A COMPARATIVE STUDY OF HIGH ACHIEVING BOYS AND
UNDERACHIEVING BOYS IN A CO-EDUCATIONAL SECONDARY
SCHOOL IN BARBADOS

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by

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ABSTRACT

A Comparative Study of High Achieving Boys and Underachieving Boys in a Co-Educational Secondary School in Barbados

Yvette Rosemary Mayers

This case study attempted to determine the factors which distinguish boys who are achieving highly from those who are underachieving in the context of a coeducational secondary school. Attribution theory was introduced as the conceptual framework for the investigation. The study was undertaken with an ontological stance of constructivism and an epistemological position of interpretivism.

Data collection methods included the examination of school documents, focus group and individual interviews and questionnaires. Student’s T-Test was used to compare the means of the responses on the student questionnaire to determine if there was any statistical difference between the responses for the two groups of boys.

The high achievement of boys was attributed to natural talent and consistent and persistent effort, good time management, and the support and encouragement of their parents. There was a significant difference between the high achieving boys and the underachieving boys in the area of academic self-handicapping. There was a significant difference between the levels of motivation of both groups of boys. The high achievers tended to have an incremental theory of intelligence, though this was not significantly different from the underachievers. There was however a significant difference between the two groups of boys, with the high achievers caring more about how their teachers and other boys viewed them as persons.

Both high achieving and underachieving boys generally had positive attitudes to their school and indicated that they wanted to do well in school. Both groups tended to have traditional patriarchal views about masculinity. However, the high achievers also associated masculinity with intellectual competence, respect and deportment.

Strategies to improve the academic attainment of the boys must take into consideration the individual. Students who are underachieving need to develop their meta-cognitive skills. Wherever possible parents should be a part of any intervention strategy.

Key Words: Boys, underachievement, attribution theory
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1.0 INTRODUCTION

1.1 The Importance of the Study

The primary purpose of this study is to identify some of the significant factors that distinguish underachieving boys from those who are achieving highly in a coeducational secondary school in Barbados and to offer potential solutions. The desire to conduct this study arose out of the perception that many boys are underachieving in our education system, not only in Barbados but the wider Caribbean. Every year, without fail, when the results of the Caribbean Examination Council’s (CXC) external examinations are published, there is wide discussion in the print and electronic media in Barbados about the academic performance of our students.

Headlines such as the following have appeared in the print media through the years:


Discussions centre on the underperformance or underachievement of males as compared to the academic performance of the girls. Several theories are offered.
Many of the concerns shared revolve around the issue of male marginalisation in society and consequently in the educational system. Furthermore, there is the belief that coeducation is having a negative impact on the performance of boys.

In such discussions, I have noticed that very little attention is given to the fact that there are some boys who are achieving highly in the same educational system. This aspect of the phenomenon captured my interest as I wondered why some boys were able to achieve the desired standards while others do not. It was against this background that I felt it necessary to explore what appears to be a phenomenon of male underachievement.

This investigation is placed in the context of education in Barbados and is considered against the historical background of the struggle of the people of Barbados to make formal education accessible to all its citizens. Some of the major issues and discussions surrounding male underachievement are considered. However, through consideration of the literature on gender and achievement, it will be shown that concern about male underachievement is not just local, but is also a global phenomenon. It is my intention to make clear that there are sub-groups within both genders who are achieving highly as well as those who are underachieving. In this particular investigation I have explored the patterns and possible reasons for these sub-groups of males.
1.2 The Historical Context of Education in Barbados

Barbados, the most easterly of the Caribbean islands, is a former British colony, 166 square miles in size. The 2011 population for this country was approximately 287,000; 90% of whom are black, 4% white and 6% Asian and mixed. There is an even distribution of males and females at the compulsory school age, that is, under the age of 16 years (CIA: The World Fact Book, 2012). This country places a high premium on education and boasts of an adult literacy rate of 99.7% (Barbados Ministry of Economic Affairs and Development, 2007).

In the pre-nineteenth century era, little attention was given to the formal education of Barbadian children. Those who could afford it sent their children to England. There were a few private schools, mainly run by religious institutions, but these catered to the fee-paying white population. In the years immediately preceding the emancipation of the British slaves (which came in 1833), the first primary school for coloured boys was established in 1818 by the Anglican church, under the leadership of the first Anglican Bishop of Barbados, William Hart Coleridge. A primary school for coloured girls was instituted in 1827. By the end of the episcopacy of Bishop Coleridge in 1842, there were about 200 schools on the island of Barbados. (Barbados Ministry of Economic Affairs and Development, 2007).

In the post-emancipation era, when the government became involved in funding education, the children of the freed black slaves were provided with a basic education of Reading, Writing, Arithmetic and Religious Education (often referred to as the four Rs). Initially these students were male and their teachers were mainly young white Englishmen.
At the beginning of the 20th century, there was intense criticism of the education system in Barbados. These criticisms focussed on the curriculum offered. When secondary education was introduced, the curriculum as well as the teaching staff was imported from Britain. As a result, schools were condemned as being severely academic, having little connection with the reality of life in the West Indies, and were hence thought to be depriving the students of essential technical and cultural skills. Consequently, the Marriot-Mayhew Commission was appointed in 1932 to investigate and make recommendations for education in the British colony. The implementation of the recommendations began in 1943 with sweeping changes throughout the educational system in Barbados. These included:

- The appointment of a Director of Education
- The establishment of the House Craft Centre in 1945 to train women in Domestic Science
- The introduction of the Visual Aids Department in the Ministry of Education to provide audio-visual materials to be used in schools
- The institution of the Erdiston Teachers’ Training College in 1948
- An expansion of the curriculum to a core of ten subjects for students between 10 and 13 years of age to include non-academic subjects like Domestic Science, Woodwork and Metalwork. (Gordan, 1963; Barbados, 2000)

In 1958 a separate Ministry of Education was created and in 1962 all citizens, between the ages of 5 and 16 years, were given free, compulsory access to secondary education. This landmark was so significant in the history of education in Barbados, that in 2012, the Ministry of Education felt it necessary to celebrate the 50 years of
free universal secondary education. A monument was unveiled on the premises of the Ministry of Education to mark the occasion. The first Prime Minister of Barbados, national hero, His Excellency Errol Walton Barrow, is championed as the one with the foresight and the fortitude to introduce free secondary education and made it accessible to all children. When universal access was made possible, education was welcomed by the Negro population as the means of attaining social mobility. This in itself proved to be a strong motivating force for those who benefited from free secondary and tertiary education in the 1960s and 1970s.

As a student in the education system during this period, the concept of education as a means of social mobility was pervasive. Though we may not have fully understood the implications then, the notion of social mobility proved to be a source of motivation for us as students. This concept was captured in the powerful lyrics of a calypso sung by Slinger Francisco, a calypsonian from Trinidad and Tobago singing under the stage name of ‘The Mighty Sparrow’. This bit of social commentary in song extols the virtues of a sound formal education. The lyrics of this calypso, entitled ‘Education’, encapsulate the feelings of the day.

Education, education this is the foundation
Our rising population needs sound education.
To be recognised anywhere you go
You got to have your certificates to show
To enjoy any kind of happiness
Knowledge is the key to success.
CHORUS:  
*Children go to school and learn well*

*Otherwise later on in life you go catch real hell*

*Without an education in your head*

*Your whole life will be pure misery, you better off dead.*

*For there is simple no room in this whole wide world*

*For an uneducated little boy or girl*

*Don’t allow idle companions to lead you astray*

*To earn tomorrow you got to learn today.*

For employment, yes employment you must be intelligent

So it’s essential, very essential to have your credentials

But if you’re block headed like a mule

Remember, no one will employ a fool.

You will be the last one to be hired

And the first one to be fired.

CHORUS:

*Illiteracy, illiteracy, is man’s greatest enemy*

*It’s your duty, yes your duty, stamp it out completely.*

*Ignorance always increases risk*

*Education saves you much distress*

*learn, learn as much as you can*

*This nation’s future is in your hands.*

CHORUS:
It’s a treasure; yes a treasure beyond any measure
So secure it, just secure it, don’t ever ignore it
I say to fight life’s battles come what may
Education will light up your way
Without it you never, never, get through
Success or failure now it is up to you.

*CHORUS*

(The Mighty Sparrow, 1967)

This calypso broached the issue of formal education. It explored the rationale for formal education and the need for students to attain some form of certification or credentials. It also reinforced the idea of formal education as a means of social and economic mobility. In this song, education is advanced as a lifelong activity. Negative peer pressure, in the form of ‘idle companions’, was to be avoided and abhorred. The message in this song is still relevant and is valued by many of us who grew up listening to these lyrics.

In order to ensure that persons who had access, participated in educational endeavours, the Government of the day, through the Ministry of Education, provided school meals for all primary school students in 1970. The Text Book Loan Scheme was established in 1973, to ensure that all students in secondary schools had access to textbooks (Barbados Ministry of Education and Culture, 2000). A small rental fee (which is waived for persons who cannot afford it) is paid each year. That fee is BDS$75 (approximately £23) per year.
In the 1970s, the discourse in educational circles in Barbados featured the marginalisation of girls in the education system. A National Commission on the Status of Women was established to investigate and report on aspects of the lives of women in Barbados, including access to education for girls and women at all levels of the educational system. As a student of a secondary school for girls in Barbados at that time, I had to attend classes at the nearby secondary school for boys, in order to pursue studies in Cambridge A-Level Physics. This arrangement was facilitated because, whereas girls could pursue studies in O-Level Physics, A-Level Physics was not offered on the curriculum of the girls’ school. The National Commission on the Status of Women reported, among other things, that the education system in Barbados discriminated against girls, and recommended that the provision of new school places be guided by the principle of equal access to education (Barbados National Commission on the Status of Women, 1978).

Consequently, in the latter half of the 1970s and into the 1980s, the Government of Barbados instituted a programme of coeducation in primary and secondary schools. Of the twenty-two Government secondary schools that currently exist, there are only two single-sex schools in Barbados, the Springer Memorial School for girls and the St. Leonard’s Boys’ School.

In the last twenty years or so, however, the discourse on education has now switched to concerns about the poor performances in Barbadian schools. There is a perception that our students seem not to value the educational opportunities available to them. The boys are the main focus of this dialogue with fierce discussion about the marginalisation of males in the context of education in Barbados. In 1995, the Government identified poor academic performance as one of the issues to be
addressed in its White paper on Education Reform (Barbados Ministry of Education and Culture, 1995). This led to the introduction of a comprehensive programme of the integration of computer technology into the curriculum in an effort to improve the delivery of the curriculum.

Leading up to this initiative, in the early 1990s, the national discussion in Barbados in the electronic media and in the press posited the view that coeducation was contributing to the marginalisation of males and hence the underachievement of boys in our schools (Jemmott, 1991; Symmonds, 1991). During this decade great emphasis was placed on the phenomenon of girls outperforming boys in our secondary schools. Blackman (1997) informed the populace that girls outperforming boys was not a Barbadian phenomenon, for there was a similar outcry in Britain. This retired principal of a secondary school felt that the problem was not co-education rather, the poor performance of boys was due to “socialisation, religion and feminisation (decline in the number of men entering the teaching service)” (Blackman, 1997:10A). Blackman, whose views on the socialisation of boys have been confirmed by Figueroa (2004) and Chevannes (2001), felt that boys were growing up on ‘the block’, away from the nurturing environment of the home, in an environment which was

hostile to traditional values and provides the ideal setting for macho outcomes – violence, drugs and other gang-related activities. There is no respect for authority and contempt for positive concepts such as education.

(Blackman, 1997:10A)
Blackman further suggested that the religious pursuits of females provide them with the tools necessary to be more disciplined and focussed, skills which he felt boys lacked in school.

In 1998, Sir Allister McIntyre, the then Vice Chancellor of the University of the West Indies, lamented the paucity of men entering the University of the West Indies. Females (then and still do) outnumbered the males 2:1. Another secondary school principal, R. H. Barker (1998:8A) responded to him in an article in the print media, attributing the “grammar school” approach to education for the failure of otherwise intelligent young men to proceed to a university education. He offered three areas for review: the system of accreditation, the coeducational setting and the curriculum of the University of the West Indies. He suggested that the university should seek to include programmes in the technical-vocational areas if they wanted to attract more males.

When I embarked on this course of study, I decided to review the most recent statistics issued by the Caribbean Examination Council (CXC) for its 2008 examinations to gain some insight into this phenomenon. In the thirty five (35) subjects offered for the Caribbean Secondary Examination Certificate (CSEC) (Appendix A), the number of male candidates surpassed the number of female candidates in only seven subjects. Those subjects were Building Technology (Construction), Building Technology (Woods), Electrical and Electronic Technology, Mechanical Engineering Technology, Physical Education and Sports, Physics and Technical Drawing.
The number of candidates writing Geography, Information Technology and Visual Arts were close with the number of girls slightly exceeding the number of boys. A casual observation of these statistics would support the view that girls outnumber and outperform the boys in the humanities and in French and Spanish, whereas the boys did better in the Sciences and in the Technical/Vocational Subjects.

In fact, the CXC 2008 performance by gender reveals that, if percentage passes are considered, then males are out-performing females in Mathematics (43.74%: 38.87%), Mechanical Engineering Technology (63.71%:54.55%), and Biology (79.90%:75.73%). While acknowledging that twice as many girls (9438) did Spanish as boys (4219) there was a marginal difference in the percentage passes for boys (68.41%) when compared with girls (68.96%). There were also marginal differences in Physical Education and Sport (97.80%: 97.74%) and Principles of Business (75.92%:75.76%).

Although these statistics only relate to one year they reflect a trend in the Caribbean. It appears that boys are predisposed towards some subjects and are motivated to attain success in them. There is the belief that people will seek situations that interest them and require the use of their creative resourcefulness. They seek challenges that are suited to their competencies that are neither too easy nor too difficult. When they find optimal challenges, people work to conquer them, and they do so persistently.

(Deci and Ryan, 1985:32)
It appears as though a majority of males either seem not to have found academic situations which interest them, or they choose not to persist in the academic tasks presented to them. In spite of all that has been said and done, there still seems to be a gender disparity in academic achievement as we measure it. In the annual report for the academic year 2011 – 2012, the Principal of the Cave Hill Campus of the University of the West Indies provided the registration data from 1999 – 2011/2012. Table: 1 indicates that the enrolment through the years has maintained an approximate 2:1 ratio in favour of the females. The trend persists.

![Growth of Total On-Campus Registration by Gender](image)

Table 1.1: On-Campus Registration at the UWI Cave Hill Campus, Barbados

The only faculty at the University of the West Indies, Cave Hill Campus, which registers more males than females each year, is the faculty of Pure and Applied Science (See Table 1:2). Courses offered in this faculty include Biochemistry, Biology, Chemistry, Computer Science, Ecology, Electronics, Information Technology, Mathematics, Meteorology and Microbiology. Mathematics and the Sciences seem to have greater appeal for the males.
1.3 The Socio-Political Context

The Barbadian society has moved from an era when boys were privileged to be the only beneficiaries of an academic education, to a situation where, as a group, girls seem to be achieving greater success than boys throughout the educational landscape of Barbados. Like most nations in the Caribbean, Governments of Barbados, through the years, have invested a large part of the national budget on education. In fact, education accounts for between 14% - 19% of the expenditure of the Government annually. As a result, the performance of boys is also perceived as potentially an economic issue.

The Current Vice Principal of the University of the West Indies, Cave Hill Campus, Barbados makes her opinion clear that “Education is an investment” (Caribbean News Now, online newspaper, August 18 2010). The current Prime Minister of Barbados, Hon. Freundel Stuart, announced in an article headed “Barbados Government spending large sums to boost education”, that the government plans to make “a massive investment” in education as they prepare to spend over US$500 million on education in the 2013-2014 financial year (Caribbean News Now, online newspaper,
December 07, 2012). This prompted further discussion in the electronic media: are taxpayers getting just returns for the investment in the educational systems? Furthermore, when these students fail to meet an acceptable standard in school, what are the social and economic consequences likely to be?

There is the anxiety that if the boys are indeed underachieving there may be social and economic repercussions. Madden (2012), in an article in the print media, disclosed that Barbadian employers were generally not satisfied with the level of performance of secondary school leavers entering entry-level jobs. His comments were based on the 2006 report on the National Initiative for Service Excellence (NISE) survey on an “Evaluation of Readiness of School Leavers for Entry to the World of Work”, which he felt was still relevant today. According to Madden (2012), the Chief Executive Officer of NISE, Miss. Kim Tudor, reported that employers thought that deficiencies of the school leavers included low self-esteem, lack of discipline, poor work ethic, unrealistic expectations, lack of perseverance and lack of pride in their work.

These concerns raised by employers are echoed within the walls of our schools and cannot be ignored. They have implications for the business of schools. I believe that part of the business of schools is to fashion citizens who can be productive citizens, meeting the needs of the society. As educators and school leaders seek to establish measures to improve the learning outcomes of the students in their care, there must be a clear understanding of the issues involved. With an expected injection of US$500 million in education in the 2013-2014 financial year, taxpayers will be expecting returns commensurate with this investment. But how does one assess returns in education? How do we measure success in education?
If we consider the basic measure of the number of passes in the subjects offered by the Caribbean Examination Council as a measure of success, then yes, the attainment of girls as a group surpasses that of boys as a group. But is this an acceptable measure? Skilbeck (1975) believes yearly examinations are inadequate means of measuring the progress of students. He argues that

> an adequate system of classroom evaluation and record keeping would relate individual pupils’ profiles much more closely to details of the syllabus being taught, identifying specific strengths and weaknesses in mastering particular skills and concepts …”

(Skilbeck, 1975:22)

Until we establish a more refined, relevant and acceptable measure, the current one is the one available to us at this time. Therefore for the purpose of this investigation this current measure of end of year examinations will be used to identify those boys who are achieving highly and those who are underachieving.

It is imperative that leaders in education make greater efforts to understand the perceived phenomenon of male underachievement in an effort to, where applicable, fashion the teaching-learning transactions to address the needs of these males who may be underachieving. I believe that the best persons to give insight to these needs, and how these needs could possibly be met, are the boys themselves. Not all boys are underachieving. In fact, some boys are excelling in the education system as it currently exists. Therefore, I believe that it is worthwhile to investigate the factors that distinguish those boys who are achieving highly from those who are
underachieving with a view to developing strategies to help those boys who are underachieving. As a result, this investigation will not be caught in the binary trap of considering the attainment of boys vis-à-vis the attainment of girls.

1.4 Objectives

This investigation has three broad objectives:

1. To provide a historical context for the examination of the academic performance of boys as a group in secondary schools in Barbados.

2. To determine what factors distinguish underachieving boys from high achieving boys.

3. To propose an intervention strategy to improve the academic performance of boys.

1.5 Statement of the Problem

The purpose of this study is to determine what factors distinguish boys who are achieving highly from those who are underachieving in a co-educational secondary school in Barbados. The views of the boys, school administration, teachers and a few girls were sought in this investigation. The following research questions were used to sharpen the focus of the literature search for the study.
1.5.1 Proposed Research Questions

1. To what factors do the school administration, teachers and students attribute:
   i  the underachievement of boys?
   ii the high academic achievement of boys?

2. To what do high achieving boys attribute their success?

3. To what do underachieving boys attribute their level of attainment?

4. What strategies would improve the academic performance of boys?

1.6 Definition of Key Terms

To ensure a common understanding of the concepts being discussed in this investigation, the following definitions will be used:

ACADEMIC ACHIEVEMENT: A level of attainment in the class assessments and examinations. For the purpose of this study, the marks for the end of year internal examinations of the students in the school will be used.

UNDERACHIEVEMENT: “A discrepancy between a child’s school performance and some index of the child’s ability. If children are not working to their ability in school they are underachieving”

(Rimm, 1997:18)
UNDERACHIEVER: An underachiever is a student who exhibits “a severe discrepancy between expected achievement (as measured by standardised achievement test scores or cognitive or intellectual ability assessments) and actual achievement (as measured by class grades and teacher evaluations). To be classified as an underachiever, the discrepancy between expected and actual achievement must not be the direct result of a diagnosed learning disability.” (Reis and McCoach 2000:157 as cited by McCoach and Siegle. 2003:145)

HIGH ACHIEVER: A child whose academic attainment is higher than 0.25 of the standard deviation of the students in the class, using the marks for the end of year examination.

1.7 Overview of the Remainder of the Study

In Chapter I the purpose of the study is stated. It outlines the scope of the problem and includes a list of proposed research questions.

Chapter II is a review of the related literature. It discusses the research findings in the literature, places the problem in context, discusses the key issues, establishes the
conceptual framework and provides the basis for the selection of the research questions in this study.

Chapter III is a description of the methodology used in the study. The aims and objectives of the study are restated. It outlines the design of the case study. Details are given on the profile of the school used in the investigation and the selection of the sample. The data collection methods are described and justified. Validity and ethical issues are addressed. The framework of the methods used to analyse the data follows. The chapter concludes with the limitations of the study using the stated research design.

Chapter IV is an introduction to and description of the data collected. The qualitative data gleaned from the teacher focus group and individual interviews, and from the questionnaires is presented first. This quantitative data gathered from the student questionnaire follows.

Chapter V addresses the main findings of the study and relates them to the findings in the literature. In this chapter the researcher subjects the findings to scrutiny against the background of the research literature reviewed in Chapter II. The chapter continues with a discussion and analysis of the theories, ideas, issues and challenges noted in the literature review. This section concludes with a summary which relates the findings to the research questions.

Chapter VI discusses the implications of the study and makes recommendations for further research.
CHAPTER II

2.0 REVIEW OF THE LITERATURE

This chapter reviews and discusses key perspectives from the literature in an effort to determine the factors which existing research links to the phenomenon of the perceived academic underachievement of boys. A distinction is made between the concepts of underachievement and low achievement. The factors identified include coeducation, pedagogy, gender socialisation and motivation. The chapter continues with an explanation of attribution theory, which is introduced as the conceptual framework for the investigation. The chapter concludes with a summary of the issues and the more refined research questions emerging from the literature are stated.

2.1 Academic Underachievement

When persons in the general public use the term underachievement, they are often referring to low levels of attainment. The distinction between underachievement and low achievement is not always clear in the literature and in some cases the terms are used interchangeably (Siegle, 2001). In the context of this study, underachievement will be defined as “a discrepancy between a child’s school performance and some index of the child’s ability” (Rimm, 1997:18). One can therefore extrapolate from this definition that when we use the term low achievement or the term high achievement, it is in the context of a person working to his or her ability. Consequently, as we refer to underachievers it will be with the understanding that:

Underachievers are students who exhibit a severe discrepancy between

expected achievement (as measured by standardised achievement test
scores or cognitive or intellectual ability assessments) and actual achievement (as measured by class grades and teacher evaluations). To be classified as an underachiever, the discrepancy between expected and actual achievement must not be the direct result of a diagnosed learning disability. (Reis and McCoach 2000:157 as cited by McCoach and Siegle. 2003:145)

Much of the discussion on underachievement in recent years has focussed on boys. The academic underachievement of males in school is a phenomenon which has engaged the attention of researchers globally. This phenomenon has prompted extensive research in places like the United Kingdom (Epstein et al, 1998; Spielhofer et al, 2002; Younger and Warrington et al, 2005), Australia (West, 1999; Jha and Kelleher, 2006), United States of America (Peterson and Colangelo, 1996; Kirby, 2003, Perry et al, 2010) and the Caribbean (Miller, 1991; Kutnick et al, 1997; Parry, 1997, 2000; Bailey, 2004; Jha and Kelleher, 2006; Cobbett and Younger, 2012; Younger and Cobbett, 2014).

As reports of the decline in the academic performance of boys gain currency there have been arguments which suggest that boys are being marginalised globally in the education system as it currently exists (Miller, 1991; Jha and Kelleher, 2006; Kutnick et al, 1997; Parry, 1997, 2000; Cobbett and Younger, 2012). More specifically, some argue that boys are underachieving only in the compulsory years at school where they have no choice in the subjects they do (Swann, 1998). There is evidence to show that the boys who perform creditably do so in the sciences and technology areas (Bailey, 2004). There is also evidence to show that the performance of boys improves
significantly at the Sixth Form level (Comber, 2001; Kutnick et al, 1997; Murphy and Elwood, 1998). But surely these boys who reach Sixth Form have done so because they have demonstrated competence in the academic curriculum.

What we term as underachievement may have more to do with the boys choosing not to engage in the education system as it currently exists, for whatever reasons (Jha and Kelleher, 2006, Bailey, 2004). In addition, what is described as the underachievement of boys may have much more to do with how we actually measure achievement, our methods of assessment (Murphy and Elwood, 1998, Skilbeck, 1975) and how we use data collected from such assessments (Bailey, 2004).

Even though the phenomenon of male underachievement is observed globally, there are some countries where boys do well academically. There is evidence that Asian boys often achieve highly in school. Their performance is attributed to the culture in which parents admonish their boys to study and achieve (West, 2010; Dandapat and Sengupta, 2012; Adenike, 2013). Therefore, the cultural environment is another factor which may be impacting on the academic achievement of boys.

Concern and discussions about the underachievement of boys are not new. In researching the historical perspective of boys’ underachievement in England, Cohen (1998:20) reports that:

from the late seventeenth century to the present - boys have always ‘underachieved’ and more importantly, this underachievement has never been seriously addressed. What I mean is that though it has been
of concern, underachievement has never been treated as a problem of boys … Boys’ achievement has been attributed to something within the nature of their intellect – but their failure has been attributed to something external – a pedagogy, method, text, teachers.

2.2 Theories Offered for Underachievement

Many theories have been proffered for the gender disparity in academic achievement. Some have sought to attribute the underachievement of boys in secondary schools to factors such as coeducation (Carrington, 1993; Parry, 1997), the curriculum and pedagogy of schools (Kutnick et al, 1997; Bailey, 2004; Majzub and Rais, 2010) gender roles, behaviour and attitudes (Jackson, 1998, Epstein, 1998; Parry, 2000, Younger and Warrington et al, 2005; Jha and Kelleher, 2006; Cobbett and Younger, 2012; Younger and Cobbett, 2014), as well as educational motivation (Deci and Ryan, 1985; Dweck, 1986; Dweck 2000). However, there is evidence to suggest that among both boys and girls, there are students who are achieving highly and there are others who are underachieving (Peterson and Colangelo, 1996; Mahony, 1998; Murphy and Elwood, 1998; Martino, 2008; Bailey, 2004; Cobbett and Younger, 2012). It is therefore important that we desist from treating all boys as a homogenous group of underachieving students.

2.2.1 Coeducation

Much of the discussion on the underachievement of boys in Barbados focuses on the impact of coeducation on the boys. This prompted Carrington (1993) to examine the relationships between gender composition of the Christ Church Foundation School in
Barbados, Common Entrance scores, socioeconomic status and gender and academic achievement. This school once existed as two separate schools: Christ Church Boys Foundation and Christ Church Girls Foundation Schools. However, in 1978, the Government of Barbados amalgamated the two schools into one co-educational institution. This school is the only coeducational school in Barbados formed from two separate institutions.

Using questionnaires, interviews and data gathered from the school records for the period 1972 – 1990, Carrington (1993) investigated three periods which she called the pre-amalgamation (1972-1977), amalgamation (1978 – 1984) and post-amalgamation (1985-1990) periods. The results of her data analysis revealed that there was no significant difference in the overall performance of boys between the single sex and co-educational stages of the school. However, the performance of girls was found to be higher in the co-educational period than in the single sex period. Her observations suggest that whereas coeducation had a positive impact on the academic performance of girls at this school, there was hardly any effect on academic performance of the boys. These findings do not support the theory that coeducation negatively impacts on the academic achievement of boys. More so, they seem consistent with the observation by Cohen (1998) that boys have always been underachieving.

A larger and more detailed study was conducted by Spielhofer et al (2002) to determine the effects of school size and single sex education on academic performance in Britain. After investigating more than 2000 secondary schools (comprehensive and grammar; single sex and coeducational), Spielhofer et al (2002) found no significant difference between the performance of boys of middle or higher prior attainment, in single sex and coeducational comprehensive schools. They
however found that: (i) boys in single sex grammar schools performed better than in coeducational grammar schools; and (ii) boys of low prior attainment in single sex comprehensive schools performed better than their counterparts in coeducational settings. These are boys at the top and bottom of the academic ladder.

Furthermore, a New Zealand based research report offered evidence that boys performed better in the single sex schools than in the coeducational schools. However, this report added that even though the boys in the single sex setting outperformed boys in the coeducational setting, the achievement gap between boys and girls in the single sex schools was greater than in the coeducational schools (Aiken, 1999 as cited by Jha and Kelleher, 2006). This suggests that there is greater gender parity as it relates to academic achievement in the coeducational setting. In essence, wherever they are schooled, girls as a group achieve at higher levels than boys as a group.

The observation that girls were outperforming boys at every stage of education in Trinidad prompted the research carried out by Kutnick et al (1997). This study, funded by the Education Division of the Department of International Development, London, was extended to include Barbados and St. Vincent. Kutnick et al (1997) sought to ascertain why females were succeeding so consistently within the classroom and the educational system, and to establish whether female educational strategies were distinct from strategies displayed by males at the classroom level. For consistency, one trained researcher was used to observe teacher behaviours, student behaviours, classroom management strategies and teaching and learning strategies in the secondary schools that made up the sample.
In the Barbados stage of the study a quantitative survey was used to determine if the girls were indeed outperforming the boys. Data were also collected on parent occupation, common entrance examination scores and end of term test scores. The case study was designed to glean qualitative data of the teaching-learning interaction. This investigation used a large sample in both primary and secondary schools. The secondary school sample of twelve was stratified and included four Sixth Form schools, along with three long established (or older secondary) schools, three newer secondary schools (built in the 20th century), one boys-only school and one girls-only school, all without Sixth Forms.

In the schools without Sixth Forms, students graduate at the end of Fifth Form year on completion of the regional Caribbean Examination Council (CXC), Caribbean Secondary Education Certificate (CSEC). Kutnick et al (1997) chose their sample from the Second Forms (12-13 years old), Fourth Form (14-15 years old) and Sixth Form (at least 16 years old). The Sixth Form schools tend to be the older schools with a tradition of academic excellence. These schools tend to be the schools of choice in the Barbados Secondary School Entrance Examination (BSSEE), which is used to transfer students from primary to secondary schools.

Using average raw scores assigned by teachers in end of term examinations, the researchers found no significant difference between the attainment of boys and girls in the Sixth Form schools in the core subject of English, Mathematics, Social Studies and Integrated Science. In the other secondary schools, girls maintained their superiority in English and Social Studies but there was no significant difference in Mathematics and Science. Kutnick et al (1997) found evidence that suggested that
those boys whose parents were professional or held a managerial position which required advanced studies, tended to be academically successful.

The academic performance of boys increased the further up they went in school (Kutnick et al., 1997). A closer examination of the data however reveals that this was against a backdrop where the number of boys in school decreased the further up in the school, with a significant drop-off at Fourth and then at Sixth Form. Starting with the same number of males and females in First Form, sample figures showed boys being 53% of the Second Form year group; 44% at Fourth Form and 35% in Sixth Form (Kutnick et al., 1997). With no explanation offered for the 53% at the Second Form year, I am left to postulate that the number of boys at Second Form may have been boosted by some boys repeating the year at this level.

Studies in Britain have also found a recovery and improvement in the performance of boys on entry into the Sixth Form. This improvement is reportedly accompanied by a positive change in the attitude of these boys. One could surmise that boys who were underachieving over a prolonged period would have fallen away and those who reached Sixth form were those who were motivated to succeed and were therefore more focussed on academic goals. Those high school dropouts and those who did not go on to Sixth Form were predominantly the working class male student who seemed more interested in seeking early employment, mainly to satisfy a need for a breadwinner in the household, without giving much thought to career planning and future studies (Parry 1997; Mahony, 1998; Jha and Kelleher, 2006).

As we consider coeducation as one of the factors affecting the achievement of boys, there is some indication that boys, as a group, have always underachieved and that
coeducation seems not to have a significant impact on the attainment of boys. However, a quest to determine which boys are affected by coeducation reveals some interesting observations. We find that those boys who make it to Sixth Form attain high levels of achievement. Boys with prior middle to high attainment levels tend to perform better in the single sex grammar school setting than in the coeducation grammar school setting. At the other end of the spectrum, boys with low attainment levels perform better in the single sex comprehensive school than in the coeducational comprehensive school.

This evidence supports the stance that not all boys are underachieving in the education system as it currently exists. There are indeed boys who are excelling. Those persons who advocate that coeducation is responsible for the underachievement of boys often attribute the underachievement to what is described as male marginalisation in the education system.

2.2.2 Gender identity

One of the significant proponents of the male marginalisation theory is Professor Errol Miller. Driven by concerns about what he termed the marginalisation of males, he sought to gain further insight into this phenomenon. He explored the nature of, and the factors leading to changes in gender roles in the United States of America, the Soviet Union and the Caribbean. While describing gender as the way in which a culture defines masculinity and femininity, Miller (1991) concluded that the global phenomenon of male underachievement was rooted in gender as constructed by patriarchal societies.
Whether we refer to male marginalisation (Miller, 1991) or male privileging (Figueroa, 2004), the problem of male underachievement needs to be considered in the historical context, where men controlled an extensive and more powerful social and political space (Figueroa, 2004). Miller (1991) postulated that men in positions of power in patriarchal societies have sought to marginalise other men who presented a challenge to them and to their authority. Miller further suggested that these men of power opted to participate in the movement for the ‘liberation’ of women without fully anticipating the strides taken by women, once given full access to an academic education.

The phenomenon of male underachievement is extensive and is believed to be connected to the impact of the cultural expectations for constructs of masculine identity which stretches across demographic, racial and socioeconomic divides (Pirie, 2002, as cited by Cleveland, 2011). Stereotypical views of what it means to be a man evolve in a society. Furthermore, the stereotypes associated with cultural constructs of masculine identities may be unwittingly reinforced by teachers in the classroom environment and coaches in the sporting arena. Boys experience a fear of failure associated with not living up to society’s perception of masculinity and they therefore adopt behaviours in school which they anticipate will negate the chances of being called a sissy (Cleveland 2011; Epstein, 1998; Jackson, 1998; Parry, 1997).

Parry (2000) investigated male underachievement in high schools in Barbados, Jamaica and St. Vincent and the Grenadines, and found that boys behaved in much the same way in single sex and coeducational institutions with apparently the same effect. Researchers concur that the hard macho behaviours (displays of maleness) were primarily directed to other males, as boys sought to be accepted by their peers (Mac
Miller (1991) argued that the Government of Jamaica contributed to the marginalisation of males when all, except one teacher training college for men were closed, while three teacher training colleges were opened to women. One wonders why they would have found it necessary to segregate teacher training. The references to male marginalisation and male privileging pit the underachievement of males against the academic successes of girls, that is, to suggest that boys are failing because girls are doing well. Concern about this way of thinking led Parry (1997:223) to explore what she termed the ‘female as villain’ theory. Parry sought to determine if females as students and as teachers were linked to the underachievement of Jamaican boys: (1) through the sexual rejection of the male students by their female peers, and (2) through the preponderance of female teachers in schools.

Parry (1997) interviewed teachers, principals and guidance counsellors in eight Jamaican schools: two boys’ schools, two girls’ schools and four coeducational schools. The interviews collected data on aspects of classroom behaviour, motivation and performance and the pupil-teacher relationship. These interviews followed classroom observation of Fourth Form classes in English Language, Biology and Physics (Parry, 1997).

In terms of the sexual rejection of male students by their female peers, Parry (1997) found that boys were overlooking education in order to obtain material wealth. There was the observation that girls were opting for relationships with older men rather than boys their age. The theory emanating from the interviews suggested that this
behaviour exhibited by these Jamaican girls was for material gain and school boys had no money or gifts to offer them. This possibly is as a consequence of poverty experienced by these students. According to Parry (1997) this rejection by girls in some way prevented boys from proving themselves as heterosexual beings. In Jamaica, homosexuality is a grave sin and it is reported that men who are suspected to be homosexuals are run out of their homes and communities (Jamaica Observer: Jamaican News Online, May 06, 2011). Consequently, Parry (2000) observed a relationship between homophobic attitudes and male underachievement. Essentially, Parry (1997) found a critical connection between gender identity and failure. Some boys were rejecting education because it did not fit in with their perception of what it meant to be masculine.

The teachers in the schools investigated by Parry (1997) surmised that female-headed, single parent households and a predominance of female teachers prevented boys from experiencing male gender identity. There is evidence, however, which counters this perspective (Mac an Ghaill, 1994; Jha and Kelleher, 2006). Martino (2008) found that students did not identify the gender of the teacher as having a significant impact on their learning. Rather these students were more concerned about good pedagogy, a relevant, engaging and demanding curriculum, and the ability of the teacher to develop respectful relationships with their students.

Male gender identity and its attendant behaviours seem to have a significant impact on classroom behaviour, participation in class, educational motivation and educational performance (Parry, 2000). However, academic achievement should improve if schools made changes which promote cooperation and respectful behaviour from all
its students (Jha and Kelleher, 2006), while addressing the issue of gender stereotypes. Furthermore, such “changes in the school’s curricula and process were more crucial than having male teachers and all-male classroom” (Jha and Kelleher, 2006:64). Academic gain could also be achieved by helping students develop skills such as “preparing to learn (personal discipline, organisational skills, attitude, ability to self-monitor) … acquire knowledge … and applying knowledge” (Fayombo, 2010:93).

### 2.2.3 Socialisation

In a study conducted at a coeducational secondary school in Barbados, Carrington (2003) found that home factors and factors related to gender identity, ranked higher than school related factors, as likely to contribute to male underachievement. This was supported by Adeyemi and Adeyemi (2014) who also found that the home environment ranked higher than student interest and study habits and school related factors. However, it must be noted that gender was not an issue addressed in this particular study.

Socialisations at home, as well as the interactions in the classroom between teacher and student, and among students, all contribute to gender identity building. It is lamentable that societal stereotypes seem to have a detrimental impact on masculinity, indoctrinating boys into unhealthy behaviours (Pollack, 1999; Plummer, 2013). These trans-generational cultural messages are part of the socialisation process boys experience from birth. These stereotypical views are collated in, what is dubbed, Pollack’s Boy Code, which suggests that
• Boys should be strong, sturdy, dependable and independent souls, who do not show signs of weakness, like complaining and crying.

• Boys should be daring, engaging in risky behaviour.

• Boys should seek to avoid shame at all costs, to always appear to be cool, to strive to achieve status and power.

• Boys should avoid any behaviour that can cause them to be labelled as feminine, like crying, asking for help, showing tenderness and love (no sissy stuff).

• Boys are expected to be sexually active, promiscuous even, without showing emotional attachment. (Pollack, 1999)

If this code is adhered to by the boys in the school system, then one can anticipate the impact it will have on the behaviour of the boys in school. Adherence to the Boy Code would certainly impact on their perception of education. Those boys who observe the Boy Code would not want to be seen as being smart or intelligent. They would not want to be seen as persons who enjoy activities such as reading and writing.

Displaying any of these “unmanly” behaviours – demonstrating intelligence, being articulate or adept at conflict resolution, showing emotional sensitivity, reading and writing well – results in a boy being labelled a sissy.

(Cleveland, 2011:40)
In order to avoid being labelled as feminine or homosexual, some boys embark on proving their masculinity by fulfilling the requirements of the Boy Code. But this adherence to the code often results in the undermining of the self-esteem of the boys (Pollack, 1999; Cleveland, 2011).

Adhering to the boy code not only limits a boy’s engagement with learning by heightening his fear of being labelled a sissy, but it also heightens his fear of failure, spurs self-protective or deflective behaviours to avoid such failure and squashes his social skills and emotional resiliency, all of which affects his ability to learn.

(Cleveland, 2011:47)

Weaning boys from this narrow definition of masculinity to a broader one is not only time consuming but requires energy (West, 2010). However, it is well worth the effort. In schools where gender constructions are less accentuated, boys produce higher levels of attainment (Warrington et al, 2005 as cited by Martino, 2008). As a result, one would expect that strategies which reduced constructions of gender difference will facilitate the academic achievement of boys.

The presence of role models in the life of the boys is invaluable. Such role models should be able and willing, not just to help the boys get better marks, but to help them develop a wider emotional language in support of lifelong relationships (West, 2010). The negative impact of the boy code increases when “a boy lacks a strong, positive role model to demonstrate on a daily basis that being a man involves more than adhering to the code’s simplistic, stereotypical version of masculinity” (Cleveland, 2011:48).
2.2.4 Attitudes to School

The issue of underachievement might be contextual in nature. More about how we “do” school (Cleveland, 2011:15). The ways in which boys function in the school environment, their attitudes about school and self may be significantly impacting on their academic performance. “Successful school attainment must be seen as an interaction between home background and support, the cultural and stratified structure of the school system and the quality of the interaction within classrooms” (Kutnick, 2000:82).

In comparing high achieving and low achieving adolescents, Seigle (2001) focussed on their attitudes towards school, attitudes towards teachers, their goal-valuation, motivation and general academic self-perceptions. In this context goal-valuation refers to whether the student identifies with, and values the goals of the school. Seigle (2001) found differences on all five factors, with academic self-perception and motivation being the most significant predictors of the student’s achievement status. There was some correlation with goal-valuation but no significant difference as it related to attitude towards teachers and school. Reference was made to research which suggests that underachievers display negative attitudes towards school. A correlation was found between affective attitudes towards school and achievement for girls but no such correlation was found for boys (Majoribanks, 1992 as cited by Seigle, 2001). Intuitively, one would expect the correlation between attitude to school and the academic achievement of all students. However, if we are to accept these findings, it seems as though the attitude of boys to school is shaped by other non-academic factors.
Attitudes to school can be influenced by the relationships that exist in the school. Central to this is the peer relationships. The social relationships in the school environment may be fulfilling a need for the boys, which the academic environment does not address. Central to this is the teacher-pupil relationship. Boys complain that too often teachers don’t ask, don’t listen and don’t care about them. It is their perception that school is a place attuned to the needs of people who are quiet, articulate and well presented (West, 2010), definitely not the boys.

2.2.5 Pedagogy

The key to understanding underachieving boys therefore lies in the context of the problem i.e. the manner in which social and academic factors within the classroom affect an underachieving boy’s ability to function as a learner within the classroom (Weaver-Hightower, 2005 as cited by Cleveland, 2011:18). Along with issues related to gender identity, the disruptive behaviours observed in the classroom may be as a result of a dissonance between the teaching style of the teacher and the learning style of the student (Cleveland, 2011). This dissonance has it greatest impact when students have a strong learning style preference. One must be wary however that learning style is not a fixed entity and may change in adolescents.

There are several different views about learning style in the context of the classroom. Carl Jung is credited as the initiator of learning style theory. Jung associated learning style with the way in which a student perceives information (sensing versus intuition), make decisions (logical thinking versus imaginative thinking) and how active or reflective they were while interacting with the information (extroversion versus introversion (Silver et al, 1997). The Myers-Briggs Type Inventory (MBTI) adds
another dimension of judging versus perception, producing four dichotomous personality dimensions (Sear et al., 1997; Silver et al., 1997)

When Cleveland (2011) explored what distinguished academically successful students from those who were struggling, she considered results using the MBTI. Cleveland (2011) reported that it was the sensing-thinking and the intuitive-thinking students, who tended to be academically successful. These students tend to be “knowledge-oriented, work well independently, and deal competently with objective assessments” (Cleveland, 2011:25). Those students, whose learning styles were sensing-feeling and intuitive-feeling, formed a highly significant 87% of the learners who were at risk of failure. These students learn best by working interactively with other and needed to make a connection between personal experienced and the material to be learnt.

There are several learning style models. However, my preference is for the multidimensional Dunn and Dunn Learning Style model. Dunn et al. (1995), who understand learning style as the way in which a student begins to concentrate on, process and retain new and difficult information, identify 21 elements which may affect learning. Included in these are two elements which suggest that learners may be affected by

- Psychological elements or processing inclinations such as global vs. analytical; right brain vs. left brain; impulsive vs. reflective.
- Their own emotional state. This includes their motivation, persistence, responsibility and the need for externally imposed structure or the opportunity to do things their way.
The belief is that underachievement is inevitable when the teaching style of the teacher is incompatible with the learning style of the student (Dunn et al, 1995). In a case study on the relationship between academic achievement and learning style, Mayers (1999) found, among other things, that

1. Those students achieving highly in class were analytical perceivers (i.e. verbal, sequential, logical learners who planned ahead and preferred a formal study setting). These students were highly motivated, highly persistent and very responsible.

2. One third of the boys ranked very low on persistence.

3. There was a strong correlation between persistence and academic achievement.

As we try to understand why boys are underachieving in our secondary schools some consideration will be given to how high achieving boys differ from underachieving boys in their level of motivation and persistence. If we can determine the causes of successes and failure, then we should be better able to manage the change necessary to improve the attainment of the boys.

2.2.6 Motivation

Quite often we hear that boys are not intrinsically motivated to succeed academically. Motivation is a concept which is difficult to define. Intrinsic motivation is “an innate, organismic need for competence and self-determination” (Deci and Ryan, 1985:32). This is often manifested when a person engages in an activity producing a quality performance, which they enjoy without the expectation of an extrinsic reward. There
is the school of thought that praise and rewards for performance actually undermines intrinsic motivation (Deci and Ryan, 1985). The focus of the formal education system on rewards, has been condemned as a system which manipulates students to do what we want and in the process destroys

the love of learning in children, which is so strong when we are small, by encouraging and compelling them to work for petty and contemptible rewards – gold stars, or papers marked 100 and tacked to the wall, or As on report cards …

(Holt, 1964:165)

Several motivation theories abound, ranging from mechanistic (human as passive participant) to organismic (human as active participant). Organismic theories recognise basic intrinsic needs and physiological drives like hunger, sex and the avoidance of pain and their impact on behaviour (Deci and Ryan, 1985). For example there is the classical Freudian theory which is based on people’s desire to seek pleasure (especially physical pleasure) and avoid pain (or punishment) (Dweck, 2000).

The McClelland-Atkinson theory is a research based theory which proposes that persons are motivated to act in a quest of three outcomes: achievement, affiliation and influence. The fear of failure is a critical factor in the McClelland-Atkinson theory (Dweck, 2000). This theory proposes a mathematical model which essentially states that whether a person engages in or avoids an achievement situation depends on his or
her need to achieve. This need to achieve = motive to achieve success – motive to avoid failure. If the motive to achieve success is stronger than the fear of failure, then the person will participate in the achievement event. If the fear of failure is stronger, the person will withdraw from the achievement activity.

Much of the early research on achievement motivation identified a strong correlation between achievement motivation and the child-rearing practices of parents. This research suggested that when parents encouraged their children to try new things and rewarded high performance they established in their children a need to achieve. Conversely, when parents sheltered their children and punished them for failure, these children ended up with low achievement motivation (Arends, 1994). Accepting these finding would make it difficult for the school to conceive of ways to raise the academic achievement of students. Surely the school environment must also influence the motivation of the students. For this and other reasons, I have found attribution theory, as proposed by Bernard Weiner a more meaningful and acceptable explanation of achievement motivation.

2.3 Attribution Theory

Attribution theory is essentially organismic, stressing that there are many facets or elements making up the individual. Attribution theory is therefore useful in relating thinking to feelings and action. Heider (1958), as cited by Deci and Ryan (1985), is acknowledged with leading the discussions on attribution theory, which links the behaviours of individuals to both internal and external factors. This theory, based in social psychology, explores the causes of behaviour and the explanations, or what
Heider (1958) called attributions, individuals make for such behaviour. An individual’s attempt to explain why a particular behaviour or event occurred is referred to as a causal search.

Bernard Weiner is credited with developing a model of attribution theory to explain academic success and failure. According to Weiner, success and failure can be attributed to four causes: ability, effort, luck and difficulty of the task (Arends, 1994). The model proposed by Weiner (1985) posits three dimensions to the causal search, namely locus, stability and controllability. The locus relates to the location of the cause, whether internal (e.g. ability or effort) or external (e.g. environmental conditions, difficulty of the task or subject etc.). The locus has implications for the self-esteem and emotions of the individual: how they respond in the event of success (e.g. pride) or failure (e.g. shame or guilt).

The dimension of stability considers whether the cause is stable i.e. the same behaviour will have the same outcome, if it will persist over time; or unstable i.e. the same behaviour has different outcomes or is temporary. This dimension of stability has implications for how the individual views future outcomes. For example, students who attribute their failure to the difficulty of the subject, a stable factor, will expect to fail the subject in the future.

The dimension of controllability adds the element of a sense of personal responsibility. It addresses those causes we can change (controllable) and those we cannot change (uncontrollable) and the feelings which result from our success of failure. (Weiner, 1985; Deci and Ryan, 1985; Graham, 1991; Dweck, 2000; Reyna, 2000). Using these causal dimensions, the student who attributes success or failure to
ability is indicating that success or failure is due to an internal factor which is stable, over which they have no control. On experiencing failure this student may show signs of helplessness. If the success or failure is attributed to effort, then the success or failure is internal, unstable and controllable. There is therefore hope for future outcomes.

Weiner (1985) in defending his theory against the criticism that it was a common sense theory extols the conceptual analysis that it offers and the principles which allow for the explanation of how facts fit together in a vast array of observations, not only in education, but in social and psychological domains. No research disputing the validity of attribution theory was available. However, in the research found, the methodology involved scenarios being used to determine the attributions of individuals (Goetz and Dweck, 1980; Graham, 1991; Dweck, 2000; Perry et al 2010). What is noteworthy is that attribution theory does offer some hope to teachers in guiding students to raise their achievement levels.

No available work used actual classroom behaviour in a causal search in a secondary school setting. However, there was evidence to show how students could be taught to attribute their failures to controllable characteristics like effort, resulting in improved academic performance (Dweck, 2000, Perry et al, 2010). There is limited literature on attribution retraining in secondary schools. Most of the studies done refer to college students and a few were done in primary schools (Perry et al, 2010; Dweck, 2000).

Graham (1991) has explored attribution theory in the context of academic achievement by scanning the Journal of Educational Psychology for the period 1979 – 1988. In this ten year period, Graham reports a high number of 66 published studies
used attribution theory as the primary conceptual framework, with Weiner’s model being the framework of choice by most researchers.

2.4 Self-Theories

Dweck (2000) is one such researcher who admits that she was influenced by Weiner and his pioneering work on attribution theory, which formed the basis for her work on learned helplessness. The research done by Dweck (2000) explores the concept of persistence in the context of what Dweck terms self-theories.

People’s beliefs about themselves (their self-theories) can create different psychological worlds, leading them to think, feel and act differently in identical situations.

(Dweck, 2000: xi)

Dweck (2000) cites studies done by Deiner and Dweck (1978, 1980); Dweck (1975); Dweck and Reppucci (1973), in which two distinct reactions to failure were identified, what they called the helpless and the mastery oriented patterns. In the face of failure, students who manifested a helpless pattern manifested “denigration of their intelligence, plunging expectations, negative emotions, lower persistence and deteriorating performance” (Dweck, 2000:6).

These persons who exhibited a helpless pattern believe that intelligence is fixed, that is, they hold an entity theory of intelligence (Table 2.1). Persons who reflected an
entity theory of intelligence define intelligence as “a person’s inherent capacity or potential” (Dweck, 2000:61). These persons believe that intelligence is more about ability than effort. For them, Intelligence = 35% effort + 65% ability (Dweck, 2000:62).

The mastery-oriented student, rather than seeking to assign blame for failure tends to focus on developing strategies to achieve mastery, in spite of the difficulties. In the face of failure, they are self-motivated to improve their performance (Table 2.1). This type of student possesses an incremental theory of intelligence and therefore believes that intellectual abilities can be increased with the necessary effort and guidance (Dweck and Reppucci, 1973; Dweck, 1975; Deiner and Dweck, 1978, 1980 as cited by Dweck, 2000). The mastery-oriented or incremental theory students define intelligence “as a person’s skills and knowledge” Dweck (2000:61). These students gave the mathematical formula for intelligence as: Intelligence = 65% effort + 35% ability (Dweck, 2000:62).

<table>
<thead>
<tr>
<th>Theory of intelligence</th>
<th>Goal Orientation</th>
<th>Confidence in present ability</th>
<th>Behaviour pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entity theory (Intelligence is fixed)</td>
<td>Performance goal (Goal is to gain positive judgements / avoid negative judgements of competence)</td>
<td>If high → Mastery-oriented Seek challenge High persistence</td>
<td>Mastery-oriented Helpless Avoid challenge Low persistence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If low → Helpless Avoid challenge Low persistence</td>
<td></td>
</tr>
<tr>
<td>Incremental Theory (intelligence is malleable)</td>
<td>Learning goal (Goal is to increase competence)</td>
<td>If high or low Mastery-oriented Seek challenge (that foster learning) High persistence</td>
<td>Mastery-oriented Helpless Avoid challenge Low persistence</td>
</tr>
</tbody>
</table>

TABLE 2.1: Achievement Goals and Achievement Behaviour (Dweck, 1986:1041)
Dweck (2000) argues against the intuitive belief that ability, success, intelligence praise and confidence in their intelligence, are at the heart of motivation and the key to achievement. Like Deci and Ryan (1985), Dweck recommends praising effort and strategies, to ensure that students interpret their experience as one of mastery. It is therefore important that teachers understand the impact their behaviours in the classroom may be having on the cues students may be receiving which may affect their motivation.

Teachers need to be aware that they may unwittingly be giving feedback which may signal to the students a teacher perception of low ability. When teachers perceive that student failure is due to low ability, they respond with pity or sympathy to the student. However, when the teacher perceives the failure is due to a lack of effort more often than not the teacher responds with anger. Students therefore used these cues from the teacher to attribute their failure to either lack of ability or lack of effort (Graham, 1984 as cited by Graham, 1991).

Furthermore, Graham advises that students take cues from the praise for success or the blame for failure. When teachers offered praise and did not ascribe blame, students interpreted this as a low-ability cue. For instance “frequent blame or criticism for the quality of one’s work was positively related to high self-concept on math ability and high future expectancies among students” (Parsons et al, 1982 as cited Graham 1991:11).

The interaction of teachers with students in the classroom provides a significant amount of feedback to the students. Help and neglect are other teacher behaviours which give students attributional cues. Graham (1991) cites research which has shown
that unsolicited help from teachers is construed by the student as a low-ability cue. However, the type of help offered by the teacher is pertinent. There is a distinction between instrumental help (such as probing) and gratuitous help, such as giving the answer. Furthermore, students interpret relative neglect by the teacher as a cue implying a lack of effort on their part (Graham, 1991).

Weiner also argued that the type of teacher feedback was important. A normative grade was considered an ego-involved feedback. This feedback tended to focus on the person, ego focus, resulting in less effort, reduced performance and an attributional cue of low ability. When teachers write comments about the performance of the student on an assignment, stressing ways in which the assignment could be improved, it is perceived as maintaining a task focus. This in turn supports a mastery approach to learning, resulting in greater interest in the activity, better performance and greater tendency to attribute failure to lack of effort (Graham, 1991; Siegle and McCoach, 2005).

In the traditional educational system, failure is more likely to occur during the transition from primary to secondary school. In this transition year, students are faced with harder work, a greater workload, less personalised instructions and a more stringent grading system (Dweck, 2000; DeHart et al, 2000). This is therefore the time when we can expect a decline in the academic performance of some students. According to Dweck (2000), we should begin to observe a disparity in the academic performance of the entity theory and the incremental theory oriented students. Even though our attention is focused on boys in this study, it is noteworthy that Dweck found a difference between the self-theories of bright girls and bright boys. Whereas
the bright boys, as a group tended to be more mastery oriented, the high achieving girls in the study had “the greatest vulnerability for helplessness. They are more likely than boys to have an entity theory of their intelligence” (Dweck 2000:123).

Dweck cites research which indicates that bright boys tend to be mastery-oriented. Boys seem not to take to secondary school as well as girls and their non-compliance attracts the attention of teachers and parents. Dweck believes this works to the benefit of the boys. If boys tend to be less diligent and attentive in class, the constant exhortations from teachers and parents to put more effort into their studies may be contributing to the mastery orientation in the boys who responded to such cajoling (Dweck, 2000).

Those students who underachieve may not lack knowledge of strategies, but rather they may not make the necessary connection that it is strategic behaviour, in conjunction with effort, which results in achievement (Borkowski and Thorpe, 1994, as cited by Seigle, 2001). Hence, one is left to conclude that for boys to be successful in the formal school setting, they would have to be intrinsically motivated to succeed, engage appropriate learning strategies and be persistent in their efforts.

Based on the preceding evidence, the fact that boys are underachieving would suggest that they may be entity theorists who do not value effort or who may even engage in self-handicapping, or deliberately withholding effort. Some boys seem to believe that

...if you withhold effort and do poorly, you can still think highly of your ability, and you can preserve the belief that you could have done
well had you applied yourself. If you somehow happen to do well anyway, then this is the supreme verification of your intelligence.

(Dweck 2000:41).

2.4.1 Effort

In the context of this discussion, I will therefore define effort as giving effective academic time and energy to a task. The theory of intelligence which a person embraces will influence their perception of effort (Dweck, 2000). For instance, students who hold an entity theory of intelligence believe that if you work hard at something it means you are not good at it. If you are good at something you shouldn’t need to expend any effort. These students interpret putting effort into studies is a sign of low ability.

The student who holds an incremental theory of intelligence views effort as something that allows you to fully use your ability and realise your potential. They acknowledge that even geniuses expend effort. However, students who hold an entity theory of intelligence may be sabotaging long term goals for the sake of short term judgement and may be minimising the effort they put into their school work even though they may honestly want to do well (Dweck, 2000).

Attribution theory is a meaningful conceptual framework, if the desired outcome is to ensure that the students benefit from the teaching-learning transaction. The self-theory of the student has its greatest relevance when failure occurs. The event of failure provides the opportunity to engage the student in a causal search. This
facilitates relatively immediate intervention as opposed to remediation after a longer time period has elapsed.

2.5 Intervention

Periods of academic transitions tend to be the most vulnerable time for students. The pattern of underachievement tends to be most critical when students entered secondary school (Peterson and Colangelo, 1996). This is the time when work will be different and more challenging and therefore there will be more opportunities for failure (Dweck, 2000; Perry et al 2010). Naturally, the sooner meaningful intervention occurs, the better for the students.

Attribution retraining is one of the methods used to intervene when students are failing academically. This involves moving students from a position where they attribute their failure to uncontrollable attributions like test difficulty, the quality of the teacher, ability and luck, to a position where they consider controllable attributions like effort and strategies (Dweck, 2000; Perry et al, 2010).

Much of the research found on attribution retraining relates to college students. Since first year college students are likely to be in a state of flux, they are therefore more able to benefit from the retraining of their attributions for failure (Perry et al, 2010). In fact, a dramatic increase in performance and motivation has been found when students were retrained to attribute failure to effort (Forsterling, 1985 as cited by Reyna, 2000). Black undergraduates who did attributional retraining also showed a marked improvement in college achievement. They reported “enjoying school more
and seeing themselves as more academically oriented than their peers in the control group” (Dweck, 2000:37).

The initial stage of the attributional retraining process used by Perry et al (2010) involved what they called causal search activation, designed to help students to identify their attributions for failure. The second step (attribution induction) involved the use of a video presentation which discussed strategies for improving poor performance. The thinking here is that if students viewed failure in terms of controllable factors then their behaviour could be modified, leading to improved performance. This culminated with ‘attribution consolidation’ designed to help students to actively seek explanations for success and failure.

After investigating the First Year in Junior High i.e. the transition from primary to secondary school, Dweck concluded that students’ theory of intelligence predicted their achievement. Interestingly, the students who were identified as entity theorists and who possessed a high confidence in their intelligence in primary school experienced the greatest decline in achievement in the transition. The incremental theorists who had low confidence in their intelligence showed the most impressive gains in the new environment (Dweck, 2000). On reflection, one may consider that the low confidence incremental theorists may have accepted the need to work hard and to develop meaningful strategies to ensure mastery. On the other hand, the highly confident entity theorists may have been so confident in their ability to be successful that they did not make the necessary effort in the transition.

Over a period of four years (2000 – 2004), Younger and Warrington et al (2005) conducted the Raising Boys’ Achievement Project on behalf of the University of
Cambridge faculty of Education, England. This study explored the ‘underachievement’ of boys from different perspectives. As a result of this longitudinal study, strategies were proposed which had the potential to enhance the learning, motivation and engagement of boys in school resulting in increased levels of attainment. This rigorous study, significant in its scope and depth was conducted in fifty primary, secondary and special schools in England.

The intervention strategies used in the “Raising Boys’ Achievement” project in England could be grouped into four different categories: pedagogic, individual, organisational and socio-cultural. For intervention strategies to work effectively, however, they should be long term and adopted in the context of a whole school approach (Younger and Warrington et al, 2005).

2.5.1 Pedagogic Approach

In their work on pedagogy, Younger and Warrington et al (2005) focused on literacy and learning styles. Many of the strategies used to develop literacy stimulated the interest and engagement of the boys as readers, writers, listeners and speakers. They saw gains in academic performance. This intervention stressed the importance of “talk, giving more attention to speaking and listening as a means of supporting writing” (Younger and Warrington et al, 2005:140).

There was no evidence to support the perception that the dominant learning styles of boys differed from that of girls. In fact, in some cases the learning styles of some students changed over time. Rather, academic gains were made when teachers planned multisensory lessons which encompassed different learning styles and were more creative in their teaching (Younger and Warrington et al, 2005).
The teachers at Hanham High School in England consulted with their boys in an effort to develop what they termed more boy-friendly teaching strategies (Kirby, 2003). However, those pedagogies which were effective for boys were also girl-friendly (Younger and Warrington et al, 2005). The boys at Hanham High felt that their concentration in class would improve if teachers provided short, focused and well-paced tasks. They also felt that teachers could break up the course work in smaller chunks with shorter deadlines for handing in assignments, since they recognised that they had a problem with time management (Kirby, 2003).

What these boys are recommending, chunking, is the presentation of new materials in small, digestible bites. This should be done in a logical well-paced sequence, giving children a chance to process and interact with the chunks (Marzano, 2009). The voices of the boys making such requests are therefore indicating that they do not cope well with long explanations and vague instructions (West, 2010). Therefore it would benefit the boys to use small steps as they work towards larger exercises. It may also benefit boys to have more immediate deadlines for handing in assignments (Fayombo, 2010). This in an effort to keep them focussed and on task.

2.5.2 Individual Approach

The individual approach used in the Raising Boys’ Achievement project focused on target setting and mentoring. The approach to target setting used in this project requires professional dialogue between staff and pupils in order to set realistic attainable goals. Well-structured, supportive target setting and mentoring were found to be transformative on achievement, attendance, behaviour and attitudes towards schooling, especially when students understood and bought into the idea. Successful
goal-setting and mentoring serve to boost the students’ sense of self-worth and belonging, their control over their lives and their ability to make decisions and effective choices about their future. However, the mentoring aspect of the intervention had different impacts in different schools (Younger and Warrington et al, 2005).

Some mentoring schemes eventually became counter-productive, exerting pressure on students which eventually became oppressive and demotivating.

(Younger and Warrington et al, 2005:142).

There is no one size fit all solution. Successful intervention requires members of staff who are sensitive and committed. The success of any mentorship programme depends on mentors establishing supportive and sustained rapport with the students, helping students to develop as independent learners. Mentoring is deemed to be most effective when there is

a mix of styles from each mentor – collaborative and supportive on one hand – offering strategies, advice and encouragement, and challenging and demanding on the other.

(Younger and Warrington et al, 2005:143)

Alternatively, rather than focusing exclusively on a mentorship scheme, the schools may need to focus on the establishment of trusting and secure teacher-student relationships, along with a supportive classroom culture, as a means of raising the
achievement levels of the boys (Cleveland, 2011). When teachers are prepared to focus with their students on acquiring life skills along with academic activity, trust develops (Siegle and McCoach, 2005; Cleveland, 2011).

2.5.3 Organisational Approach

Achievement levels have been known to increase when the school adopts a culture where achievement at all levels is recognised and celebrated. The whole school approach was most effective in the Raising Boys’ Achievement project when the pedagogy was interactive, lively and clearly structured. This was most obvious when teachers used a proactive and assertive approach, using praise regularly and consistently. Furthermore,

there must be a promotion of a team ethic, to forge an identity for the class of which the students can feel part, with humour and informality, and identification with students’ interest and enthusiasms.

(Younger and Warrington et al, 2005:145)

When students experience a positive, non-threatening classroom environment where they feel respected and experience a sense of belonging, academic gains result. This is achieved when the students value their unique gifts, when the teacher and students develop the learning culture together, developing a sense of shared responsibility Cleveland (2011).
Research in the Caribbean has similar outcomes as demonstrated in the “Change from within” intervention used in a Jamaican case study. The approaches used in this intervention included: Empowering school leaders; working on the positives by identifying the area of success like sports, performing arts and providing positive feedback. That intervention also required the creation of a culture of continuous improvement and a new pedagogy which included the use of the immediate environment as a learning resource allowing for collaborative learning, mentoring and the involvement of parents and the wider community in the school community (Jha and Kelleher, 2006).

Furthermore, student representation was also involved in the decision making process of the school. One cannot discount the input of the students. With strong leadership there was a marked improvement in the attendance and academic achievement of the boys. An interesting observation made with this type of intervention was that “changes in the schools’ curricula and process were more crucial than having male teachers and all-male classrooms.” (Jha and Kelleher, 2006:64)

2.5.4 Socio-Cultural Approach

Socio-cultural strategies should be central to any intervention strategy seeking to address the concept of the macho image portrayed by the boys. These boys need to be integrated more fully into the life of the school. Any attempt to alter the environment to make the boys feel as though they belong, addresses the perception that school is for girls. One of the secondary schools in the Raising Boys’ Achievement project adopted the initiative of identifying and using what they called key leaders within the peer group (Younger and Warrington et al, 2005).
This scheme identified the key macho image makers in the school and incorporated them positively in the life of the school. These key leaders were then assigned to a member of staff (known as key befriender) who already had a positive relationship with the key leader. This person served as a mentor charged with the responsibility of getting the key leader to complete coursework, attend extra lessons and work cooperatively within the school structure. This initiative was challenging to transfer other schools. This scheme worked only in the context of a school that promoted a culture of academic achievement. In choosing the key befrienders the emphasis was on “credibility, rapport, identification with student potential, persuasion and non-stereotyping attitude and behaviour” (Younger and Warrington et al, 2005:146). This again stresses the need for meaningful and productive student-teacher relationships.

Such an initiative must be handled with care, for invariably those boys who display macho behaviours tend to be popular and may relish the popularity gained. The stereotypical expectations imposed by society will be a significant force to reckon with in addressing the issue of underachievement. Therefore one must be very careful in helping the boys to achieve an academic focus, while still maintaining a palatable image. That is not easy. For adolescent boys, identity and image is important. One can therefore understand why it would have been so difficult to adopt the key leaders programme in other schools.

It is imperative that the broader issue of underachievement, along with all the factors which contribute to the mismatch between genders and the educational system, be explored together. Beyond the school setting the societal structures which foster male privileging must be challenged. However, adopting measures that further segregate
the genders to protect males from female competition are unlikely to bring success, and therefore the gender issues in education cannot be solved by confronting male underachievement in isolation (Figueroa, 2004).

Out of the Jamaican experience it was established that the recommended changes of promoting cooperation and respect, as well as the questioning of gender stereotypes, not only helped the boys but also benefited the girls (Parry, 2000). The way forward requires a focus on the individual as a person without the gender stereotypes getting in the way (Miller, 1991). The solution therefore lies in “a more gender fair culture” with “a new vision of masculinity that vigorously opposes patriarchy” (Jackson, 1998:93).

### 2.6 Summary

Attribution theory is accepted as the conceptual framework for this investigation. The literature is rich as it relates to the work done by several researchers using attribution theory. Among these is Carol Dweck who acknowledges that her work on self-theories has been influence by Weiner and his pioneering work on attribution theory.

The causal attributions for the underachievement of some boys should not only be considered from an external, unstable, uncontrollable perspective of pedagogy, methods and teachers, but from an intrinsic perspective as well. We need to treat the underachievement of boys as a problem of the boys, but definitely not at an expense of the girls. Not all boys are underachieving. Not all girls are exhibiting academic brilliance.
There is substantial literature on research done on the underachievement of boys globally. In some cases the research was originally focussed on girls and their achievement levels (Kutnick et al, 1997) or on gender parity in education (Bailey, 2004). The literature is therefore rich in considering the underachievement of boys in relation to girls. There is general agreement that boys, as a group, are not achieving as highly as girls, as a group, with some variation at the Sixth Form level. This global phenomenon demands greater interrogation and deeper analysis in order to determine which boys are underachieving and why.

One can find studies of the underachievement in schools for gifted boys (Frankel, 1960; McCoach and Siegle, 2003). There is research comparing high and low achieving boys (Peterson and Colangelo, 1996; Siegle, 2001), but no published studies can be found in the Caribbean, especially Barbados. Several studies investigated the underachievement of college or university students. However, there seems to be a dearth of published research that addresses the problem of the underachieving boy in relation to highly achieving boys in regular coeducational secondary schools in the Caribbean.

Of the available research, there is a focus on specific aspects of male achievement and underachievement (Fayombo, 2010; George, 2012). The investigations reported in the literature considered factors which could be categorise as extrinsic (pedagogy, curriculum, teacher quality and behaviours etc.) or intrinsic (gender construct and theory of intelligence). These factors should not however be considered as mutually exclusive. As a result of the paucity of work in this area, the decision was made to explore the phenomenon using a wider lens rather than considering a specific
problem, since a divide exists on the perceived causal factors of academic underachievement in boys.

Intervention strategies have been well documented. The concept of attribution retraining is recommended to help students to accept that developing meaningful strategies and exercising effective effort would result in academic success. What is clear from those intervention strategies recommended is that success is dependent on the leadership and management skills of the principal and the cooperation of staff and students. Short term measures will not result in long term benefits. There must be a whole school approach if we are to see any improvement in the academic performance of our students, recognising that strategies which help boys will also help the girls.

2.6.1 Conclusion

The investigation has three broad objectives:

1. To provide a historical context for the examination of the underachievement of boys as a group in secondary schools in Barbados.
2. To determine what factors distinguish underachieving boys from highly achieving boys.
3. To propose an intervention strategy to improve the academic performance of boys.

The purpose of this investigation is to determine what factors distinguish highly achieving boys from underachieving boys with a view of developing an intervention
strategy to raise the achievement of the underachieving boys. Factors to be considered will include (1) gender construct (2) motivation and (3) academic or career goals. This review of the literature and the conceptual framework of attribution theory provide the context for the analysis of the issue of male underachievement by delving deeply into one school in a case study.

2.7 The Research Questions

After consideration of the literature, the proposed research questions have been reviewed and extended. The research questions being used to focus the investigation are:

1. To what factors do the school administration, teachers and students attribute:
   
   i. the underachievement of boys?
   
   ii. the high academic achievement of boys?

2. To what do high achieving boys attribute their success?

3. To what do underachieving boys attribute their level of attainment?

4. Do underachieving boys and high achieving boys differ in terms of their academic and career goals?

5. How do high achieving boys and underachieving boys describe masculinity?
6. Do high achieving boys and underachieving boys differ in terms of motivation?

7. What strategies would improve the academic performance of boys?

Having provided a review of the relevant literature, attention will now focus on the methodology employed in the study.
CHAPTER III

3.0 METHODOLOGY

In this chapter, the research design is explained and justified. Details are given on the profile of the school used in the investigation and the selection of the sample. The data collection methods are described and justified. Validity and ethical issues are then addressed. The framework of the methods used to analyse the data follows. The chapter concludes with the limitations of the study using the stated research design.

3.1 Educational Research

Educational research may be defined as the “formal, systematic application of the scientific method to the study of educational problems” (Gay et al 2009:6). The scientific method can in a broad sense be described as going through the steps of (a) identifying and defining a problem, (b) data collection, (c) data analysis and (d) drawing and stating conclusions (Miles and Hubernam, 1994; Bryman, 2008; Gay et al, 2009). Even though educational research follows these four basic steps, not all educational research is strictly scientific in execution. There are two philosophical strands to educational research: ontology, what is there to know, and epistemology, how can we go about gathering this knowledge.

3.1.1 Ontology

Bryman (2008:4) describes ontology as having to do with whether the “social world is regarded as something external to social actors or as something that people are in the process of fashioning”. One’s view of what exists, what is real, can be considered to
be one’s ontology. One’s ontology will influence the way in which research is carried out and research questions formulated. Ontology may be examined under the frameworks of objectivism versus constructivism.

Constructivism is described by Bryman (2008:19) as an “ontological position that asserts that social phenomena and their meanings are continually being accomplished by social actors”. The implication is that social phenomena are not only produced by social interaction, but they are in a constant state of revision. Some phenomena in education cannot be directly observed and so concepts like intelligence, achievement and motivation are constructed to explain human behaviour (Gay et al., 2009). Knowledge is therefore viewed as indeterminate and as a result, what is presented as research is perceived as a version or a construct of reality.

In contrast, objectivism is an ontological position in which the phenomena and their meaning have an existence that is beyond the reach and influence of the social actors (Bryman, 2008). Therefore, knowledge is perceived as existing independent of human beings, to be discovered by human beings. There is no place for feelings and beliefs in objectivism. Rather the burden of the proof of existence is fundamental to objectivism. Knowledge is considered to be objective.

3.1.2 Epistemology

If ontology provides the framework within which the research questions may be considered, then epistemology focuses on the questions that need to be answered. Epistemology can be described as the study of knowledge - what constitutes knowledge, how we acquire knowledge and essentially how we know what we know.
(Bryman 2008; Gay et al 2009). Therefore, in the context of educational research, epistemology seeks to address what is acceptable knowledge in education. The approach taken in research is influenced by the epistemological stance of the researcher, whether the researcher perceives the acquisition of knowledge from a positivist or interpretive position.

### 3.1.3 Positivism

Positivism is essentially a scientific approach to research. Positivists believe that science provides us with the clearest possible ideal of knowledge. Trochim (2006) explains that positivists believe in empiricism, the concept that observation and measurement form the core of the scientific search for knowledge. The steps of the scientific method adopted in educational research appear linear, moving from hypothesis to the formulation of generalisations and new theories (Caesar, 2012).

Specifically, the scientific method, as used by the positivist, starts from a theoretical standpoint, using deductive reasoning (where the theory guides the research), to develop a hypothesis, then collect and analyse data. Following the data analysis, the hypothesis is then confirmed or rejected. The researcher may then use inductive reasoning (where the research informs the theory) to revise the theory in light of the research findings (Bryman, 2008). This approach seeks to generate hypotheses which can be tested experimentally, by controlling and changing different variables. Hence, this epistemological position reflects the view that knowledge is objective, measurable and can be generalised (Bryman, 2008; Gay et al, 2009). Hence, there is compatibility between the positivist epistemology and objectivism.
An important pillar of positivism is the claim of objectivity. There is a perception that the reduced influence of the researcher in the collection of the data makes the data collected more valid. The scientific approach to data collection easily lends itself to replication hence, according to the positivist, enhancing the reliability of the data collected (Bryman, 2008; Gay et al, 2009).

Some opponents of positivism deem it as an inappropriate model for the study of society. This approach has been considered limited when applied to “complex interactions within schools and classroom situations, intricacies of human actions and intangible education issues” Caesar, 2012:622). People perceive the world differently, and therefore there will be multiple constructs of reality which can even change over time. These opponents of positivism see reality as an internal construct and hence relate closely to constructivist ontology (Bryman, 2008). As a result, the interpretive paradigm presents a contrasting view to positivism and is preferred by some for social and educational research.

3.1.4 Interpretivism

Denzin and Lincoln (2003) as cited by Freimuth (2009), describe the period 1900 – 1950 as being dominated by positivism, whereas interpretivism emerged in the modernist age of 1950 – 1970. One significant distinction between the positivist and interpretivist stance is the role of the researcher in the data collection process. The positivist sees the researcher as distinct from the process, whereas the interpretivist immerses the researcher in the data collection process.
Unlike positivism, which seeks to control the environment in order to explain a phenomenon, interpretivism seeks to understand the phenomenon or behaviour within its natural environment. Interpretivism therefore tends to be more subjective and contextualised in a social or educational environment. Bryman (2008) believes that the interpretive paradigm acknowledges that the study of the social world requires a research approach which reflects the distinctiveness of humans.

The interpretive approach is to try to understand the subject from within, rather than imposing external frames and structures to study the subject (Cohen et al., 2000). The opinion here is that the acquisition of knowledge is by observation of the subjects in as close to a natural environment as possible. Human behaviour should therefore be considered in a context (Guba and Lincoln, 1994).

The interpretivist view is therefore essentially constructivist. That is a belief that we each construct our view of the world based on our perception and experiences. Since perception and observation are fallible, one would therefore expect that our social constructions will be flawed (Trochim, 2006).

Because of the subjectivity of this paradigm, concerns about validity and reliability are raised and must be addressed. Guba and Lincoln (1994) are of the view that the validity of qualitative data is enhanced by grounding it in theory. Gay et al. (2009) propose that the interpretive paradigm is compatible with qualitative research and encompasses among others phenomenology, narrative research, ethnographic research and case study research.
3.1.5 Critical Theory

The period 1970-1986 saw the emergence of critical theory believed to have originated in the University of Frankfurt (Denzin and Lincoln, 2003 as cited by Freimuth, 2009). Bryman (2008:693) describes critical theory as a realist epistemology, where its practitioners seek to identify structures in order to change them “so that inequalities and injustices may be counteracted”. The aim of the critical theorist is therefore to critique social structures with a view to emancipation or liberation. As a result, research is used to transform ignorance and misconceptions, to informed insight (Guba and Lincoln, 1994). This epistemological stance therefore perceives knowledge as subjective, contextual and evolving.

3.1.6 Feminist Influence

The feminist perspective has surfaced as a part of critical theory. This perspective is subjective, taken within a social context and tends to be qualitative. Bryman (2008) argues that the research process where data collection was done without much feedback to the subjects was incompatible with feminist values. As a result, qualitative methods of data collection were influenced by the feminist perspective of engaging the persons involved in the research process and not treating them simply as respondents. A feminist approach has influenced research methodologies by paying attention to the marginalised persons in the social context and this approach is seen as emancipating.
3.1.7 Paradigms and Approaches

Thomas Kuhn is credited with the popularisation of the concept of a paradigm. A paradigm can be considered as a set of beliefs, values and assumptions that a research community has in common with regard to the nature and conduct of research. That is, the accepted research culture, which focuses on what should be researched, how that research should be conducted and how the findings should be interpreted. (Bryman, 2008; Johnson and Onwuegbuzie, 2004)

Johnson and Onwuegbuzie (2004) contend that there exists a trilogy of major research paradigms: quantitative, qualitative and mixed methods research. Quantitative research is described as the collection and analysis of numerical data, whereas qualitative research may be considered to be the collection and analysis of non-numerical data with a view to gaining a deeper insight into the phenomenon of interest (Gay et al, 2009). The term mixed methods research is increasingly being used to describe research which combines quantitative and qualitative research methods (Bryman, 2008).

The quantitative approach includes methodologies such as surveys, correlational research, causal-comparative research and experimental research. It is based on an ontological standpoint of objectivism and develops through deductive reasoning. The quantitative approach starts with a hypothesis which is to be tested. Manipulated and responding variables are identified and provision is made to control other variables which may influence the collection of the data. This type of research tends to involve very little personal interaction between the participants and the researcher. (Bryman, 2008; Gay et al, 2009; Johnson and Onwuegbuzie, 2004).
Qualitative researchers tend to avoid stating hypotheses and other deductive activities before the data collecting process. Rather, induction (including the discovery of patterns) is preferred. The qualitative researcher is more focused on probing deeply into the research setting to gain an in-depth understanding of the way things are, why they are that way and how the participants in the context perceives them. The data tends to be collected in a naturalistic setting.

Johnson and Onwuegbuzie (2004:17) believe that mixed methods research comes naturally to the pragmatic practising researcher in education. They define mixed methods research as

the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or languages into a single study.

(Johnson and Onwuegbuzie, 2004:17)

One of the major reasons offered for mixing the methods is for the purpose of triangulation, especially in qualitative research where issues of research validity may arise. Triangulation is the process where more than one method of data collection or more than one data source is used so that findings may be cross-checked as a means of ensuring research validity (Bryman, 2008). Mixed methods research is also useful in the development of the research process. The findings from one method may be used to inform another method, hence expanding the breadth and depth of the enquiry process.
3.3 The Research Approach

Coming from a scientific background of Physics and Mathematics, my early foray in research was essentially quantitative. My growth in the field of education has however broadened my perspective and I am therefore inclined towards an ontological stance of constructivism with an interpretive epistemology. It is against this background that I have chosen to employ a case study methodology as the chosen research approach. Such an inclination does not however preclude the use of the quantitative methods to enhance the case study. Rather, Caesar (2012:625) recommends the “use of mixed methodologies by drawing on the strengths of both positivist and interpretive approaches to investigate the delivery of quality education”.

3.3.1 Case Study

The aim of this investigation is to determine what factors, if any, distinguish highly achieving boys from underachieving boys. A case study approach is believed to be suitable for this type of investigation. A case study entails the intensive analysis of a single case (Bryman, 2008; Gay et al 2009). Yin (2009) posits a twofold definition of a case study. Firstly a case study is described as an empirical enquiry which

- investigates a contemporary phenomenon in-depth and within its real context, especially when
- the boundaries between phenomenon and context are not clearly evident.

(Yin 2009:18)
Yin (2009) however recognises the need to expand on this definition. Since the boundaries between phenomenon and contexts are not clearly evident, his explanation of the case study approach goes on to address the data collection process and the data analysis strategies. Yin (2009:18) states that a case study inquiry

- copes with the technical distinctive situation in which there will be many more variables of interest than data points, and as one result
- relies on multiple sources of evidence, with data needing to converge in a triangulating fashion, and as another result
- benefits from the prior development of theoretical propositions to guide data collection and analysis.

This extended definition therefore justifies the case study as a research approach encompassing not only data collection, but data analysis as well. The case study is not just a form of qualitative research but it can also be inclined to mixed methods research (Bryman, 2008; Gay et al, 2009; Yin, 2009).

Whereas the case study approach tends to give a rounded and more profound picture of a given situation, it does have a number of disadvantages. Chief among these disadvantages is the lack of scientific rigour. Each case study design depends on the phenomenon under investigation and relies heavily on the skills and sagacity of the researcher. In order to ensure the reliability of the data collected, the researcher should have a good knowledge of the phenomenon under investigation and be sensitive enough to discern new and unexpected issues in the data collection process.
The researcher should also be adaptive and flexible. The researcher should be practiced in asking good questions and be a good listener. The researcher must furthermore ensure that all data are fairly and accurately reported (Yin, 2009). It is even more important therefore that the researcher, in the quest for acceptance, engages in critical introspection as part of the research process.

The uniqueness of the data in case study research presents as another disadvantage. With a case study one cannot generalise from the data, as is possible in, for example, the survey design. For this reason, case study researchers tend to analyse their data in the context of existing bodies of knowledge. The case study approach is rather time consuming and may require a variety of research settings and research tools (Yin, 2009).

3.3.1 The Procedure

This is a case study which makes use of a mixed method design, essentially for the purpose of triangulating the data. The study is predominantly qualitative, using focus group interviews, individual interviews and document searches. However, the case study also makes use of a questionnaire (Appendix B) given to the students, which uses a 5-point Likert-scale. This questionnaire is designed to distinguish any differences between the responses of the high achieving boys and the boys who are underachieving.

The principal focus of this case study was the boys who were achieving highly and those who were considered to be underachieving in the school. At the commencement of the study the permission of the Principal of the school was obtained (Appendix C).
The study began in June 2012, with a focus group interview of some teachers at the school. A questionnaire designed for teachers followed (Appendix D). The data collected from the teacher questionnaire, and confirmed by the school records, were essential in identifying the boys who would form the sample for the study.

The boys identified for interviews were approached and given an overview of what the study would entail. Those who agreed to participate were each given a consent form to take to their parents (Appendix E). Only after each consent form was returned was the interview scheduled. The questions used to guide the student interview can be found at Appendix F. The focus group interviews were scheduled to precede the individual interviews. However, the Fifth Year focus group interview had to be rescheduled for October 2012.

3.4 The Profile of the School

3.4.1 Students

This case study is an in-depth investigation of a school in Barbados. The school of choice for the investigation is a coeducational government secondary school catering to students ranging from 11 to 18 years of age. The school has six year levels with a population of approximately 1100 students, the vast majority of whom are of the same ethnicity, black.

At the First Form level, students enter the school after completing the Barbados Secondary School Entrance Examination (BSSEE). This examination is used to facilitate the transfer of students from primary school into the twenty-two government owned secondary schools. The assignment to school is based on the scores attained in
the examination along with the choice of schools made by the parents. The examination comprises papers in English, Mathematics and an Essay. The essay is graded from A to D and the scores on the English and Mathematics Papers range from 0 – 100%.

The BSSEE (often referred to as the eleven-plus exam) is usually taken at age eleven. Students have only one opportunity to write this examination. There is a flexible transfer option which permits students, on request, and with supporting evidence, to write the examination one year early at ten years old or to be deferred by one year, to write the examination at twelve years old.

In terms of the examination scores of the students entering secondary schools, this school ranks in the upper quartile of the twenty-two secondary schools in Barbados. Every effort is made to ensure the enrolment of an equal number of males and females at the First Form level. Consequently, the boys entering each year have, on average, a mark lower than that of the girls. To allocate the students so that boys had the same marks as the girls would result in more girls than boys entering this particular school each year.

The range of scores of those students entering the secondary school in 2010, 2011 and 2012 is displayed in Table 3.1. In each case the highest score was that of a girl and the lowest score (except for Mathematics in 2011) was that of a boy. There is a school of thought that the BSSEE places boys in secondary school at a disadvantage. However, the range of scores for this school does suggest that there are boys entering this school with high attainment scores.
<table>
<thead>
<tr>
<th>YEAR</th>
<th>RANGE OF SCORES FOR BOYS</th>
<th>RANGE OF SCORES GIRLS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ENGLISH (%)</td>
<td>MATHEMATICS (%)</td>
</tr>
<tr>
<td>2010</td>
<td>65 – 90</td>
<td>57 - 84</td>
</tr>
<tr>
<td>2011</td>
<td>70 - 88</td>
<td>74 - 97</td>
</tr>
<tr>
<td>2012</td>
<td>73 - 94</td>
<td>69 - 98</td>
</tr>
</tbody>
</table>

TABLE 3.1: Range of BSSEE Scores for Students Entering the School

The number and distribution of students entering the school may vary. Sometimes students may be reallocated to the school from other secondary schools at the request of the parents. This is done once permission is granted by the Ministry of Education or the Principal of the school. For the year 2011 – 2012, for example, 85 girls and 85 boys were allocated to the school at the First Form level as a result of the BSSEE. However by the start of the school year in September 2011, there were four boys and one girl repeating the year and nine students reallocated to the school bringing the number of students in the First Form to 92 girls and 92 boys.

**3.4.2 The Curriculum**

The curriculum of the school at the First Form level is compulsory and follows the national curriculum. The subjects offered are Mathematics, English Language, English Literature, Integrated Science, Social Studies, Religious Studies, Health and Family Life Education, French, Spanish, Visual Arts, Music and Physical Education. (There are approximately nine schools on the island that include French in the curriculum. Spanish is the more popular Foreign Language.) In addition, students have one period allocated to Library Studies and an introduction to Information
Technology. These additional courses are designed to train students to use the library for research and recreation and to become familiar with the care and use of the computer as a means of helping them to research and produce documents for their coursework.

3.4.3 External Examinations

All students are required to write an external examination at the end of the Fifth Form year. Some students, who are deemed ready, may write English Language and Mathematics examinations at the end of Fourth Form. This Caribbean Secondary Education Certificate (CSEC) examination is administered throughout the Caribbean region by the Caribbean Examination Council (CXC). The Caribbean Advanced Proficiency Examination (CAPE) is written by the Sixth Form students at the end of each year over a period of two years.

English Language, English Literature, Mathematics and Physical Education are compulsory throughout the school from First Form to Fifth Form. However, on entering the Fourth Form year, students are required to choose five additional subjects to write for the Caribbean Secondary School Education Certificate. That choice is made from the following: Biology, Building Technology, Chemistry, Electronic Document Preparation and Management, Food and Nutrition, French, Geography, Human and Social Biology, History, Information Technology, Integrated Science, Mechanical Engineering Technology, Music, Physical Education and Sport, Physics, Principles of Accounts, Principles of Business, Social Studies, Spanish, Technical Drawing, Theatre Arts and Visual Arts.
At the Sixth Form level students are prepared to write the CAPE in Accounts, Biology, Chemistry, Computer Science, Environmental Science, Geography, Literatures in English, Management of Business, Mathematics, Physics and Sociology. Communication Studies and Caribbean Studies are compulsory.

3.4.4 Extra-Curricular Activities

Students are encouraged to participate in the extracurricular life of the school. The extracurricular activities include basketball, cricket, football, hockey, karate, netball, table tennis, and volleyball. There is an athletic club associated with the school. There exists as well the Inter-School Christian Fellowship, an Environmental Club, a Cadet Corp and a Girl Guide company. The Kiwanis Club of Barbados sponsors a service club called the Key Club. Students can also participate in the school choir and the school band.

3.4.5 Staff

At the time of the investigation the school had a male Principal, who was assisted by a female Deputy Principal. There were sixty-seven members of staff, of these twenty-six (39%) were male and forty-one (61%) were female. There were six Senior Teachers or Year Heads (3 male and 3 female), each assigned the responsibility of the pastoral care for a year level from First to Sixth Forms. There were eight Heads of Department (3 male and 5 female) each having responsibility for an area of the curriculum. There was one female Guidance Counsellor serving the 1100 students at the school.
3.5 Sample Selection

3.5.1 Focus Group of Teachers

The investigation began in June 2012 with the selection of teachers for a focus group interview. It was felt that the views of new and experienced male and female teachers across the curriculum would lead to richer discourse. An effort was made to keep the size of the group to approximately ten persons. As a result, two Mathematics teachers (both male), two English teachers (one male, one female), two Science teachers (one male, one female), two Foreign Languages teacher, (one male, one female) and two teachers of the Humanities (one male, one female) were invited to participate in the focus group.

There was only one female teacher in the Department of Mathematics for the academic year and she was on maternity leave at the time of the focus group session. A male member of the Mathematics department was invited to replace her. There was only one male Foreign Language teacher and he was not available at the time of the focus group interview. The focus group was therefore made up of:

<table>
<thead>
<tr>
<th>GENDER</th>
<th>YEARS TEACHING</th>
<th>SUBJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEMALE</td>
<td>10-20</td>
<td>SCIENCE</td>
</tr>
<tr>
<td>MALE</td>
<td>10-20</td>
<td>SCIENCE</td>
</tr>
<tr>
<td>FEMALE</td>
<td>10-20</td>
<td>HUMANITIES</td>
</tr>
<tr>
<td>MALE</td>
<td>0-10</td>
<td>HUMANITIES</td>
</tr>
<tr>
<td>FEMALE</td>
<td>20-30</td>
<td>FOREIGN LANGUAGE</td>
</tr>
<tr>
<td>MALE</td>
<td>0-10</td>
<td>MATHEMATICS</td>
</tr>
<tr>
<td>MALE</td>
<td>20-30</td>
<td>MATHEMATICS</td>
</tr>
<tr>
<td>FEMALE</td>
<td>0-10</td>
<td>ENGLISH</td>
</tr>
<tr>
<td>MALE</td>
<td>0-10</td>
<td>ENGLISH</td>
</tr>
</tbody>
</table>

Table 3.2: Profile of the Participants in the Teacher Focus Group
3.5.2 Teacher Questionnaire

It was important to have the input of the teachers in selecting the sample of students who were considered to be underachieving. A questionnaire (Appendix D) was designed to collect this information. Teachers who were familiar with students especially in the transition years of the First, Third and Fourth Form were needed. The timetable for teachers was used to identify those teachers who taught at least three of the year levels between the First and Fourth Forms. There were thirty-nine possible candidates, twenty-six female and thirteen male. Nine of these possible candidates had recently joined the staff and were only just becoming familiar with the students. (The school has recently transitioned to a Sixth Form institution, which resulted in additional staff being recruited.) Thirty questionnaires were therefore prepared for those teachers who would have been teaching for more than a year in the school. Twenty-eight were given to those teachers who were at school during the week of distribution.

3.5.3 Samples of Students

The student sample was purposely stratified to facilitate a comparison of high achieving and underachieving boys in their academic journey through school. The students indentified by the teachers in the teacher questionnaire formed the catalyst for the selection of the student sample. Teachers were required to recommend students whom they perceive as high achievers and those whom they considered to be underachievers. The school records were used to corroborate these recommendations. These records included the form mark sheets, which are spreadsheets of the marks attained by the students in each class for the range of subjects done. The records also included the end of term report of each of the students.
The names submitted by the teachers were collated and the form mark sheets were used to determine whether the high achievers recommended were achieving highly in several subjects, and not just for the subject of the recommending teacher. Their end of term marks were considered in relation to the other students in the class to ensure that those identified satisfied the requirement of an attainment higher than 0.25 of the standard deviation for the class. While doing this search it was found that there were other boys who would have satisfied the criteria, who were not recommended by teachers as high achievers. When a decision had to be made the boy with the higher attainment was given preference.

From the list of students recommended by teachers and gleaned from the school records, twenty students were selected for individual interviews. These were five high achieving boys and five underachieving boys at each of the First and Third Form levels. The underachievers used for the interviews were those who were more popular among the teacher recommendations.

The students in the First Form had just transitioned from primary school into secondary school. The Third Form is also a level at which a transition occurs. These Third Form students had an opportunity to choose the subjects they wanted to do in the Third Form and were reassigned to classes based on their subject selection. This choice however does not signal the end of the compulsory education for these students because in their choices, they must include at least one Foreign Language and at least one Science subject. At this level History, Geography, English Language and Literature and Mathematics were compulsory.
The sample for the individual interviews was taken from two forms at the First Form level. Those high and underachievers selected were taken from the same form, doing the same subjects with the same teachers at the First Form level. This was done to establish some measure of control over the school variables which may impact upon the academic performance of the students.

It was more difficult to find both high achievers and underachievers doing exactly the same subjects at Third Form, since at this year level they are allowed to choose some of the subjects they do. The selection was made of a high achiever and an underachiever in the class doing (i) three science subjects of Biology, Chemistry and Physics; (ii) Technical and Vocational studies and (iii) a general programme made up of Business Studies, Foreign Languages and Science.

Other students recommended by the teachers and who met the criteria of underachievers and high achievers were asked to complete the student questionnaire. The student questionnaire was distributed to six boys identified as high achievers and six boys identified as underachievers at each of the First, Second, Third, Fourth and Fifth Form levels. That gave a total of sixty students who received the student questionnaire.

Table: 3.3 displays the academic performance of four of the First Form boys identified by teachers who met the criteria for selection as high achievers against a background of their prior attainment in the Barbados Secondary School Entrance Examination.
STUDENT

<table>
<thead>
<tr>
<th>MALES IN CLASS</th>
<th>PRIOR ATTAINMENT 2011 BSSEE %</th>
<th>TERM 1</th>
<th>TERM 2</th>
<th>TERM 3</th>
<th>EXAM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ENG</td>
<td>MATH</td>
<td>ESSAY</td>
<td>%</td>
<td>POS</td>
</tr>
<tr>
<td>IHJM</td>
<td>16/31</td>
<td>79</td>
<td>89</td>
<td>C</td>
<td>71</td>
</tr>
<tr>
<td>IHSa</td>
<td>16/31</td>
<td>83</td>
<td>83</td>
<td>B</td>
<td>64</td>
</tr>
<tr>
<td>IHTK</td>
<td>17/32</td>
<td>81</td>
<td>84</td>
<td>D</td>
<td>81</td>
</tr>
<tr>
<td>IHTy</td>
<td>16/32</td>
<td>84</td>
<td>87</td>
<td>C</td>
<td>81</td>
</tr>
</tbody>
</table>

Table 3.3: Academic Achievement of a Sample of High Achieving First Year Boys

The average for the end of year promotion examination is disaggregated by subject in Table: 3.4. This gives a perspective of the attainment of the high achieving students across the curriculum.

<table>
<thead>
<tr>
<th>STUDENT</th>
<th>ENG LANG</th>
<th>ENG LIT</th>
<th>MATH</th>
<th>SCIENCE</th>
<th>FRENCH</th>
<th>SPANISH</th>
<th>GEOG</th>
<th>HISTORY</th>
<th>VISUAL ARTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHJM</td>
<td>64</td>
<td>68</td>
<td>79</td>
<td>73</td>
<td>85</td>
<td>84</td>
<td>65</td>
<td>69</td>
<td>85</td>
</tr>
<tr>
<td>IHSa</td>
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<td>75</td>
<td>73</td>
<td>85</td>
<td>89</td>
<td>91</td>
<td>56</td>
<td>78</td>
<td>45</td>
</tr>
<tr>
<td>IHTK</td>
<td>83</td>
<td>52</td>
<td>93</td>
<td>71</td>
<td>100</td>
<td>76</td>
<td>96</td>
<td>67</td>
<td>35</td>
</tr>
<tr>
<td>IHTy</td>
<td>72</td>
<td>41</td>
<td>79</td>
<td>83</td>
<td>86</td>
<td>85</td>
<td>77</td>
<td>71</td>
<td>55</td>
</tr>
</tbody>
</table>

Table 3.4: Promotion Examination Marks for the Sample (2011 – 2012)

The comments made by the teacher on the reports of those students identified were scrutinised and noted. Such comments included:

Excellent work, (name) has been a wonderful student to teach and I applaud his ability to stay focused amid many distractions.

(Science Teacher A)
A hard working and capable student. Pleasing results.

(English Teacher A)

A very keen student who has maintained a high standard of work.

(French Teacher A)

(name) loves music and it shows in his dedication in class to do well.

Excellent job.

(Music Teacher)

For the sample of underachievers one could not rely solely on marks, as with the high achievers. The comments made by teachers on the reports of the underachievers were used as corroborating evidence. Once a student was recommended, the school records were checked primarily for the comments made by at least three teachers on the reports of these students. In these reports some cues were sought to determine if the particular student under consideration was not fulfilling the expectations of his teachers.

In the reports of the students identified, reference was made by teachers about the lack of preparation of students for class:

(Name) is a capable student but is poorly organised.

(English Literature Teacher A)
Moderate. (Name) must prepare more thoroughly for tests in order to improve his grades.

(Spanish Teacher A).

(Name) needs to submit all assignments. He is a capable student but is poorly organised. (Name) is too easily distracted.

(French Teacher B)

(Name) is not doing enough revision and is seldom if ever prepared for class. Seems to be disorganised all the time.

(Spanish Teacher B)

There was reference to disruptive activities in the classroom and even absence from class:

A very good term's work. However (name) is too talkative and disruptive in class. He needs to learn some self-discipline.

(Music Teacher)

(Name) is too often absent from class. He must settle down to some serious work.

(Mathematics Teacher A)

Fair effort (name) is very capable of a higher standard but he needs to apply himself. He is too easily distracted by minor things in class.

(Science Teacher B)
The reports referred to the attitudes of some of these First Form students:

Below average results. (Name) very often seems not to care.

(History Teacher A)

Unsatisfactory. (Name) has started off with a very negative attitude towards the subject, without giving it a chance. This attitude, if not worked on, will stand in the way of his success.

(French Teacher C)

With greater application the standard of work should improve.

(English Literature Teacher B)

The marks attained by these students in the First Form year are shown in Table 3.5. Not all students identified were performing at the bottom of the class. This to me was an indication that teachers understood the type of student we were trying to indentify. Furthermore, the prior attainment of these students in the Barbados Secondary School Entrance Examination was similar to those of the boys who were achieving highly.

<table>
<thead>
<tr>
<th>STUDENT</th>
<th>MALES IN CLASS</th>
<th>PRIOR ATTAINMENT 2011 BSSEE %</th>
<th>ENG.</th>
<th>MATH</th>
<th>ESSAY</th>
<th>TERM 1</th>
<th>TERM 2</th>
<th>TERM 3</th>
<th>EXAM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>POS</td>
<td>POS</td>
<td>POS</td>
<td>POS</td>
</tr>
<tr>
<td>IUF E</td>
<td>16/31</td>
<td>86</td>
<td>63</td>
<td>17</td>
<td>61</td>
<td>69</td>
<td>9</td>
<td>72</td>
<td>5</td>
</tr>
<tr>
<td>IUR R</td>
<td>16/31</td>
<td>76</td>
<td>90</td>
<td>43</td>
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<td>45</td>
<td>27</td>
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<td>32</td>
</tr>
<tr>
<td>IUK W</td>
<td>17/32</td>
<td>87</td>
<td>42</td>
<td>25</td>
<td>52</td>
<td>32</td>
<td>41</td>
<td>32</td>
<td>31</td>
</tr>
<tr>
<td>IUD D</td>
<td>16/32</td>
<td>86</td>
<td>43</td>
<td>31</td>
<td>41</td>
<td>31</td>
<td>49</td>
<td>28</td>
<td>49</td>
</tr>
</tbody>
</table>

Table 3.5: Academic Attainment of a Sample of Underachieving Boys in First Form
The End of Year promotion examination scores were disaggregated to observe how these boys were performing in the individual subjects on completion of their First Year at school.

<table>
<thead>
<tr>
<th>STUDENT</th>
<th>ENG. LANG.</th>
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Table 3.6: Promotion Examination Marks for the Sample of Underachievers

This process was replicated for all the boys recommended by the teachers. At the Third Form level two names were added to the teachers’ list of high achievers as a result of the document search. These boys, who fit the criteria but were not recommended, were used either in the focus group or to complete the student questionnaire. One student (3UVJ) who satisfied the criteria based on the comments made on his report was added to the list of underachievers recommended by the teachers.

At the Third Form level the comments on the reports of students identified as underachievers, referred to several factor:

1. **Attitude**,  

(Name) is a capable student whose MAIN hindrance is his attitude.  

(Name) appears too immature and restless. He MUST correct these issues before it is too late.

(Mathematics Teacher C)
A very weak term's performance. (Name) has not pushed himself to do well this term and his marks tell the tale. An attitude improvement and self-evaluation of his goals in life are long overdue.

(Mathematics Teacher B)

Fair progress. (Name) pretends ignorance but has the potential to do very well. He must not be allowed to relax in the upcoming school year.

(History Teacher B)

2. **Effort**

(Name) needs to exert himself more as he can produce a higher standard of work.

(Biology Teacher B)

(Name) should have shown the effort he is currently displaying now all year. It is a shame that he decided too late to pay attention to his studies. Based on his results he is clearly capable of doing well.

(Mathematics Teacher A)

3. **Organizational skills**

(Name) is a capable student but is poorly organized. He failed to submit his assignments at the correct time.

(Visual Arts Teacher)
(Name) can do better work but he is poorly organised. A number of assignments and lab work were not completed and submitted.

(Biology Teacher C)

4. **Self-discipline**

   Needs to settle down and pay attention in class. Too easily distracted.

   (Mechanical Engineering Technology Teacher)

And in a few cases, all of the above

(Name) has made no positive effort in class. He concentrates his energy on being obnoxious in the classroom. He fails to bring to school his Geography exercise, test and text book as required.

(Geography Teacher A)

At the same Third Year level, the comments made on the reports of the high achieving students focused more on work ethic.

Very good work (name) has worked well throughout the year.

(Geography Teacher B)

Good overall term's performance. (Name) is very keen and is a diligent worker. He must keep striving for nothing but the best.

(Mathematics Teacher D)
(Name) was a pleasure to teach. If he continues with his current work ethic he should be successful. Good work.

(English Teacher A)

A very keen student who has maintained a high standard of work.

(I.T. Teacher)

This type of scrutiny was undertaken for all the students recommended by the teachers.

3.5.4 Focus Group of Students

There were two focus groups of students. One group was made up of First Formers at the beginning of their journey through secondary school. Another was made up of Fifth Formers who had completed their Caribbean Secondary Examination Certificate programme. The First Form focus groups were made up of high achievers some of whom were actively involved in the extra-curricular life of the school. The focus group of Fifth Form students included two girls to glean the perspective of the females.
3.6 The Research Tools

Several different research tools were used to collect data. The data collection process started with a focus group interview of teachers. This was followed by a questionnaire completed by teachers at the school. The data collected from the teacher questionnaire informed the search of the school documents to garner information on the students to be used in the study. A questionnaire was administered to the students. This was followed by focus group interviews with the first, third and Fifth Form students. The individual interviews of the students and the Principal were the last data collection method used. Several data sources and data collection techniques were used in an attempt to reduce subjectivity and ensure the reliability of the data.

3.6.1 Focus Group Interviews

The focus group is a valuable interview technique, designed to use the interaction between participants to lead to a clear understanding of a problem. Gay et al (2009) consider the focus group as a means of eliciting as much information as possible out of a given question. The focus group may be used to collect data on why persons hold the views they do; why they do what they do. These groups may also be used to assist in the analysis of data collected by other means. Pole and Morrison (2003) express the view that focus groups are attractive to young persons, who seem to enjoy and seem less threatened by this type of engagement.

A pilot study was done with a focus group of teachers. Out of this pilot it was decided to keep the focus group to a maximum of 10 persons to facilitate the involvement of all participants in the discussion. Careful thought was given to the
questions used in the focus group interview since the members might not have the same interpretation of the terms used. So in each of the focus groups, the persons interviewed were asked to distinguish between a low achiever and an underachiever. The terms used had to be clearly understood. As indicated by Pole and Morrision (2003), the interactive nature of the focus group made it easier to clarify any misconceptions that arose during the interview. Care was taken to have frank discussion without any one person dominating the process.

3.6.2 The Focus Group of Teachers

A focus group of teachers was established to explore and capture a shared understanding of the concept of underachievement in males, while acknowledging that there were male students who were achieving highly in school. Careful thought was given to the size and the demographics of the focus group. The participants were practicing teachers, some trained, some untrained, all with first degrees.

The aim of this focus group was to address the questions:

- To what factors do the school teachers attribute the underachievement of boys?
- To what factors do the school teachers attribute the high academic achievement of boys?

The size of this group (9 members) was considered manageable in terms of eliciting the views of several different persons giving each a fair opportunity to state his/her views. Careful thought was given to the choice of moderator. Yin (2009) posits the
view that a good investigator should be curious and have a firm grasp of the issue being studied. The moderator had to be someone who could effectively guide the discussion and who had experience working in a focus group. The person chosen had gained that experience as she pursued her first degree in Psychology and Sociology. She was intuitive, with very good interviewing skills. There was only one other participant, a male, who had experience participating in a focus group. I had no experience of his skills as an interviewer.

Those teachers who were identified were invited to participate. They were individually appraised as to the nature of the investigation and the informed consent of each was sought. They all accepted the invitation. Teacher C was asked to serve as the moderator while I served as recorder. One week before the session, I met with Teacher C to prepare for the focus group interview. In this meeting I solicited her views on the subject of male underachievement and I shared with her the purpose of the investigation and some of the questions I wanted her to ask. She subsequently did a literature search of her own to add to her knowledge base.

The purpose of this focus group was to determine to what factors teachers attribute:

i) the underachievement of boys?

ii) the high academic achievement of boys?

The questions for the discussion included:

1. Is there a difference between “low achievement” and “underachievement”? If yes, what is the difference?
2. Do you believe that the boys are underachieving in our secondary schools in Barbados and in this secondary school in particular? If yes, what factors contribute to this underachievement?

3. Are there boys in our secondary school who are achieving highly? If yes, what factors would you attribute to their success?

4. What strategies do you think would improve the academic performance of those boys who are underachieving?

The moderator and I had agreed that I would welcome the participants and once again explain to them the reason for having the focus group. Permission was sought to capture a video recording solely for the purpose of verifying the accuracy of my transcript and for me to evaluate my own listening and recording skills. Participants were promised that no one outside the group would have access to the video recording. All participants consented and Teacher D and Teacher F volunteered to record the group session using a digital camera. The camera was hand held to capture the person speaking at the time. The roles of the moderator and recorder were outlined and Teacher C was introduced as the moderator. The quality of the video recording was not very good and it could not be used.

3.6.3 Questionnaire for teachers

The questionnaire for teachers was used to identify the students who were perceived as underachievers, from the perspective of the teachers. To achieve these aims this questionnaire was administered mid-June 2012 to those teachers who taught at least
two forms in the first to Fourth Form levels. There were seventeen female teachers, fourteen of whom were formally trained and seven male teachers, four of whom were trained.

Part A of the questionnaire was used to collect data such as the gender, the qualifications of the teacher and the department to which he/she belonged. Part B required teachers to distinguish between a low achiever and an underachiever in an effort to determine what criteria teachers were using to recommend the underachievers for the sample. Then the teachers were asked to identify high achievers and underachievers from the students they taught. (Appendix D)

The questionnaire was used to capture the views of teachers as they related to the research question:
To what factors do teachers attribute:

i the underachievement of boys?

ii the high academic achievement of boys?

3.6.4 Documents

The school records provided an unobtrusive way of gathering data about the students and as a result formed the launch pad for further inquiries. The records of the End of Term marks and the End of Year Examination were used to confirm the high achieving boys at each of the year levels.

The school records included the Form Mark Book. These marks, compiled at the end of each term by the subject teachers, are a record of the assessments done for the
particular term. At the secondary school under investigation in Barbados, teachers use various means of assessment including written class tests, projects, laboratory exercises (Science), oral and aural work, as in the case of the Foreign Languages, class work and homework assignments. Whereas most of these assessments are developmental, summative assessments are made at the end of a unit of work or at the end of the term. This mark book, which before 2009 was a physical book, is currently an electronic document stored on a programme called AbusSTAR (Abus Student Tracking and Reporting).

There is an End of Year Examination compatible with the syllabus for each subject at each year level, which is designed to measure attainment of skills and facts. All students at a particular year level do the same exam for a given subject. This End of Year Examination mark may be a more reliable measure of academic attainment across a given year level. Once compiled and validated, the Form Mark Book is posted on the school’s network as a ‘read-only’ document, accessible to staff. This document is authentic and credible and therefore deemed suitable for this inquiry. As a result, permission was sought from the school administration to use this data for research purposes.

3.6.5 Questionnaire for Students

A questionnaire (Appendix E) was administered to thirty high achieving boys and thirty underachieving boys, to capture their views on the factors which contribute to high achievement and underachievement as well as their attitudes to school. The
questions sought to address issues raised in the literature and in the focus group interview with the teachers. The questionnaires were distributed to students who were invited to complete them and return them on the same day.

The questionnaires were distributed to the high achievers first, who were asked to return them by the end of the day by slipping them under the door to my office. After all these questionnaires were returned the other questionnaires were distributed two days later to the students who were identified as underachievers, using the same procedure. It is noteworthy that all the high achievers returned their questionnaires on time; however there were four of the underachievers at the Fifth Form level and three at the Fourth Year level, who had to be pursued for their questionnaire. This was easily determined because only one “Fifth Form” and two “Fourth Form” questionnaires were returned. Knowing the persons who received questionnaires it was not difficult to track down and collect the others. The questionnaires were placed in two differently coloured folders labelled “H” for high achievers and “U” for underachievers.

The student questionnaire comprised questions rated on a five-point Likert scale (strongly disagree, disagree, unsure, agree, strongly agree). Some statements sought to determine the achievement goals of the students. That is, whether they had a learning goal or a performance goal orientation. Those statements used to determine a learning goal orientation reflected a desire to learn new skills and master new tasks. The items used were:

- It is important to me that I understand the work done in class
- I don’t mind making mistakes when I am learning something new
- I enjoy learning new things
- I like class work that challenges me to think.

Students with a performance goal orientation want to look smart not just to others but to themselves as well. Persons with this orientation are focused on attaining positive responses of their competence, and on avoiding negative judgements. The items used to identify a performance goal orientation were:

- It is importance to me that I do better than other students in class
- I feel good when I am one of the few who know the answers to the questions asked in class
- I don't want to be considered a nerd in class
- I want other students to know when I am doing well in class

Dweck (2000) postulates two theories of intelligence, a fixed entity theory and a malleable incremental theory. In order to determine the theory of intelligence held by each child, three questions from the “Implicit Theories of Intelligence Scale for Children – Self Form”, as recommended by Dweck (2000:177), were included in the questionnaire. The three questions, designed for children age 10 and over, were:

- You have a certain amount of intelligence and you really can’t do much to change it
- Your intelligence is something about you that you can’t change very much
- You can learn new things but you can’t really change your basic intelligence.
These items are designed to have children report on their theory of their own intelligence. They are all entity theory items. They were not placed consecutively in the questionnaire but were spread throughout the questionnaire to hopefully reduce the impact of the response to one question on the others.

Some items were included to determine the attitude of the boys to school and school work (“I don’t like this school”; “I really want to do well in school”). A few statements address the issue of self-handicapping (“I am often put out of the classroom”; “I am involved in a lot of activities and therefore have very little time to study”). Other items sought to determine who or what influences the behaviours of the boys (“I want to continue my studies when I leave school”, “I care what the other boys think about me as a person”; “I care what my parents think about my academic performance”).

The student questionnaire was pretested with students of the Second Form at the school. They were asked to identify any questions they had difficulty understanding and they were invited to make recommendations to improve the instrument.

3.6.6 The Focus Groups of Students

They were two focus groups of students to address the research questions:

- To what factors do high achieving boys attribute their success?
- What factors contributes to the underachievement of the boys?
- What strategies would improve the academic achievement of boys?
The first focus group to meet was that of the First Form students. Seven high achieving boys were chosen but only six came to the interview. The seventh boy forgot. These boys were all in the First Year of their secondary school life at the school. These students were from different forms, but following the same compulsory curriculum. Three of these were from the list recommended by teachers and the other four were my choice gleaned from the mark sheets of the First Forms for the year.

The second focus group of students was made up seven students, five males and two females who were all high achievers. These students were in the Fifth Form in the academic year 2011 -2012, and had completed their external examinations with the Caribbean Examination Council. For the academic year 2012-2013, they were all in the Sixth Form at the school. This interview took place in October 2012.

Five of the students selected (three males and two females) were all high achievers in the same form. These were students who had opted to do the three sciences: Biology, Chemistry and Physics. The other two were included because they were also high achievers in their forms, which followed a more general curriculum and because of their heavy involvement in extracurricular activities. Both of the girls were also involved in the extracurricular life of the school. One of these girls was also the most outstanding student academically at each year level in the school throughout her school life. It was felt that the views of girls who had worked for five years beside boys who were achieving and underachieving would be invaluable. It was also felt that having students from the same forms would place them at ease and contribute to the comfort of the participants. I believed that bringing students from different and overlapping backgrounds would add to the richness of the data collected.
The focus group interviews of students were conducted in my office with just the students and me present. I served as the interviewer and a digital recorder was used to record the discussion. No video recording was made for the student interview in an effort to protect the identity of each participant. Students were also advised not to use any names in the discussion as another means of protecting their own identity.

3.6.7 Individual Interviews

All the individual interviews were conducted by me. This was done to preserve the privacy of those being interviewed. There was also a desire to, as far as possible, prevent the underachievers especially from experiencing embarrassment or any other negative feelings in the presence of their peers. These interviews were prefaced with an explanation of the purpose of the study. Students were invited to use the interaction for their benefit by being honest and open and they were reminded that they could withdraw at any stage of the study. When each student agreed to participate, he was given a consent form (Appendix C) to take home to his parents for their consent and signature. The time for the interview was set when the consent form was returned.

The five high achievers and five underachievers at the First Form level and the Third Form level were interviewed separately. Those interviews were designed to address the following research questions:

1. To what do high achieving boys attribute their success?

2. To what do underachieving boys attribute their level of attainment?
3. Do underachieving boys and highly achieving boys differ in terms of their academic or career goals?

4. How do high achieving boys and underachieving boys describe masculinity?

5. Do high achieving boys and underachieving boys differ in terms of motivation?

6. What strategies would improve the academic performance of boys?

3.6.8 

*Interview of the Principal*

The last interview to be conducted was that of the Principal. The research questions addressed in this interview were:

1. To what factors does the school administration attribute:
   
   i. the underachievement of boys?
   
   ii. the high academic achievement of boys?

6. What strategies would improve the academic performance of boys?

3.7 

*Analysis of Data*

The research questions formed the foundation for the analysis of the data. The raw data collected using various methods and data sources required processing. This
processing involved sorting and coding the data. Attribution theory, the conceptual framework under which the study was undertaken, was employed in the sorting process. Therefore, factors were initially divided into two groups internal (e.g. ability and effort) and external (e.g. learning environment and home factors). Factors were then subdivided. Those within the control of the respondent were separated from factors not controlled by the respondents. Themes which emerged which were controllable by the students included effort, self-discipline and motivation. Themes which were perceived as beyond the control of the individual students included the home environment and the school environment. The analysis of the qualitative data therefore included summaries of the data collected by the various methods as well as a synthesis of conclusions and interpretations.

3.7.1. **Coding Qualitative Data**

The analysis of the data proved to be a mammoth task which had to be approached systematically. The analysis began with the preparation of the interview schedule itemising the questions which were to be asked, leaving space after each question for the responses.

The first interview to be analysed was the focus group interview with the teachers. A transcript was made of that interview the same night of the interview. In fact, an effort was made to transcribe all the interviews by the end of the next day. After the transcript was made, I read through the transcript several times familiarising myself with the content. I then colour coded the factors discussed on a soft copy of the transcript – blue for internal factors (like ability and effort) and green for external factors (like home, teachers, learning environment). I then subdivided the internal and
external factors each into two groups controllable (in bold text) and uncontrollable (in regular text). This process was repeated for all the focus group interviews. These codes made it easy to group the data for presentation as a narrative.

The questionnaire completed by the teachers was analysed after the focus group interview of teachers. The analysis of this questionnaire was crucial to the selection of the student samples. This data helped to identify those students who would be interviewed and who would be asked to complete the questionnaire for the students. Attribution theory was again used to code the factors which the teachers identified as contributing to high achievement and underachievement on Part B of the teacher questionnaire.

The names of students identified by teachers were recorded in a table and a tally was made of the frequency with which a particular name was mentioned. All the names presented were recorded and the school records were used to confirm the recommendations. There was a case where one name was listed as both high achiever and underachiever. On the report of this particular child three teachers made a comment which suggested that he was not working to his usual standard. This student was categorised as underachieving.

There was another student who was listed by one teacher as a high achiever and by two others as an underachiever. A check of the records indicated that he was indeed achieving highly in one subject but did not meet the stated criteria to be categorised as a high achiever. He was processed as an underachiever. All the other recommendations made by teachers were substantiated and used for either interviews
or the questionnaire. The Fifth Form students who were given questionnaires were all identified from the records of the school, using the same method used to corroborate the high achievers and the underachievers.

For the individual interviews, a spreadsheet was prepared to collate the data. Each question asked of the students was placed on the spreadsheet and the responses of the students were grouped for each question. The responses of the high achieving boys were separated from the responses of the boys who were considered to be underachieving. In the analysis of the interviews, the factors which the boys gave for high achievement and underachievement were colour coded using attribution theory as was done for the focus group interviews.

3.7.2 Quantitative Analysis

Student’s T-Test was used to compare the means of the responses made on Section C of the student questionnaire completed by the boys identified as high achieving and underachieving. This was done to determine if there was any statistical difference between the responses for the two groups of boys. The T-Test was considered appropriate since I only wanted to determine if there was any significant difference in the means of the responses made by the two equal groups on boys on the questionnaire. For the purpose of this analysis, the samples were deemed independent of each other, since knowledge of one group did not impact on knowledge of the other.
The questionnaire had five options ranging from “Strongly Agree” to “Strongly Disagree”. A value of zero was assigned to unsure and to no response. A value of 1 to “Agree”, 2 to “Strongly Agree”, -1 to “Disagree” and -2 to “Strongly Disagree”. The T-test was done on the data to determine if there was a statistical difference between the responses from the two groups of students. A probability value (P-value) of less than 0.05 (5%) would indicate a statistically significant difference between the two groups for the given item. A P-value greater than 0.05, would therefore indicate no real significant difference between the two groups of boys, for the particular item shown.

3.8 Ethical Issues

There are essentially two fundamental rules of ethics in educational research (a) that the research gains the informed consent of the participants and (b) that the researcher do no harm (physically, mentally or socially) to the participants (Miles and Huberman, 1994; Pole and Morrison, 2003; Bryman, 2008; Gay et al, 2009). Since the participants were minors, parental consent was gained. The nature of the study was clearly explained to the participants with the understanding that they could withdraw their participation at any stage of the investigation. Guba and Lincoln (1994) believe that concealing the intent of the investigation would undermine the constructivist researcher.

Students were therefore told before any questionnaires were given to them and before any interviews were started that one of the benefits expected would include the development of their metacognitive skills with a view of improved learning outcomes.
It was hoped that their participation would be mutually beneficial. There is a plan to follow this study by helping the participants and others to develop some effective learning strategies.

So as not to do any harm to the self-esteem of those students who were underachieving or to make them look bad, these students were interviewed privately and individually. Students were reminded that they could withdraw from the study at any time if they so desired. All participants were given the assurance that every effort would be made ensure anonymity and confidentiality of the information provided.

Although video recordings may have been useful to the researcher, audio recordings were used for those students who consented. Those students who consented to be recorded were told to avoid using names. This was in keeping with the promise of anonymity. Therefore every effort was made to be respectful and honest in reporting the findings without identifying the respondent.

A pseudonym was assigned to each person who participated in the focus groups. Each of the other student participants was given a code which began with a number. The number indicated the year level of the participant. Those students who were interviewed individually had that first number followed by ‘H’ for high achiever or ‘U’ for underachiever. Each was then completed by two randomly assigned letters written on the interview schedule. No names were mentioned nor recorded in the interview.

The permission of students was sought before the audio recording was done and in two cases no permission was given and therefore no recording was made. In fact one boy indicated that he said no only to see how I would react. I found that situation to
be an interesting one simply because of the power dynamics involved. I am the deputy Principal of the school and he found it interesting that I was seeking his permission to record his interview.

As I walk around the school on a daily basis, I engage students in conversations about anything, in an effort to establish a respectful relationship with the students where they can feel comfortable sharing with me. I sometimes teach Health and Family Life Education to the first and Third Year students and discussions can be wide and varied taking in topics like school spirit, study skills and sexual health. In situations where a teacher may be absent from a class I sometimes visit classes to teach or just to engage the students.

As the Deputy Principal, when I have disciplinary issues to address, I often seize the opportunity to discuss academic performance with the students in my care. I believe that these actions would have contributed to the willingness of students to participate in the study. All the students I asked were willing. All the parents gave consent. One parent who heard what I was doing called and volunteered her son. When I returned to school in September 2012, three of the boys who participated in one of the focus groups came to my office to find out if I was successful in my studies. The interest shown by these boys was significant for me.

All student interviews (individual and focus group) were conducted in my office and the participants could not be seen from the outside. Students in the focus group were advised to maintain the confidentiality of the interview. Every effort was made to maintain the confidentiality of the data collected.
Guba and Lincoln (1994) warn that the close relationship that may develop between the researcher and the participants may present personal difficulties and may undermine the desire for anonymity and confidentiality. Therefore it was important to be constantly reflecting on the process, paying close attention to ensure that the two fundamental rules mentioned above were not violated.

3.9 Limitations of the Study

The following limitations of the study should be noted:

- The study is a case study in that it is an investigation of a single school. The findings may be unique to this institution. There will therefore be no attempt to generalise beyond this institution, but it is envisaged that the findings may not be unique.

- The measure used to determine high achievement in itself presents limitations. There is the possibility that the assessments done may be flawed.

- The size of the sample of students used (20 interviewed and 60 completing questionnaires) may not adequately represent the school population.

- The investigator is the Deputy Principal at the school and there is the chance that the boys participating in the interviews may say what they think the interviewer wants to hear, rather than what they actually believe. The questionnaire which was given to the students to be completed and returned by
the end of the day at their leisure was used as a different data source with a greater degree of anonymity.

- The study is an ex post facto one in which the investigator is engaged in a retrospective search for plausible causal factors. The investigator has no control over the variables that may impact on student attainment.

3.10 Conclusion

It is imperative that as one embarks on educational research some consideration and acknowledgement be made about one’s philosophical stance. Such research should be ontologically and epistemologically grounded. The purpose of the proposed investigation is to determine what factors distinguish high achieving boys in a secondary school in Barbados from underachieving boys. This investigation was undertaken against an ontological stance of constructivism and an epistemological position of interpretivism.

A sample of boys was selected at two transitional levels at the school, for more in-depth interviews. Those students who had just entered the secondary school at the First Form level pursuing a compulsory academic programme and those who had transitioned into the Third Form, having had an input in the choice of subjects they want to do.

The strength of the proposed investigation relied heavily on the skills of the researcher, including the ability of the researcher to gain the confidence and trust of
the participants in the research setting. The success of this investigation depended greatly on the honest introspection of the participants as well as the informed reflections of the researcher, something that these persons may not have been challenged to engage in before.

The findings from the investigation are presented in the following chapter.
CHAPTER IV

4.0 FINDINGS

A mixed methods approach was used to gather data from both students and staff. This methodological triangulation included the use of questionnaires, focus group and individual interviews to gather data from students (predominantly male) and staff. The data collected are introduced, described and presented in this chapter. The qualitative data is presented in the first section and the quantitative data follows. This data will be analysed in Chapter V.

4.1 The Qualitative Data

This section begins with an overview of the teacher questionnaire which was used to identify the students who would qualify to participate in the study. The factors which were identified as affecting achievement levels are then offered. The strategies recommended to raise the achievement levels of the boys who are underachieving follow. This section concludes with a summary of the qualitative data.

4.1.1 The Teacher Questionnaire

Part A of the teacher questionnaire (Appendix D) was used to collect demographic data. As indicated in Table 4.1, the responses came from teachers, male and female, trained and untrained, across the curriculum. The questionnaire was distributed to teachers who taught at three or more year levels between the first and Fourth Forms. There were 39 possible candidates. Questionnaires were distributed to those 28 persons who were teaching for more than two years and 24 teachers (86%) responded.
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Table 4.1: Distribution of Respondents to the Teacher Questionnaire

The teacher questionnaire was a critical part of the investigation. This instrument was used to give teachers the opportunity to identify those students whom they perceived as underachievers. In order to ensure that the teachers were clear on what was required of them, the questionnaire first sought to determine how the teacher would go about distinguishing between a child who is underachieving and one who is a low achiever.

Only one trained graduate teacher thought that she would look at test scores to make her determination. However, the other respondents suggested that such a determination would require more thought and observation. It was suggested that one could

note student attentiveness in class, preparation for and participation in class; readiness for exams. Underachievers may show highs and lows
in performance on a frequent basis. Low achievers - comprehension,
grasping of subject matter, difficulties in expressing self, but tries, is
attentive in class.

(Teacher QL)

There was also the opinion that

An underachiever does not submit assignments; seldom focuses in
class and is usually disruptive. A low achiever will submit assignments and make some attempts but perform poorly in tests.

(Teacher QP)

There was the general view that the low achiever is a student who makes an effort but for one reason or another may not be able to make the passing grade.

A low achiever could be a student who may be academically weak, has basic problems with language and though tries he often does not make the grade. The underachiever, my guess, is the student who may have ability but is simply unmotivated and is content to remain functioning at a mediocre or less level.

(Teacher QC)
This outlook was shared by several teachers, one of whom stated that

A child who is underachieving is one who is not making an effort and therefore receives poor grades. A child who is a low achiever is one who tries and despite this, is still only able to achieve fairly low grades. This low achiever then is limited by his/her ability or intellectual capacity while the underachiever is limited by his/her attitude or work ethic.

(Teacher QN)

In making the distinction, one teacher suggested reasons for underachievement and low achievement.

The underachiever is one who may have ability but refuses or is unable to work to his true potential because of certain social stressors. The low achiever may be the child who is not performing well possibly because of learning difficulties and biological or psychological factors.

(Teacher QH)

The questionnaire concluded with the teachers listing those students whom they perceived as high achieving boys and underachieving boys by year group.

4.1.2 Definition of Terms

In order to ensure there was a clear perspective of what was meant by underachievement, all participants (students and teachers) were either asked to
distinguish between low achievement and underachievement or between a low achiever and an underachiever. In their focus group one teacher explained that “the low achiever is incapable of doing better; the underachiever has ability but is not working to his full potential” (Ms. Gilkes).

This opinion was supported by Mr. Oliver who felt that “a child getting 80% can be underachieving, if they are not working to their full potential”. In relation to the boys attending the school, Mr. Thomas suggested that

based on our common entrance results we don’t really have any low achievers in this school. Our boys who do badly ARE [teacher’s emphasis] underachieving.

From the students’ perspective “underachievement is when you ... don’t do too well, when you have the potential to do well” (Mark (1st)). In distinguishing between the underachiever and the low achiever the submission was made that “I would think that a child who is an underachiever is one who can do work but just doesn’t, whereas, a low achiever lacks the ability to achieve highly” (Andrew (5th)).

4.1.3 Factors which may affect achievement

4.1.3.1 The Socialisation of Boys

The socialisation of boys was perceived by the teachers as a highly pertinent factor. This factor is external, unstable and uncontrolled by the student. It was the belief that much more effort is given to the socialisation of girls and not enough given to boys. Ms. Gilkes suggested that “parents have expectations for their girls and some of the
same parents will turn around and tell you they can’t get Johnnie to do any work”.

Ms. Adams added that

parents spend more time on the socialisation of their girls. No real focus is given to the socialisation of the boys who are left free to roam.

The low achievement of boys seemed to be an accepted norm in present day society and for boys there seemed to be “no shame in performing badly” (Mr. Phillips). There was the opinion that:

For the majority of boys it is about what is fashionable. You must do badly because it is accepted. I do believe they feel badly privately. They want to be considered macho but I believe in the heart of hearts they want to do well.

(Mr. Richards)

With reference to the Barbados Secondary School Entrance Examination, Mr. Rogers believed that

We put it in their heads. From primary school we tell them we don’t expect much from you, but we give them the same rewards as girls who do better. We tell them that they are not supposed to do better.

There was also the view that the interest shown by parents does make a difference in the academic performance of the boys.
I know a boy who came first in the first and second terms and then came 1Sixth in third term. I saw a change in his attitude. His family reacted in shock. Parental expectations are important.

(Ms. Gilkes)

4.1.3.2 Self-Discipline

The high achievement of boys was linked to them being more focussed in terms of the academics.

That focus could be as a result of the home background, that is what is happening with respect to their parental oversight and there are some individuals who seem to naturally have a bent towards being more focussed on what they are doing and who will seem to be more amenable to the encouragement given by their teachers; so it’s a combination of what is happening at home and what is happening at school.

(Principal)

According to the teachers, students who were “goal oriented and self-disciplined” (Teacher QK) were more likely to be high achievers. These students would be “well prepared for class and test; attentive in class, participate on a regular basis” (Teacher QL). They would not be concerned “with following their peers. They set their own standards” (Teacher QV). These were the students who also exhibited the “ability to manage time” effectively (Teacher QJ).
It was however felt that there were many distractions in the school and the wider society which tended to undermine the achievement of the male students. These teachers proposed that those boys who lacked the strength of character, self-discipline and “strong role models” (Teacher QC) who were a positive influence on their lives, were more likely to underachieve academically in school. Furthermore, it was felt that achievement levels declined when students were impacted by “poverty” (Teacher QD), “hunger; illegal drugs; gambling” (Teacher QK), along with negative influences in the home and society; the influences of girlfriends who do not positively influence them to achieve; peer pressure from others in school who are not interested in school work. (Teacher QM)

The presence of such distracters may be manifested in high levels of restlessness or even lethargy, and “the lack of preparation” (Teacher QL) exhibited by some students. Teachers believed that boys who desired “not to be seen as a nerd” (Teacher QL) intentionally or unconsciously sabotaged their achievement.

We live in a time now where it is not cool to be smart. Knowing things is seen as less desirable and makes you soft. (Teacher QV).

As a result, some boys “underperform” (Teacher QF). Those boys who were “not being firmly held accountable for performance” (Teacher QG), may be unwittingly enabled in their behaviour by their teachers and parents. This resulted when teachers
and parents too readily accepted “less than outstanding standards” (Teacher QG) from their charges.

The respondents to the student questionnaire also believed that boys who were underachieving lacked self-discipline. The tendency to “break the school rules, not doing homework and not paying attention in class” (4HA1) was identified as a major contributor to their underachievement. This lack of discipline manifests itself in many forms, such as “fooling around in class” (1HA3; 2UA4; 4HA4; 4UA5), “getting to class late” (1HA1) “disrespecting the teacher” (1HA5), “skipping of classes, and the disregard for the importance of education” (5HA5). This type of negative behaviour was however perceived by some of the boys who were achieving highly, as an appeal for help by those boys who exhibited such behaviour. One student referred to students who

> give lots of trouble, always walking on the hallways, cause fights and arguments. Most of them have family problems that they don’t know what to do or how to deal with it.

(3HA1).

Another aspect of discipline mentioned was “good time management” (5HA3), having “a balanced lifestyle” (1HA1), and more specifically, establishing a “balance between school work and recreation” (2HA2). The submission was made that underachievement resulted when students got involved in “over scheduling” (3HA4) that is, involvement in several different activities, without dedicating enough time to the completion of their studies.
4.1.3.3 Distractions

Students in both focus groups and those responding to the questionnaires identified several distractions which they felt contributed to the underachievement of boys. The type of distraction varied depending on the ages of the boys. The First Year underachievers indicated that they were distracted by “watching T.V.” (1UA5) and “playing video games during school time, instead of leaving them for in the vacation, not doing homework and not studying” (1UA1). These boys were unable to establish a balance between the time allocated to homework and their time for playing electronic games.

The most common distraction identified by the underachieving boys from the 3rd to the 5th year, was simply put “girls” (4UA1; 4UA2) and “sex” (4UA6).

BREA: When boys are in First, Second and Third Forms they do work, but when they get a little older and stuff start happening to them they get distracted.

[Erupion of laughter in the room, when the interviewer asked: “by what?”]

PAUL: ... by girls!

The Fifth Form focus group which included two girls did not see a single sex school as an effective solution to this problem:

BREA: That would be worse
ANDREW: Yeah, that would be worse,

BREA: That would be like ‘sufferation’”

PAUL: Boys would be suffering then...

BREA: Then they won’t do any work at all...

It was the view of one of the girls that “the ones who do well, ignore the girls and focus on their studies” (Ceri). However, the boys did state that they were more likely to be distracted by their classmates who were talking or fooling around in class when they should be doing work.

PAUL: When you sit next to people and they talk and distract you, people who just talk, talk, talk, you would find yourself talking with them instead of doing your work

JUSTIN: You could be sitting next to somebody and they could be talking and distracting you. You could speak to them or tell the teacher. I think it has to do with yourself ... I don’t think you should let anybody distract you

The older students also identified the use of “drugs” (4UA3; 4UA6) and “the use of alcohol” (5UA2) as factors which contributed to the underachievement of boys.
However, The Fifth Form students were philosophical in their outlook. The view was posited that students needed to take more responsibility for their actions and their academic performances and stop looking for excuses. Success was in their control. One student summarized that “honestly, it has to do with their mentality, they choose if they want to be successful or not” (Reggie).

4.1.3.4 Peer Relationships

The desire to belong to a social group of one’s peers seemed to take precedence over academic matters for the respondents. It was postulated that some boys were so concerned about how they were perceived by their peers that “they do what others think is cool” (3HA2), just to gain the acceptance of their peers. This seemed to be a constant struggle for the boys. It was the underachievers who referred to “friends” (3UA5; 4UA2) and negative “peer pressure” (5UA2) as negatively impacting on achievement.

There was the opinion that the students who achieved highly may have come to the “realisation of the importance of education” (5HA5) and therefore did not give in easily to negative influences. Rather than engaging in “lawlessness” (5UA2), these high achieving students have the “discipline to work even when not told to do so” (4UA2). They possessed the strength of character to work even when it was not the popular thing to do.

The Principal acknowledged the value of the friendship group to which the boys belonged.
If you are with a group that has a high aspiration in terms of achievement and goals and ideals and all of that and they have an idea of what they plan to do, that seems to be an encouraging factor.

4.1.3.5 The Home Environment

The home environment featured in the majority of the responses from both students and teachers, as an important factor which contributed to the attainment of boys. This view was shared by sixteen of the twenty-four teachers who responded to the questionnaire. From the teachers, it was proposed that successful students require “a happy and functional home life” (Teacher QK). Such a home would be one with a “family which has instilled strong values – moral and social” (Teacher QH). One teacher opined that “those boys who have a positive home environment with helpful resourceful parents usually do well” (Teacher QF).

Teachers proffered the view that when students come from dysfunctional homes, where there were “misguided aspirations and negative life applications; low self-esteem; lack of parental love and guidance” (Teacher QK), the boys suffered academically. This along with the “absence of a father figure in the home; continuous negativity being fed to individuals” (Teacher QO) contributed to underachievement.

A Second Form high achieving student opined: “I think the home you come from contributes to the high achievement of boys in this school” (2HA5). Such a home would be one with highly disciplined or “strict parents” (1UA1) who set boundaries for their children. One senior boy believed that it was not just the home but “the
neighbourhood they were born in” (4UA3) which could possibly influence achievement.

Having a “stable home environment” (5HA1) was a factor external to the students, over which they have very little, if any, control. The students did however acknowledge that there were boys who would work “just to please their parents” especially when “they have that loving support to push them further” (5HA6). It was the view that boys who were “obedient to parents” (3HA1), who were genuinely “interested in learning” (3HA3) and were “well organised” (5UA1) were the ones more likely to succeed academically.

One in four of the high achieving boys who were interviewed individually spoke of the discipline which their fathers instilled and reflected positively of the relationship they shared with their parents.

My parents helped to keep me on track. They kept me disciplined.

They require that I do well in school and they help me in any way possible to be successful.

(3HS)

In the minds of the respondents, a healthy relationship, emotional connection and interaction between parent and child were critical to academic success. The stress of living with parents who were going through divorce or relationship problems was also of concern (4UA3). They believed that when “all isn’t going well at home ... it takes a
toll on their studies ... the loving support to push them further is not there, so to them it makes no sense achieving in school” (5HA6).

Some underachieving boys attributed their lack of success to an unstable living arrangement, where a child was living with parents (or guardians) in different homes. One student expressed concern about his particular living arrangements, over which he had very little control. He was living with his grandmother during the week and his mother at the weekend. He attributes his underachievement to

… switching houses so often. At my mother I am more motivated to work but at my grandmother, I am bored and I don't feel like working. I need supervision at home.

(3UA)

It was deemed disobliging for students to have “parents that do not care what their children think or do” (1UA1). Furthermore, students seemed to favour parents “who do not pressure their children” (4UA1). The boys were clear on the distinction between pressure and encouragement. Whereas they welcomed encouragement, they responded negatively to pressure. For them the effective parent was perceived as one who helped their child to understand “that the only way in life to succeed is to make sacrifices, to do good work and to make it somewhere in life” (4HA2).

Students in both focus groups shared similar views. A female student referred to one of her colleagues in Fifth Form who
did very well because he grew up in an environment where his parents made him study, he did not change. He had a lot of structure and encouragement from his parents.

(Ceri)

The encouragement offered by parents seemed to make a big impression on all of the high achievers. A First Year student in the focus group explained that

If I get a low mark in a subject she [mother] motivates me to revise my work better, so that when the next test comes I would know what to write.

(Scott).

Some were inspired by their parents to work towards a long term goal.

What motivates me is my father. He usually stresses the seriousness of my education on my future, so I really think that through, and I really need to study harder to do well.

(Dario)

The opinion of some of the high achieving students was that students underachieved when parents did not provide enough structure and accountability in the home.
CERI: The ones who don’t have any kind of structure in their lives don’t really do any work.

This group poked fun at the parents they perceive as gullible:

BREA: I find children go home, go inside, change their clothes get something to eat and watch TV. Parent comes in “You have homework?”; “no” and that’s it.

PAUL: [laughing] ... all that time you got REAL [student’s emphasis] homework to do, you know.

The school offers one evening each year for the different year groups to have what is known as Form Level Meetings. All parents at a particular year level are invited to come to the school and have a one-on-one interaction with each teacher, who teaches the child. Many students attend with their parents and they see it as a useful exercise, but with short-comings. One student lamented that

CERI: When you go to form level meetings, the persons don’t do well in school, their parents don’t come. I don’t know how you would get through to them.

There was also the view that boys need to ask for help when they needed it.
ANDREW: It is good if you can get some help from your parents. Most likely you get help from your mother. If your mother don’t help you, you go to your father. Your father got enough work to do at work and don’t have any time to help you and you then have to go to your friends or somebody else to help you ...

BREA: Or do it yourself

REGGIE: The part he was referring to just now.... yeah, my father don’t really live with us, so I don’t spend much time with he; my mother live with me... but she got injuries; my sisters don’t live with me; so most of the time I have to do work by myself or ask friends for help. But I know my mother wants me to do well and she is always encouraging me.

4.1.3.6 The School Environment

Some factors external to the boys themselves, which are unstable and beyond their control were given for the underachievement of the boys. The view was expressed that, to some extent, the teaching style of the teachers may not appeal to boys.

There must be a culture change. We have to look at our teaching styles. Chalk and talk caters more to females.

(Mr. Richards)
Teachers also felt that students who were engaged in subjects and activities which they enjoyed would perform well. The submission was that boys enjoy hands on teaching, an interested teacher willing to empathise with the ‘mechanics’ of being a boy and motivation by way of rewards, or simple attention outside the classroom.

(Teacher QE).

The relationship between teacher and student is fostered by how teachers perceived their role in the life of the students. The teacher-student relationship was perceived as an important factor which contributes to the academic success of the child. “Encouragement from teachers” (Teacher QD) was deemed essential. Teacher QQ suggested that boys needed “teachers who do not give up on them and (who) help them to set goals” rather than “uncaring or disinterested teachers” (Teacher QE).

The principal advocated that achievement levels might rise if teachers were a bit more “male sensitive” providing an environment that would be more “encouraging to males”. The use of technology was also recommended as a means of enhancing the teaching of the boys.

Some teachers felt that classroom management and the teaching strategies used by teachers had an impact on the attainment of the boys. It was further suggested that underachievement resulted when teaching strategies were incompatible with the learning styles of the students. Students suffered in a school environment where there was “late or no intervention in investigating factors contributing to
underachievement” (Teacher QE). Furthermore, students suffered when there was a “failure to give boys individual responsibility over certain aspects of their work and to consistently discipline them for not following through” (Teacher QM).

None of the boys who were achieving highly acknowledged the teacher as contributing to their academic achievement. Only two underachieving students cited the “teacher” (3UA5; 4UA2) as contributing to the underachievement of boys.

One of the female students suggested that the curriculum of the school may be a contributing factor

Students have to choose subjects that they do not want to do. Everyone, from the form to choose subjects, must choose a Foreign Language and one of the Humanities. These subjects may not interest the persons who choose them.

(Ceri)

This choice referred to occurs at the end of the Third Year in the school. Students are required to select five subjects which they pursue for their external examinations along with English Language, English Literature and Mathematics which are compulsory at this school.

There was the belief that the school contributed to the underachievement of boys, especially those involved in sport. One student thought that the school was partial to
sportspersons and as a result these students were not held up to the same high standards as other students.

In the case of sports persons, they need to manage their time. Also their grades should be monitored. A lot of the returning 5ths are sportspersons, whether from this school or other schools. This gives sportspersons the idea that they don’t need to study because they will be favoured over other students to return to school.

(Ceri)

4.1.3.7 Goals

Many of the boys who were achieving highly associated their success with having attainable goals. The view was posited that the successful students were those “who care about their future and about their work. They don’t let anyone influence them” (3HA2).

It was the students with “realistic long term goals” (3HA4) who seemed to have a sense of purpose when it came to academic pursuits. It was however felt that those students who were unable to make connections with how current school activities impacted on what they “are going to do later in life” (4HA3) were the ones likely to underachieve, since they lacked the necessary focus.

In the individual student interviews, all the boys who were underachieving identified a career goal as compared to six of the eight high achievers. However, half of the
underachievers were unsure of what they needed to do to achieve their particular goal.
The high achievers were more general in identifying what they needed to do to achieve their career goal. They suggest that they need to “stay focus” (H3S) and “strive to be as good as I can in whatever I do” (Student HWD) now in preparation or life after school.

Both groups of boys expressed a desire to do well in school. Even though the high achieving students were making the necessary effort to achieve their academic goals, six of the eight high achievers were not satisfied that they are doing enough. In contrast, the underachieving students had a general idea of what they needed to do to be more successful but seemed unwilling, unable or lacked the motivation to invest the required effort to achieve the desired outcome.

4.1.3.8 Motivation
Successful students were thought to be highly motivated. The lack of motivation and the “lack of drive to success” (5HA1) were offered as factors which may contribute to the underachievement of boys. This lack of motivation may be manifested in the attitude of the boys to their school and to their work. The boys felt that the “lack of interest” and the “wrong attitude towards studying” (3HA4) impacted negatively on academic achievement.

A student who was underachieving submitted that “some girls and activities help to motivate them” (4UA1) to achieve. The high achieving students also acknowledge the role of girls in motivating some boys to do well academically. One felt that the
boys “use some time with girls” (3HA1) to study. There was the view that “some may do it (achieve highly) just to impress girls or their friends or even just to please their parents” (5HA6).

In the focus group of teachers, Mr. Rogers suggested that while “we make excuses for boys, we help girls to set goals”. The idea was expressed that if boys are encouraged to set attainable goals then they would be more motivated to achieve. The role of the teacher in the classroom was perceived as important, not only in the teaching of the subject, but in the preparation of students for life in general. The reflection was that “we probably have to show boys how good grades translate into good jobs” (Mr. Thomas). There was agreement

I say to them tell me what you would like to become. Boys who have goals in mind tend to do better. As teachers we should get each child to know what he wants to get from life.

(Ms. Adams)

Ms. Gilkes indicated that she used career interest as a means of motivating her students to do well in Spanish, sharing advertisements for jobs requiring Foreign Languages with her students. The low level of motivation in the boys was offered as a reason for underachievement. Ms. Gilkes expressed the view that “boys seem to have less value for education; less motivated”. There was agreement: “A lot are not intrinsically motivated” (Mr. Phillips).
Motivation was mentioned by nine of the twenty-four respondents to the teacher questionnaire. It was suggested that the most academically successful students were those who were intrinsically motivated to achieve. It was also the view that parents and teachers had a role to play in encouraging and motivating their children to achieve. Teachers spoke of using incentives, rewards and recognition as means of motivation students. The school currently has a system where students are recognised for “their efforts via certificates” of achievement (Teacher QC).

It was felt that boys needed “teachers who motivate students and are interested in them excelling” (Teacher QD). This, along with “good support at home” (Teacher QI), may result in a boy who attained “a feeling of self-worth” (Teacher QU), was prepared to work towards a high level of attainment and who was “proud of his achievements” (Teacher QL).

In the individual interviews, boys who were achieving highly claimed to be self-motivated and were simply inspired by the “joy of success” (Student 1HT). Family loyalty and the support given by parents provide an external impetus to success. These students achieved satisfaction from academic excellence and were inclined towards competing with themselves.

This view was supported by most of the high achievers who participated in the focus group. They gave the assurance that they were self-motivated. Some had positive role models. These boys confirmed that they felt a sense of pride when they achieved. One First Year student indicated that
I look at those who do well and try to learn something from them. I like doing well in class.

(Mark)

Half of the boys who were underachieving were not sure what motivated them to achieve. Some were motivated by a fear of failure, as they did just enough work to avoid repeating the year at school. The others cited incentives and rewards as necessary if they were to produce good work. “I work when my mother promises that I will get something if I do well” (Student 1UN).

Some students were motivated by short term rewards like “trips” (Brea) and “gifts, incentives; when you do good in school you get what you desire, the Blackberry...” (Justin). But not all boys were motivated by material gain. Some were motivated by:

ANDREW: The prize at the end. Personal achievement. Achieving your goals.

REGGIE: Recognition.

PAUL: Acceptance.

However, whatever the source of motivation, the members of the Fifth Form focus group agreed that boys “admire boys who do well. It is just that they themselves would not do it because it is just time consuming...” (Ceri).
CERI: Yeah, boys look up to them, look at Renaldo..., boys look up to Renaldo...

PAUL: Yeah, (laughter) look at Aaron; Aaron looks up to me...

(the whole group laughs)

REGGIE: Look at Renaldo. He is a hard worker;

CERI: It is his consistency...

ANDREW: Yeah, he always working hard

REGGIE: ... and we respect him for that

ANDREW: Yeah boys do respect those who work consistently hard at least in my form

4.1.3.9 Effort

The effort which the child put into his studies was deemed a most significant reason for success. It was felt that there was a connection with the amount of effort made by the student and the academic attainment. Mr. Phillips sums it up by saying that “the ones who are prepared to work hard will succeed”.

There was the submission that high achievement in boys was associated with a “good work ethic” (Teacher QH). Those students, who demonstrated a “commitment to high output” (Teacher QX) and who were prepared to make the necessary effort and prepare and revise their work thoroughly, tended to be the more successful ones.

Almost all the respondents who were achieving highly attributed their success to the effort they put into their studies. According to them, this included “paying attention
in class” (2HA1; 2UA6), “participating in class” (4HA4), “taking down notes” (5HA2), “revising at home” (3HA3) and having sheer “determination, perseverance and a balance between school work and recreation” (2HA2).

While acknowledging that some students are just “naturally bright” (3HA4), it was their view that those students who were underachieving “do not put in the work needed to excel” (3HA4) doing only the minimal requirement to pass. These high achieving boys felt that it was important for students to communicate effectively with their teachers, seeking clarification and assistance and to challenge themselves by not just passing each test, but by working “to get a higher mark next time” (4HA4).

The boys who were underachieving attributed their performance to not studying, being easily distracted, fooling around in class and not handing in assignments. Student 1UN reflected on his

… attitude towards work. Not caring. I did not realise that you had to really work hard to succeed.

Recognising that many of the boys who were underachieving were involved in sport, the Principal observed that once these underachievers got on the field they are transformed in that they become more disciplined more focused, they become more prone to practise, having determine the areas where they are not as strong on the cricket field, the football field, the volleyball field, the basketball field, they are more prone to
come and practice and work on those areas so that they can become a bit better. That is an attitudinal thing which if it can be transferred to the academic would serve them well. Because in many cases it isn’t so much lack of ability but it is the ease with which they give up when they come across a challenge be it a Maths problem or what have you. And if only they remained and stuck to it a bit longer as happens with the ones who are considered brighter, they would get it worked out too.

4.1.3.10 Views on masculinity

Both high achieving boys and underachieving boys have traditional patriarchal views of masculinity. “The man is the head of the household” (Student UNJ) who is there to care for and protect the family. There seems to be consensus that “a man is someone to take care of the family, pay the bills and helps look after the children if the mother is not there” (Student 1UR). In fact a real man “would never hit a woman” (Students 3HM, 3HW, 1HF, 3UA, 1UN, 1UR).

Whereas the underachievers kept their descriptions at this level, the high achieving boys elaborated. To their description of masculinity, they added such qualities as “being intelligent, thinking before you act” (3HS). For them “being a man means doing what is right. Being mannerly” (Student 1HF). They believed that a real man was respectful and paid attention to how he dressed and presented himself. One high achieving student however declared that as far as masculinity was concerned “I don’t believe in stereotypes” (3HW).
4.1.4 Strategies for Improving Underachievement

The students participating in the focus groups felt that high achievement was associated with a goal orientation. Therefore any intervention used to improve the attainment of boys should address goal setting.

Boys need to have goals in mind. Boys that performed well last year already have chosen their careers. They therefore were working towards their goals. Most boys and students in general do not have a specific goal. Programmes could be put in place where students are encouraged to have goals and choose career paths and the subjects that go along with them. More effort would be put into their work.

(Ceri)

The intervention should acknowledge that students need to work hard consistently. It was suggested that whatever strategy was employed, it should be attractive to the underachiever and should not only be about academics and studying. These programmes should also cater to personal development and emotional growth aimed at developing the social and interpersonal skills of the students. A First Year, high achieving student who describes himself as shy, relates that he had some initial issues settling into school. He, however, recognised some improvement in his attainment once he had made a few new friends. There was also the belief that those who were underachieving needed
programs that help them to learn to be more disciplined; how to say no to drugs; how to choose friends wisely.

(3HS)

The view was also expressed that many of the boys who were underachieving had personal issues confronting them. As a result, any intervention aimed at assisting these boys should be tailored to the individual. The recommendation was that we do different things depending on who we are talking about. Some boys that the teachers pick on have serious problems at home, especially with their mothers. Those children end up hating everyone, especially teachers who keep picking on them.

(Student 3UK)

Study hall was offered as a practical way of helping the underachievers. From the experiences of the teachers, attendance at study hall has brought some level of success to those who participate. At the school study hall is sometimes organised by the Form Teacher or the Senior Teacher in charge of a year level (Year Head). It is organised in such a way that those students, who are invited to attend, with the permission of their parents, spend a few afternoons after school in a supervised study environment. Students who are attaining low scores are invited to attend, but attendance is voluntary.
In addition to study hall, one teacher recommended that academic success could be achieved if students experienced

couragement by teachers, especially male teachers, to perform well;
individual mentoring by teachers; target setting by teachers; out of school teacher-student lessons.

(Mr. Richards)

4.1.5 Summary of the Qualitative Data

The high achievement of boys was attributed to natural talent and consistent and persistent effort. High achieving boys were believed to be self-disciplined, intrinsically motivated and did not subscribe to the stereotypical view that academic achievement was associated with femininity. High achieving students seemed to practise good time management and were able to balance their academic pursuits with recreational activities. Furthermore, most significantly, high achieving students had the support and encouragement of their parents.

Like the Principal and the teachers, the students associated the underachievement of boys with the lack of effort. However, some of the underachieving students admitted that they responded academically to incentives and gifts. Boys who were underachieving tended to present as ill-disciplined, fooling around in class, skipping classes, not doing homework and not submitting assignments completed and on time.
Underachieving boys were able to offer a career goal, even though half were unable to indicate how they would achieve such goals. The high achieving students were not as specific in identifying career goals, but generally indicated that whatever goal they had, they had to continue working hard in school now to reach that future goal. They made a connection between the activities of school and the attainment of their goals.

Both high achieving and underachieving boys generally had positive attitudes to their school and both indicated that they wanted to do well in school. Both high achieving and underachieving boys tended to have traditional patriarchal views about masculinity. However, the high achievers also associated masculinity with intellectual competence, respect and deportment.

Teachers felt that it was their responsibility to develop a relationship with their students so as to help the boys with life skills such as time management and goal setting. Some teachers proposed that in some ways the teaching styles used may not be attractive to boys and that there may be dissonance between the teaching styles used by teachers and the learning style of those boys who were struggling.

It was recommended that strategies to improve the academic attainment of the boys must take into consideration the individual. Students who are underachieving should be trained in problem solving and in fostering positive interpersonal relationships. They would also need training in meta-cognitive skills to enhance their study programme. Wherever possible parents should be a part of any intervention strategy.
4.2 The Quantitative Data

This section contains the results of the data collected from the student questionnaire (Appendix B). It starts with data related to the student’s involvement in extra-curricular activities and details as to the average amount of time spent doing homework each day. This is followed by the statistical analysis of the responses to Part C of the questionnaire. The section concludes with a summary of the major findings.

4.2.1 Extra-Curricular Activities

The school in this investigation offers a wide variety of extra-curricular activities to the students (See Table 4.2). These activities usually occur in the afternoon after formal classes have ended. The Inter-School Christian Fellowship (ISCF) meets twice weekly during the lunch break. Even though involvement in extra-curricular activities is strongly encouraged at the school, participation is optional.

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>FIRST (11+ yrs)</th>
<th>SECOND (12+ yrs)</th>
<th>THIRD (13+ yrs)</th>
<th>FOURTH (14+ yrs)</th>
<th>FIFTH (15+ yrs)</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>H</td>
<td>U</td>
<td>H</td>
<td>U</td>
<td>H</td>
<td>U</td>
</tr>
<tr>
<td>ATHLETICS</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BASKETBALL</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>CADET CORP</td>
<td>2</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>CRICKET</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DRAMA</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>FOOTBALL</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>HOCKEY</td>
<td>1</td>
<td>1</td>
<td></td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>I.S.C.F.</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>KARATE</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC</td>
<td>1</td>
<td></td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SWIMMING</td>
<td>2</td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TABLE TENNIS</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 4.2: Involvement in Extra-Curricular Activities
The responses of the boys are shown in Table 4.2. Sixteen of the students completing the questionnaire were not involved in any extracurricular activities. Most of those students who were involved in the extracurricular life of the school were involved in only one activity. However, nine students were involved in more than one activity. They were:

- a Second Year underachiever who is involved in both cricket and football.
- a Fourth Year underachiever involved in both hockey and music (piano).
- a First Year high achiever who is involved in both football and athletics and another involved in cadets and hockey.
- a Second Year high achiever involved in cricket and swimming and another involved in music and hockey;
- a Third Year high achiever involved in basketball and cricket;
- a Fourth Year high achiever involved in cricket and swimming; and another who is involved in the Inter-School Christian Fellowship, music (choir) and hockey.

Forty-four (73%) of the sixty respondents were involved in the extra-curricular life of the school. There was no significant distinction between the number of high achievers (21) and the number of underachievers (23) involved in extra-curricular activities. What was noteworthy, however, was the involvement of seven high achievers in more than one extra-curricular activity as compared to two underachievers. One may need to explore if these high achievers were able to so effectively manage their time that they could maintain high grades and still share in the non-academic life of the school.
One Second Year underachiever added a note to his questionnaire that even though he was not involved in an activity at this time, he “used to play basketball” (2UA5). Parents often prevent their children from participating in extracurricular activities if they perceive that it conflicts with the academic performance of the child. A First Year high achieving student noted that he was not involved “because my mother says I have to settle into my new school first” (1HA1).

The majority of these boys indicated a preference for sporting activity. Football stood out as the most popular activity among the underachieving boys, having been chosen by nine of the thirty underachievers and four of the thirty high achievers. The high achievers (4) seemed to favour cricket when compared to the underachievers (1). Hockey was the pick of four high achievers and two underachievers. Only underachievers at First Year were involved in karate (2). There was no noteworthy difference between the number of high achievers and underachievers involved in the other sport of athletics, basketball and swimming as shown in Table 4.2.

The Cadet Corp had greater involvement among the students who were achieving highly (5) than among those who were underachieving (1). Only high achievers declared an involvement in music (4), and the Inter-School Christian Fellowship (2).

4.2.2 Homework

The vast majority of students (22 of the high achievers and 20 of the underachievers) spent, on average, between 1-2 hours on homework each day (Table 4.3). As the students progressed through the school, more time was devoted to home study. However, one observed that at Fourth and Fifth Form, when students should be fully
engaged in preparing for external examinations, all except two high achieving students surveyed spent less than 2 hours per night occupied in home study.

During the First Year at the school ten of the twelve students spent at least one hour each night in home study. There was a notable change in the Second Year where only five boys (42%) spent more than one hour in home study. It was only at the Second Form year that the majority of the high achieving boys spent less time in home study. Thereafter, there was a gradual increase in the number of persons involved in at least one hour of home study. In the Fourth Year group there was no distinction between the time spent by the high achieving and underachieving boys since all reported that they spent between 1 and 2 hours studying. In the final year before external examinations, the Fifth Year, ten of the twelve boys reportedly spent at least one hour studying at home.

<table>
<thead>
<tr>
<th>YEAR LEVEL</th>
<th>TIME SPENT ON HOMEWORK</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less than 1 hour</td>
<td>1 – 2 Hours</td>
<td>More than 2 hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>H</td>
<td>U</td>
<td>H</td>
<td>U</td>
<td>H</td>
</tr>
<tr>
<td>FIRST (11-12 yrs)</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>SECOND (12-13 yrs)</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>THIRD (13+ yrs)</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>FOURTH (14+ yrs)</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>FIFTH (15+ yrs)</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>5</td>
<td>10</td>
<td>22</td>
<td>20</td>
<td>3</td>
</tr>
</tbody>
</table>

|          | 17% | 33% | 73% | 67% | 10% | 0% |

Table 4.3: Average Time Spent on Homework
4.2.3 Student Questionnaire: Part C

Part C of the questionnaire was made up of 33 items to which students were required to respond using a five point Likert scale. Numerical values were assigned to the suggested responses to facilitate the analysis of the responses. The suggested responses were “strongly agree”(2), “agree”(1), “unsure”(0), “disagree”(-1) and “strongly disagree”(-2). A value of 0 was also assigned when no response was given. These items on the questionnaire were used to glean data on:

- The students’ attitude to school;
- the students’ goal orientation, whether mastery goal or performance goal orientation;
- whether the students had an entity theory of intelligence;
- if the students were engaging in academic self-handicapping
- the students’ views on gender related issues
- the students’ feelings on their level of motivation
- the opinion of the students on their relationships with peers, teachers and parents

A T-Test was used to analyse the responses to the 33 items. The T-test was used to determine whether the means of the two groups were statistically different from each other. A probability value (P-value) of less than 0.05 (5%) would indicate a significant difference between the two groups for the given item.
4.2.3.1 Attitude to school

The maximum possible mean value for an item was 2.0 (strongly agree) and the minimum possible mean value was -2.0 (strongly disagree). Both high achieving (1.9) and underachieving boys (1.7) strongly indicate that they “really want to do well in school” (See Table 4.4). Both high achieving and underachieving boys disagree with the statement “I would be happier in a single sex school”, with the underachieving boys registering the strongest disagreement. All 5th Year students and the 4th Year underachievers strongly disagree with the statement. Only one 4th Year high achiever agreed with this statement. It is noteworthy that this same student was one of the two high achievers who felt that “there are too many female teachers in the school”.

<table>
<thead>
<tr>
<th>ATTITUDE TO SCHOOL</th>
<th>MEAN VALUE</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I really want to do well in school</td>
<td>1.9</td>
<td>1.7</td>
</tr>
<tr>
<td>I would be happier in a single sex school</td>
<td>-1.6</td>
<td>-1.7</td>
</tr>
<tr>
<td>I don’t like this school</td>
<td>-1.4</td>
<td>-1.0</td>
</tr>
<tr>
<td>My school friends are not interested in doing well in school</td>
<td>-0.7</td>
<td>-0.7</td>
</tr>
<tr>
<td>I find school boring</td>
<td>-0.9</td>
<td>-0.4</td>
</tr>
</tbody>
</table>

Table 4.4: Students’ Responses re: Attitude to School

Taken as a whole, there was no significant difference between the attitudes of both groups of boys to their school (Table 4.4). However, when the responses were disaggregated by year group there was a notable difference between the high achieving boys and the underachieving boys for the item “I don’t like this school” at the First Year level. Whereas all the high achieving boys disagreed with this statement with a mean of -1.7, two of the six underachieving boys agree with this
statement. The other First Year boys were yet to establish how they really felt about the school. These First Year students may be having difficulty settling into school. This view was explored in the individual and focus group interviews with the First Year students.

4.2.3.2 Motivation

The responses to the items associated with motivation in Part C of the questionnaire, supported the views offered by the students in Part B of the questionnaire that motivation was a factor which impacted on academic attainment. Table 4.5 revealed a clear and highly significant distinction between the level of motivation of the high achieving students and those who were underachieving. Twenty of the thirty high achievers had no difficulty with motivating themselves to do school work, as compared to eight of the thirty underachievers. This distinction was most pronounced at the Fourth Year level where all except one underachiever confessed that they found some difficulty in motivating self to do school work.

<table>
<thead>
<tr>
<th>MOTIVATING FACTORS</th>
<th>MEAN VALUE</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I find it difficult to motivate myself to do school work</td>
<td>-0.7</td>
<td>0.3</td>
</tr>
<tr>
<td>I want a job as soon as I leave school</td>
<td>0.2</td>
<td>0.5</td>
</tr>
<tr>
<td>I want to continue my studies when I leave school</td>
<td>1.1</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Table 4.5: Students’ Responses re: Motivating factors

There was the view that some students may be motivated by the desire to find a job on leaving school or to obtain passes in the subjects pre-requisite to further studies.
Whereas the underachievers were more inclined to want a job on leaving school, the high achieving students were more inclined towards continuing their studies. The differences, however, were not statistically significant.

4.2.3.3 Achievement Goals: Mastery goal orientation

A mastery goal orientation was reflected by the student’s interest in developing competence in academic pursuits. Statistically there was no significant difference between the groups which seemed to share a mastery goal orientation (Table 4.6). Both groups of boys agree that it was important to them to understand the work done in class. The mean for each of the items was higher for the high achieving boys than for the boys who were underachieving.

<table>
<thead>
<tr>
<th>MASTERY GOAL ORIENTATION</th>
<th>MEAN VALUE</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUESTION</td>
<td>HIGH</td>
<td>UNDER</td>
</tr>
<tr>
<td>It is important to me that I understand the work done in class</td>
<td>1.7</td>
<td>1.6</td>
</tr>
<tr>
<td>I don’t mind making mistakes when I am learning something new</td>
<td>1.2</td>
<td>1.0</td>
</tr>
<tr>
<td>I enjoy learning new things</td>
<td>1.4</td>
<td>1.2</td>
</tr>
<tr>
<td>I like classwork that challenges me to think</td>
<td>1.0</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Table 4.6: Students’ Responses re: Mastery Goal Orientation

4.2.3.4 Achievement Goals: Performance goal orientation

A performance goal orientation is manifested in the student’s desire to attain the positive judgement of their competence by others. These students want to look smart and will sometimes not engage in an activity to avoid a negative judgement of their competence. There was a statistically significant difference between the high
achieving boys and the underachieving boys on only one of the items associated with performance goal orientation (Table 4.7). This occurred in the item “It is important to me that I do better than other students in class”. This view was much stronger for the boys who were underachieving than for those who were achieving highly.

Taken alongside the results for the mastery goal orientation, it would appear as if students really want to achieve competence. Furthermore, the impression was given that they also desired to be acknowledged and recognised for demonstrating this competence.

<table>
<thead>
<tr>
<th>PERFORMANCE GOAL ORIENTATION</th>
<th>MEAN VALUE</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUESTION</td>
<td>HIGH</td>
<td>UNDER</td>
</tr>
<tr>
<td>It is important to me that I do better than other students in class</td>
<td>0.9</td>
<td>1.3</td>
</tr>
<tr>
<td>I feel good when I am one of the few who know the answers to the questions asked in class</td>
<td>1.6</td>
<td>1.4</td>
</tr>
<tr>
<td>I don't want to be considered a nerd in class</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>I want other students to know when I am doing well in class</td>
<td>0.6</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Table 4.7: Students’ Responses re: Performance Goal Orientation

4.2.3.5 Academic Self-Handicapping

Students will sometimes adopt certain behaviours that can be categorised as academic self-handicapping. Academic self-handicapping is manifested in the strategies that some students embrace so that, just in case they are not successful in an academic activity, they blame their low attainment on the circumstances, rather than on their lack of ability or effort. These underachieving boys were engaging in academic self-
handicapping (See Table 4.8). They were the ones who tended to fool around a lot in class and who were often put out of class. This behaviour may also have contributed to these particular boys being identified by their teachers as underachieving students. Furthermore, they were also the ones who confessed that they allowed their involvement in the extracurricular life of the school to interfere with their studies.

<table>
<thead>
<tr>
<th>ACADEMIC SELF HANDICAPPING</th>
<th>MEAN VALUE</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUESTION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am involved in a lot of activities and therefore have very little time to study</td>
<td>-1.1</td>
<td>-0.4</td>
</tr>
<tr>
<td>I am really bright so I don't have to study as hard</td>
<td>-1.1</td>
<td>-0.9</td>
</tr>
<tr>
<td>I don't want to look stupid in class so I avoid participating in class</td>
<td>-1.2</td>
<td>-0.7</td>
</tr>
<tr>
<td>I am often put out of the classroom</td>
<td>-1.7</td>
<td>-0.9</td>
</tr>
<tr>
<td>I fool around a lot in class</td>
<td>-1.3</td>
<td>-0.5</td>
</tr>
</tbody>
</table>

Table 4.8: Students’ Responses re: Academic Self Handicapping

All the mean values in Table 4.8 were negative, indicating disagreement with all the statements. When the data were disaggregated by year group (Table 4.9), there was a distinction between the Second Form high achievers and the Second Form underachievers in this area. It was the Second Year (and to a lesser extent the Fifth Year) underachieving boys who indicated that their involvement in activities encroached on their study time.
I am involved in a lot of activities and therefore have very little time to study

<table>
<thead>
<tr>
<th>YEAR LEVEL</th>
<th>MEAN VALUE</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRST (11-12 yrs)</td>
<td>-0.7</td>
<td>-0.7</td>
</tr>
<tr>
<td>SECOND (12-13 yrs)</td>
<td>-1.2</td>
<td>0.5</td>
</tr>
<tr>
<td>THIRD (13+ yrs)</td>
<td>-1.2</td>
<td>-0.8</td>
</tr>
<tr>
<td>FOURTH (14+ yrs)</td>
<td>-1.3</td>
<td>-1.2</td>
</tr>
<tr>
<td>FIFTH (15+ yrs)</td>
<td>-1.0</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Table 4.9: Academic Self-Handicapping Item 5 by Year Group

A similar trend occurred for the item “I fool around a lot in class” (Table 4.10). The second and Fifth Year boys who were underachieving were also the ones who were more likely to agree with this statement.

<table>
<thead>
<tr>
<th>YEAR LEVEL</th>
<th>MEAN VALUE</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRST (11-12 yrs)</td>
<td>-1.7</td>
<td>-1.3</td>
</tr>
<tr>
<td>SECOND (12-13 yrs)</td>
<td>-1.8</td>
<td>0.2</td>
</tr>
<tr>
<td>THIRD (13+ yrs)</td>
<td>-0.8</td>
<td>-1.2</td>
</tr>
<tr>
<td>FOURTH (14+ yrs)</td>
<td>-1.3</td>
<td>-0.3</td>
</tr>
<tr>
<td>FIFTH (15+ yrs)</td>
<td>-0.8</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Table 4.10: Academic Self-Handicapping Item 23 by Year Group

A spread of the responses made in response to the statement “I fool around a lot in class” is shown in Table 4.11.
<table>
<thead>
<tr>
<th>YEAR LEVEL</th>
<th>FIRST</th>
<th>SECOND</th>
<th>THIRD</th>
<th>FOURTH</th>
<th>FIFTH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>H</td>
<td>U</td>
<td>H</td>
<td>U</td>
<td>H</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Agree</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Unsure</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Disagree</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 4.11: Spread of the Responses to Item 23

It was only at the First Year level that there was a distinction between the high achieving boys and underachieving boys on the item “I don't want to look stupid in class so I avoid participating in class” (Table 4.12). Once again it seemed as though the First Year boys were seeking to find themselves in their new school environment. The high achieving boys were unanimous and strong in their disagreement, whereas two of the underachievers were unsure and the other four indicated disagreement with this item.

<table>
<thead>
<tr>
<th>YEAR LEVEL</th>
<th>I don't want to look stupid so I avoid participating in class</th>
<th>MEAN VALUE</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>HIGH</td>
<td>UNDER</td>
</tr>
<tr>
<td>FIRST (11-12 yrs)</td>
<td></td>
<td>-2.0</td>
<td>0.7</td>
</tr>
<tr>
<td>SECOND (12-13 yrs)</td>
<td></td>
<td>-1.3</td>
<td>-0.7</td>
</tr>
<tr>
<td>THIRD (13+ yrs)</td>
<td></td>
<td>-1.0</td>
<td>-0.3</td>
</tr>
<tr>
<td>FOURTH (14+ yrs)</td>
<td></td>
<td>-0.7</td>
<td>-1.5</td>
</tr>
<tr>
<td>FIFTH (15+ yrs)</td>
<td></td>
<td>-1.0</td>
<td>-0.5</td>
</tr>
</tbody>
</table>

Table 4.12: Academic Self-Handicapping Item 8 by Year Group
A disaggregation of the data for the item “I am often put out of the classroom” (Table 4.13) indicated that none of the high achievers agreed with this statement. However the same cannot be said for the underachievers.

<table>
<thead>
<tr>
<th>YEAR LEVEL</th>
<th>MEAN VALUE</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HIGH</td>
<td>UNDER</td>
</tr>
<tr>
<td>FIRST (11-12 yrs)</td>
<td>-1.7</td>
<td>-1.3</td>
</tr>
<tr>
<td>SECOND(12-13 yrs)</td>
<td>-1.7</td>
<td>-0.5</td>
</tr>
<tr>
<td>THIRD(13+ yrs)</td>
<td>-1.5</td>
<td>-0.8</td>
</tr>
<tr>
<td>FOURTH(14+ yrs)</td>
<td>-1.8</td>
<td>-1.2</td>
</tr>
<tr>
<td>FIFTH (15+ yrs)</td>
<td>-1.8</td>
<td>-0.8</td>
</tr>
</tbody>
</table>

Table 4.13: Academic Self-Handicapping Item 10 by Year Group

The spread of the responses as shown in Table: 4.14 indicated that it was the Second Year group and to a lesser extent the Fifth Year group who were more likely to be removed from the class.

<table>
<thead>
<tr>
<th>YEAR LEVEL</th>
<th>FIRST</th>
<th>SECOND</th>
<th>THIRD</th>
<th>FOURTH</th>
<th>FIFTH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>H</td>
<td>U</td>
<td>H</td>
<td>U</td>
<td>H</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>0 1 0 0 0 1 0 0</td>
<td>0 1 0 1 0 1 0 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>0 0 0 2 0 0 0 1</td>
<td>0 1 0 1 0 1 0 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unsure</td>
<td>0 0 0 1 0 0 0 0</td>
<td>0 0 0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disagree</td>
<td>2 0 2 1 3 3 1 2</td>
<td>1 2 1 0 1 0 1 0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>4 5 4 2 3 2 5 3</td>
<td>3 5 5 4 3 5 4 3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.14: Spread of the Responses to Academic Self-Handicapping Item 10
4.2.3.6 Theory of Intelligence

There was a significant difference between the boys who were achieving highly and those who were underachieving in their theory of intelligence on one of the three items in this section of the questionnaire. The boys who were underachieving seemed to be disposed towards an entity theory of intelligence. The distinction between the high achieving boys and the underachieving boys was most significantly manifested in response to the item “You have a certain amount of intelligence and you really can’t do much to change it” (Table 4.15). For the item “You can learn new things but you can’t really change your basic intelligence” the mean for the high achieving boys was negative (-0.6) indicating general disagreement and that mean for the underachieving boys was 0.1. Even though the P-value was 0.06, this however was not a statistically significant difference.

<table>
<thead>
<tr>
<th>DWECK ENTITY THEORY</th>
<th>MEAN VALUE</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>You have a certain amount of intelligence and you really can't do much to change it</td>
<td>-1.2</td>
<td>-0.5</td>
</tr>
<tr>
<td>You can learn new things but you can't really change your basic intelligence</td>
<td>-0.6</td>
<td>0.1</td>
</tr>
<tr>
<td>Your intelligence is something about you that you can't change very much</td>
<td>-0.5</td>
<td>-0.4</td>
</tr>
</tbody>
</table>

Table 4.15: Students’ Responses re: Dweck Entity Theory

These questions proposed by Dweck (2000) were placed at different positions in the questionnaire questions 7, 22 and 33 respectively. Sixteen of the thirty high achievers were consistent in their responses. This included five of the six First Year students. Only two of the Second Year and two of the Third Year students were consistent in
their responses for the three questions. Ten of the underachievers, five in the Fourth Year, were consistent in their responses. There was therefore a greater variation in responses to these three questions from the underachievers than from the high achievers. The highest degree of uncertainty was with the third question where eleven of the thirty underachievers and seven of the thirty high achievers indicated that they were unsure.

4.2.3.7 Gender Issues and Relationships

The only significant difference between the high achieving and the underachieving boys existed for two items in this section (Table 4.16). For the item “I care what my teachers think about me as a person”, Twenty-seven (90%) of the high achievers were in agreement as compared to eighteen (60%) of those who were underachieving. The sharpest distinction occurred at the Fourth Year level where all the high achievers reported that they cared about what their teachers thought of them as a person. A similar response was given for only ten of the thirty underachieving boys.

The underachieving boys were stronger in their disagreement with the item “I care what the other boys think of me as a person”. Ten of the high achieving boys agreed with this statement, twice as many as the number of underachieving boys who respond favourably to the statement.

It is mainly the high achieving Fourth Form boys who valued what other students thought of them as a person. Only one of the six Fourth Year boys disagreed with this statement. Furthermore, there was only a distinction between the responses for the
item “I care what other boys think of my academic performance” at the Fourth Year level. All of the underachieving boys disagreed with this statement as compared with two of the six high achieving boys. The underachieving boys indicated that they did not care about what the other students thought about them, nor about how the other boys thought about their academic performance.

The respondents did not believe that there were too many female teachers at the school. So the gender of the teacher did not seem to be an issue for them. Although they cared about how their teachers’ viewed them, the students indicated that it was their parents’ perception of their academic performance which was held in higher esteem.

<table>
<thead>
<tr>
<th>GENDER ISSUES and RELATIONSHIPS</th>
<th>MEAN VALUE</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUESTION</td>
<td>HIGH</td>
<td>UNDER</td>
</tr>
<tr>
<td>There are too many female teachers in this school</td>
<td>-0.8</td>
<td>-0.8</td>
</tr>
<tr>
<td>I care what my teachers think about me as a person</td>
<td>1.4</td>
<td>0.6</td>
</tr>
<tr>
<td>I care what my teachers think of my academic performance</td>
<td>1.2</td>
<td>0.8</td>
</tr>
<tr>
<td>I care what my parents think of my academic performance</td>
<td>1.6</td>
<td>1.4</td>
</tr>
<tr>
<td>I care what other students think of me</td>
<td>-0.2</td>
<td>-0.4</td>
</tr>
<tr>
<td>I care what the other boys think of me as a person</td>
<td>-0.1</td>
<td>-0.5</td>
</tr>
<tr>
<td>I care what the other boys think of my academic performance</td>
<td>-0.4</td>
<td>-0.5</td>
</tr>
<tr>
<td>I care what the girls in class think of my academic performance</td>
<td>-0.1</td>
<td>0.0</td>
</tr>
<tr>
<td>I care what the girls think of me as a person</td>
<td>0.4</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Table 4.16: Students’ Responses re: gender issues and relationships
Summary

Most of the boys completing the questionnaire were involved in at least one extra-curricular activity. Seven of the high achieving students were involved in more than one activity as compared to two of the underachieving boys. The majority of the boys indicated a preference for sporting activities, with football standing out as the more popular activity among the boys who were underachieving.

Most of the students, both high achieving and underachieving, spent between 1 and 2 hours per night on homework. The high achieving students were more likely to spend more time on home study than those students who were underachieving.

Both sets of boys wanted to do well in school. There was however a significant difference between the levels of motivation of both groups of boys. The underachievers found it difficult to motivate themselves to do work. The high achievers tended to have an incremental theory of intelligence, though this was not significantly different from the underachievers. There was however a significant difference between how the two groups of boys felt about how their teachers and how other boys viewed them as persons.

The most significant difference between the high achieving boys and the underachieving boys was in the area of academic self-handicapping, especially among the Second Year students. Those who underachieved seemed to be easily distracted and unable to focus on the academics.
In terms of gender and relationship issues, there was a significant difference between the two sets of boys for the items: “I care what my teachers think of me as a person” and “I care what the other boys think of me as a person”. These issues seemed to matter to the Fourth Year high achieving boys than any other year group.
CHAPTER V

5.0 ANALYSIS, SYNTHESIS AND DISCUSSION

In this chapter the findings are subjected to scrutiny against the background of the research literature reviewed in Chapter II. The chapter continues with a discussion and analysis of the theories, ideas, issues and challenges noted in the literature review. This section concludes with a summary which relates the findings to the research questions.

5.1 The Investigation

All my life as a teacher has been spent in the co-educational secondary school environment in the island nation of Barbados. In an atmosphere where there is perpetual discussion about the performance, or lack thereof, of the boys in our secondary schools, I felt it necessary to pursue a deeper understanding of this perceived phenomenon. I was therefore motivated to embark on this journey of exploration to gain some insight into the factors which might be contributing to the underachievement of boys in a coeducational secondary school in Barbados.

For me the voices of the boys formed a fundamental part of the investigation. However, since the boys do not exist in isolation, I felt that it was also necessary to listen to the views of the other members of the school community – the teachers and the girls. The point must be made that this study was designed, not to pit boys against girls, rather, this investigation sought to determine what factors distinguished high achieving boys from boys who were underachieving.
The three broad objectives to this investigation were:

1. To provide a historical context for the examination of the academic performance of boys as a group in secondary schools in Barbados.
2. To determine what factors distinguish underachieving boys from high achieving boys.
3. To propose an intervention strategy to improve the academic performance of boys.

This case study was undertaken within a conceptual framework of attribution theory. To achieve these broad objectives the following research questions were considered:

1. To what factors do the school administration, teachers and students attribute:
   i. the underachievement of boys?
   ii. the high academic achievement of boys?
2. To what do high achieving boys attribute their success?
3. To what do underachieving boys attribute their level of attainment?
4. Do underachieving boys and high achieving boys differ in terms of their academic and career goals?
5. How do high achieving boys and underachieving boys describe masculinity?
6. Do high achieving boys and underachieving boys differ in terms of motivation?
7. What strategies would improve the academic performance of boys?
5.2 Underachievement

It was imperative, for the validity of this research, that all persons involved share a clear understanding of the concept of underachievement. Much of the published research considered low achievement or looked at the underachievement of boys when compared to the academic performance of girls. In a few cases, the terms low achievement and underachievement were used interchangeably. In this case study, both teachers and students were able to make a distinction between low achievement and underachievement. What was noteworthy was that some persons confessed that they had not considered a distinction between the two before participating in this investigation.

Both students and teachers submitted that a child did not have to be failing, or attaining a low academic standard, to be considered an underachiever. The difference was articulated in the view that “a child getting 80% can be underachieving, if they are not working to their full potential” (Mr. Oliver). In the words of one of the boys “underachievement is when you ... don’t do too well, when you have the potential to do well” (Mark (1st)). These views are compatible with the explanation that underachievement is

a discrepancy between a child’s school performance and some index of the child’s ability. If children are not working to their ability in school they are underachieving.

(Rimm, 1997:18)

Therefore, “a child who is an underachiever is one who can do work but just doesn’t”
The general perception, therefore, was that “the underachiever is one who may have ability but refuses or is unable to work to his true potential…” (Teacher QH).

These views are similar to those expressed by Reis and McCoach (2000):

Underachievers are students who exhibit a severe discrepancy between *expected achievement* (as measured by standardised achievement test scores or cognitive or intellectual ability assessments) and *actual achievement* (as measured by class grades and teacher evaluations). To be classified as an underachiever, the discrepancy between expected and actual achievement must not be the direct result of a diagnosed learning disability.

(Reis and McCoach, 2000:157 as cited by McCoach and Siegle, 2003:145)

Based on these submissions on the concept of underachievement we can conclude that underachievement is perceived as a dynamic process which can be addressed when observed. Whereas the evidence is clear that teachers are able to identify which students are underachieving, the challenge is in knowing what to do. The vigilance and sagacity of the teacher in the classroom are therefore crucial in identifying when and why a child is underachieving and to provide the relevant intervention. This can only be done by interacting with the individual student.

Choosing the high achievers in this study was simple and this was easily done by investigating the records of the school. However, selecting the underachieving boys
required the cooperation and insight of the teachers. The comments made by teachers on the end of term reports of the boys, which were prepared for parents, proved to be an invaluable instrument in corroborating the recommendations made by the teachers. Jha and Kelleher (2006) linked underachievement of boys to either under-performance (Australia) or under-participation (Lesotho) or both (Samoa and Jamaica). Under-participation was linked to enrolment figures, especially at secondary levels. In Australia, where boys were fully enrolled the problem was considered to be one of underperformance.

A similar link is made by a teacher at the school in this Barbados study where all students under the age of 16 are fully enrolled. Like Bailey (2004), the teachers felt that the problem was not one of access to education, but more likely one of underperformance. In relation to the boys attending the school, Mr. Thomas suggested that

based on our common entrance results we don’t really have any low achievers in this school. Our boys who do badly ARE [teacher’s emphasis] underachieving.

The boys did admit that their performance was to a large extent within their control and was more to do with their attitude to the academics and their lack of effort. Those students who were underachieving “do not put in the work needed to excel” (3HA4) doing only what was necessary to attain a passing grade.
5.3 Factors Which May Influence Achievement

5.3.1 Motivation

Attribution theory, which developed out of social psychology, is concerned with a person’s perceptions, not necessarily reality, of the causes of their success and failure. According to this theory, perceptions stimulate motivation. Hence, if one is to address the issue of motivation there definitely must be some interaction with the student.

The issue of motivation was, for me, the cornerstone of this investigation. Many, if not all, of the factors offered by both students and staff impinge on the level of motivation of the student. This stood out as a significant distinguishing factor between the boys who were achieving highly and those who were underachieving. As expected, the high achieving boys seemed more likely to be intrinsically motivated.

It was the boys who identified those factors which were symptomatic of a lack of motivation. This included their attitude towards studying, their academic performance and their behaviour in class. The boys who were underachieving spoke of the dysfunctional relationships at home which sapped their desire to achieve. Conversely, the high achieving boys spoke of the parent or parents who provided the loving support, boundaries and stability that they required.

The teachers shared a similar perspective. “A lot are not intrinsically motivated” (Mr. Oliver). Barber (1994) as cited by Murphy and Elwood (1998) suggested that the disaffection of boys with school was related to their motivation to learn.
When the theory of intelligence of the boys was considered, the strongest opinions were held by the First Year boys who were achieving highly. These First Year boys provided the mastery-oriented responses of an incremental theory of intelligence. This finding was consistent with that of Dweck (2000) who found that students who possess an incremental theory of intelligence tend to be the ones who are likely to blossom during the transition to Junior High; regardless of their confidence level.

According to Dweck (2000) the distinction between the entity and incremental learners is greatest at this transition level from primary to secondary school. The boys in the First Year entered the school with a relatively narrow range of marks from the Barbados Secondary School Entrance Examination (BSSEE), and yet some were achieving highly and others underachieving in the new school setting.

This issue was addressed by Dweck (2000), who investigated students who had similar levels of attainment before failure occurred. It is in the face of failure that the theory of intelligence has a significant impact. In the First Year of secondary school, students are faced with new subjects in which they have to organise themselves to succeed. On the reports of many of the underachieving boys, teachers made reference to their lack of organisation. It was in the First Year of secondary school that we would expect vulnerable entity students to start showing a decline in achievement relative to their more mastery oriented peers (Dweck, 2000).

Achievement levels were impacted after the transition from primary to secondary school. There were some boys who did well in primary school but deteriorated in the secondary school setting. Teachers observed this decline.
My experience in the primary school system is that the top positions are evenly distributed between girls and boys. Nature and puberty change it dramatically in the secondary school.

(Mr. Richards)

But is it really simply just about “nature and puberty”? Could the theory of intelligence which these students hold be also impacting on their achievement levels? There is little doubt that periods of academic transitions tend to be the most vulnerable time for students. The boys confirmed that on entering their new school, making new friends has an impact on their comfort, their attitude to the school and their academic performance. One First Year high achieving student reflected:

My difficulty was to make new friends. I am a shy person. So when I first came a morning I was sitting (by) the plaza, this boy (name) came up to me and asked me ‘do you want to be friends’. I really got to know him and now I have lots of friends.

(Darren)

Cleveland (2011) found that teachers identified social confidence as another non-academic factor associated with academic success. This view was shared by the Principal of the school.

The First Year is also the time when work will be different and more challenging and therefore there will be more opportunities for failure (Peterson and Colangelo, 1996; Dweck, 2000; Perry et al 2010). These along with other external factors such as a
greater workload, a different grading system and more impersonal instruction (Dweck 2000) must be considered as contributing to underachievement. In the data collected on the attitude of students to their school, the students in their First Year stood out. The First Year boys, especially those who were underachieving, were not sure if they really liked the school. They had some difficulty

...getting to understand the new concepts in the classroom. The subjects were difficult.

(Hilton)

On the student questionnaire, three questions, recommended by Dweck (2000), were used to determine the theory of intelligence of the boys. On the first question there was a significant distinction between the boys who were achieving highly and those who were underachieving, with the boys who were underachieving showing an entity theory of intelligence. What was noteworthy is that the distinction became progressively blurred by the time the students answered the third question. The level of uncertainty rose by the third question. Maybe three questions were too many. The evidence suggests that students began to doubt themselves as it related to these questions as they did recognise that it was the same question being asked in different ways. This was not obvious when the questionnaire was piloted.

Both high achieving boys and underachieving boys shared a mastery goal orientation, which reflected a desire to develop competence in academic pursuits. However, the mean for each of the items on the questionnaire was higher (though not significantly different) for the high achieving boys than for the boys who were underachieving. The
higher the mean the more inclined the students would be to hold an incremental theory of intelligence. The fact that there was no significant difference between the mastery goal orientation of the high achieving boys and underachieving is worthy of some consideration. This suggests that the issue of underachievement could also be related to learning strategies. As a result, meaningful intervention may be made possible by helping the students to develop strategies to facilitate mastery.

Dweck (2000) found that students who held an entity theory of intelligence were more likely to choose a performance goal. In this case study, the boys who were underachieving were the ones more likely to choose a performance goal. There was a significant difference between the high achievers and the underachievers for the first item: “It is important to me that I do better than other students in class”. This added support to the finding that those boys who were underachieving tend to hold an entity theory of intelligence.

Students with a performance goal orientation desire to attain the positive judgement of others for their competence. These boys wanted to look smart and would sometimes not engage in an activity to avoid having persons think negatively about their competence. The underachieving boys appeared to be more competitive, and seemed to be more concerned about how they were viewed by their peers than the high achieving boys. This competitive streak might be their undoing, and may lead to them engaging in academic self-handicapping in order to protect their image. Kutnick et al (1997) found that a competitive atmosphere in the classroom tended to encourage high achievers and discourage, what was termed, low attainer, regardless of gender.
5.3.2 Academic Self-Handicapping

As expected, there was a significant distinction between the high achieving boys and the underachieving boys in the area of academic self-handicapping. Academic self-handicapping is manifested in the strategies that some students adopt so that, just in case they are not successful in an academic activity, they could blame their low attainment on the circumstances, rather than on their lack of ability or effort.

Again, it is in the context of failure that the self-theory held by students is important. When children are focussed on measuring themselves by their performance, failure is more likely to provoke a helpless response. When children are focussed on learning, failure is likely to provoked continued effort (Dweck, 2000). Students with performance goals are most vulnerable when they are focussed on the possibility of failure and their need to avoid failure (Dweck, 2000).

The evidence clearly showed that the underachievers were involved in academic self-handicapping. The item on the questionnaire: ‘I am involved in a lot of activities and therefore have very little time to study’ had support among the underachievers, especially at the Second Year level. Dweck (2000) believes that the theory of intelligence embraced by a student will influence his perception of effort. Therefore students who hold an entity theory of intelligence reflect the belief that if you have to work hard at something to succeed then it means you are not good at it. Consequently, if you are good at something you shouldn’t need effort. For those who hold an entity theory of intelligence, putting effort into studies is an admission of low ability.
A scan of the six Second Year boys who were underachieving, indicated that two who strongly agreed and two who were unsure, were involved in football. Half of these boys spent less than one hour doing homework. On the item which tested their theory of intelligence all six Second Year boys who were underachieving gave responses which supported an entity theory of intelligence. These Second Year boys who hold an entity theory of intelligence may be sabotaging their long term achievement goals for the sake of preserving their short term persona.

5.3.3 Attitudes to School

Dweck (2000:32) also found that students who held an entity theory of intelligence tended to be more anxious about school in general. This anxiety may impact upon their attitude to school. Siegle (2001) cites Majoribanks (1992) who found a correlation between attitude to school and achievement for girls, but not for boys. I, too, found no significant distinction between the high achieving and underachieving boys as it related to their attitude to school and their desire to do well in school.

Rather, Siegle (2001), who used the terms underachiever and low achiever interchangeably, found that high achievers and low achievers differed in both their academic self-perception and motivation or self-regulation. Cleveland (2011) also found that high achieving boys were characterised more by their attitude to self and to learning. I found a similar situation where high achieving boys were confident, persistent and proud of their achievements. Surprisingly, they did not credit teachers with their success. They however credited their success with their propensity to ask for help, even if it meant asking a girl!
In general, I found no significant difference between the attitudes of both groups of boys to their school. However, when the responses were disaggregated by year group there was a notable difference between the high achieving boys and the underachieving boys for the item “I don’t like this school” at the First Year level. Again, these First Year students seem to be having difficulty settling into school. These finding have implications for the programmes offered by the school as they relate to the orientation and socialisation of the new students entering the school, especially at the First Year level.

5.3.4 **Home Factors**

There was consistency in the views of students, teachers and the Principal with regard to the impact of home factors on the attainment levels of the boys in secondary school. According to the boys, having a “stable home environment” (5HA1) with parents who provided “that loving support to push them further” (5HA6) contributed to academic success. The Principal too felt that the combination of home and school had a significant impact on the focus and attainment of the boys. The high achieving boys were more focussed on their studies and this could be as a result of what was described as parental oversight. The teachers suggested that parents, whose expectations are aligned with the values of the school, do make a positive difference in the academic performance of the boys. “Parental expectations are important” (Ms. Gilkes). This was supported by the opinion that “a most lethal cause of student underachievement is parents’ lack of support for school and teachers” (Rimm, 1997:18).
Carrington (2003:170) found that home factors ranked higher than gender related or school related factors as contributing to underachievement of boys. The boys who participated in this case study qualified what they perceived as home related factors. For them it was a healthy relationship, emotional connection and interaction between parent and child that were crucial to academic success.

There was no significant difference in the structure of the homes from which the high achiever and the underachieving students came. In this investigation there was a high achieving student whose mother was living overseas but who spoke with her on a daily basis. There were students living in what may be described as a nuclear family setting, in daily contact with parents, who were concerned about “the stress of living with parents who are going through divorce or relationship problems” (UA3). Students believed that when

all isn’t going well at home ... it takes a toll on their studies ... the loving support to push them further is not there, so to them it makes no sense achieving in school.

(5HA6).

It was against this background that I reflect on the findings of Kutnick et al (1997), which indicated that, those boys whose parents were professional or held managerial positions which required advanced studies, tended to be academically successful. These parents may be the ones whose values as they relate to education are aligned with that of the school. These may be the parents who are able to guide their children and help them to organise themselves and their studies.
However, even in families where parents were professional or held managerial positions, we found some students who were underachieving, simply because those families appeared to be dysfunctional and were not meeting the needs of the child. What seemed to be of greater significance to the students in this study, both male and female, was the quality of the relationships in the home. In reference to a student who was excelling, a female student suggested that he did very well because he grew up in an environment where his parents made him study, he did not change. He had a lot of structure and encouragement from his parents.

(Ceri)

Even though a parent might not have been able to assist with the school work, just the knowledge that they cared and were supportive made a difference.

My father don’t really live with us, so I don’t spend much time with he; my mother lives with me, but she got injuries; my sisters don’t live with me; so most of the time I have to do work by myself or ask friends for help. But I know my mother wants me to do well and she is always encouraging me.

(Reggie)

Cleveland (2011:12) found that among the significant non-academic factors which teachers associated with high achievement was “access to support systems”. This
included having the support and involvement of parents, as well as the ability of the child to surround himself with positive influences. The Principal shared the opinion that when students surrounded themselves with peers who have high aspiration in terms of achievement, goals and ideals, they would be encouraged to succeed.

Students seemed to have a greater regard for parents who understood the process of schooling and showed some interest in the activities of school. One female student lamented the fact that

When you go to form level meetings, the persons who don’t do well in school, their parents don’t come. I don’t know how you would get through to them.

(Ceri)

There is no doubt that these students understood the value of cooperation between the school and the home for the benefit of the child. Every effort must therefore be made to strengthen the tripartite union of student, home and school, wherever possible, for the benefit of the child, and by extension the community. The child is a more successful student academically, when socialised into appreciating the value of formal education.

5.3.5 **Socialisation of Males**

The teachers perceived the socialisation of boys to be a highly relevant factor which may be impacting on the achievement of the boys.
Parents spend more time on the socialisation of their girls. No real focus is given to the socialization of the boys who are left free to roam.

(Ms. Adams)

The socialisation of males has been observed to be very different to the socialisation of females in the Caribbean. The phrase “tie the heifer, loose the bull” (Parry, 2000:40; Jha and Kelleher, 2006:87) quite graphically describes the gender difference in socialisation pattern. The home experiences of females prepare them for responsibility, whereas the boys are free to roam and are often without responsibility (Figueroa, 2004). The situation is not much different in Barbados.

The inter-generational cultural transmission of gender stereotypes may therefore be preventing the boys from developing a meaningful and effective work ethic. These stereotypes, according to Pollack (1999) have a detrimental impact on masculinity, indoctrinating boys into unhealthy behaviours (Plummer, 2013). Socialisation is a dynamic process. As we gain more insight into the phenomenon of male underachievement we need to share our findings. One can only hope that informed discussion will cause us to reflect on how we socialise our children, both male and female, and that this will have a noticeable impact on the socialisation patterns of the future.

5.3.6 Gender related factors

The low achievement of boys seemed to be an accepted norm in present day society and there appears to be “no shame in performing badly” (Mr. Phillips). “Not trying
becomes acceptable because it is better than trying and failing” (Cleveland 2011:43). Mahony (1998) expressed the view that boys seemed more interested in preserving the image of disinterest or disengagement in academic work. This view is shared by the teachers in this investigation.

For the majority of boys it is about what is fashionable. You must do badly because it is accepted. I do believe they feel badly privately. They want to be considered macho but I believe in their heart of hearts they want to do well.

(Mr. Richards)

The responses on the students’ questionnaire do support the view of this teacher that both the high achieving and underachieving boys want to do well in school. It was the Fifth Year students who suggested that boys in this school did respect those who were achieving highly, but were not prepared to make the necessary effort.

Boys admire boys who do well. It is just that they themselves would not do it because it is just time consuming.

(Ceri)

This is an interesting contribution because the feeling in the school community, especially of the teachers, is that boys assume a macho persona to gain acceptance, respect and popularity in the school. There must clearly be, in the eyes of the students, a distinction between respect given to a successful student and the respect given to a popular student who displays stereotypical macho behaviour.
In the student questionnaire, both high achieving and underachieving boys strongly indicate that they “really want to do well in school”. So we have a situation where there is a desire to do well, but we have boys who may be too lazy to make the effort, who may not want to be seen to be making the effort or who may not possess the necessary skills to succeed. What may be described as laziness by the adults may in reality be boys trying to preserve a macho image of academic disengagement; a macho image which runs contrary to the ethos of our educational institutions (Parry 2000).

Parry (1997) found that boys were rejecting education because it did not fit in with their perception of what it meant to be masculine. This issue of male gender identity cannot be ignored because it seems to significantly impact on the educational performance of our boys (Mac An Ghaill, 1994; Epstein 1998; Parry, 2000; Carrington 2003; Younger and Warrington et al, 2005; Cleveland, 2011).

There was the belief that the education system might be unwittingly encouraging the underachievement of boys in many ways. The teachers at this school, like Figueroa (2004), considered the entrance examinations to secondary schools to be an example of male privileging. For instance,

we put it in their heads. From primary school we tell them we don’t expect much from you, but we give them the same rewards as girls who do better. We tell them that they are not supposed to do better.

(Mr. Rogers)
Naturally, this would have some impact on how the boys construct masculinity. Both high achieving and underachieving boys in this study tended to have traditional patriarchal views about masculinity. Being a man meant “being responsible enough to have a job and to take care of his family” (3UOK). What was noteworthy was that the high achievers went beyond this, associating masculinity with intellectual competence, respect and good deportment. For one student being a man meant “being intelligent. Thinking before I speak. Doing well.” (1HJM). One high achiever refused to conform to the stereotypical views of masculinity emphatically stating that “I don’t believe in stereotypes” (3HW). Cleveland (2011:40) in reference to the Pollack’s Boy Code indicates that boys who want to be real men do not want to be perceived as smart … displaying any of these “unmanly” behaviours – demonstrating intelligence, being articulate or adept at conflict resolution, showing emotional sensitivity, reading and writing well – results in a boy being labelled a sissy.

So the perceptions of these high achievers may signal a growing maturity as it relates to their construct of masculinity and their perceptions may be having a positive impact on their academic achievement. Non-conformance to stereotypical views requires a strong, socially confident individual, who must have the support of parents who are progressive in their child rearing techniques.

There were other gender related factors which students offered as contributing to the underachievement of boys. A preoccupation with girls and sex, drugs and alcohol
may, in some way, be the boys’ attempt at establishing or proving their manhood. These students engage in, what Plummer (2013) describes as risky behaviour. Jackson (1998) believes that such behaviours may be the actions of insecure boys whose displays of hyper-masculinity are viewed as an attempt to gain the approval of their peers.

Other behaviours such as getting to classes late or skipping classes, disrespecting teachers and general “disregard for the importance on education” (5HA5) were also associated with underachievement. This type of negative behaviour was neither condoned nor admired by those boys who were achieving highly. Rather the high achievers considered such behaviours as an appeal for help. Concern was expressed about students who

...give lots of trouble, always walking on the hallways, cause fights and arguments; most of them have family problems that they don’t know what to do or how to deal with it.

(3HA1)

There may, however, be other explanations for this type of behaviour. There was the observation that this type of behaviour may be a defence mechanism used by the macho boys who want to distance themselves from academia (Jackson, 1998). These are the boys who associate working hard at school with girls or as an effeminate activity (Mac An Ghaill, 1994) and are as a result resorting to such behaviours as proof of their manhood or masculinity. Mac An Ghaill (1994) relating his findings on the Macho Lads at a school in England to the work of Jackson (1968) states that
The Macho Lads rejected the official three Rs (reading, writing and arithmetic) and the unofficial three Rs (rules, routines and regulations). They explained why they opted for the three Fs – fighting, fucking and football.

(Mac An Ghaill, 1994:58)

West (1999) observed that boys needed to prove their masculinity, and he made a connection between the involvement of boys in sport and proving masculinity. Sport was seen as cool and an essential part of the activities for boys. The majority of the boys in this investigation indicated a preference for sporting activity. Football stood out as the most popular activity for boys at this school, being especially popular among the underachieving boys. Football seemed to be considered by boys to be the sport of real men. This preference for football by the macho boys in secondary schools is corroborated by several studies (Mac An Ghaill, 1994; Rimm, 1997; West, 1999).

The high achieving boys may have developed coping skills and may have the social confidence to work, even when it is not the popular thing to do. The high achievers did not conform to the negative, anti-school behaviour associated with the macho boys; they did not appear to conform to the traditional stereotypes. Younger et al (2005) recognised that high achieving boys were able to preserve their masculinity while maintaining high academic standards. Even though some underachievers at the school in the study displayed anti-school behaviour, the boys (both high achievers and
underachievers) seemed to have positive attitudes to the school as they did in fact declare that they liked the school.

I believe that in some cases, this love for school may not be only for academic reasons. Rather, the desire to belong to a social group of one’s peers apparently overshadowed academic matters for these adolescent boys. School may be providing the context and the opportunity for developing social relationships and proving their masculinity. It was postulated that some boys were so concerned about how they were perceived by their peers that “they do what others think is cool” (3HA2), just to be accepted by their peers. This seems to be a constant struggle for the boys.

Belonging, in fact, is so important that some boys will do almost anything, endure almost anything, and inflict on one another almost anything in order to be part of the group.

(Cleveland 2011:42)

The underachievers did acknowledge that friends and negative peer pressure impacted negatively on their achievement. However they seemed not to have the willpower, skill or confidence to extricate them from this environment.

When students presented as ill-disciplined, fooling around in class, skipping classes, not doing homework and not submitting assignments completed and on time, they were perceived by teachers as lacking intrinsic motivation. The issue of gender identity influencing such behaviour was not raised by the teachers, but on reflection, gender identity, and the trappings associated with proving masculinity, may be
relevant. There is therefore a need for teachers to become familiar with gender related issues. The findings of this study should stimulate that interest.

The principal and the teachers agreed that the role of the teacher in the classroom was very important, not only in the teaching of the subject, but in guiding and encouraging the boys. They believed that if boys were socialised and encouraged to set realistic and attainable goals then they might be more motivated to achieve. So the teacher-pupil relationship was considered important in not only addressing academic issues but in building life skills. One teacher felt that one simply has to say to these boys

Tell me what you would like to become. Boys who have goals in mind tend to do better. As teachers we should get each child to know what he wants to get from life.

(Ms. Adams)

In support of this observation, Cleveland (2011) identified the acquisition of life skills alongside academic learning as a recurring theme in the research on the underachievement of boys.

Academic and career goal setting were therefore perceived as effective strategies to help the boys to focus. When teachers engaged in such discussion, it helped to build the trusting and supportive relationship that might significantly impact on the performance of the boys. In this study, both the high achieving boys and the underachieving boys were able to state a career goal.
However, many of the underachieving boys were unable to indicate how they would go about realising such a goal. This highlights a need for career counselling in this school. For the underachievers setting long term goals is a form of delayed gratification in a fast food era. On the other hand, the high achievers spoke of maintaining an academic focus as they worked towards their goals, in many ways keeping their options open. This mindset opens the door for mentorship and the development of life skills.

5.3.7 Effort and Work Ethic

According to attribution theory, effort is a factor which would be categorised as internal, unstable and controllable. This is a useful classification, because if we are to have meaningful intervention to benefit those boys who are underachieving, then it is important for them to view the factors which contribute to their underachievement to be within their control.

Effort (or hard work) and a positive work ethic were identified by the high achieving and underachieving boys, as well as the teachers in this study, as major factors contributing to the high achievement of the boys. Simply put: “The ones who are prepared to work hard will succeed” (Mr. Phillips). The students qualified this by offering the view that it was not just effort, but consistent and persistent effort, which contributed to success. Accompanying this effort must be a positive work ethic. High achievers would have developed the “discipline to work even when not told to do so” (4UA2) because of their “realisation of the importance of education” (5HA5).
According to the students, the effective work ethic involves “paying attention in class” (2HA1; 2UA6), “participating in class” (4HA4), “taking down notes” (5HA2), “revising at home” (3HA3) and having sheer “determination, perseverance and a balance between school work and recreation” (2HA2). Teachers concurred that students who demonstrated a good work ethic were often “goal oriented and self-disciplined” (Teacher QK). High achievers would be “well prepared for class and test; attentive in class; participate on a regular basis” (Teacher QL). High achievers felt that it was important to them to organise themselves and their time well. They felt that it was important to their success to “do all your homework and pack your bag at night” (1HAS). There was some correlation with the views of teachers in the United States of America who credited successful boys with academic skills such as

listening, organizing, focusing, using time wisely, paying attention to details, reading and writing well, and finishing assigned tasks.

(Cleveland, 2011:9)

Consequently, both teachers and students associated the underachievement of boys with the lack of effort and an ineffective work ethic. One boy reflected on his performance after failing the promotion examinations and being asked to repeat the year. He attributed his lack of success to his

attitude towards work. Not caring. I did not realise that you had to really work hard to succeed.

(Student UNS)
Seigle (2001) cites Borkowski and Thorpe (1994) who believe that the underachievers in school may not lack the necessary knowledge of strategies. Rather, they are of the view that underachievers may not fully understand that success is achieved with deliberate behaviour along with effort. More succinctly put: “Underachievers haven’t learnt about hard work” (Rimm, 1997:18).

Some high achievers attributed their success to being “naturally bright” (3HA4), or “naturally intelligent” (5HA6). Epstein et al (1998:4) describes the “innate brilliance, intellectual or natural potential” of the boys as a significant factor which would contribute to the high achievement of boys.

5.4 Intervention

The approach to intervention cannot be one of one size fits all. Consideration of individual trends is important when trying to find strategies to help. As a result any intervention aimed at assisting these boys should be tailored as far as possible to the individual. The boys recommend that we do “different things depending on who we are talking about” (1UK). The solutions employed will therefore require that the teacher be emotionally intelligent and have the emotional competence to discern the feelings of the students and be able to artfully make a positive difference.

Finding solutions would mean helping educators find ways to respond flexibly and effectively to the challenges their underachieving boys were facing in their classrooms.

(Cleveland, 2011: 8)
The teacher should therefore have a good knowledge and clear understanding of the issues associated with the phenomenon of male underachievement. The Principal suggested that teachers may need to be more “male sensitive”. The teacher, as professional, should be sensitive enough to recognise and discern the new and unexpected issues in the classroom, and respond accordingly. The professional in the classroom should also be flexible and adaptive. The teacher should be prepared to ask deep and searching questions and more importantly, be a good listener. Essentially, the teacher needs to be emotionally intelligent.

In this case study there seemed to be different points of interest at each year level. Whereas some boys seemed to have made a seamless transition from primary into secondary school, others have not. Associated with the transition is the ability to make friends, develop social competence and gain the acceptance of one’s peers.

Children can be mean to each other and it takes a resilient child to endure, cope with or overcome the trauma of fitting into a new environment. Cleveland (2011:12) refers to the “experience” of school as contributing to academic success. This includes the interaction with peers and with teachers. Therefore the teacher has a crucial role to play, as it relates to the mode of instruction and the type of relationships established with the boys in their First Year.

I found the Second Year to be the one where students were more disposed to academic self-handicapping. These boys may be at the period of adolescence associated with establishing a personal identity. There may therefore be several occasions of conflicts and challenges to authority, not only in the school, but in the
home as well. The underachievers at this Second Year level were the ones who wanted to have a job as soon as they left school. This response was consistent with the established social and emotional development of adolescence.

A … major task of adolescence is moving towards a more autonomous stance towards the larger world. This includes taking personal responsibility for schoolwork and perhaps finding a job and becoming more financially independent.

(DeHart, Sroufe and Cooper, 2000:491)

There were no statistically significant differences between the high achievers and underachievers at the Third Year level. In the Fourth Year the high achievers valued what their peers and their teachers thought about them as a person and about their academic performance. Not so for the underachieving boys who indicated that they did not care about what the other students thought about them as a person, nor about how the other boys thought about their academic performance. There was a significant distinction between the high achievers and the underachievers at this level with regard to their motivation. And even though these Fourth Form underachievers had difficulty motivating themselves to do work, they did however declare that it was important to them to do better than the others in the class. Note that it is at this year level that there is the largest number of students repeating the year in this school, and these students are mainly boys.

The students suggest that whatever intervention strategy is employed, it should be attractive to the underachiever and should not only be about academics and studying.
These programmes should also cater to personal development and emotional growth. These boys believe that those who are underachieving needed “programs that help them to learn to be more disciplined; how to say no to drugs; how to choose friends wisely” (3HS).

Students, teachers and school administration all agree that any strategy must address the motivation and mentorship of the boys. It was recommended that academic success could be attained with

- encouragement by teachers, especially male teachers, to perform well;
- individual mentoring by teachers; target setting by teachers; out of school teacher-student lessons.

(Mr. Richards)

Dweck offers the insight that the motivation of a student could be enhanced by changing their belief about their own intelligence. “Students’ theory of intelligence can be influenced, are malleable” (Dweck, 2000:24).

5.5 Summary

The research questions identified at the beginning of the chapter were effectively addressed and answered by this case study.

1. To what factors do the school administration, teachers and students attribute:
   i. the underachievement of boys?
the high academic achievement of boys?

The school administration, teachers and students all agree that the underachievement of boys may be attributed to a lack of effort, organisational and time management skills, motivation and focus. In addition they all agree that the lack of support and encouragement from parents contribute significantly to underachievement.

The school administration, teachers and students attribute the high academic achievement of boys to the tripartite union of student, home and school sharing a common appreciation for formal education and working together for the benefit of the child. The high achievement of boys was associated with intrinsic motivation, consistent hard work and a sense of purpose.

2. To what do high achieving boys attribute their success?

The high achieving boys attributed their success to the loving support and encouragement they got from their parents as well as the effort they put into their studies. These boys seemed not prepared to rest on their laurels but were consistently seeking to improve on the previous performance. Whereas the underachieving boys identified teachers as contributing to their underachievement, the high achieving boys did not credit teachers with their success.

3. To what do underachieving boys attribute their level of attainment?
The underachieving boys attribute their level of attainment to several factors including a dysfunctional family, lack of effort, teachers.

4. Do underachieving boys and high achieving boys differ in terms of their academic and career goals?

Whereas there seems to be no distinction in the academic and career goals of underachieving boys and high achieving boys there was some variance in how they planned to achieve these goals. The underachieving boys were often unable to describe how they would attain their goals. The high achieving boys believed that what they were currently doing in school would contribute to their future success and were therefore more focused on working consistently and persistently now for future gain.

In essence, the high achieving students were able to make a connection between what they were doing not in school and their long term ambition, even though they may not have been able to zero in on a specific career. The underachieving students had an idea of what career interest them but could not make the connection with what they needed to do now to achieve that goal.

5. How do high achieving boys and underachieving boys describe masculinity?

The boys tended to have traditional views of masculinity. The underachieving boys spoke of the man as being the head of the household, as protector and as financier (paying the bills). The high achieving boys including some of the softer attributes
like being intelligent, respectful and responsible and displaying love. The high achieving boys seem not to be as constrained by stereotypes as the underachieving boys.

6. Do high achieving boys and underachieving boys differ in terms of motivation?

The high achieving boys were more academically motivated than those who were underachieving. The high achieving boys had a greater tendency towards an incremental theory of intelligence. The distinction between the theory of intelligence held by the high achieving boys and the underachieving boys was only significant at the first year level.

7. What strategies would improve the academic performance of boys?

With the diverse factors which contribute to underachievement, there can be no single strategy which can be used to improve the academic performance of boys. However, taking all the findings into consideration, I would suggest any attempt to improve the academic performance of boys must have two components: proactive and reactive. Any intervention strategy employed should address the broad themes of

1. Theory of intelligence
2. Gender identity
3. Relationships
4. Career planning
Furthermore, for intervention to be effectively and efficiently employed, attention must be given to the school culture as it relates to the pedagogy and the relationships between the tripartite union of school, student and home. The professional development of teachers is crucial and underpins any attempts at intervention.

5.6 Conclusion

The emphasis on the academic performance of students in school fuels the need for educational research. The measurement of academic performance is the means by which schools determine if learning is taking place; if the methods used are effective. It was therefore in this context that this investigation sought to determine how boys who were achieving highly in a coeducational secondary school differed from those boys who were underachieving. What is clear is that the underachievement of boys is a complex issue, with no simple quick fix.

The study adds to the existing research in several ways.

- High achieving boys tended to have an incremental theory of intelligence which contrasted with the entity theory of intelligence held by the boys who were underachieving, supporting the findings of Dweck (2000).

- Both high achieving and underachieving boys had positive attitudes towards school, consistent with Majoribanks (1992), who found no correlation between attitudes to school and academic achievement for boys. However, in this investigation the boys did reveal that it was their ability to make new friends, their peer relationships, which influenced their attitude towards school. Hence, for them, especially the underachieving boys, school was more about social
interaction than about academic pursuits. However, it was stated that good friendships contributed to academic achievement.

- The boys who were underachieving lacked motivation and engaged in self-handicapping behaviours. There was a greater prevalence of this type of behaviour at the Second Year level where the boys were between 12 and 13 years of age. At this stage of adolescence, where identity building is of great importance to the boys, they engage in behaviours which they deem necessary to prove their masculinity.

- The type of relationships in the home environment was identified as a highly significant factor. High achievement was linked to a supportive, stable and disciplined family environment. Students desired healthy relationships, emotional connection and meaningful interaction between parent and child. Hence, underachievement was linked to a dysfunctional family environment, regardless of the family structure.

- The existing research correlates high achievement with career goals. The findings differed in this study. Both high achieving and underachieving boys identified career goals. The difference, however, was that the high achieving students were able to make a connection with what they needed to do now in school to achieve the long term goal. The underachieving boys did not make that connection.

- Interestingly, the high achieving boys did not attribute their success to their teachers. They were more inclined to attribute their success to parental support and encouragement. These boys felt that it was important to ask for help, even if from a girl, when they needed it. The boys who were
underachieving did identify teachers as contributing to their attainment levels. Among the other factors identified by them as contributing to underachievement were not enough time spent studying, and a preoccupation with illegal drugs, alcohol, sex, television and electronic games.

- Neither high achieving boys nor underachieving boys desired to be in a single sex institution. For them, coeducation was preferred and considered to be less stressful.

This case study adds to the existing literature on the difference between boys who are underachieving and those who are achieving highly in the coeducation secondary school setting in Barbados. It considers attribution theory to be a viable conceptual framework in which to address this phenomenon. Attribution theory sets the stage for intervention with the individual student. It also provided the background for teacher training in relation to the cues and feedback which may be unwittingly given to students and the impact of such cues and feedback on student motivation.

Some recommendations will follow in the Chapter VI.
CHAPTER VI

6.0 CONCLUSIONS AND RECOMMENDATIONS

In this chapter the original theoretical and conceptual insights that result from the investigation will be identified. An intervention strategy is recommended. At the end of the chapter new directions for further study are identified.

6.1 Theoretical Context

6.1.1 Attribution Theory

Attribution theory is a motivational theory which links the behaviours of individuals to both internal and external factors. This theory, based in social psychology, explores the causes of behaviour and the explanations individuals make for such behaviour. In attribution theory, an individual’s attempt to explain why a particular behaviour or event occurred is referred to as a causal search.

Attribution theory proved to be a viable conceptual framework for determining what factors distinguish high achieving boys from those who are underachieving. As students are guided into a causal search, attribution theory will also be a useful tool for helping boys who are underachieving, to develop their meta-cognitive skills. This will be a necessary component of attribution retraining, which is, teaching students to attribute their failures to controllable characteristics like effort. This is expected to result in improved academic performance (Dweck, 2000, Perry et al 2010).

6.1.2 Theory of Intelligence

Dweck (2000) provides evidence to show that students who believe that they can develop academic abilities and intelligence (incremental theory) are more likely to be
persistent with academic tasks in school. These students are mastery oriented. Those
who believe that academic abilities are fixed (entity theory) will engage in academic
activities as a means of showing what they know, they are performance oriented.

What Dweck (2000) is clear to point out is that these orientations are malleable and
can be changed. Therefore, part of a proactive approach would be to stress the
concepts that relate to an incremental theory of intelligence. Feedback from teachers
in the classroom setting should endeavour to help students to identify ways in which
they can improve their attainment levels. Feedback should be swift and should
address strategies rather than the person.

6.1.3 Gender Identity

The gender stereotyping we, as a society and as a school, unwittingly engage in, is
deemed not helpful to boys. This issue needs to be addressed and discussed openly as
we challenge the inter-generational stereotypes of what constitutes masculinity. In the
school setting there needs to be some reflection on the way in which the actions and
conversations in the school environment may inadvertently be upholding the Boy
Code as articulated by Pollack (1999). The construct of masculinity of the boys may
be the most difficult thing to change. This is part of their socialisation from birth and
is part of the culture of the home. Both formal and informal discussion on gender
roles will be necessary for the education of the boys and their parents. Parental
support would be critical in this area.
6.1.4 Relationships

Relationships are a fundamental aspect of life. If we want to help our boys to raise their achievement levels, then we must make it possible for them to experience meaningful, supportive and helpful relationships in the home and at school. Therefore, when interviewing a boy who is underachieving, part of the interview should seek to determine what relationship challenges he may be having. As far as relationships in the school are concerned, every effort should be made to determine what teacher behaviours are deemed positive and what teacher behaviours are perceived to be undermining the teacher-student relationship. Furthermore, students should feel safe, respected and appreciated in the school environment. Every effort should also be made to help students to foster healthy peer relationships.

Training and guidance in fostering positive interpersonal relationships should be an integral part of the education of every child. The focus on developing life skills along with academic activities should be part of a mentorship arrangement, where students can interpret their education in a context that is meaningful to them. However, when underachievement is manifested, wherever possible, parents should be a part of any intervention strategy.

6.1.5 Intervention

Any proposed intervention strategy must acknowledge the student as an individual and must therefore cater to the individual needs of the particular student. That student must also be involved in developing and participating in his own intervention strategy. I would recommend inviting the student who is underachieving to an
individual interview, a practice already in place at this school. However, I would recommend that the interview be structured in such a way as to determine

(a) To what factors he attributes his level of attainment.

(b) The theory of intelligence held by the student.

(c) His construct of masculinity.

(d) His career goals and how he plans to achieve such.

This is necessary to determine what support structures may be needed. Parents have been identified as an important part of the support system for the high achievers. One would want to counsel and involve parents wherever possible into a tripartite union of student, parent and school, working for the benefit of the child. The objective of this exercise would be to guide the student into associating effort and a positive work ethic with academic success.

6.2 Theoretical and Conceptual Insights

This investigation essentially focussed on the voices of the boys who were achieving highly and those who were underachieving in the context of a coeducational secondary school in Barbados. The opinions of teachers and a few girls were also taken into consideration. There were many factors identified as contributing to academic underachievement. The overarching factors emanating from this study include the level of motivation of the student, his theory of intelligence, his construct of gender identity and his relationships at home and at school.
The research indicated that the high achievement of boys in the secondary school was attributed to natural talent, consistent and persistent effort; and the loving support and encouragement each boy receives from his parents. Boys who were achieving highly were believed to be self-disciplined, intrinsically motivated and goal oriented. High achieving students seemed to practice good time management and were able to effectively balance their academic pursuits with recreational or extra-curricular activities. Moreover, high achieving students believed that they had the support and encouragement of their parents.

The Principal, teachers and students associated the underachievement of boys with the lack of effort. Students, who were underachieving, were thought to lack intrinsic motivation, but might respond academically to incentives and gift. They require metacognitive skills. Underachieving students might sometimes present as ill-disciplined, fooling around in class, skipping classes, not doing homework and not submitting assignments completed and on time. Those who underachieved seemed to be easily distracted and had difficulty focusing on the academic programme.

It was important to gain a perspective of the perception of masculinity held by the boys. Both high achieving and underachieving boys tended to have traditional patriarchal views about masculinity. However, the high achievers also associated masculinity with intellectual competence, respect and deportment. The high achievers did not have a stereotypical outlook of masculinity.

The students, especially the girls, also expressed concern that the school may be unintentionally sending a message to the boys who were involved in sporting
activities, that they need not make the effort to be academically successful since there would always be a place for them in the school. Therefore, it is incumbent on the school to ensure that all students be aware that they are expected to be academically successful. Sports persons should therefore be expected to rise to the challenge.

The psycho-social needs of the student must also be taken into consideration. For instance, the investigation found that in the first year of entering secondary school the desire to make new friends and fit into the new environment was paramount. By the second and third year of the journey through secondary school the need seemed to be one of establishing an identity. In this school, this was the period where academic self-handicapping was more prevalent among the underachievers. These boys seemed more concerned with establishing a macho identity.

The high achievers tended to be more resistant to this behaviour. The high achievers spoke of the loving support given by their parents and the personal satisfaction they felt when they achieved. They were not preoccupied with the stereotypical views of masculinity. They seemed to have a sense of identity in the context of their family. They valued effort and mastery.

6.3 Proposed Protocol

6.3.1 Goals

The goal of this proposal is to help those boys who are underachieving in the secondary school to improve their academic performance. (This may also be beneficial to girls).
6.3.1 Objectives

1. To identify the theory of intelligence held by the student.
2. To determine to what factors the student attributes his underachievement.
3. To develop strategies with the student to improve his academic performance.

Consideration is given to the approaches recommended by Younger and Warrington et al (2005) and Cleveland (2011) which are generally compatible with the strategies recommended by the participants in the study. Younger and Warrington et al (2005) recommended that any intervention strategy designed to raise the academic achievement of boys should follow four different approaches: pedagogic, individual, organisational and socio-cultural. They also suggested that for intervention strategies to work effectively they should be long term and adopted in the context of a whole school approach.

6.3.3 Whole School Approach

There should be two approaches by the school as an organisation:

- Proactive
- Reactive (Intervention)

The proactive approach should be one in which the school establishes or prominently reinforces a culture of academic achievement. Therefore at the commencement of the school year, goals and objectives should be agreed upon. The students, to some extent, should have some input in this process. Students should be made aware of the requirements for promotion at the end of the academic year. At the end of this
process there should be no ambiguity as to what is expected of both student and teacher.

It is important that teachers be aware of the factors identified as contributing to the underachievement of the boys in the secondary school. As a result, teacher training is required. This training should include issues such as: self-theories, constructs of gender identity; teaching styles and developing emotional intelligence in teachers. Cleveland (2011) reported that when students experience a positive, non-threatening classroom environment where they feel respected and experience a sense of belonging, academic gains result.

Teachers should be encouraged to vary their teaching strategies to meet the diverse learning styles in the classroom. It is important that teachers be aware of the need to give feedback which conveys information that addresses learning strategies. The desire here is to develop a mastery orientation rather than a performance based orientation. Teachers need to be passionate about what they teach and infect their student with this passion.

An analysis of the data revealed that there were different concerns identified at each year group. This must also be considered as we seek to develop a meaningful strategy. The First Year level, the transition to secondary school, requires special attention.

6.3.4. First Year

Objective: To prepare students for life in secondary school.

Rationale: The transition from primary school to secondary school has been identified
as a time when students may have difficulty organising themselves to cope with the increased work load, the different methods of assessment, as well as with making new friends. The interaction between teacher and student and between the student and his peers will impact on his attitude to school in general.

Action: The orientation exercise should be so structured to address issues raised in the rationale by considering learning strategies, goal setting, making friends, and organisational skills.

Whereas the proactive approach addresses the school environment, there is still the need for the individual approach when the need for intervention is recognised. A summary is given in Table: 6.1.

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<th>Objective</th>
<th>Activity</th>
<th>Responsibility</th>
<th>Timeline</th>
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<td>Prepare students for life in secondary school</td>
<td>Orientation Exercise</td>
<td>Guidance Counsellor</td>
<td>First week of school year</td>
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<td>Year Head</td>
<td>Follow up through the year</td>
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<td>Monitor academic performance</td>
<td>Formative and Summative Assessments</td>
<td>Subject teacher Form Teacher</td>
<td>Throughout the year</td>
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<td></td>
<td>Year Head</td>
<td>At the end of each term</td>
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</table>

Table 6.1: Recommendations for First Year Students
It is expected that when formative assessments are made, subject teachers will seek to identify those students who may be underachieving and seek to determine why. It is important that intervention, when necessary, occurs as early as possible. There should therefore be communication between the Subject Teacher and the Form Teacher and or Year head and subsequently the parents, if there is need for concern. If underachievement persists, then it may be wise to do some further investigation.

Students who are underachieving should be interviewed by the Year Head. The objective of the interview would be:

1. To identify the theory of intelligence held by the student.
2. To determine to what factors the student attributes his underachievement.
3. To develop strategies with the student to improve his academic performance.

The monitoring of students described above should be practiced throughout the school.

### 6.3.5 Second Year

Objective: To reduce the instances of academic self-handicapping by boys at this level.

Rationale: The research findings indicated that the Second Year was the level where students were more disposed to academic self-handicapping. Academic self-handicapping is manifested in the strategies that some students adopt so that, just in case they are not successful in an academic activity, they blame their low attainment on the circumstances, rather than on their lack of ability or effort. It is in the context of failure that the self-theory held by the student is
important. These are the students who tend to have an entity theory of intelligence.

These boys may be at the period of adolescence associated with establishing a personal identity. As a result there may be several occasions of conflicts, disrespect and challenges to authority, not only in the school, but in the home as well. These unproductive and distracting behaviours may also be attempts by the boys to prove their manhood.

Action: As part of the proactive approach teachers and parents must work together to hold their charges responsible for their education. Cleveland (2011) found that academic gains resulted when the students value their unique gifts, when the teacher and students develop the learning culture together, developing a sense of shared responsibility.

Feedback on assessments should address learning strategies and methods, rather than concentrating on the child. Students should be encouraged to set short term attainable goals in an effort to develop some academic resilience. The concept of academic self-handicapping is compatible with a performance goal orientation and an entity theory of intelligence. Attribution retraining is necessary to encourage a mastery goal orientation.

6.3.6 Third and Fourth Year

Rationale: The Third and Fourth Year may be considered transition years at this school. It is at the Third Year that students are assigned to classes based on their
subject choices. There may be issues of adjustment similar to that associated with the First Year. This may be compounded with other issues associated with adolescence and gender identity. The Fourth Form Year level was the one at which there was the largest number of boys repeating the year, many of whom were involved in sports.

Action: A summary of the pedagogical approach and the intervention strategy is given in Table 6.2.

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<tr>
<th>Objective</th>
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<td>Meet with the child to determine to what he attributes his underachievement?</td>
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<td>What does he need to do improve?</td>
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<td>Is there a need for attribution retraining?</td>
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<td>Meet with parents. How can they contribute to the improved academic performance?</td>
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Table 6.2: Pedagogical Approach and Intervention Strategy
6.3.7 The Student Athlete Programme

Several of the boys who were identified as underachievers were involved in sport, especially football. Some attention should be given to these students to help them to develop a balance between their involvement in sport and their academic pursuits.

As a whole school approach, all students should be strongly encouraged to commit to some form of extra-curricular activity. The culture of the school should be so adjusted as to phase in this requirement. More and more the society and the workplace are calling for persons who are not just academically inclined but who can contribute in other ways, persons who are multifaceted. The Student Athlete Programme should be used as a pilot study to promote the concept of each child being actively involved in the extra-curricular life of the school.

Objective: To help athletes and sports persons to value academic pursuits.

Rationale: In the research findings, the opinion was expressed that the school contributes to the underachievement of boys, especially those involved in sport. It was articulated that the school is perceived as partial to sportspersons and as a result these students were not held up to the same high academic standards as other students.

Action: At the start of the school year there should be an orientation workshop for all the boys who represent the school in sporting activities. The objective of this workshop should be to identify ways of ensuring the academic achievement of
those students who represent the school in sporting activities. Each student should be invited to ask himself:

1. How do I become a better athlete?
2. How do I become a better student?

Since most of the sporting activities are team activities, then a team approach to study is being recommended to the boys. This is an opportunity for peer tutoring and peer support. This is also an opportunity to encourage reading and enhance literacy.

This programme should also incorporate some life skills as identified by the participants, as well as skills relevant to being a successful athlete. Sessions may include topics such as:

- “Interview techniques: Talking to the press” – this should focus on the need to develop literacy and enhance verbal skills. Younger and Warrington et al. (2005) found academic gains when attempts to develop literacy focussed on boys as readers, writers, listeners and speakers.
- Time Management – this should be a practical session helping students to develop the skill of scheduling their training, academic and social life.
- Challenging gender stereotypes – this session should explore the gender stereotypes as they see them and openly discuss the implications of such stereotypes.
• Drugs and sports – this should acknowledge the incidences of sports persons caught cheating with performance enhancing drugs and have open discussion on monitoring what is consumed by athletes.

Persons Responsible:
The school administration, the Guidance Counsellor and the coaching staff should all be involved in this programme. The school administration needs to be involved to emphasise the mutually beneficial relationship between the student and the school. The school benefits from the participation of the student in sports and the student must benefit academically from being a member of the school.

Evaluation:
At the end of the first term the Student Athlete project should be evaluated. This programme should be data driven and the coaches must be involved in the data collection process.

• The reports of the participants should be reviewed not only for the marks but for the comments from the subject teachers as they relate to the attitude of and the effort made by the student.
• A survey should be conducted among the participants to garner their views on the success of the project and ways in which it can be enhanced (or even if it should be abandoned).
• Focus group interviews should also be used to collect data on ways of improving the project.
• The input of parents and teachers should also be sought and valued.

6.3.8 Summary

This case study identified a number of areas of interest in raising the achievement levels of boys. Among them is the whole concept of how we do school. The ability to raise the achievement level of the boys is dependent on a culture of achievement in the school. Younger and Warrington et al (2005) found that achievement levels increased when the school adopted a culture where achievement at all levels was recognised and celebrated.

The teacher-pupil relationship, though not identified by many of the students as a critical factor to their achievement, is crucial as far as fostering academic self-efficacy. The monitoring and coaching by teachers become even more necessary when the parental support is lacking. Whatever the situation, the cooperation of the students in the teaching-learning transaction is essential to their success.

Therefore in addressing the academic underachievement of boys in this secondary school setting a whole school approach which is both proactive and reactive is recommended. This approach should start from the first year, anticipating the social and academic needs of the students who enter the school. When underachievement becomes a concern then intervention should be swift and the causal search and solution should engage the student.
6.4 Generalisability

I believe that the findings from this study add to the research done locally and regionally. It also provides empirical data, albeit from one institution, which should offer another perspective to the debate on the underachievement of boys. The findings should move the discussion beyond mere speculation, as we acknowledge that while underachievement may be a problem, not all boys are underachieving. However, the results of this case study should not be generalised to other populations. There may be some characteristics associated with the boys in the case study which may not apply in another context. This emphasises the need to be cautious in generalising results to all populations.

While the results may shed light on the problems of boys’ underachievement in this secondary school, they may not be representative of boys in other secondary schools in Barbados or elsewhere. The role of motivation on achievement may vary depending on the context of the school. Whereas teachers were not identified as a major factor in this school, this may vary from school to school, depending on the culture and ethos of the school.

Nevertheless, having grounded the findings in the context of the existing literature it is evident that several of the observations made are not peculiar to this school. The study should find some relevance in other schools, if only for the methodology used. The voices of the students are essential in understanding the issues facing them.
6.5 Further Research

It would be useful to repeat this study in a stratified sample of schools to determine to what extent the results of this study are representative of the factors which distinguish high achieving boys from underachieving boys. Individual schools may want to conduct their own research to determine the extent to which this study has relevance for their school.

I found the issue of boys and sport to be interesting. This is an area in which I would want to do some further investigation to determine if there is a relationship between gender construct and the choice of sport in which boys engage.

The Barbados Secondary School Entrance Examination took place on May 07, 2013. Every year at this time there is great discussion on the validity of this method of transfer from primary to secondary school. The issue of the allocation of students to secondary schools and the impact this may be having on the self-theories of these students requires some investigation.

As for the boys who drop out of school, what is their theory of intelligence? How do they construct masculinity?

6.6 Conclusion

This case study conducted in this school sought to determine factors which distinguished high achieving boys from those who were underachieving in a coeducational secondary school in Barbados. This study was done without pitting the achievement of boys against that of girls. It was also conducted as a journey of
discovery. On completion of this study I have grown as a person and as a professional. Most importantly I have learnt to really listen to the voices of my students.

I have gained insight into attribution theory and Dweck’s self-theories. This knowledge provides a framework for the causal search of underachievement. This knowledge also provides a springboard for developing individual intervention strategies.

I have gained further insight into the concept of how societies construct masculinity and its impact on academic achievement. In the words of Jackson:

I believe we can actively use that sense of inner contradiction in many boys and men by offering them a new vision of masculinity that vigorously opposes patriarchy.

(Jackson, 1998:93)

The risk must be taken: abandon patriarchy and replace it with notions of humanity and society that affirm the personhood of all humans.

(Miller, 1991:289)

The journey does not end here. What is clear is that our boys need support and encouragement. Our boys need to experience relationships at home and at school, which honestly enhance their understanding of self. It is imperative that those in positions of leadership in our educational system address this issue. We owe it to the boys. We owe it to the society.
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## APPENDIX A

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N.B. Grades I, II and III are accepted as passes for matriculation into the university.

OTHER includes

(i) candidates who were entered for the subject but did not write all or part of the exam;

(ii) candidates for whom the School Based Assessment was not submitted;

(iii) candidates whose work was un-graded.
Dear Student, I am currently carrying out a survey to determine what factors distinguish high achieving boys from underachieving boys. I need your assistance in this project. Please complete the questions below. There are no right or wrong answers. If there are any questions you do not understand please indicate this by making a note next to the question. Do not write your name anywhere on the paper. The information collected will not be traced back to you.

PART A

PERSONAL INFORMATION

1. Circle your Form Level?

   1st  2nd  3rd  4th  5th

2. In what extra-curricular activity do you participate?

   .............................................................................................................................................................................

3. How much time (on average) do you spend doing homework each night?

   Less than 1 hour [ ]  Between 1 and 2 hours [ ]  More than 2 hours [ ]
PART B

Identify the factors which you believe contribute to the high achievement of boys in this school:

Identify the factors which you think contribute to the underachievement of boys in this school:
PART C

Tick the box which best represents your views on the following:

Key:  **SA** (Strongly Agree);  **A** (Agree);  **U** (Unsure);  **D** (Disagree);  **SD** (Strongly disagree)

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<td>I really want to do well in school</td>
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<tr>
<td>2</td>
<td>I care what my teachers think about me as a person</td>
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<td>3</td>
<td>I would be much happier in a single sex school</td>
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<td>4</td>
<td>I don’t like this school</td>
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<tr>
<td>5</td>
<td>I am involved in a lot of activities and therefore have very little time to study</td>
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<tr>
<td>6</td>
<td>I am really bright so I don’t have to study as hard</td>
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<tr>
<td>7</td>
<td>You have a certain amount of intelligence and you really can’t do much to change it</td>
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<tr>
<td>8</td>
<td>I don’t want to look stupid so I avoid participating in class</td>
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<tr>
<td>9</td>
<td>It is important to me that I understand the work I am doing in class</td>
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<tr>
<td>10</td>
<td>I am often put out of the classroom</td>
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<tr>
<td>11</td>
<td>My school friends are not interested in doing well at school</td>
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<tr>
<td>12</td>
<td>I find it difficult to motivate myself to do school work</td>
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<tr>
<td>13</td>
<td>I want to find a job as soon as I leave school</td>
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<tr>
<td>14</td>
<td>I want to continue my studies when I leave school</td>
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<tr>
<td>15</td>
<td>There are too many female teachers in this school</td>
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<tr>
<td>16</td>
<td>I care what other students think of me</td>
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<tr>
<td>17</td>
<td>I don’t mind making mistakes when I am learning something new</td>
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<tr>
<td>18</td>
<td>I care what my parents think about my academic performance</td>
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<tr>
<td>19</td>
<td>I find school boring</td>
<td></td>
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<tr>
<td>20</td>
<td>It is importance to me that I do better than other students in class</td>
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<tr>
<td>21</td>
<td>I feel good when I am one of the few who know the answers to the questions asked in class</td>
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<tr>
<td>22</td>
<td>You can learn new things but you can’t really change your basic intelligence</td>
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<tr>
<td>23</td>
<td>I fool around a lot in class</td>
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<tr>
<td>24</td>
<td>I enjoy learning new things</td>
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<tr>
<td>25</td>
<td>I don’t want to be considered a nerd in class</td>
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<tr>
<td>26</td>
<td>I care what the girls think about me as a person</td>
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<tr>
<td>27</td>
<td>I care what the others boys think about my academic performance</td>
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<tr>
<td>28</td>
<td>I like class work that challenges me to think</td>
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<tr>
<td>29</td>
<td>I care what the girls in my class think about my academic performance</td>
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<tr>
<td>30</td>
<td>I care what my teachers think about my academic performance</td>
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<tr>
<td>31</td>
<td>I care what the other boys think about me as a person</td>
<td></td>
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<tr>
<td>32</td>
<td>I want other students to know when I am doing well in class</td>
<td></td>
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<tr>
<td>33</td>
<td>Your intelligence is something about you that you can’t change very much</td>
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</tbody>
</table>

Thank you for your assistance
APPENDIX C

Letter to the Principal

The Rectory
St. John’s Parish Church
St. John
June 25, 2011

Dear Mr. ...........

I am currently enrolled as a student at the University of Leicester in the Department of Education – Doctoral Studies. The title of my thesis is "A study of high achieving boys and underachieving boys in a coeducational secondary school in Barbados”. My supervisor is Dr. Phil Wood.

I am seeking your permission to use the school for this case study. This would require access to

(1) the records for the marks and reports of the students participating in the study
(2) the members of the teaching staff and
(3) the students identified for the study and their parents.

It is my intention to use the data collected to develop strategies to assist boys who are underachieving in this school.

Thank you for your cooperation.

Yvette R. Mayers
(N.B. The name of the Principal was removed from this copy)
APPENDIX D

TEACHER QUESTIONNAIRE

Dear colleague

I am currently researching the academic achievement of boys in this school. I therefore require your assistance in completing this questionnaire. Please note that every effort will be made to ensure your anonymity and confidentiality.

PART A

PERSONAL INFORMATION

1. SEX: FEMALE [ ] MALE [ ]

2. POSITION: SENIOR TEACHER [ ]
   HEAD OF DEPARTMENT [ ]
   GRADUATE TEACHER (TRAINED) [ ]
   GRADUATE TEACHER (UNTRAINED) [ ]

3. DEPARTMENT: BUSINESS STUDIES [ ]
   ENGLISH [ ]
   FINE ARTS [ ]
   FOREIGN LANGUAGES [ ]
   GENERAL STUDIES [ ]
   MATHEMATICS and I. T. [ ]
   PHYSICAL EDUCATION [ ]
   SCIENCE [ ]
   TECH. and VOC. STUDIES [ ]
PART B

1. How would you distinguish between a child who is underachieving and one who is a low achiever?

2. Identify the factors which you believe contribute to the high achievement of boys in this school.

3. Identify the factors which you think contribute to the underachievement of boys in this school:
Complete the table below, listing students in your classes whom you consider to be high achievers and underachievers.

<table>
<thead>
<tr>
<th>FORM LEVEL</th>
<th>HIGH ACHIEVING BOYS</th>
<th>UNDERACHIEVING BOYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1ST FORM</td>
<td></td>
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<tr>
<td>2ND FORM</td>
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<tr>
<td>3RD FORM</td>
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<tr>
<td>4TH FORM</td>
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</tbody>
</table>
APPENDIX E

CONSENT FORM

Dear Parent/Guardian

I am a student at the University of Leicester in the Department of Education – Doctoral Studies. I am conducting research on the academic achievement of boys and I am seeking your permission to include your son/ward in this study. I believe that his participation will help me to determine what factors contribute to the (a) high achievement and (b) underachievement of boys at his school. It is my intention to use the data collected to develop strategies to assist boys who are underachieving in this school.

If you allow your child to participate please note that he can be withdrawn at any time during the data collection process. Every effort will be made to ensure confidentiality and anonymity. His responses will not be linked to his name or your name in any written or verbal report of this research project.

Your decision to allow your son/ward to participate will not affect your or his present or future relationship with the school. If you have any questions about the study, please contact me at 4289330 (work) or 4331586 (home).

Your signature below indicates that you have read the information provided above and have decided to allow him to participate in the study. If you later decide that you wish to withdraw your permission for your son/ward to participate in the study, please contact me.

Remember, you may discontinue his participation at any time.

Yvette R. Mayers (Investigator)  Date

Printed Name of Student

Signature of Parent(s) or Legal Guardian  Date
APPENDIX F

STUDENT INTERVIEW SCHEDULE

Research Questions

2. To what do high achieving boys attribute their success?

3. To what do underachieving boys attribute their academic performance?

4. How do underachieving boys and high achieving boys differ in terms of their career goals?

5. How do high achieving boys and underachieving boys define masculinity?

6. Do high achieving boys and underachieving boys differ in terms of their level of motivation?

7. What strategies would improve the academic performance of boys?

INTERVIEW SCHEDULE: ………………………………………………………………………………………………………

1. With whom do you live?

2. Are you involved in any extracurricular activities?

3. What does being a man mean to you?
4. Complete this statement: A man should never ...

5. What are your career goals?

6. What do you have to do to achieve that goal?

7. How do you feel about your academic performance during this year?

8. What do you think is responsible for this performance?

9. How would you go about improving your performance?

10. What help do you think you would need to improve on that performance?

11. What do you think needs to be done to help those boys who are underachieving?

12. What motivates you to achieve?
APPENDIX G

Glossary

Terms

*Academic Achievement:*
Academic achievement is a level of attainment in the class assessments and examinations. For the purpose of this study, the marks for the end of year internal examinations of the students in the school were used.

*Underachievement:*
Underachievement is “A discrepancy between a child’s school performance and some index of the child’s ability. If children are not working to their ability in school they are underachieving”. (Rimm 1997:18).

*Underachiever:*
An underachiever is a student who exhibits “a severe discrepancy between *expected achievement* (as measured by standardised achievement test scores or cognitive or intellectual ability assessments) and *actual achievement* (as measured by class grades and teacher evaluations). To be classified as an underachiever, the discrepancy between expected and actual achievement must not be the direct result of a diagnosed learning disability.” (Reis and McCoach 2000:157 as cited by McCoach and Siegle. 2003:145)
**High Achiever:**

A high achiever can be described as a child whose academic attainment is higher than 0.25 of the standard deviation of the students in the class, using the marks for the end of year examination.

**Abbreviations and Acronyms**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>BSSEE</td>
<td>Barbados Secondary School Entrance Examination</td>
</tr>
<tr>
<td>CAPE</td>
<td>Caribbean Advanced Proficiency Examination</td>
</tr>
<tr>
<td>CSEC</td>
<td>Caribbean Secondary Education Certificate</td>
</tr>
<tr>
<td>CXC</td>
<td>Caribbean Examination Council</td>
</tr>
<tr>
<td>UWI</td>
<td>University of the West Indies</td>
</tr>
<tr>
<td>MBTI</td>
<td>Myers-Briggs Type Inventory</td>
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</table>