents should allow children to solve problems on their own, so that they could develop a desire to excel. Recently Schunk (1991) suggested that children who feel that their behaviours may have an impact on their physical and social environments and who are advised how to recognise a good performance tend to develop the desire for excellence.

Atkinson (1964) presented a comprehensive theory of achievement motivation which explains some relationships between a desire to achieve and consequent behaviours. According to this theory, achievement goal (Ts) is a product of three factors: motive for success (Ms), the probability of success (Ps) and the incentive value of success (Is). In addition to success, there is also a tendency of avoiding failure (Taf) which is also a product of three factors: the motive to avoid failure (Maf), the probability of failure (Pf) and the incentive value of failure (-If). Atkinson's theory elaborated that the motive for success is thought of as the capacity to feel pride in achievement while the motive of avoiding failure is the capacity to experience shame after a failure. According to the theory, all people have a need to achieve as well as a need to avoid failure. If a need to achieve for an individual is greater than his need to avoid failure, his resultant motivation would be to take risks in order to make efforts for achievement. On the other hand, if his need to avoid failure is greater, he would avoid the situation because the risk will be threatening him. Weiner (1972) pointed out that people with low resultant achievement motivation tend

to experience fears while handling the relevant tasks. On the other hand, people with high resultant achievement motivation tend to choose tasks of intermediate difficulty.

The Ms (motive for success) and the Maf (motive to avoid failure) are regarded as relatively stable personality characteristics (Weiner, 1972). McClelland (1985) proposed four principles to increase people's desire for achievement. These principles are: (i) to take moderate risks, (ii) to take personal responsibility for outcomes, (iii) to search the environment, and (iv) to use feedback. Weiner (1972) listed the following general trends in relation to achievement motivation:

1. a failure among individuals with high resultant achievement motivation enhances their motivation;

2. a failure among individuals with low resultant achievement motivation inhibits their motivation;

3. a success among individuals with high resultant achievement motivation may decrease their motivation; and

4. a success among individuals with low resultant achievement motivation may increase their motivation.

Stipek (1984) observed developmental trends in achievement motivation. According to Stipek, since cognitions related to achievement change with increasing age, children's motives for achievement are also expected to change with their cognitive, social and emotional growths. For instance, younger students tend to focus on tasks rather than outcomes. When they become more

responsive to social comparisons, they are defensive and avoid handling difficult tasks.

2.2.2 Achievement Motivation and Behaviour

Some researchers (McClelland and Winter, 1969; Hoyenga and Hoyenga, 1984) summarized the following characteristics of high n-achievement people:

1. they prefer to work on moderately challenging tasks which promise success;

2. they like tasks in which their performance can be compared with that of others;

3. they show persistence in career-related tasks;

4. successes in their chosen tasks raise their levels of aspiration; and

5. they work in those situations in which they could apply some control over the consequences.

2.2.3 Achievement Motivation and Success in School

Much of the research with regard to relationship between achievement motivation and school performance was directed to see if certain training programmes could enhance achievement motivation of school children. In this regard, McClelland (1972:144) concluded that there is no doubt that achievement motivation training can dramatically influence school performance if it is properly understood by teachers. Kestenbaum (1970) reported that students who are high in achievement motivation tend to succeed in school tasks. One question could arise here. Does high achievement

motivation affect the school performance or does success in school tasks lead to a high desire for motivation? Gottfried (1985) proposed the answer to the question by suggesting that each contributes to the other.

2.2.4 Sex differences in Achievement Motivation

Horner's (1970) study is frequently quoted in the literature to document sex differences in achievement motivation. It was suggested that there is a well established tendency for females to fear success. Tresemer (1974) analyzed the results of over sixty studies and concluded that fear of success among women demonstrated by the majority of studies, could be due to instruments used to take estimates of success; the type of cues supplied in the items of the instruments tended to generate fear of success in female subjects.

2.3 SOCIOECONOMIC BACKGROUND

2.3.1 Scope of Socioeconomic Background

Woolfolk (1993) defined socioeconomic status (SES) as "relative standing in the society based on income, power, background and prestige" (p. 161). Slavin (1991) defined it as "a measure of prestige within a social group, usually based on income and education" (p. 449). Earlier Duncan ***et al.*** (1972) suggested that social class or socioeconomic background refers to an individual's income, occupation, education, and prestige in society. The three definitions given here involve level of income and education. But socioeconomic class indicates more than education and income. A pervasive set of behaviours, expectations and attitudes go along with social class (Slavin,

1991). Parents' social class tends to have profound influences on behaviours and attitudes of school children (Duncan ***et al.***, 1972; Boocock, 1980).

Much research focused on characteristics of low, and middle class families. The findings indicated that (a) there are significant differences in child-rearing practices between the average lower class and the average middle class family (Shipman, 1970); (b) lower class mothers use less clear and elaborate language (Hess and Shipman, 1970); and (c) middle class parents tend to express high expectations for their children, they reward them for intellectual development, provide good models for language use, encourage reading and other learning activities, and provide various types of learning opportunities at home.

2.3.2 Socioeconomic Background and Academic Attainment

There is abundant evidence to believe that students with higher socioeconomic background tend to receive higher grades and stay at school for longer periods (Alwin and Thornton, 1984; White, 1982). Boocock (1972) emphasized the role of socioeconomic background in school performance; the researcher suggested that socioeconomic background is the most powerful predictor of academic achievement of school children. Heyns' (1978) data suggested that social class affects not only academic readiness for school but also the level of academic attainment throughout students' schooling.

Maqsud and Rouhani (1991) investigated the relationship between socioeconomic background and academic attainment of Batswana school children and they found a significant positive association between the two variables. Cherian (1992) also reported that a positive and statistically significant relationship was found between parental education and academic achievement of Xhosa children in Transkei. However, Galagedera (1991) did

not find a significant relationship between the measures of socioeconomic status and academic attainment of university students in Sri Lanka. In another study with Batswana children in Bophuthatswana, Maqsud (1993) reported a significant positive link between socioeconomic measures and achievement in languages.

2.4 PARENTAL INVOLVEMENT

2.4.1 Role of Parental Involvement in School Performance

Woolfolk (1993) pointed out that when SES is estimated in terms of parents' income, occupation and education, the relationship between SES and academic attainment of school children is weaker, but when SES is measured in terms of family atmosphere variables (parents' aspirations for their children, attitudes towards education and intellectual stimulation) the relationship between home background and academic achievement is usually found stronger. Anastasi (1958) observed that physical conditions of children's homes may have some influences on their academic attainment, but the impact may be far from perfect.

Some researchers (Stevenson ***et al.***, 1985; Leetsma ***et al.***, 1987; Song and Ginsburg, 1987) examined influences of home on school in top scoring Asian countries and the United States. They noted that Japanese, Taiwanese and Korean children were smarter than their American counterparts. According to these researchers, these differences are mainly due to parental involvement in children's school tasks. Asian parents spend a great deal of time assisting their children with homework, while American parents spend very little time and they do not regard homework as an important activity. Leetsma ***et al.*** (1987)

concluded that family influences are partly responsible for underachievement of American children when they are compared with Japanese children. There are studies (Walberg, 1984) which demonstrated that parental involvement in school children's learning tasks plays a very significant role in raising their levels of academic attainment.

2.5 SUMMARY

Self-concept is the image an individual creates of him/herself and it continues to change as he/she is exposed to new experiences. The development of self-concept is also associated with age because the individual becomes a more sophisticated thinker about his/her own being and the social world around him/her, with increasing age. In addition to a general self-concept, there are more differentiated academic self-concepts as well as non-academic self-concept. There is yet no definite evidence of significant gender variations in self-concept. However, some Australian studies suggested that boys tend to have higher self-concepts than girls. A number of empirical studies indicated that self-concept is significantly positively associated with school children's school attainment.

Theories presented by McClelland and Atkinson introduced a psychological construct of achievement motivation, or need for achievement. These theories suggested that there are individual variations in achievement motivation; some people have less need-achievement while others have more desire for achievement. Family environment and cultural demands and values have significant influences on the developmental trends in achievement motivation. There are some developmental trends in achievement motivation. Research findings suggested some identifiable characteristics of people with high n-

achievement. The evidence is not yet adequate to believe that significant gender variations exist in achievement motivation. With regard to relationships between achievement motivation and school performance, research studies focused on the aspect of whether or not level of achievement motivation can be raised by special training programmes. Common sense, however, leads us to assume that there is a possibility of a significant positive association between n-achievement and academic attainment.

Socioeconomic background refers to income, occupation, education, and prestige of parents in society. Parents belonging to low social class tend to have different expectations from their children when compared with those who belong to middle or upper social classes. The previous research generally indicated that socioeconomic background positively associates with school performance. Some researchers pointed out that the variable of family atmosphere is more important than socioeconomic background. Children, whose parents involve themselves in the school tasks of their children, tend to show higher academic achievement than those whose parents do not care about their school work.

The review of available literature on self-concept, achievement motivation, socioeconomic status, and parental involvement indicated that academic attainment of children living in non-African countries are generally influenced by these variables. It would be interesting to see if similar results could be found for this small scale study that has been undertaken in an African educational setup.

CHAPTER THREE

3. METHOD

3.1 AIMS OF THE STUDY

The study was aimed at examining relationships of socioeconomic background, parental involvement, academic self-concept and achievement motivation to academic attainment of standard 7 children in Mmabatho/Mafikeng area of Bophuthatswana.

3.2 HYPOTHESES

H1 There is a significant positive relationship between academic self-concept and academic achievement in English, mathematics and second language of standard seven pupils in Mmabatho/Mafikeng.

H2 There is a significant positive relationship between socioeconomic background and academic achievement in English, mathematics and second language of standard seven pupils in Mmabatho/Mafikeng.

H3 There is a significant positive relationship between parental involvement and academic achievement in English, mathematics and second language of standard seven pupils in Mmabatho/Mafikeng.

H4 There is a significant positive relationship between achievement motivation and academic achievement in English, mathematics and second language of standard seven pupils in Mmabatho/Mafikeng.

3.3 *POPULATION*

All standard 7 children in middle/high schools in Mmabatho/Mafikeng area of Bophuthatswana constituted the population of this study. Mmabatho/Mafikeng area was selected because the headquarters of the Department of Education is located in Mmabatho; and the assumption was made that educational norms as found in this area would be fairly representative of the general norms in Bophuthatswana.

3.4 *SELECTION OF SAMPLE*

In Mmabatho/Mafikeng area, there are thirteen schools where education for standard 7 children is available. Of the 13 schools, two are private schools, two are under the administration of Departments of Education in the Republic of South Africa, and nine fall under the administration of the Bophuthatswana Department of Education. Three schools, one from each category of school, were randomly chosen. After selecting the three schools, 306 standard 7 children were randomly chosen to form a sample of the study. The distribution of the sample is given in Table 3.1:

TABLE 3.1: DISTRIBUTION OF SUBJECTS ACCORDING TO SCHOOL AND SEX

School	Boys	Girls	Total
Private	30	40	70
R.S.A.	33	44	77
Bophuthatswana	84	75	159
TOTAL	147	159	306

Subjects' ages ranged between 13 and 22 years. However, the majority of subjects' ages were between 13 and 16 years. Since people of different ethnic groups live in Mmabatho and Mafikeng area, the sample included children from Tswana, Coloured, Indian, White, Xhosa, and Zulu sub-groups. The majority of the children in the sample belonged to Tswana and Coloured groups.

The interpretation of the results of this study would be easier if we know a little more about the three schools from where the sample of the study was drawn. Hence, it was decided to present some descriptions of the three schools.

3.4.1 School 1

School 1, which was randomly chosen, is a state-aided private school. After Bophuthatswana had gained her independence in 1977, this school was founded and introduced the then unusual concept of multi-racialism in schools. Its establishment was also intended to indicate that the Bophuthatswana Government distanced itself from the inferior standard of education which the South African government had forced upon Blacks through their Apartheid policy, demanding that Black children should attend "Black" schools, which were administered by a separate department of education.

What is regarded as relatively high school fees by the man in the street, has had the effect of causing the school population to be composed mainly of children from the upper and middle classes of society. The high standards set for admission to the school enables the school to draw the best pupils from Bophuthatswana and South Africa. Members of the teaching staff are highly qualified and efficient.

The pupils of this school are taught and prepared to write the matriculation examination of the Joint Matriculation Board of South Africa, when they reach standard 10. The school is well-equipped to prepare its students for the requirements of the Joint Matriculation Board's examinations. The school has an excellent record in the final JMB examinations. Since the JMB stopped conducting the matriculation examinations, the school now prepares its students for the matriculation examinations of the Independent Examining Board. This board functions with the approval of the Council of University Principals.

3.4.2 School 2

School 2 came into existence as a primary school in 1969 as a direct result of the implementation of the Apartheid laws. These laws decreed that Coloured children should be taught separately from other ethnic groups, and that their schools should be located in the group areas assigned to Coloureds. The school falls under the administration of the House of Representatives of the South African Government. The school was upgraded to a high school in 1988.

The above events caused the student population of the school to be composed of mainly children from middle class Coloured families. Presently the school admits Black children, but only a small percentage of the student population is Black. The teaching staff consists of Coloureds who are suitably qualified. This fact is attested to by the good results the standard 10 students have achieved over the past few years.

The school's standard 10 pupils write the Senior Certificate examination of the Administration: House of Representative's Department of Education and

Culture. The Matriculation Board has set certain requirements by which these Senior Certificate candidates can qualify for university entrance.

3.4.3 School 3

School 3 was established as a direct result of the First National Education Commission's recommendation that the organisational structure of the education system should include middle schools, which teach classes from standard 5 to standard 7. These schools would serve to offer preparation for high school, as well as rounding off those pupils who leave school at the end of standard 7.

The relatively low school fees and the location of the school in a low socioeconomic residential area, has resulted in this school attracting mainly children who come from a low socioeconomic family background. The majority of the pupils are Tswana. The teachers are suitably qualified to do the work assigned to them. They are, however, limited by poor physical amenities and equipment.

Standard 7 is the highest standard taught at school 3. The standard 7 pupils write an external examination which is set by the Department of Education of Bophuthatswana.

3.5 VARIABLES STUDIED

The four hypotheses of this study demanded the researcher to take measures of the following variables:

socioeconomic background

parental involvement

achievement motivation

academic self-concept

academic achievement

3.6 INSTRUMENTS

3.6.1 Socioeconomic Background Questionnaire

Maqsud (1993) constructed a brief Socioeconomic Background Questionnaire (SBQ), which requires the subjects to give information on their parents' educational and occupational backgrounds as well as some economic facilities available at home. For full questionnaire, see Appendix "A". Maqsud suggested the ways to quantify the data and his procedure was used by the researcher in order to quantify the information provided by the subjects of this study. For scoring procedure, see Appendix "B". The minimum and maximum scores on the SBQ could be 4 and 27 respectively.

3.6.2 Parental Involvement

The Eksteen (1981) Parent Involvement Scale (EPIS) was chosen to take measures of parental involvement in the subjects' school tasks. Eksteen (1981:474) found the following reliability coefficients for this scale:

Educational involvement of father = 0.89

Educational involvement of mother = 0.82

The EPIS is based on 18 Likert-type items. Two items of the scale are given here for illustrative purposes:

1. He (father) makes me feel that he is ready and available to help and give advice when I need it.

never	
seldom	
sometimes	
often	
always	

2. When he wants me to do something he explains it.

never	
seldom	
sometimes	
often	
always	

The scale has two versions, one for items on fathers and one for mothers. The scale for mothers was identical to the one used for fathers. One item which was used for the scale on mothers, is given below:

1. She (mother) makes me feel that she is ready and available to help and give advice when I need it.

never	
seldom	
sometimes	
often	
always	

The subjects' responses were scored by using the following key:

Never	1
Seldom	2
Sometimes	3
Often	4
Always	5

3.6.3 Achievement Motivation

Cohen (1976) presented six scales which can measure the variable of achievement motivation. Of these six scales, the researcher selected the Robinson's (1961) Achievement Motivation Scale, based on 15 items. The instructions for the completion of the scale read as follows:

"Underline the one alternative with which you most agree".

Two items of the scale are given below:

1. In how many activities do you wish to do your very best?

   As many as possible

   Many

   Some

   Few

   Very few

2. How often do you lack confidence when you have to compete against others?

   Hardly ever

   Seldom

   About half the time

   Frequently

   Nearly always

The full description of the RAMS is given in appendix "A". As the above examples indicate, the RAMS items were of two types: positive and negative. Numerical values (5,4,3,2,1) were given to responses of positive items (As many as possible = 5; very few = 1), while numerical values (1,2,3,4,5) were given to responses of negative items (Hardly ever = 5; nearly always = 1). The sum of scores for 15 items provided a measure of achievement motivation for each subject. The minimum and maximum scores could be 15 and 75, respectively.

3.6.4 Academic Self-Concept

The Brookover (1976) Self-concept of Ability Scale (BSCAAS) was considered a suitable instrument to take estimates of academic self-concept. The scale consists of six items: one item of the scale is given below as an example:

1. How do you rate yourself in school ability compared with your class friends?

I am the best	
I am above average	
I am average	
I am below average	
I am the poorest	

The subjects were asked to consider five options given under each item and to tick only one option. The responses were scored as given below:

I am the best	5
I am above average	4
I am average	3
I am below average	2
I am the poorest	1

The maximum and minimum scores on the BSCAAS could be 30 and 6, respectively.

3.6.5 Academic Achievement

There were three schools which participated in the study. The researcher took the subjects' scores for mathematics, English and his/her second language from the school records. All scores were converted to a maximum score of 100. These scores were treated separately for the three schools.

3.7 PROCEDURE

A booklet, containing the SBQ, EPIS, RAMS and BSCAAS, was compiled and multiple copies were produced. The researcher then obtained permission from the Departments of Education in Bophuthatswana and the Republic of South Africa as well as the private school, to use standard 7 pupils as the subjects of the study. After permissions were granted, the researcher met the principals of the schools and explained the objectives of the study to them. They agreed to extend their full cooperation to the researcher in connection with collecting the required data.

Cooperation of some teachers was also sought to help the researcher in administering the four instruments. Testing sessions, one school at a time, were arranged and the selected subjects were seated in large classrooms. Before actual administration of the instruments, opinions of a panel of standard 7 teachers were sought to make sure that the items of the instruments were understandable to the subjects. During the testing sessions, subjects were allowed to seek the help of the researcher or teacher involved in the administration of the instruments. The explanations by the researcher or his assistants were limited to enabling the subjects to comprehend the meaning of the items. The subjects generally took about 45 to 55 minutes to complete all four instruments.

3.8 ANALYSIS OF DATA

The raw data were processed on a mainframe computer of the University of Bophuthatswana. Using the SAS program (SAS INSTITUTE INC. 1985) the following procedures were carried out:

1. The means and standard deviations of the scores for each of the eight variables of the study were calculated separately for boys and girls for each of the three schools.

2. The mean scores of boys and girls for each of the eight variables, were compared by using a t test, for each school.

3. The intercorrelations of the eight variables for boys and girls and for each school separately were computed.

4. A multiple regression analysis was carried out to see the effects of independent variables on a dependent variable.

CHAPTER FOUR

4. DATA ANALYSIS

4.1 RAW SCORES

The raw scores of 306 subjects of this study for socioeconomic background, father involvement, mother involvement, achievement motivation, academic self-concept, English, mathematics and second language are given in Appendix "C". These scores are given separately for each school and the sex of each subject is also indicated.

4.2 HYPOTHESIS 1

There is a significant positive relationship between academic self-concept and academic achievement in English, mathematics and second language of standard seven pupils in Mmabatho/Mafikeng.

Table 4.1 gives coefficients of product-moment correlation between measures of academic self-concept and scores for English, mathematics, second language and average achievement. The data indicated that scores of mathematics and second language for the subjects from School 2 significantly positively associated with the measures of academic self-concept, but no significant relationship between academic self-concept and academic achievement for the subjects from School 1 and School 3 were found. These data partially supported the researcher's hypothesis.

TABLE 4.1: ACADEMIC SELF-CONCEPT AND ACADEMIC ACHIEVEMENT: CORRELATIONS

School	n	English	Maths	2nd Lang.	Average
School 1	n=70	0.23	0.12	0.20	0.20
School 2	n=77	0.08	0.30**	0.25*	0.25*
School 3	n=159	0.07	0.00	0.00	0.00

*p < 0.05 **p < 0.01

4.3 HYPOTHESIS 2

There is a significant positive relationship between socioeconomic background and academic achievement in English, mathematics and second language of standard seven pupils in Mmabatho/Mafikeng.

Table 4.2 gives coefficients of product-moment correlation between estimates of socioeconomic background and scores of English, mathematics, second language and average achievement. For Schools 1 and 2, no significant association between socioeconomic background and academic achievement were found, but for School 3 significant negative correlations for English and average achievement were found. These data did not support the researcher's hypothesis.

TABLE 4.2: SOCIOECONOMIC BACKGROUND AND ACADEMIC ACHIEVEMENT:CORRELATIONS

School	n	English	Maths	2nd Lang.	Average
School 1	n=70	0.02	-0.03	-0.08	-0.012
School 2	n=77	0.02	0.13	0.17	0.14
School 3	n=159	-0.16*	-0.15	-0.15	-0.21*

*p < 0.05

4.4 HYPOTHESIS 3

There is a significant positive relationship between parental involvement and academic achievement in English, mathematics and second language of standard seven pupils in Mmabatho/Mafikeng.

Product-moment correlations between estimates of parent-involvement and academic achievement are given in Table 4.3 Figural details in Table 4.3 indicated that mother-involvement in school children's education for School 3 was found significantly associated with their academic achievement. It should be mentioned here that children in School 3 generally belonged to lower social strata. These data partially supported the researcher's hypothesis.

TABLE 4.3: PARENTAL INVOLVEMENT AND ACADEMIC ACHIEVEMENT: CORRELATIONS

School	n	English	Maths	2nd Lang.	Average
School 1	n=70				
Father		0.03	0.12	0.06	0.07
Mother		0.15	0.00	0.06	0.03
School 2	n=77				
Father		-0.00	0.15	-0.02	0.03
Mother		-0.06	-0.19	-0.11	-0.14
School 3	n=159				
Father		0.05	0.04	0.08	0.07
Mother		0.31**	0.19*	0.27*	0.27*

*p < 0.05 **p < 0.01

4.5 HYPOTHESIS 4

There is a significant positive relationship between achievement motivation and academic achievement in English, mathematics and second language of standard seven pupils in Mmabatho/Mafikeng.

Table 4.4 contains the product-moment correlations between achievement motivation and achievement scores of English, mathematics, second language and average achievement. Achievement motivation was found significantly

related to mathematics scores and average achievement scores of School 2. These data tended to partially support the researcher's hypothesis. It was observed that achievement motivation's association with academic attainment tended to depend on the type of school and the nature of academic subject.

TABLE 4.4: ACHIEVEMENT MOTIVATION AND ACADEMIC ACHIEVEMENT: CORRELATIONS

School	n	English	Maths	2nd Lang.	Average
School 1	n=70	0.12	0.16	0.16	0.15
School 2	n=77	0.03	0.31**	0.21	0.24*
School 3	n=159	0.05	-0.05	-0.13	-0.10

*p < 0.05 **p < 0.01

4.6 SEX DIFFERENCES

It must first be noted that children from School 1 belonged to middle and upper class families, those from School 2 generally came from middle class homes and those from school 3 belonged to lower middle class and low class homes. The basic statistics given in Table 4.5 indicated that in School 1, mothers tended to show more involvement with their daughters' education. In Schools 1 and 2, girls' achievement in English was found significantly higher than that of boys. In School 2, girls' achievement in their second language was also found significantly higher than that of boys.

TABLE 4.5: SEX DIFFERENCES

	Variables									
	Sex	Stats	SES	FIC	MIC	AM	SC	ENG	MATH	L2
School 1	Boys	Mean	19.30	58.57	55.83	53.67	22.57	56.07	60.93	49.1
		SD	2.79	8.58	8.49	5.83	2.88	6.44	13.84	11.74
	Girls	Mean	18.40	58.40	67.18	53.80	22.43	60.53	60.43	54.50
		SD	3.33	15.26	8.16	6.36	2.95	8.07	12.81	14.33
		t	1.23	0.05	5.50**	0.09	0.02	-2.57**	0.16	-1.73
School 2	Boys	Mean	11.67	58.10	63.79	52.94	23.15	46.12	33.88	43.30
		SD	2.73	13.39	8.02	5.84	2.55	6.08	15.20	5.32
	Girls	Mean	11.91	54.88	64.43	53.64	22.07	49.23	34.23	49.86
		SD	3.23	17.33	8.10	5.40	2.22	6.59	16.94	8.99
		t	-0.35	1.18	-0.33	-0.53	1.99*	-2.14*	-0.09	-3.99**
School 3	Boys	Mean	8.03	57.05	63.46	49.89	22.94	50.17	37.82	51.70
		SD	3.49	17.14	9.51	4.97	3.91	9.41	11.36	13.37
	Girls	Mean	8.55	55.93	64.93	50.61	23.32	50.23	36.87	52.12
		SD	3.20	16.60	10.43	4.27	4.15	10.48	10.64	14.33
		t	-0.05	0.42	-0.92	-1.03	-0.59	-0.04	0.55	-0.19

*p<0.05 **p<0.01

SES=Socioeconomic Status; FIC=Father-involvement; MIC=Mother-involvement; AM=Achievement Motivation; SC=Academic Self-concept; ENG=English; MATH=Mathematics; L2=Second Language

4.7 REGRESSION ANALYSIS

In this study, academic achievement (English, mathematics, and second language) was a dependent variable and there were five independent variables:

socioeconomic background, academic self-concept, achievement motivation, father involvement and mother involvement. In order to see the effects of these independent variables on academic achievement, the data were also analyzed through the statistical technique of regression analysis. The results are given in Table 4.6.

The figural details indicate that there are consistent positive effects of mother-involvement on academic achievement of children from School 3. It has already been mentioned that children form this school belonged to less privileged homes.

TABLE 4.6: REGRESSION AND ANOVA: EFFECTS OF INDEPENDENT VARIABLES ON DEPENDENT VARIABLES

		English			Mathematics			Second Language		
	Var	F	t	p<	F	t	p<	F	t	p<
School 1	SES		0.43	0.66-		-0.44	0.66		-0.83	0.06
	FIC		-0.31	0.76		0.97	0.34		0.05	0.62
	MIC	0.99	1.11	0.27	0.61	-0.47	0.64	0.52	-0.06	0.95
	AM		0.03	0.97		0.97	0.34		1.25	0.22
	SC		1.59	0.12		0.38	0.71		-0.35	0.80
School 2	SES		0.17	0.87		0.48	0.63		1.74	0.09
	FIC		-0.11	0.92		1.09	0.28		-0.87	0.39
	MIC	0.161	-0.47	0.63	3.39*	1.45	0.15	1.40	-0.59	0.56
	AM		-0.02	0.98		1.93	0.05*		1.64	0.10
	SC		0.66	0.51		1.92	0.05*		-0.08	0.93
School 3	SES		-2.13*	0.04		-1.88	0.06		-1.96	0.05
	FIC		0.11	0.91		0.21	0.84		0.44	0.66
	MIC	4.31**	3.81**	0.0002	2.16*	2.47**	0.01	4.54**	3.67**	0.0003
	AM		0.22	0.83		-0.84	0.40		-2.13*	0.03
	SC		0.04	0.97		-0.40	0.70		-0.40	0.67

* $p<0.05$ ** $p<0.01$

SES=Socioeconomic Status; FIC=Father-involvement; MIC=Mother-involvement; AM=Achievement Motivation; SC=Academic Self-concept; ENG=English; MATH=Mathematics; L2=Second Language

4.8 MAIN FINDINGS AND DISCUSSION

From the above data of this study, the following main findings emerged:

1. Girls' achievement in English language was found significantly higher than boys in Schools 1 and 2, but no significant sex differences were seen in the academic achievement of the subjects from School 3.

2. Measures of academic self-concept for the subjects from School 2 were found significantly positively associated with their mathematics and second language scores.

3. Socioeconomic background measures did not significantly relate with mathematics, English and the second language scores of subjects from Schools 1 and 2, but its estimates significantly negatively related to English achievements scores of the subjects from School 3.

4. For the subjects from School 2, achievement motivation scores are significantly positively associated with mathematics scores.

5. For the subjects from School 3, the variable of mother involvement is consistently significantly positively associated with all three measures of their academic achievement.

4.9 DISCUSSION OF RESULTS

4.9.1 Sex Differences in English Language Achievement

The data of this study indicated that girls' mean scores of English achievement in Schools 1 and 2 tended to be higher than those of the boys, but no significant sex differences were seen in the subjects from School 3. Gage and

Berliner (1991:182) noted that since girls learn to talk, to use sentences and to use a greater variety of words a little earlier than boys, they were expected to show superiority in language achievement. But there are some studies which did not support the idea of girls' linguistic superiority. For instance, Hyde and Linn (1988) did not find higher performance of girls on measures of verbal fluency; they concluded that any gender differences in verbal ability are no longer worth discussing. This researcher interprets girls' higher performance in English language in terms of their aspirations for future jobs. Limited occupational openings are available to female high school leavers in Bophuthatswana as compared with their male counterparts. For most jobs available to girls, proficiency in English is an additional advantage. Hence they tend to put more efforts in learning language skills. As far as the girls in school 3 (from less privileged homes) are concerned, their occupational aspirations tend to be rather different as they are likely to be less certain and confident in getting jobs after leaving their schools.

4.9.2 Positive Relationship Between Academic Self-Concept and Academic Achievement

Measures of academic self-concept significantly positively related to mathematics and second language scores for the subjects from School 2, but no significant relationships were found for the subjects from Schools 1 and 3. There are numerous studies (Cauley and Tyler, 1989; Metcalfe, 1981; Reynolds, 1980) which reported that higher self-concept is associated with more favourable attitudes towards school, more positive behaviour in the classroom and greater popularity with other students (Woolfolk, 1993:77). One should note that a significant association between two variables does not lead one to believe that one variable is causing the other. High achievement

may enhance self-concept or high self-concept may raise the level of achievement. However, it can be held that children with high self-concept tend to be more successful in school life (Marsh, 1990). A number of researchers (Hansford and Hattie, 1982; Marsh and Holmes, 1990) suggested that the strength of relationship between self-concept and academic attainment greatly depends on the characteristics of the students and research instruments used. This researcher believes that some of the students' characteristics are largely dependent on home and societal values. Since the subjects from the three schools differed in home values, one can expect different results, in terms of strength of the relationship between academic self-concept and achievement in various subjects, for the three schools.

4.9.3 Association Between Socioeconomic Background and Academic Achievement

Socioeconomic status did not significantly relate to academic achievement in Schools 1 and 2. There was, however, a significant negative relationship between socioeconomic status and English achievement in the scores of the subjects from School 3. In order to understand this finding, cognizance should be taken of the fact that the subjects from School 1 belonged to upper and middle socioeconomic class, while those from School 2 came from middle class families and the children from School 3 came mainly from the low social class.

When SES is measured solely on the basis of parents' education, occupation and possession, as is the case in this study, the relationship between SES and academic achievement is weaker, but when SES is measured in terms of family atmosphere such as parents' attitude toward education, their aspirations for their children, the correlation between SES and scholastic achievement is

reported higher (Laosa, 1984; White, 1982). This idea may explain the reason for the weak relationship between SES and academic achievement of subjects from Schools 1 and 2. These children may place a higher value on their parents' involvement rather than on the material possessions, which they have been conditioned to take for granted.

The parents of the subjects from School 3 experienced the discriminatory laws of Apartheid, which deprived them of basic rights, such as education, exposure to intellectual stimulation and essential material necessities. It is assumed that these parents will be more inclined to teach their children to appreciate and value education more than the meagre material possessions of the family. Many less privileged Black children perhaps view English as a key to education, which would open the doors of opportunities for them. This belief is reinforced in Tswana children by the fact that English is the official medium of instruction from standard 3 up to standard 10 in schools of the Bophuthatswana Department of Education. This might be the reason why there is a significant negative correlation between SES and academic achievement for the subjects from school 3.

4.9.4 Achievement Motivation and Academic Achievement

Generally, there was a low positive association between achievement motivation and academic achievement. However, School 2 subjects showed a significant positive relationship between achievement motivation and mathematics achievement and there was a significant negative relationship between achievement motivation and second language for the subjects from School 3.

The origins of high achievement motivation are assumed to be in the family

and cultural group of a child. The parents of the Coloured subjects of School 2 were labelled as second class citizens under the Apartheid laws of South Africa. They were allowed to do the same work in the building industry as their white counterparts were doing. Increases in wages and promotions came to them through hard work and not automatically, because of their skin pigmentation, as was often the case with the Whites. The parents in the Coloured population were highly motivated to achieve in their lines of work, initially for extrinsic reasons, such as increases in salary and promotions, but later for the intrinsic good feelings experienced at being able to provide well for their families.

The negative relationship between achievement motivation and mathematics of the subjects of School 3, can partly be explained by the idea presented by Maqsud and Rouhani (1991); these researchers suggested that Batswana school children experience mathematics phobia which generates a lot of anxiety in them whenever they face mathematical tasks.

4.9.5 Parental Involvement in Children's Education

A number of contributory factors could be responsible for the significant positive association of mother involvement and all three measures of academic attainment for the subjects in school 3. The culture of the Batswana is one factor that may explain this result. Batswana children are expected to learn and firmly hold deep-rooted cultural values of the society in which they live (Maqsud and Rouhani, 1991). Among these values is the religious precept, which is equally applicable to Christian and Muslim children, to honour and respect their fathers and mothers.

A basic human interaction that arises as a result of the dependence of one

person on another person or a group, is known as identification. According to Ausubel and Novak (1978), identification, which is characteristic of the early parent-child relationship, is called satellization and nonsatellization. In a satellizing relationship, the child identifies in a dependent sense with the parent's status. This relationship arises because the parents accept their child and they love him/her for him/herself and not for purposes of ego-enhancement. The opposite is characteristic of parents of nonsatellizers. The parents of the satellizing child would listen sympathetically, encourage and offer help to him/her when he/she performs poorly. On the other hand, the parents of the nonsatellizing child will either criticize or be indifferent to their child's poor performance.

It is the experience of this researcher that generally mothers reveal the characteristics which cause their children to become satellizers. Fathers, on the other hand, are more inclined to cause their children to be nonsatellizers. Bandura (1977) theorized that children learn by observing parents, teachers and others. Taking the observational learning theory of Bandura (1977) into account, it is reasonable to assume that the child will be inclined to learn from observing the behaviour of the satellizing mothers. It is assumed that the mother's involvement with the child would be greater in less affluent homes, where there is no distraction of television and video games, than in the homes of the upper and middle socioeconomic classes. The strong influence of the Tswana culture which demands that the wife should stay at home and look after the children and see to the domestic chores, will promote a closer association between mothers and children than between the children and their fathers. It is therefore reasonable to assume that the mother's involvement with the children of School 3 would have more significant influences on their academic attainment.

CHAPTER FIVE

5. SUMMARY AND CONCLUSIONS

5.1 STATEMENT OF THE PROBLEM

The recent annual reports of Department of Education in Bophuthatswana consistently pointed out that the results of standard 7 pupils have been lower than the expectations of teachers and parents. These reports did not specify any single reason for underachievement of middle school children. Since recent researchers indicated that in addition to cognitive variables there are a host of noncognitive variables which contribute to academic attainments of school children, this study was intended to investigate effects of some of these variables on academic attainment of Std. 7 children. The noncognitive variables which were investigated are socioeconomic status, achievement motivation, academic self-concept and parental involvement in their children's education.

5.2 REVIEW OF LITERATURE

The literature relevant to the role of socioeconomic status, achievement motivation, academic self-concept and parental involvement in their children's education in academic achievement generally demonstrated that all the aforementioned four variables are positively related to academic attainment of school children. The literature also indicated that the degrees of the relationships of the aforementioned independent variables to academic attainment varied from one variable to the other and, in some cases these were affected by sex and age. This researcher therefore hypothesized that

above mentioned variables are significantly positively related to academic achievement in some selected academic subjects of standard 7 pupils studying at schools in the Molopo District of Bophuthatswana.

5.3 METHODS OF RESEARCH

5.3.1 Subjects

A sample of 306 standard 7 pupils was drawn from three schools in Mmabatho/Mafikeng area of the Molopo District. The student populations of these three schools differed greatly from each other in terms of socioeconomic backgrounds of the children' parents.

5.3.2 Instruments

Four measuring instruments, which were frequently used by other researchers, were administered to all the subjects of the study in order to take measures of socioeconomic background, achievement motivation, academic self-concept and parental involvement. Their achievement scores in English, mathematics and a second language (Setswana or Afrikaans) were collected from the school records.

5.3.3 Analysis of Data

The scores were subjected to a computer programme in order to examine relationships of socioeconomic background, achievement motivation, academic self-concept and parental involvement to academic achievement in the three academic subjects.

5.4 *RESULTS*

No consistent patterns of relationships for all the subjects in the three schools were found. The close examination of coefficients of product-moment correlation and the regression analysis led the researcher to believe that the nature of relationships of achievement motivation, academic self-concept and socioeconomic background to academic achievement of the subjects of this study generally depended on the characters of the population of each school and that of academic subjects. For instance, there was a significant negative correlation between socioeconomic status and average academic achievement of less privileged students of School 3. This implies that children with lower socioeconomic status tended to have higher academic achievement. In addition, it was found that mother- involvement in education of children from less affluent homes has a significant positive impact on their academic achievement in all three academic subjects.

The results of this small scale investigation suggest the significance of mother-involvement in education of children with relatively lower socioeconomic background. These results should, however, be interpreted with some cautions as this study was conducted with a small sample taken from only three schools in Molopo District of Bophuthatswana.

5.5 *LIMITATIONS*

During the course of this study, the researcher felt that the following limitations may be present in the study:

The Socioeconomic Background Questionnaire (SBQ) did not include items to discover how the parents' education, occupation and aspirations impact on the

subjects' academic achievement. The inclusion of such items might have produced results more supportive of the findings of past studies.

A subject specific self-concept questionnaire might, as Bester (1988) found, have produced higher correlations with the academic subjects than was the case with the general academic self-concept questionnaire that was used in this study.

5.6 RECOMMENDATIONS

This research did not reveal conclusive supportive results for the hypotheses tested. It did not, however, produce enough evidence to reject the hypotheses. It is therefore recommended that the hypotheses should be re-investigated, with the use of more and or refined measuring instruments for each hypothesis.

As this research was done with subjects taken only from Mmabatho/Mafikeng area of the Molopo District of Bophuthatswana, it is recommended that the research should be repeated and it should include subjects from all the regions of Bophuthatswana or the envisaged new province. The study should include subjects from rural schools.

5.7 CONCLUDING REMARKS

This small scale study investigated the relationships of some non-academic variables to academic achievement in selected academic subjects with the intention of identifying reasons that may explain the problem of underachievement of standard 7 pupils in Bophuthatswana. The researcher is of the opinion that the results were encouraging in the sense that no conclusive

evidence was found to totally reject his hypotheses. It is therefore hoped that the investigation of these variables will be pursued on a larger scale with more refined measuring instruments.

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APPENDIX A

MEASURING INSTRUMENTS

APPENDIX A

MEASURING INSTRUMENTS

SCALES

NAME: ..... SCHOOL: .....
STANDARD: ..... AGE - YRS: .....
RELIGION: ..... SEX: .....
CULTURAL GROUP: .....

SECTION A

SOCIOECONOMIC BACKGROUND QUESTIONNAIRE

1. Indicate your father's education by placing an "X" in the appropriate block.

Did not attend school	
Attended Primary school	
Attended Secondary/High school	
Attended College	
Attended University	

2. Indicate your mother's education by placing an "X" in the appropriate block.

Did not attend school	
Attended Primary school	
Attended Secondary/High school	
Attended College	
Attended University	

3. What is your father's occupation? .....
4. What is your mother's occupation? .....
5. Does your family own a car? Yes No
6. Does your family own a TV Set? Yes No
7. Does your family own a video recorder? Yes No
8. Does the house you live in have a garage? Yes No
9. Do your parents own their house? Yes No

SECTION (B) (1)

EKSTEEN'S PARENTAL INVOLVEMENT SCALE (FATHER)

The following statements refer to your FATHER. Think about your father. What are his characteristic qualities? Is he unreasonable sometimes? Does he love you? Does he talk to you and play with you? Is he from home often? Do you really know your father?

If your father has passed away or does not live with you, respond in respect of your stepfather or guardian or the way you remember your father. Make an "X" in the block that describes your father the best.

Your response to the statements should be one of the following: never; seldom; sometimes; often; always. Give an honest response. Remember! There are no right or wrong answers. The information is intended strictly for academic purposes and no one will ever know how you responded.

1. He makes me feel that he is ready and available to give help and advice when I need it.

never	
seldom	
sometimes	
often	
always	

2. When he wants me to do something he explains it.

never	
seldom	
sometimes	
often	
always	

3. He wants me to achieve better than other children.

never	
seldom	
sometimes	
often	
always	

4. If I am disobedient, or do something that is forbidden, he punishes me by not allowing me to do the things that I enjoy.

never	
seldom	
sometimes	
often	
always	

5. I can convince him to do just what I want.

never	
seldom	
sometimes	
often	
always	

6. If I do something that he does not like he is hurt and disappointed.

never	
seldom	
sometimes	
often	
always	

7. He is interested in what I do.

never	
seldom	
sometimes	
often	
always	

8. He allows me to make my own plans in connection with things that I really want to do, even if I make mistakes.

never	
seldom	
sometimes	
often	
always	

9. He discusses newspaper and other news reports and current events with me.

never	
seldom	
sometimes	
often	
always	

10. He discusses his future plans with me.

never	
seldom	
sometimes	
often	
always	

11. He discusses my school work with me.

never	
seldom	
sometimes	
often	
always	

12. He comforts and helps me with my problems.

never	
seldom	
sometimes	
often	
always	

13. If I should do something that he does not like, I know exactly what to expect from him.

never	
seldom	
sometimes	
often	
always	

14. He finds it very easy to punish me.

never	
seldom	
sometimes	
often	
always	

15. I know exactly how he wants me to act.

never	
seldom	
sometimes	
often	
always	

16. He makes me feel that I can talk to him on any subject.

never	
seldom	
sometimes	
often	
always	

17. He is worried that I cannot look after myself.

never	
seldom	
sometimes	
often	
always	

18. He encourages me to try to do new things on my own.

never	
seldom	
sometimes	
often	
always	

SECTION B (2)

EKSTEEN'S PARENTAL INVOLVEMENT SCALE (MOTHER)

The following statements refer to your MOTHER. Think about your mother. What are her characteristic qualities? Is she unreasonable sometimes? Does she love you? Does she talk to you and play with you? Is she away from home often? Do you really know your mother?

If your mother has passed away or does not stay with you, respond in respect of your stepmother or guardian or the way you remember your mother. Make an "X" in the block that describes your mother the best.

Your response to the statements should be one of the following: never; seldom; sometimes; often; always. Give an honest response. Remember! There are no right or wrong answers. The information is intended strictly for academic purposes and no one will ever know how you responded.

1. She makes me feel that she is ready and available to give help and advice when I need it.

never	
seldom	
sometimes	
often	
always	

2. When she wants me to do something she explains it.

never	
seldom	
sometimes	
often	
always	

3. She wants me to achieve better than other children.

never	
seldom	
sometimes	
often	
always	

4. If I am disobedient, or do something that is forbidden, she punishes me by not allowing me to do the things that I enjoy.

never	
seldom	
sometimes	
often	
always	

5. I can convince her to do just what I want.

never	
seldom	
sometimes	
often	
always	

6. If I do something that she does not like she is hurt and disappointed.

never	
seldom	
sometimes	
often	
always	

7. She is interested in what I do.

never	
seldom	
sometimes	
often	
always	

8. She allows me to make my own plans in connection with things that I really want to do, even if I make mistakes.

never	
seldom	
sometimes	
often	
always	

9. She discusses newspaper and other news reports and current events with me.

never	
seldom	
sometimes	
often	
always	

10. She discusses her future plans with me.

never	
seldom	
sometimes	
often	
always	

11. She discusses my school work with me.

never	
seldom	
sometimes	
often	
always	

12. She comforts and helps me with my problems.

never	
seldom	
sometimes	
often	
always	

13. If I should do something that she does not like, I know exactly what to expect from her.

never	
seldom	
sometimes	
often	
always	

14. She finds it very easy to punish me.

never	
seldom	
sometimes	
often	
always	

15. I know exactly how she wants me to act.

never	
seldom	
sometimes	
often	
always	

16. She makes me feel that I can talk to her on any subject.

never	
seldom	
sometimes	
often	
always	

17. She is worried that I cannot look after myself.

never	
seldom	
sometimes	
often	
always	

18. She encourages me to do new things on my own.

never	
seldom	
sometimes	
often	
always	

SECTION C

ROBINSON'S ACHIEVEMENT MOTIVATION SCALE

Underline the one alternative with which you most agree.

1. In how many activities do you wish you were the best?

   as many as possible
   many
   some
   few
   very few

2. Would you hesitate to undertake something that might lead to your failing?

   nearly always
   frequently
   about half the time
   seldom
   hardly ever

3. In how many areas are you personally concerned about how well you do?

   most
   many
   some
   few
   very few

4. Success brings relief or further determination and not just pleasant feelings. Do you

   agree?
   strong agreement
   agreement
   neutral
   disagreement
   strong disagreement

5. How much effort do you use to reach the goals you set yourself?

0%
25%
50%
75%
100%

6. How often do you lack confidence when you have to compete against others?

hardly ever
seldom
about half the time
frequently
nearly always

7. How hard do you feel you have to try in seemingly trivial tasks?

not at all
not very
medium
fairly
very

8. How strong is your desire to avoid competitive situations?

very
fairly
medium
not very
none

9. How true is it to say that your efforts are directed towards avoiding failure?

quite untrue
not very true
unsure
fairly true
quite true

10. In how many spheres do you think you will succeed in doing as well as you can?

most
many
some
few
very few

11. How far do you agree that effort rather than success is what is important?

strong agreement
agreement
neutral
disagreement
strong disagreement

12. How often do you seek opportunities to excel?

hardly ever
seldom
about half the time
frequently
most of the time

13. How many situations do you avoid in which you may be exposed to evaluation?

very few
few
some
many
most

14. Do you ever do better if you are worried about failing?

hardly ever
seldom
about half the time
frequently
most of the time

15. The stronger the chance of failing the more determined you are to succeed. Do you agree?

strong disagreement
disagreement
neutral
agreement
strong agreement

SECTION D

BROOKOVER SELF-CONCEPT OF ACADEMIC ABILITY SCALE

Put an "X" in the box next to the statements below which best show how you see yourself in response to the question. Put only one "X" against one statement of each question.

1. How do you rate yourself in school ability compared with your clase friends?

I am the best	
I am above average	
I am average	
I am below average	
I am the poorest	

2. How do you rate yourself in school ability compared with others in your class?

I am the best	
I am above average	
I am average	
I am below average	
I am the poorest	

3. Think of all the other classes in your year at school. Where would you place yourself in terms of your school ability?

I am the best	
I am above average	
I am average	
I am below average	
I am the poorest	

4. To become a teacher, a doctor or a scientist, you have to go to College or University and pass difficult examinations. How likely do you think it is that you could do this?

Very likely	
Somewhat likely	
Not sure either way	
Unlikely	
Most unlikely	

5. For a moment forget how twachers mark your work. In your opinion, how good do you think your work is?

My work is excellent	
My work is good	
My work is average	
My work is below average	
My work is much below average	

6. What kind of marks do you really think you are capable of getting?

mostly 10/10	
mostly 7/10	
mostly 5/10	
mostly 3/10	
mostly 1/10	

APPENDIX B

KEYS

APPENDIX B

KEYS:

1. SOCIOECONOMIC BACKGROUND QUESTIONNAIRE

QUESTION NO.	RESPONSE	SCORING
1.	Did not attend school	1
	Attended Primary school	2
	Attended Secondary school	3
	Attended College	4
	Attended University	5
2.	Did not attend school	1
	Attended Primary school	2
	Attended Secondary school	3
	Attended College	4
	Attended University	5
3.	Labourer	1
	Cleaner/messenger	2
	Semi-skilled worker	3
	Skilled worker/Junior professional	4
	Intermediate profession	5
	Super professional	6
4.	Scored as for father above.	
5.	Yes	1
	No	0
6.	Yes	1
	No	0
7.	Yes	1
	No	0
8.	Yes	1
	No	0
9.	Yes	1
	No	0

2. *EKSTEEN'S PARENTAL INVOLVEMENT SCALE*

This scale contains 18 items to which the subject had to respond;

(1) firstly in respect of his/her father, and then
(2) in respect of his/her mother.

The items for both the father and mother are identical in every respect, the only difference being that where the word father was used in the first set of items, it was replaced with the word mother in the second set of items of the scale.

The subject had to respond by choosing one alternative from a set of responses which consisted of:

never; seldom; sometimes; often; always.

The scoring for each question was done as follows:

never	1
seldom	2
sometimes	3
often	4
always	5

Examples.

1. He makes me feel that he is ready and available to give help and advice when I need it.

never	1
seldom	2
sometimes	3
often	4
always	5

2. When she wants me to do something she explains it.

never	1
seldom	2
sometimes	3
often	4
always	5

3. *ROBINSON'S ACHIEVEMENT MOTIVATION SCALE*

QUESTION NO.	RESPONSE	SCORE
1	as many as possible	5
	many	4
	some	3
	few	2
	very few	1
2	nearly always	1
	frequently	2
	about half the time	3
	seldom	4
	hardly ever	5
3	most	5
	many	4
	some	3
	few	2
	very few	1
4	strong agreement	1
	agreement	2
	neutral	3
	disagreement	4
	strong disagreement	5
5	almost 0%	1
	almost 25%	2
	almost 50%	3
	almost 75%	4
	almost 100%	5
6	hardly ever	5
	seldom	4
	about half the time	3
	frequently	2
	nearly always	1

7	not at all	1
	not very	2
	medium	3
	fairly	4
	very	5
8	very	1
	fairly	2
	medium	3
	not very	4
	none	5
9	quite untrue	5
	not very true	4
	unsure	3
	fairly true	2
	quite true	1
10	most	5
	many	4
	some	3
	few	2
	very few	1
11	strong agreement	5
	agreement	4
	neutral	3
	disagreement	2
	strong disagreement	1
12	hardly ever	1
	seldom	2
	about half the time	3
	frequently	4
	most of the time	5

13	very few	5
	few	4
	some	3
	many	2
	most	1
14	hardly ever	5
	seldom	4
	about half the time	3
	frequently	2
	most of the time	1
15	strong disagreement	1
	disagreement	2
	neutral	3
	agreement	4
	strong agreement	5

4. *BROOKOVER'S SELF-CONCEPT OF ACADEMIC ABILITY SCALE*

QUESTION NO.	RESPONSE	SCORE
1	I am the best	5
	I am above average	4
	I am average	3
	I am below average	2
	I am the poorest	1
2	I am the best	5
	I am above average	4
	I am average	3
	I am below average	2
	I am the poorest	1
3	among the best	5
	above average	4
	average	3
	below average	2
	among the poorest	1
4	very likely	5
	somewhat likely	4
	not sure either way	3
	unlikely	2
	most unlikely	1
5	my work is excellent	5
	my work is good	4
	my work is average	3
	my work is below average	2
	my work is much below average	1
6	mostly 10/10	5
	mostly 7/10	4
	mostly 5/10	3
	mostly 3/10	2
	mostly 1/10	1

APPENDIX C

RAW SCORES

APPENDIX C

RAW SCORES

BOYS

SCHOOL 1 : S.NO. 1 - 30

SCHOOL 2 : S.NO. 31 - 63

SCHOOL 3 : S.NO. 64 - 147

GIRLS

SCHOOL 1 : S.NO. 1 - 40

SCHOOL 2 : S.NO. 41 - 84

SCHOOL 3 : S.NO. 85 - 159

KEY TO HEADINGS:

HEADING		VARIABLE	MAXIMUM SCORE
S.NO.	=	STUDENT NUMBER	
S.E.S.	=	SOCIOECONOMIC STATUS	27
F.I.C.	=	FATHER'S INVOLVEMENT	90
M.I.C.	=	MOTHER'S INVOLVEMENT	90
A.M.	=	ACHIEVEMENT MOTIVATION	75
S.C.	=	ACADEMIC SELF-CONCEPT	30
ENG.	=	ENGLISH	100
MATH	=	MATHEMATICS	100
L.2	=	SECOND LANGUAGE	100
AVE.	=	AVERAGE % FOR THE WHOLE EXAMINATION	

BOYS

SNO	SES	FIC	MIC	AM	SC	ENG	MATH	L2	AVE.
1	24	54	55	48	27	61	77	45	63
2	23	46	50	60	23	57	54	63	48
3	23	71	58	55	26	60	50	57	59
4	22	60	59	55	17	50	68	48	53
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GIRLS

SNO	SES	FIC	MIC	AM	SC	ENG	MATH	L2	AVE.
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