

Author: Edmund-Woods, Marcia

Title: *A literature review exploring academic underachievement among males in the Trinidad and Tobago school system.*

The accompanying research report is submitted to the **University of Wisconsin-Stout, Graduate School** in partial completion of the requirements for the

Graduate Degree/ Major: MS Family Studies and Human Development

Research Adviser: James Lehmann, Ph.D.

Submission Term/Year: Fall, 2011

Number of Pages: 68

Style Manual Used: American Psychological Association, 6th edition

I understand that this research report must be officially approved by the Graduate School and that an electronic copy of the approved version will be made available through the University Library website

I attest that the research report is my original work (that any copyrightable materials have been used with the permission of the original authors), and as such, it is automatically protected by the laws, rules, and regulations of the U.S. Copyright Office.

STUDENT'S NAME: Marcia Edmund-Woods

STUDENT'S SIGNATURE: _____ DATE: 12/21/2011

ADVISER'S NAME: Dr. James Lehmann

ADVISER'S SIGNATURE: _____ DATE: 12/22/11

**This section for MS Plan A Thesis or EdS Thesis/Field Project papers only
Committee members (other than your adviser who is listed in the section above)**

1. CMTE MEMBER'S NAME:

SIGNATURE: _____ DATE:

2. CMTE MEMBER'S NAME:

SIGNATURE: _____ DATE:

3. CMTE MEMBER'S NAME:

SIGNATURE: _____ DATE:

This section to be completed by the Graduate School

This final research report has been approved by the Graduate School.

(Director, Office of Graduate Studies)

(Date)

Edmund-Woods, Marcia. *A literature review exploring academic underachievement among males in the Trinidad and Tobago school system.*

Abstract

Male academic underachievement is considered to be a major educational issue. Ministers of Education across the Commonwealth and throughout the English speaking Caribbean have raised the issue of academic boys' underachievement. In Trinidad and Tobago the issue has formed a key component in the educational reforms proposed by the Governmental agency responsible for education within the country: namely the Ministry of Education. The underachievement of boys in education is a topic which has raised significant debate and a host of divergent hypotheses. Some of these are predicated upon the belief that the issue revolves around a boys versus girls conflict. Others hold the view that male underachievement results from a war of the sexes.

This paper attempts to analyze the literature available on this issue, particularly those produced within the Caribbean; it may be argued however, evidence within the Caribbean remains limited. Factors such as policy formulation, gender and achievement, gender differentials, teacher gender impact, male marginalization, masculinity concepts and same-sex schools have been considered and commented upon. The paper draws conclusions from the available data and concludes with recommendations for further research into the area of male academic underachievement.

Acknowledgments

Jeanne Stoeklen in the Graduate School, for promptly responding to every question I ever asked.

Dr. Kevin Doll my Department Chairperson for his help and support.

Dr. James Lehmann who graciously agreed to serve as my adviser, I appreciate your patience.

My brother Martin and sister Mary, for their tireless and unwavering assistance and support.

The only wise God and Savior who made a way out of no way.

Table of Contents

	Page
.....	
Abstract.....	2
Chapter I: Introduction.....	5
Statement of the Problem.....	12
Purpose of the Study.....	13
Assumptions of the Study.....	13
Definition of Terms.....	13
Limitations of the Study.....	15
Chapter II: Literature Review.....	16
Chapter III: Discussion.....	51
Limitations.....	54
Conclusions.....	54
Recommendations.....	57
References.....	60

Chapter I: Introduction

Overview of the Trinidad and Tobago Education System

Trinidad and Tobago is a twin-island republic situated at the southern end of a chain of islands in the Caribbean, with a population of approximately 1.3 million. It gained its independence from Britain in 1962 and acquired Republican status in 1976: however, remains a Commonwealth country.

The education system in Trinidad and Tobago like in other British Commonwealth countries has evolved from a colonial past. The colonial government's involvement in education began in the post-slavery era and marked the opening up of education to the freed classes. Hitherto, education was provided only for the children of the landowners by way of private teachers and/or denominational schools established by various Christian groups. A dual system of Government schools and church schools (financially assisted by Government and known as “assisted” schools) has persisted to the present time. It is within this context that the Primary teacher education enterprise is examined.

Structure of the Education System

The education system within the Republic of Trinidad and Tobago is comprised of several school types. Government schools are fully owned and operated by the State. These include Primary, Junior Secondary, Senior Secondary/ Comprehensive and Traditional Government Secondary schools. A second type of school is the Government-assisted school. These are managed by a private body, which in most instances is a religious denomination, which receives financial assistance from the State. There are both Primary and Secondary schools which fit into the Government-assisted mold. Thirdly there are private schools which are maintained and operated by private bodies without any assistance from the State. The final

category of schools is the Special School. These are designed for educating handicapped children and which provide education mainly at the Primary level.

Educational provision within this system occurs at various levels. Early Childhood Care and Education (ECCE) centers cater for children who are three to four years of age. The education system within the country provides universal education to children at both the Primary and Secondary levels. Universal Primary education caters to children between the ages of five to 11. This includes two years of infant classes for children aged five and six and five years of schooling (five Standard/Grade levels) for the seven to 11 age cohort. Secondary education caters for the 12-18 age cohorts. This is a complex sector, with educational provision in the different types of Secondary Schools mentioned previously namely; three-year Junior Secondary schools, two-year Senior Secondary/Senior Comprehensive schools, four-year Senior Secondary/Senior Comprehensive schools, five-year Composite (Government) schools, five year Government Schools, five year Government-assisted schools, five year Private schools and seven-year Government and Government-assisted schools.

The Primary level consists of 476 Public Schools, 135 Government Schools, 341 Assisted Schools, 10 Special Schools and 54 registered Private Primary schools. The Secondary level schools can be further classified in terms of their programme offerings. The Traditional Sector institutions are five and seven year schools comprising both the Government and Government-assisted types. They offer a mainly academic type programme which is essentially designed to prepare graduates for further education or for employment at the clerical level. The New Sector schools (which are all Government schools) emerged during the 1970s and 1980s as a result of the Government's efforts to expand the Secondary school intake and broaden the curriculum. The New Sector schools consist mainly of a two-tiered system incorporating the three-year

Junior Secondary schools with transitions into the two-year or four-year Senior Secondary/Senior comprehensive schools. The New Sector also encompasses the five-year Composite schools. Schools in this sector offer courses in both academic and Technical/Vocational subjects. There are approximately 141 Secondary Schools which are either full day schools (generally 8:00 a.m.-2:30 p.m.) or shift schools (7:20 a.m.-12:15p.m. and 12:30 p.m.-5:30 p.m.). In 1994/95 there were 13 registered Private Secondary schools. The system is characterized by a series of selection points at which progression to the next level is controlled.

Selection

Primary education up to age 12 was made compulsory and free in 1961 and in the 1970s respectively; access to Secondary education expanded from 22% to 70% of the 11+ age group. Until 2000, education beyond the Primary level was not all-encompassing and students were required to sit selection examinations at the end of this cycle of education for selection for publicly subsidized places at the next level.

At the end of Primary education, Standard five students wrote the Common Entrance Examination (CEE) for placement in Form one of a Secondary School and for tracking, either in the Traditional Sector (considered as the better quality schools), or in the Junior Secondary or Composite Schools in the New Sector. This was a very competitive examination, since most students wished to secure a place in the Traditional Sector schools, but the number of such places was severely limited. Those who failed the CEE twice could enter the Post-Primary grades of the Primary School or Post-Primary centres for a maximum of two years, attend Private Secondary Schools or drop out of the system. Students who opted to enter the Post-Primary grades could take the School Leaving Certificate (SLC) Examination. If they passed the SLC, they could be placed in Form two of a Secondary school. If they failed twice, their formal

education in Public schools was terminated, but they had the options of non-formal vocational education at youth camps or youth centres, apprenticeship, or attendance at private schools.

With the establishment of universal Secondary education in 2001, the CEE was replaced by the Secondary Entrance Assessment (SEA) Examination, the results of which determines whether students are placed in schools of their choice or at the discretion of the Ministry of Education. A Continuous Assessment Programme (CAP) was meant to compliment this examination but is yet to be fully implemented. Since the new system is still in its infancy, it is not yet clear what changes will take place in the progression of students through the system.

At the Secondary level, the 14+ Examination at the end of Form three was originally intended to screen Junior Secondary students for placement in Form four in the New Sector schools. Although it is still administered to Junior Secondary students, it does not appear to serve any discernible purpose, since these students are assigned to the Senior Secondary/Senior Comprehensive schools before their 14+ examination results are available. Students in the composite schools and the Traditional Sector schools do not write the 14+ examination.

The regional Caribbean Examinations Council (CXC) Examinations (General and Basic Proficiency Levels), administered at the end of Form five, certify the completion of five years of Secondary schooling and select students for Form six, where they pursue pre-university studies. Some Form five students also take the Cambridge General Certificate of Education (GCE) Ordinary Level (O' Level) Examination. The National Examinations Council (NEC) Examination, also administered at the end of Form five, screens students in the vocational craft track for admission to Technical Institutes. The Cambridge GCE Advanced Level (A' Level) Examination is administered at the end of the Upper Sixth Form year for selection for university places.

The Ministry of Education is currently examining the feasibility of having a national assessment system that would certify the completion of five years of Secondary schooling, and allow for the award of a Secondary school completion certificate-the National Certificate of Secondary Education (NCSE). This new system is intended to embody continuous assessment features, and highlight achievement in personal development and in the aesthetics, in addition to achievement in the academic and technical/vocational areas. The proposal is that success at the CXC examinations would contribute credits toward the award of the NCSE.

Within the context of the educational system as outlined above, the academic performance of our young male students has been and continues to be a source of great concern for many, including the current Minister of Education of Trinidad and Tobago Dr. Tim Gopeesingh and his staff. Male disenfranchisement which is characterized by an increasing sense of hopelessness and frustration occasioned by a lack of success experience has become a major societal focal point, as men are either opting out or being forced out of our academic institutions. As a consequence they find themselves unable to access viable employment options later on in life.

Several theories have been put forward to account for this underachievement in males with much attention to the educational model currently in place. Many believe the genesis can be found in the breakdown of the current education model. Theorists believe the breakdown of this model, in which students scoring in the 90th percentile and above on the SEA Examination are sent to denominationally administered same sex schools while those scoring below this level go to co-educational Government run schools, has its genesis in the school. Numerous statistical reports reveal males are being consistently outperformed by females and are becoming

increasingly uneasy and disinterested. What has given occasion to this phenomenon has occupied the attention of many in the field of education.

For the past three years the majority of boys writing the Caribbean Examinations Council's Caribbean Secondary Education Certificate (CSEC) examinations have failed to obtain a full certificate of five passes (Grades I, II, or III in five or more subject areas). Much ado has been made about the predominantly female teaching fraternity and its possible influence on the young male student. Does this affect the ability of the male student to perform academically as well as to function appropriately within the context of his gender? Endeavoring to obtain some possible answers to these and many other burning questions surrounding male academic performance in the Republic of Trinidad and Tobago this researcher will extensively examine the available literature.

Commencing in 1961 there was a change in the transition process from the Primary to the Secondary level. Prior to that, transition was based on entrance examinations set by individual schools and on the College Exhibition examination, which provided free tuition and limited financial assistance for the purchase of books to successful students in the form of scholarships. The Common Entrance examination replaced both transition mechanisms, thereby allowing successful students eligibility to all schools. This was followed by the establishment of free Secondary education which further increased equitable access and largely overlooked geographical, ethnic, socio-economic and gender differences. The need for adequate school places to accommodate the widened Secondary population saw a massive school building program; first, with the central schools in various geographic locations and then with the new sector schools. The latter incorporated a two-tier system, comprising three-year double-shift Junior Secondary schools and counterpart two to four-year Senior Secondary/Senior

Comprehensive schools. While the central schools focused mainly on academics new sector schools tended to recognize the varying abilities, aptitudes and interests of students. Their focus on academics and technical/vocational areas of study allows for graduation on completion of a basic education program by combining rudimentary, numeracy and literacy skills with vocational training in a specific area such as plumbing, masonry or welding.

Recognition of these differences in student aptitudes, abilities and interests gave rise to expansion and diversification of curricula and the development of new examination structures. To this day the debate continues as to the most appropriate mechanisms for ensuring all Secondary students the best possible education and equitable earning potential. This debate encompasses Technical/Vocational study streams, which cater to the development of skills for employment in Primary and Secondary industries such as construction and manufacturing as well as theories of multiple intelligences, and other responsive student support systems.

Notwithstanding, the efforts of students at these senior Secondary schools, many of whom perform at high levels of excellence, certain negative perceptions persist causing concern. These students continue to be labeled as underachievers despite efforts to the contrary simply because the institutions they attend are stigmatized. Particular clusters of Secondary students demonstrate low levels of literacy, ambivalence to scholastic effort, lack of motivation and ambition, and disruptive behavior in and out of school.

Common perceptions regarding these students, most of whom attend the Government administrated Senior Secondary schools include relative educational underachievement of males, socio-economic and ethnic imbalances with respect to achievement and dropout rates, increasing elitism, widening of gaps in earning potential and possible links to deviant or criminal activity.

The Ministry of Education has stated that these perceptions are supported by Primary data; they direct the agenda and are being given priority on the ministry's research agenda.

This researcher will extensively examine the available literature in an attempt to obtain some possible answers to the many burning questions surrounding male academic performance in the republic of Trinidad and Tobago.

Statement of the Problem

A problem exists in that statistical data from the norm reference tests used to assess students at the Primary and Secondary levels (SEA and CSEC examinations respectively) clearly indicate girls are performing much better than boys. The data actually revealed girls consistently scored passing grades of 50% and above while boys were consistently below 50% on Math and Language examinations. This persistent manifestation of failure has caused grave concern to the Ministry of Education. Government proposed undertaking a pilot study to assess if boys will improve their academic performance in a same sex environment since girls do far better than boys in studies and examinations. The schools chosen for this project are former Junior Secondary and Senior Comprehensive schools which have already undergone conversion from three and two year institutions respectively to five and seven year institutions, a conversion that was fraught with difficulty. Students of these institutions are already challenged by public perception which stigmatizes them as being academically and socially inferior to their grammar school counterparts. No concrete reason was put forward as to why the project is necessary and why in the specific schools chosen. The Government's proposed pilot project, instead of making these students feel like pioneers can lead instead to them feeling like guinea pigs.

Purpose of the Study

The purpose of the study is to explore academic underachievement by boys, to explore possible contributors to, reasons for and consequences of this occurrence and, to advocate for in-depth study into the area with a view to improving the quality of school life for boys in particular and all students in general.

Assumptions of the Study

The study is assuming that boys do in fact underachieve academically, that the Government will be willing to undertake an in-depth analysis of this issue with a view to identifying reasons for and solutions to this occurrence, that students and teachers would be willing to work together to facilitate an improved education system. Notwithstanding these assumptions this study proposes to address the following questions:

Research Questions

1. Are male students underachieving academically?
2. What are the societal influences impacting the learning experiences of male students?
3. Why do boys perform lower than girls on academic tests in particular subject areas?

Definition of Terms

Afro-Trinidadian. People of Trinidad and Tobago who are largely of African descent and whose ancestors originated in Africa.

Caribbean Secondary Education Certificate (CSEC). An examination administered to students desirous of matriculation from Secondary education.

Central or Grammar School. Government constructed and operated traditional five and/or seven year grammar type school. It was designed to provide Secondary educational opportunities for students similar to those provided by the denominational Secondary schools.

Common Entrance. An examination administered to all elementary school students of approximately 11 or 12 years of age as a means of determining Secondary school placement. This examination has been restructured and is now referred to as the Secondary Entrance Assessment or SEA.

Indo-Trinidadian. People of Trinidad and Tobago who are largely of East Indian descent and whose ancestors originated in India.

Junior Secondary School. Three year dual shift Secondary schools which accommodate successful SEA students from age 11 or 12 to age 14 on either the a.m. or p.m. shift. At the end of the three year period students undertake the 14 plus examination as a means of determining placement at the senior comprehensive level.

New Sector School. Junior Secondary and Senior Secondary schools

Senior Secondary/Senior Comprehensive School. Two year Secondary schools which Junior Secondary students attend in order to complete their final two or four years of Secondary education.

Note: Students wishing to pursue Tertiary level studies must spend an additional two years in the Secondary school system i.e. from age 16-18 as participation in the advanced of A' Level program so as to prepare for such an undertaking.

Technical Education. Courses of study and practical training aimed at preparation of technicians to work as supervisory staff.

The Stanford-Binet Intelligence Scale. Is a standardized test that measures intelligence and cognitive abilities in children and adults, from age two through mature adulthood.

The Wechsler Adult Intelligence Scale (WAIS). Is an individually administered measure of intelligence, intended for adults aged 16–89.

Vocational Training. Refers to lower level education and training for the population of skilled or semi-skilled workers in various trades, it does not enhance their level with respect to general education.

Limitations of the Study

This review looks mainly at Trinidad and not necessarily Tobago therefore a portion of the nation is not represented. Since no surveys are being conducted the only thoughts, feelings and opinions represent are those previously recorded and now represented in print. No thoughts, feelings and opinions of present teachers and/or students are represented. Access to local literature on the subject area was not readily available.

Chapter II: Literature Review

The education sector in Trinidad and Tobago plays a critical role in social transformation. The principal task of this sector is to supply the country with its human resource capital for effective socio-economic participation in local, regional and international activities. To this end the Government has invested heavily in this sector. Notwithstanding the significant budgetary allocations provided by the Government the education sector is still plagued by problems, not the least of which has been the persistently low performance by the Country's males on the nationally administered norm referencing tests (S.E.A. and C.S.E.C.). According to De Lisle, Smith and Jules (2005) the education system inherited from British colonial rule was noticeably elitist and examination-oriented, designed to filter, segregate and retain students based on perceived meritocracy, as defined solely by performance in public examinations. A logical question comes to mind, is the current design of the education system the best strategy for efficient and equitable human resource-centered development? An examination of literature on the local education system will cover such topics as the composition of the teaching service, the impact of teacher gender, teacher bias, classroom structure, teacher efficacy, gender stereotypes, male marginalization and privilege, socio-economic factors, testing and assessment, socialization patterns, cultural mistrust, gender differentials and same sex schooling.

Teaching Service Composition

Gender issues in education have been of some concern to many researchers in the field. Trinidad and Tobago is not immune to these issues and in fact statistical data disseminated by the Department of Educational Research and Evaluation (D.E.R.E.) revealed a trend in which girls have been performing better at the various assessment instruments employed in the education system. Many areas of concern have arisen based on these trends, including the impact of

teacher gender on the academic performance of male students. One contemplates what impact if any, does the teacher have upon the student.

Of the 7,311 teachers employed at the Primary level, 5,665 (77.5%) were trained teachers the other 22.5% had yet to complete the two year training program at the local Teachers' Training Colleges and were thus considered untrained. From a gender perspective, although the ratio of the total number of female teachers to male teachers is 2.8:1 the ratio of female to male Vice-principals is only 1.7:1 and that of female Principals to male Principals is lower yet at 1.1:1. The gender composition of the administration of Primary schools does not adequately reflect the gender composition of the teaching staff with female administrators being under-represented. The data also indicates the ratio of female Secondary school teachers to male Secondary school teachers in 2004/05 was 2810:2185 or 1.3:1. In nearly all school types female teachers were in the majority. Data on the gender distribution among the school administrators at the Secondary level were not readily available for analysis.

Impact of Teacher Gender

According to Dee (2006) gender gaps in educational outcomes are a matter of real and growing concern. Jacob (2002) asserted that boys are substantially more likely than girls to repeat a grade and are also increasingly less likely than girls to attend college and to persist in attaining a degree. Riordan (1999) described the lag of boys behind girls in a variety of important educational outcomes as the silent gender gap, a description which has contributed in part to the undertaking of this research.

Although a significant body of literature examined the impact of teacher and student gender on teacher-student interactions precious little research has been done examining the impact of these interactions on student outcomes as measured by standardized tests. According

to Hopf & Hatzichristou (1999) while a large body of research focuses on the gender of students, less research explores the impact of a teacher's gender on students. Additionally, the majority of literature concerned with gender issues in education has focused its interest upon Tertiary education.

Einarsson & Granström (2002) found most researchers have documented significantly more teacher attention to concept development directed toward boys rather than girls. They also stated that male teachers pay more attention to girls as pupils while female teachers consistently give more attention to boys. In their 2002 study, Einarsson & Granström surveyed teachers regarding their perception of student abilities. Their findings indicated male teachers are more likely to believe boys are superior visual learners while girls are more helpful in the classroom. Conversely, female teachers do not demonstrate these differences in belief but rather tend to think boys have better quantitative skills.

Einarsson & Granström (2002) acknowledged there is a clear distinction in the manner in which teachers treat and perceive boys and girls. Boys are sometimes perceived as threats to male teacher authority when they question and challenge teacher directives. Girls on the other hand are perceived as outspoken and proactive. The roles are reversed in the case of female teachers with boys viewed as exercising their critical and logical thinking skills while girls are perceived as being rude and disrespectful. They noted this differential treatment had no real impact on student performance on particular standardized exams as boys and girls test scores in Math and Language were similar. Also, while a large body of literature established differences on standardized exams based upon the gender of the student no research connects test results to teacher gender and its interaction with student gender.

An experimental study conducted by Spencer, Steele, and Quinn (1999) highlighted the phenomenon known as “stereotype threat”. This presents another perspective on how students might react based on a teacher's gender. The term has been used to define a situation where student performance suffers when they fear being viewed through the lens of a negative stereotype threat; for example female students in a class who underperform due to the perception that they are viewed by a male teacher as being less than efficient at the subject. They further suggest stereotype threat finds application when examining female performance in the area of Math.

Jones and Dindia (2004) suggested teachers may subtly communicate differences in academic expectations of boys and girls. The biased expectations of teachers may then become self-fulfilling when students respond to them resulting in the so called “Pygmalion effect” (self-fulfilling prophecy). Sommers (2000) asserted based on classroom observation teachers are more likely to offer praise and remediation in response to comments by boys but mere acknowledgement in response to comments by girls.

Dee (2006) in his study of the effect of teacher gender employed the United States’ National Education Longitudinal Survey (NELS); which contained data on a nationally representative sample of approximately 25,000 8th graders from 1988. He claimed his results confirmed a teacher’s gender has a significant effect on student test performance, teacher perceptions of students and students’ engagement with academic material. He further stated girls have better educational outcomes when taught by women and boys achieve more when taught by men. Dee’s assertion seemed to suggest that one possible method of dealing with male academic underachievement is to have male teachers tutor male students.

Dee (2006) assumed significant patterns can be detected within the NELS data. According to him when a class is headed by a woman boys are more likely to be seen as disruptive while girls are less likely to be seen as either disruptive or inattentive. Furthermore, when taught by a man, girls were more likely to report that they did not look forward to a subject, that it was not useful for their future, or that they were afraid to ask questions. Boys also had fewer positive reactions to an academic subject taught by a teacher of the opposite gender. In particular, when taught by a female teacher boys were significantly more likely to report that they did not look forward to the subject. The resultant disinterestedness may be correlated to the poor performance level of male students in schools.

According to Dee (2006) his results indicated learning from a teacher of the opposite gender negatively impacted students' academic progress and their engagement in school. He estimated it lowered test scores for both boys and girls by approximately four percent of a standard deviation and had an even greater effect on various measures of student engagement. He holds adverse gender effects impact upon both male and female students; this effect is felt more heavily by the male half of the population in middle schools in the United States simply because most middle-school teachers are female. Similarly, the results suggested part of boys' relative propensity to be seen as disruptive in these grades was due to the gender interactions resulting from the preponderance of female teachers. Although Dee's assertions appear plausible research into same gender learning environments is far more definitive. Mael, Alonso, Gibson, Rogers, & Smith (2005) found the evidence for the impact of single gender education to be limited internationally. Mulholland, Hansen and Kaninski (2004) discovered little difference in both single gender and co-educational classrooms and Baker, Riordan, & Schaub (1995) found positive effects for single gender classroom environments to be inconsistent.

The role of the teacher is one which has always been under scrutiny however, like many other social roles it is a dynamic one. In his book *“The Prophet and the Virgin”* Errol Miller (2003) contended since the initial schools were primarily denominational teachers were expected to be in part substitute priests. He asserted the school and Christianity were tied together conceptually and operationally. Teachers in the schools were supposed to reflect roles in society and often had to perform several functions including father, mother, doctor, judge, farmer, entrepreneur and priest. Initially Teachers were mostly male. As a result of secularization the education system began to change and men began to be replaced by women. Boys were robbed of these positive role models and so became detached from the school experience resulting in poor academic performance.

According to Odette Parry (2000) in *“Male Underachievement in High School Education”* levels of educational attainment have been a focus of concern in the Caribbean and as a result school underachievement has been explored in relation to several variables. One recurring theme in the educational research literature highlights the different levels of achievement for males and females in Caribbean systems of education. Recent concerns with gender differentiated achievement in the Caribbean reflected a growing concern about the underperformance of males. In the developed world recent research showed whilst the domains of academic achievement continues to differ by gender women are apparently motivated to achieve equally or surpass men in educational achievement.

Parry (2000) cited a 1993 World Bank report which indicated females performed better than males at both the Primary and Secondary levels. This was clearly evident from the Common Entrance and CXC results. There was a word of caution to becoming overly exuberant

however; Whitley as cited in Parry (2000) indicated their success was clustered primarily in subject areas that were considered to be traditionally female such as English Literature.

Parry's study in 2000 examined many possible reasons for the underperformance of males when compared academically with their female counterparts. One such issue was of male role models. Many respondents described how masculine or macho attitudes and behaviors were not compatible with educational motivation or good grades. They also expressed the concern that male identity was being affected by a lack of suitable male role models. Within the Caribbean context part of this concern stemmed from the large number of single parent female headed households. The high occurrence of households lacking a male parent or guardian was compounded by the fact that there are many more female teachers than male teachers in the Caribbean.

According to Parry (2000) both male and female respondents to her survey mentioned the "over presence of female teachers" in schools. They felt "schools have too many women teachers" and "boys are sick of seeing women" (pg. 50). The invisibility of male teachers it was argued failed to redress the absence of a father figure in the home. There are dissenting voices to this view as Epstein and Stack cited in Parry (2000) have both asserted the supposition female single parent family units do not have access to role models from whom children can learn is erroneous. Furthermore Herzog and Sudia cited in Parry (2000) suggested there was no firm basis to assume boys who grow up in fatherless families are more likely as men to suffer from poor masculine identity due to a lack of role models. They pointed to several successful male students who came from female led single-parent homes manned either by single mothers or grandmothers as evidence.

Teacher Bias

Jawanza Kunjufu (1986) in his book *“Motivating and Preparing Black Youth to Work”* believed the impact of teachers is significant. He stated many black youth have lost the desire to learn because they have not been encouraged to question and develop critical thinking skills. He claimed the problem may not be with black youths but with adults who do not know how to develop teenagers or who are deficient in effectively delivering the curriculum. When blacks enter first grade the stories they construct expressed positive feelings about themselves in the school environment but by the second grade, accounts of their school experiences changed and were characterized by negative imagery of the teacher and school atmosphere. Kunjufu saw this as a result of the shortage of minority teachers with which they could identify along with the stereotyping of minority students.

He contended this negative experience soon relegated young blacks to the category of underachievers. They possessed a low self-concept demonstrated through distrust, lack of concern and even hostility toward others. Based on their level of underachievement they often felt rejected by their family and believed their parents are dissatisfied with them as a result of their low academic performance. They take little responsibility for their actions; often dislike school or their teacher and choose companions with a similar attitude. They lack motivation for academic achievement and may not have hobbies that could occupy their spare time. Moreover, they tend to state their career goals very late, have much lower aspirations than achievers and often choose goals that are not in line with their major interests or abilities.

Kunjufu (1986) reported in a study by Stanworth (1981) it was discovered both male and female teachers indicated they would choose to work with male students rather than female students during the instructional phase of a lesson. Boys were found to be less likely to engage

in unrelated chatter and were more likely to remain engaged in lesson tasks than girls. On the basis of such an analysis, the responsibility for gender imbalances rests largely with the teacher. Some students felt that they were receiving different treatment from their teachers and complained about what they saw as teacher unfairness.

Classroom Structure

While it is well known girls score significantly higher than boys in areas such as reading, there is now increasing evidence the gender gap in school performance is closing in Math and Science, subjects thought of as being dominated by boys. U.S. educational statistics report between 1973 and 1999 the male advantage in Mathematics and Science scores at age 17 was significantly reduced (Campbell, Hombo and Mazzeo 1999). Furthermore, statistics obtained from the Swedish National Agency for Education 2004 test scores revealed 15 year old girls clearly score higher than boys on Swedish and English tests and there is no obvious gender difference in Mathematics.

Schanzenbach (2006) claimed the research into the gender composition of classrooms had been relatively insignificant. This has not served to prohibit the popular press from purporting the notion of boys being left behind in school, and somehow schools are being feminized to the detriment of boys. He asserted this phenomenon obviously will have damaging effect upon the academic achievement of the few boys in a girl-dominated classroom. According to her, boys who constantly hear they are failing may give up in frustration opting not to pursue academic excellence. Schanzenbach posited while tests have shown classroom gender composition impacts learning the gender effect may be working through several different mechanisms. Girls are typically both better behaved and higher scoring.

In addition, Dahl and Moretti (2004) stated there is some evidence that girls and boys come from different socio-economic background, so gender may actually serve as a proxy for whether a student comes from a two-parent family or other related characteristics. Higher scoring peers may increase student performance through peer-to-peer teaching or by setting generally higher expectations in the classroom. Another factor may be that girls respond differently to teachers; a classroom that is majority female is somehow different from a majority male classroom. Schanzenbach further stated there are few covariates in the Standardized Testing and Reporting (STAR) data permitting any insight into this since the problem has deep intertwined roots in conditions both in and out of the school setting.

Teacher Self-efficacy

Bandura (1997) defined self-efficacy as an individual's judgment of his or her capability to organize and execute the courses of action required to attain designated types of performances. Ashton (1985) as cited in Ames and Ames defined teacher efficacy as teachers' beliefs in their ability to have a positive effect on student learning. He further stated teachers with higher teaching efficacy (the teachers confidence in his or her ability to promote student learning) find teaching meaningful and rewarding, expect students to be successful, assess themselves when students fail, set goals and establish strategies for achieving those goals, have positive attitudes about themselves and students, have a feeling of being in control, and share their goals with students. These teachers believe they have the ability to reach even the most difficult of learners and redouble their efforts to reach underachieving students.

Gibson and Dembo (1984) stated teachers with high efficacy devote more class time to academic activities and focus less on discipline as a prerequisite to student learning. Woolfolk and Hoy (1990) asserted teacher efficacy is considered as one of the few teacher characteristics

which consistently relates to teaching and learning; a teachers' sense of efficacy affects the effort they put into teaching, the goals they set and their level of inspiration.

Hyde, Fennema and Lamon (1990) asserted since some subjects such as Mathematics are frequently stereotyped as a male domain different efficacy levels of female and male teachers may add to such beliefs in students. Since teachers' efficacy beliefs influence their professional practices, gender differences regarding their efficacy beliefs may have significant impact in the classroom.

Although several studies have focused on understanding teachers' level of efficacy beliefs and the characteristics of self-efficacious teachers, Brandon (2000) believes that there is a need to assess prospective male and female teachers' beliefs about their ability to perform specific teaching competences before going into the classroom. Brandon (2000) also believes the relationship between teacher efficacy beliefs and academic performance should be investigated. Swars (2005) asserts given the importance of teacher efficacy regarding instructional practices further investigation should occur in this area. Accordingly in-depth exploration should occur regarding teachers' perceptions of their teaching effectiveness in their specific subject area for example Math.

Male Marginalization or Privilege

A major focus of the literature on student performance, particularly in the Caribbean concentrated upon the role played by gender. The major part of this literature addressed the disparity in performance by gender of students in the Caribbean Secondary school system. One school of thought best captured in the work of Miller (2000) is the underachievement of males in the school system being linked to a historical process of male marginalization.

Other scholars of Caribbean society hold an alternative view. Most notably Mark Figueroa (2004) who contends male underperformance in education is not a result of male marginalization. He asserts girls are expected to do better than boys since teachers focus on them and ignore the boys. He suggested it is the historical privileging of Caribbean males, a condition in which young boys were cultured to do as they pleased while girls were restricted in their actions resulting in the phenomenon of male educational under performance. He also stated males can now opt out of the education process with impunity since there is no one to discipline them and further claimed male academic underperformance has its origin in male privilege and the manner in which this has been manifested in relation to education at a time of social change within some institutions values and norms. He suggests the problem of male underperformance be dealt with at three levels: at the home/community, school and workplace. Figueroa purports as long as academic disciplines continue to be defined as male or female boys will be at a disadvantage in choosing a career in keeping with their aptitude.

With the use of primary research and analyzing data for Secondary and Tertiary level institutions Figueroa further developed on his earlier work. He asserted there were a number of complexities found in the explanation of the underachievement of the male gender. Male students he explained generally underachieve relative to females with the gap widening at the higher levels. He further explains the mismatch between male gender identity and the growing educational. He argues the situation is further exacerbated by the persisting strong view men should discipline boys, despite the fact that 42% of households in Jamaica are female headed. Compounding this issue is the fact that boys are less subject to community controls and would eventually acquire “street skills” which along with the role models they meet and the media are detrimental to the schooling process. Figueroa saw these skills as equipping the young male with

the ability to survive within his present circumstances. They very rarely present an opportunity for advancement through legitimate or legal avenues. The immediate gratification they presented is not in keeping with the hard work ethic espoused by the school.

Other scholars have also pointed to the extent to which gender is a critical factor in educational achievement. Evans (1999) for example identified gendered home and school socialization as a key element explaining the underachievement of boys in the Jamaican Secondary school system. Bailey and Brown (1999) are not as convinced about the role of socialization and suggest from the findings of their pilot study the critical factors accounting for male underperformance were financial constraints and home and community violence.

Figueroa wrote the decline of male relative to female academic performance in the Caribbean has captured the attention of professionals. Although the theory of male marginalization introduced by Miller is popularly held, it has been suggested male academic underperformance is rooted in male privileging and gender socialization (the differences in the way boys and girls are expected to conduct themselves and which are communicated to them by social institutions such as the home and school). At home boys are expected to misbehave while girls are expected to conform to a rigid code in which they adhere to strict rules of moral uprightness and avoid any hint of sexual impropriety. If a boy misbehaves it is essentially expected but if a girl does so it is a serious matter.

Within Caribbean academia traditional patterns of study exists. Boys have identified English and reading as too girlish for males and Parry (2000) in her study indicated that even female teachers perceived English and Grammar as being women's subjects. Female dominance can be explained in certificate programs because their male counterparts do not need further qualifications to get ahead. Jamaica's recent statistics on education have indicated females now

outperform males at all levels and in a wide range of disciplines including some formerly dominated by males.

Gender Stereotypes

Efforts to educate students, which entail equipping them with the attitudes, tools and skills to engage in educated decision-making and responsible social action, must give consideration to the significant influence of the unseen curriculum. In some instances this hidden curriculum inclusive of the unrecognized and sometimes unintended knowledge, values and beliefs which constitutes part of the learning process in schools and classrooms, appears to successfully transmit gender stereotypes. One characteristic of the hidden curriculum through which gender stereotypes is conveyed is the materials (both print and non-print) used to support the delivery of curricula at all levels.

Several of the sexual discrimination which distinguishes the educational process result from the belief men and women are expected to perform different functions in life. Unquestioning acceptance of this philosophy is realized by a number of agencies through a process of socialization of which the school holds primacy of position. Therefore, the images portrayed in curriculum materials are powerful and effectual socialization tools. Many researchers have concentrated upon the manner in which the images depicted in curriculum materials communicate unspoken messages which contribute to the acquisition of differentiated gender identities and the internalization and acceptance of corresponding sex-linked behaviors and roles. Some of these researchers include: King and Morrisey (1988) who analyzed 20 Secondary level textbooks in History, Geography and Social Studies and found women were invisible in most of the texts and where they appeared they played subordinate or menial roles.

Ayodike (1989) and Pollard (1989) who analyzed Literature texts and found the projection of damaging concepts of women and few images challenged accepted female stereotypes. Pollard however found books written by a particular author sought to convey the strength, wisdom and courage associated with Caribbean women. Bailey and Parkes (1995) discovered not only were girls/women under-represented in Language Arts texts used at the Primary level but both sexes were characterized as displaying traditional gender-appropriate behaviors. Whiteley (1996) reviewed Science texts and found there was a gender balance in illustrations of young people but an imbalance in the illustration of adults in favor of males. Drayton (1997) examined Caribbean English texts and posited these books conveyed both Eurocentric and patriarchal bias.

Socio-economic Factors

Academic performance in Secondary schools exposed differences in performance which favor females. These are evident from the Primary level and continue at the Secondary and Tertiary levels. At the Secondary level achievement gaps in Jamaican public schools favor females in 13 of 17 academic subjects. Of significance also is the impact of aspects such as type of school on performance outcomes. In co-educational schools, boys obtain the higher pass rate in nine of 16 academic subjects including six of seven science subjects. The pattern changes in favor of girls however, when the performance in single sex boys' schools is compared with single sex girls' schools. In the all-female schools the pattern was reversed with girls having the higher pass rate in nine of the 16 academic subjects including the six science subjects for which there were entries from all-boys schools.

Studies also established an interaction between sex and socio-economic status in determining educational outputs. The performance of students in different types of schools provided some suggestions of this relationship between sex and socio-economic status. Both male and female students from the higher socio-economic groups served by original traditional grammar schools have an advantage over students from the other school types both in terms of participation and performance.

The schools which cater to students of the lower socio-economic strata, the so called working class schools, experienced much lower rates of participation and performance for both sexes. However, the boys on leaving school are better equipped to move into more productive forms of work in both the formal and informal sectors of the labor market. Any analysis of the problem as it relates to males in the system must take notice of this converse relationship between educational outputs and social outcomes if the problem is to be properly identified and dealt with through programme and policy formulation.

There is also acknowledgement of the critical role schools and teachers play in reproducing and reinforcing gender inequalities. A recent survey of teacher educators revealed there was a general lack of awareness with respect to the concept of gender and ways in which gender functions in the educational process. The survey also noted these concerns were not being addressed in Teacher Training Institutions.

Testing and Assessment

Success in examinations or performance is another indicator which can be used to gauge the level at which both sexes are benefiting from the educational process. Any conclusion regarding performance indicators in relation to gender equity has to be drawn in relation to the socio-cultural environment and the socio-economic value of certification to either sex.

Differences in performance which favor females are manifest from the Primary level. At this level there is a National Assessment Programme (NAP) which monitors students' learning through the years of Primary schooling at four grade levels: (1) Grade 1 Readiness Test (2) Grade 3 Diagnostic Test (4) Grade 4 Literacy Test and (5) Grade 6 Achievement Test (GSAT).

An analysis of results for the four areas of the 1998 Grade 1 Readiness Test (visual/motor coordination, visual perception, auditory perception and number and letter knowledge) indicated at that time girls performed better than boys in all four areas and the difference was statistically significant in three of the areas: visual and auditory perception and number and letter knowledge. Data for 2000/2001 showed on the Grade 4 Literacy Test which assesses proficiency in word recognition, reading, comprehension and writing, 36% of males were graded as being 'at risk', 32% as 'uncertain' and 32% as 'not at risk'. Girls however, performed at a much higher standard with 17%, 27% and 56% classified in the three relevant categories.

Consequently, performance in this examination determined placement of students in the varying types of Secondary level institutions. Highest scoring students are placed in the traditional grammar schools and lower performing students are assigned to the other government schools. Data indicated these schools are populated by a higher percentage of boys; a reflection of the general higher performance of females on this examination.

Socialization Patterns

Miller (2000) noted:

In the Caribbean, on average, girls start schooling earlier, attend school more regularly, drop out of school more infrequently, stay in school longer, and achieve higher levels

of functional education at the end of schooling than boys... Whatever progress was made in literacy in the Caribbean, women made more progress than men and, on the whole, are more literate than men. (p. 47)

Studies conducted by local researchers shed additional light on this matter. Figueroa and Handa (1996) hypothesized the need for girls to achieve higher levels of attainment is reinforced in the home where greater protection is given to girls rather than to boys and where girls more so than boys are encouraged to excel in school. Parental attention to girls and their schooling is not only fuelled by the implicit acknowledgement that 'it is a man's world' and girls must work doubly hard in order to succeed; it is also predicated upon a recognition in Jamaican society of the so called rules of the game which involves the methods through which individuals achieve vocational success being different for the two sexes.

Parental attention is also prompted by the fear of early pregnancy which is now more heightened with the increasing occurrence of HIV/AIDS among the adolescent population particularly among girls. Another contributing factor to increased female participation in higher education worldwide has been the global influence of UN international conferences at which concerns regarding gender equality and women's empowerment have been addressed. At many of these conferences education has been proffered as the medium for achieving the goal of gender equality in addition to empowering women to participate more fully in the development process. The idea of education being used as the vehicle for empowering women to become equal partners with men in decision-making as well as in the economic, political and socio-cultural spheres of life is highlighted in a number of outcome documents receiving the support and endorsement of Governments.

Cultural Mistrust

The construct of the teaching service in Trinidad and Tobago reveals the majority of teachers are not only female but East Indian in ethnicity. This has resulted in many Afro-Trinidadian families becoming suspicious of the so called Indo agenda. Many of the Afro-Trinidadian males in the public school system have developed a significant level of mistrust of the hierarchical construct of the education system.

According to Irving and Hudley (2005) their work with African American males revealed an inverse relationship between cultural mistrust and academic achievement. Their research also indicated cultural mistrust is a significant predictor of academic achievement. As African American males' mistrust increases their academic outcome expectations decrease. Irving and Hudley also found as mistrust increased oppositional cultural attitudes also increased. Students with high cultural mistrust, oppositional cultural attitudes, and low valuation for educational outcomes have lower academic outcome expectations. They further state many African Americans believe racism remains a core element in the American macro-culture therefore, their expectations based on perception is institutions created and controlled by the White establishment will not treat them in a fair manner. Academic underachievement has been particularly evident in urban areas where many low-income African Americans reside. Jordan and Sanders (2000) found this to be especially troubling because academic success remains a Primary avenue for social mobility in the United States.

Irving and Hudley (2005) believed their findings have implications for educational research and practice, particularly concerning the education of African American males living in urban environments. They asserted resistant cultural identity or cultural mistrust may be early markers of risk status for educational underachievement. They contend school policies and

practices which support identity development may help more African American youth cultivate a strong positive cultural identity consistent with academic achievement.

According to Terrell & Terrell (1981) cultural mistrust (which they define as the tendency for African Americans to distrust institutional, personal, or social contexts controlled by Whites) is a construct which attempts to capture the influence of discrimination on academic motivation. Ogbu (1991) stated however, African Americans value education as a means to improve their social and economic circumstances. Conversely, when confronted with poorly maintained underfunded schools and ill-prepared teachers African Americans may not trust the public schools to provide an adequate education

According to Ogbu (1991) a belief that African Americans cannot expect equal educational services or access to the opportunity structure in the United States may have created both lowered expectations for the benefits of educational achievement and a devaluation of striving for achievement among African American adolescents. Graham, Taylor, & Hudley (1998) asserted research has shown adolescents who devalued academic achievement more often direct their behavior to non-academic pursuits (personal dress and grooming, athletic prowess, and dating success) which may conflict with academic success.

Few studies have been conducted into the relationship between cultural mistrust and academic functioning. Early research into this relationship has revealed, for African American students with high cultural mistrust, aptitude test scores were significantly higher when the test was administered by an African American examiner. Terrell & Terrell (1981) found this held true for both elementary school children (nine to 11 years old) taking the Stanford-Binet Intelligence Scale and for adolescent males (17–19 years old) taking the Wechsler Adult Intelligence Scale (WAIS).

Fordham and Ogbu (1986) suggested high achieving African American high school students may have embraced cultural assimilation and diminished their African American identity. Ford's (1992) work with fifth and sixth grade students found high achievers were more prone to endorse the American macro-culture achievement ideology. They found the reverse occurred with low achieving students who often adopted an oppositional identity and embraced strong ethnic group identification.

According to Hudley & Graham (2001) although boys valued education, academic success was viewed as more appropriate for African American girls. Isom (2007) expressed the view African American males often defined their success by athletic ability or through some other non-academic indicator. Furthermore, Noguera (2003) asserted African American males more often believed their teachers did not support them or care about their success compared to their peers of other races.

Hunte (2002) in the context of Guyana argued boys will seek out negative macho role models to fill the gaps at home or school and the resultant anti-schooling attitudes will leave an emotional deficit which inhibits their progress. Figueroa (2000) took this further and suggested the absence of discipline meted out to boys in Jamaica by women who believe this to be the preserve of a father or other male figure disadvantages boys by permitting their exploration of negative masculine identity to be played out unchecked.

West (1999) analyzed the problem of an imbalance of male and female teachers, which potentially disadvantages boys by giving messages 'only women teach' and 'only women read'. West's paper further outlined studies conducted in Australia showing boys value male teachers as role models to get them through the difficulties of the classroom.

The debate over whether boys perform better in single-sex or co-educational schools is characterized by a lack of consensus. Arguments suggesting boys adopt anti-school masculine identities as a response to the feminized ethos of schooling might result in the conclusion single-sex schools might be effective in alleviating the problem.

Hunte (2002) argued in Guyana's case the re-introduction of single-sex Secondary schools could fast track the education of boys as such schools are able to bring boys' emotional and learning needs more sharply into focus. Davis (2002) claimed single-sex school will allow the freedom of multiple masculinities but maintains these schools can help boys to embrace the diversity of male roles. Many position themselves as restoring a normative masculinity.

Gender Differentials

Male academic underachievement has captured the attention of educators in the English speaking Caribbean for some time now. A widely held belief is gender differentials favor females in most subjects and at all levels of education. A significant body of work has been conducted on the issue dating from as far back as 1991. In Trinidad and Tobago the issue is a key component in the seamless education reform project funded by the Inter-American Development Bank (IADB). In 2010, the Ministry of Education proposed the phased conversion of 20 Secondary schools into single sex institutions. For the past 20 years the issue of gender differences in educational outcomes has occupied the interest of policymakers, academics and the popular media. The issue was the subject of much study during the 1970s and 80s and more recently it became the basis for the focus on achievement tests in the 1990s. According to Benavot & Tanner (2007) in the last decade the increasing availability of data from national and international assessments of educational achievement has refocused attention on the issue.

According to Epstein, Elwood, Hey, and Maw (1998) the seeming underachievement of males has become an important focus globally. Connell (1996) believed the work on male underachievement or failing boys had numerous strands. Much of the work in the UK and Australia has focused on anti-school male identities with the school sometimes seen as an active agent.

Although this work does not always capture the dynamic and complex nature of masculinities, Connell & Messerschmidt (2005) noted the following: the idea of poor failing boys, bad failing boys, or schools failing boys provided a popular but simplistic explanation for a complex problem. Whitmire (2010) commented the popular press is actively engaged in the debate and growing concerns have been expressed by Governments and nongovernmental agencies. Sadly, these debates are being channeled into a narrow twofold debate about the academic accomplishments of boys relative to girls.

According to Bailey (1998) as a region, the Caribbean appears to represent one such context in which gender differentials are routinely in favor of females in several subject areas. Duryea, Sebastian, Hugo, and Claudia (2007) asserted one of the possible reasons for the early emergence of the female advantage in the Caribbean may be the attainment of gender parity in enrolment as early as the 1950s. Indeed, the problem now appears to be reversed with declining participation ratios for males in Secondary schools according to a UNESCO (2008) report.

Trinidad and Tobago was one of the few countries in which girls had a statistically significant advantage in the subject areas of Math, Reading and Creative Writing. Also in Trinidad and Tobago, females have higher means in the National Assessments at all subject levels although these differences are regarded as small. The gender gap appears well before Secondary school. Recent data produced by De Lisle, Smith and Jules (2010).also points to the

complexity of the situation by highlighting significant geographic variation across educational districts aligned to poverty and overall underachievement.

Theoretical frameworks developed in the Caribbean to explain the perceived gender gap utilize and expand on frameworks from elsewhere; additionally use is made of a number of indigenous constructs. Caribbean theory views gender differences through perspectives formulated over time from considering diverse academic communities. The different theories may be expediently grouped into (1) sociological-structural (2) feminist structural (3) education and institution focused and (4) equity-oriented perspectives. The earliest studies were definitely sociological including the work of Errol Miller. In his early work Miller (1986) developed a theory for the large gender differences favoring females in Jamaica by borrowing from dependency theory. Labeled as the “marginalization thesis”, Miller argued structural contexts were designed to ensure native African-Jamaican males were excluded from schools and schooling. As cited in Lindsay (2002) Miller considered local and peripheral elites as the source of marginalization. In other words his focus was on men dominating men in the patriarchal order. Quite a few other sociological explanations were developed in the 1990s, as reflected in the work of Figueroa (2004) and Chevannes (2001). Figueroa built his theoretical framework from observation of Jamaican parenting practices. He used the term “privileging” to refer to disparity in the treatment of males by parents. Chevannes (2001) observed some facets of this practice which included the tendency to give greater freedom to boys and to limit the activities of females. Both Figueroa and Chevannes believed females learnt self-discipline from these practices helping them to be successful in school.

Figueroa (2004) held schoolteachers might display similar differential behavior with the same effect. Chevannes (2001) considered differential aspiration held by rural families for males and females as well as differences in the level of participation in the family labor market. Differential treatment by teachers and administrators is a major theme in the work of educators studying male underachievement in the Caribbean. Kutnick's (1999) study included both quantitative and qualitative methods in examining this problem. The case studies suggested a number of institutional factors contributed to gender differentials including teacher expectations, beliefs, and behavior. Kutnick, Layne, and Jules (1997) studied classroom processes at the early Secondary school level and although they observed classes in which standardized test results were identical, in-class differences were frequently obvious.

Evans (2001) focused upon the interface of organizational elements such as streaming and the expectations and attitudes of students and teachers. Boys tended to be placed in the lower streams in the schools studied and this intensified the problem of differential accomplishments by gender. The work of educators in explaining gender and achievement also draws heavily from the work of theorists in the field of gender and feminist sociology. The work in this area has predominantly focused on males themselves and the attitudes and behaviors adding to lowered performance. A leading concept in this explanatory framework is the construction of anti-school masculinities a concept partly borrowed from the work of feminist sociologists in the United Kingdom and applied to both Primary and Secondary school settings. According to Gosine (2007) the complex, dynamic and fluid nature of young males enacted within a multicultural setting has rarely been considered. Parry (2000) argued it was "not appropriate to allow educators to take full responsibility for male underachievement" (p. 56).

She believed instead anti-school male identity which considered education as feminine to be the main problem but admitted teachers fostered this approach in boys.

According to De Lisle, Smith and Jules (2005) equity theorists have recently entered the field of gender and achievement. From this standpoint gender is viewed as one of the many extraneous factors responsible for inequality of opportunity; notwithstanding, the argument is that it is not the most crucial factor and is inextricably linked to other factors such as socioeconomic status and ethnicity. Like the feminist and pro-feminist sociologists, equity theorists are also quick to remind consumers the issue may be more complex than first apparent and several groups of males and females may be at risk at the same time. Equity theorists study achievement using large-scale secondary databases with the aim of understanding patterns caused by gender and other factors. De Lisle, Smith, and Jules (2010) for example argued that no single explanation could account for the current patterns, multiple antecedents, and varied outcomes obtained in studies using data from large-scale assessments.

The empirical evidence and the multiplicities of foci for the different theories suggest gendered achievement is a difficult phenomenon operating at multiple levels. There may be factors in parenting, community, and the wider society as argued by Chevannes (2001) and Figueroa (1996) and factors in schools and schooling as argued by Evans (2001) and Kutnick, Layne, and Jules (1997). The feminist sociologists have pointed to individual factors associated with male identity and its construction.

Rogers (2008) expressed the view complex social and educational issues present a difficulty both for intervention design and evaluation practice. An efficacious intervention therefore, must target multiple factors at multiple levels. There is recent evidence in the context of Trinidad and Tobago; several influential factors in gendered achievement operate at the school

level. Thus, Trong's (2009) finding of higher risk among poor, rural boys in Reading may have to do with the quality of rural low achieving schools and not necessarily the nature of the community and parenting influences. However, Trong asserts even if the school is the principal focus a single purposeful intervention method such as masculinity training will not be effective if it does not target other stakeholders in the issue.

Despite the concentrated theorizing on gender differences in the Caribbean there are hardly any prevailing local interventions targeting the achievement gender gap. In terms of interventions and policies the gender gap has mostly been ignored in considering education reform. For example, Bailey (2002) noted the highly successful large-scale education reform project, Reform of Secondary Education (ROSE) in Jamaica which consisted of several interlocking initiatives did not specifically target the gender achievement gap. The Trinidad and Tobago Ministry of Community Development, Culture, and Gender Affairs has developed a revised policy on gender and development that generally examines the problem of gendered achievement but is unclear about the exact policies and strategies to be executed. The Ministry has also implemented a male focused programme called "Defining Masculine Excellence" which targets males older than 14 years of age. The programme provides social and emotional competencies for males in vulnerable situations. Modules from the programme have been adapted for young offenders, media and street theatre. Although helpful these interventions do not specifically address the issue of differential achievement in schools.

Same-Sex Schools

In 2008-2010 the policy-making infrastructure in Trinidad and Tobago took the bold step to pilot a large-scale intervention designed specifically to remedy what is believed to be a large gender gap favoring females in schools. The intervention was described as a pilot and included

some 20 schools which were to be gradually converted into single sex institutions commencing in 2010. According to De Lisle, Smith, and Jules (2010) the Commonwealth Secretariat described this reform as radical and the largest of its nature targeting gendered achievement in the Commonwealth but also suggested it represented international best practice.

Gersten & Hitchcock (2009) stated the choice of single gender intervention did not appear aligned to the complex theories developed in the Caribbean on gendered achievement. In fact evidence for the impact of single gender education is even limited internationally especially when high quality evidence is demanded. Mulholland, Hansen, and Kaminski (2004) found little difference in both single gender and coeducational classrooms although the period of treatment was only six months. No consistent set of evidence supports the contention single gender schools or classrooms leads to higher achievement among boys. There is some evidence girls might benefit more from single gender environments and boys from coeducational learning environments

Feniger (2010) expressed the view the study of programmes in different countries suggests that positive effects for single gender environments are inconsistent and context matters. One related factor which might lead to higher performance among single sex Secondary schools in Trinidad and Tobago is high achievers tend to select the traditional schools at the Secondary Entrance Assessment which coincidentally happens to be mostly single-sex institutions.

Jackson (2010) found the primary enhancing effect was attendance with other high achieving peers rather than the gender composition. Additionally, he discovered girls benefited more from this environment than boys did. Perhaps more importantly, apart from general recommendations on teaching through one of the consultants, was the reality little thought was

put into constructing the education experience within the 20 target schools. There was also little consideration of the Caribbean work on anti-school male identity and limited training for teachers involved in the intervention schools.

Another obvious oversight, according to De Lisle, Smith, and Jules (2010), in which evidence appeared not to be used was the location of the schools targeted for conversion. The majority of the schools 10 were located in Victoria, but at the Primary school level this district had small differentials in Mathematics (0.08) and small differentials in Language (0.46), Science (0.20) and Social Studies (0.30). In an educational district like Port of Spain and Environs where the gender differentials in Language were medium-sized (0.59) there are only two schools to be changed and in Tobago where the Standard three Language differential is 0.61, no school is to be converted.

Thus, the programme not only failed to take into consideration the nature of the differences between males and females but also the geographic location of these differences. Quite possibly the conversion programme was not designed to target specific problems and is therefore more symbolic than real with schools primarily chosen because of convenience. Sanderson (2009) viewed the belief that Trinidad and Tobago could effectively contribute data to the international debate on the effectiveness of single gender schooling through this intervention as exciting but naive. The ability to generate and even to use plausible evidence required much greater investment in evidence based systems especially when considering the critical importance of context to successful design and implementation. However, it is necessary for small states like Trinidad and Tobago to adopt intelligent policy-making.

In this area of gendered achievement substantial local evidence and Caribbean-based theory was available and a more fitting approach would have been to work with individual

schools or districts guided by the data collated to develop innovative strategies for specific problems faced. Athill and Jha (2009) believed both coeducational and single sex institutions can benefit from a wide scope of interventions such as those contained in their action guide for developing a gender responsive school. This holistic intervention gives consideration to the wider context; general school issues as well as teaching and learning built on the principles of action research thus school practitioners have an opportunity to cross-examine their own context. As a consequence the challenge for policy-makers and practitioners alike in countries like Trinidad and Tobago is to differentiate between international best practice and contextualized approaches in order to become competent consumers of information. Implementing interventions without completely understanding the theorized instrument of change prior to and during the implementation process is unwise.

From our formative years the significance of gendered distinctiveness is impressed upon us. At the childhood stage of life we are endowed with techniques for constructing that identity basically by modeling behaviors which distinguish us from the opposite sex. In actual fact these behaviors and practices are not permanent. The pathways to achieving legitimate manhood usually differs between cultures and within cultures over time, in this context changing educational accomplishments appear to present us with a significant challenge.

In times past, academic distinction was mostly if not entirely a male domain. However, with education progressively becoming common ground, boys have fewer opportunities to establish their gendered individuality through education and academic attainment does not readily provide for fulfilling those needs. More recently, gender dynamics in education in the English-speaking Caribbean have undergone considerable shifts. On one hand, educational access, maintenance and accomplishments by girls have improved considerably and should be

celebrated as key success stories. On the other hand retention, completion and achievements by boys appear to be on the decline. The question at the core of these changes is whether the decline for boys is relative (boys only appear to be declining because girls are doing so much better) or real (fewer boys are reaching their potential than was the case in the past).

In the Caribbean, outdoor physical activity seems to have gained paramount importance for the development of the identity of boys. While this leaning to physicality may redound to the benefit of sporting achievements there are also significant negative consequences. Opportunities to demonstrate one's gender identity through physical domination are increasingly along the lines of, physical, risk-taking, hyper-masculine, sometimes antisocial means, including bullying, harassment, crime and violence. Meanwhile, the classroom no longer holds as much significance for boys in establishing masculine distinctiveness and it is therefore less attractive to them. Indeed boys who do achieve in their academic pursuits are in danger of being considered suspect by their peers and of becoming the target of gender taboos. This includes boys who show a preference for reading, who frequently reported receiving homophobic criticism, possibly the deepest of all masculine taboos.

Reddock (2004) proffered recent decades have witnessed important shifts in educational outcomes in the Commonwealth Caribbean for both boys and girls. These shifts are cause for both celebration and for concern. On the one hand, educational outcomes for girls have improved significantly with girls now constituting the majority of Secondary school enrolments in the region. While we should rightly celebrate the achievements of women we should also analyze what is happening with the men. In this regard, there is increasing proof the educational standing of boys and of young men is not faring nearly as well, boys' enrolment, retention and completion rates are lower throughout the system. There is little doubt the performance of boys

has declined relative to the increasing successes of girls but what remains unclear is whether the information reflects a real decline or a relative decline? That is to say boys only seem to be slipping because girls are now doing much better or are boys less likely to attain their potential in real terms as compared with how boys performed in the past?

Data from Plummer (2007) confirms achieving a gendered identity (being able to project oneself as successfully masculine) takes centre stage for most boys as they mature. There is a notion boys both aspire to masculine status and their behavior is policed to ensure it conformity to prevailing masculine standards. Central to this policing process is the peer group, which the data reveals to be a formidable force in the lives of boys. According to Chevannes (1999) peer groups begin to exercise a magnetic pull as boys approach pre-pubescent years. Indeed, the present research revealed for many teenage boys the authority of the peer group at least competes and frequently exceeds the authority of any of the adults who feature in their lives. In that respect the data corroborated Chevannes (1999) who also contended peer groups replace parents as controlling agents either partially or entirely. While it is popular to blame parents, teachers and the media for the unpleasant outcomes of boys, more often than not it is the peer group which exerts the most profound influence. And therefore serious consideration and attention must be given to this reality since this influence has wide-ranging social implications, from educational achievement to the perpetuation of crime.

Notwithstanding, the influences of peer groups are not necessarily negative but they can be. According to Bailey, Branche, McGarrity & Stuart (1998) the worst and most individualistic and predatory aspects of the street became the norm for youngsters who found validation for their behaviors in their peers and in the larger environment. Again Bailey, Branche, McGarrity & Stuart (1998) expressed the view that “in time, some of these groups become fundamental

identity-bearing groups who not only impose themselves on the behavior of the young men but separate them competitively and conflictually from other similar groups of young men” (p. 59).

Presumably, in the absence of adequate restrictions, for example where there is lack of supervision or a power vacuum for whatever reason, the peer group readily occupies that space. Often this occurs on the streets where the peer group really comes into its own.

For many boys the continuous social policing of masculinity literally becomes a straight-jacket. These young men find themselves caught in a vice, occupying a thin space of authorized masculinity while at the same time being cut off from vast fields of social life which are rendered taboo by the same masculine standards under which they are pressured to conform. The language of the young men who were interviewed and their descriptions of the commanding influence of peer groups offered revealing insights into the standards against which boys are judged and the consequences of failing to conform. At the forefront of these standards is hard, physical, narrow, polarized masculinity. As Bailey, Branche, McGarrity & Stuart (1998) noted: it appeared as if the younger teenage boys had embrace in a most uncompromising way the prevailing male gender ideology (p. 82). The relentless policing of manliness depends upon boys being closely scrutinized. This scrutiny is especially severe from peers. As a result boys learn to choose their styles carefully and to select an image for projection to the outside world. This image reflects their personality in part but also carefully bears evidence of their allegiance to the prevailing standards of masculinity endorsed by their peers. Complex codes arise which govern what is deemed acceptable clothing, the designer labels to be worn, the use of ‘bling’ (jewelry acceptable to men), authorized styles of speech, striking a cool pose and so on. For many boys the Nike motto of ‘image is everything’ sustains their masculine reputation. Of course, image is more than simply the appearance, it also stems from what you do. In current male culture

masculine status is greatly enhanced by displays of sexual prowess, physical toughness and social dominance. Having multiple sexual partners earned respect while being faithful meant loosing face as Bailey, Branche, McGarrity & Stuart found: multiple partnerships can equate status for males. Nonetheless, valorization of hard and risky masculinities extends even further, this occurrence represents the very foundations of many of our most profound social problems. There is strong pressure to oppose adult authority, to earn status by taking risks and to display masculine identification by way of hard, physical and sometimes anti-social ways.

The combination of masculine requirements and taboo reduces the potential of boys and alienates them from large areas of social life; this scenario in most cases is to their disadvantage. Embracing hard, risk-taking, often anti-social hyper-masculinities puts the lives of young men in a context of exposure to innumerable dangers: sexually, on the road, in the gang, and potentially in conflict with authority. By disenfranchising boys from activities that have been rendered taboo by their own system of masculinity, boys are denying themselves access to substantial social benefits. For example, if being safe is considered sissy, then driving small low-powered cars at a harmless speed comes at a cost to one's reputation but instead many of them opt to place themselves (and others) at risk driving at recklessly high speeds in order to assert their masculine status; likewise, if youth culture has come to associate education with their own feminization or with deep homophobic taboos then getting an education is no longer something a real man would want to pursue. This is precisely what present research has found and these findings have been confirmed by the accumulated evidence of other Caribbean researchers as per the following quotations:

- Chevannes (1999) "School is girl stuff!" This declaration by an eight-year old inner-city boy... reveals the association built up in the minds of many boys" (p. 26)

- Crichlow (2004) “Many young men in Trinidad argue academic subjects such as mathematics, physics and English are for “bullers” (homosexuals) and women, while trades are for men” (p. 206)
- Figueroa (2004) “There is evidence that boys actually actively assert their maleness by resisting school. This is particularly true with respect to certain subjects that are seen as ‘feminine’. Male-child subculture therefore exerts considerable peer pressure on boys to be disruptive in school and to underrate certain subjects.” (p. 152)
- (Parry 2004) “The homophobic fears expressed by staff and the resulting censure of attitudes and behaviors which were felt to be ‘effeminate’, ‘girlish’, ‘sissy like’ and ‘nerdish’ reinforce a masculine gender identity which rejects many aspects of schooling as all of the above.” (p. 179)

Chapter III: Discussion

T.S. Dee's study has courted significant controversy with many challenging his conclusions and the manner in which he arrived at them. Nevertheless, he remains convinced his research supports his assertion gender matters when it comes to learning. While he remains firm in his belief (having a teacher of the opposite sex hurts a student's academic progress), he warns about drawing conclusions from his work. Dee refrained from endorsing same sex education or any other policy and has stated he hopes his work will stimulate more research into gender's effect and what to do about it.

Dee's study is based on a nationally representative survey of approximately 25,000 eighth-grade students conducted by the United States Department of Education in 1988. He states, though dated, the survey is the most comprehensive look at students in middle school when gender gaps emerge. Dee examined test scores as well as self-reported perceptions by teachers and students and concluded having a female teacher instead of a male teacher raised the achievement of girls and lowered that of boys in Science, Social Studies and English. He also contends gender influences attitudes, and claims he isolated a Teacher's gender as an influence by accounting for several other factors which could affect student performance.

Dissenters to Dee's point of view claim the data he presents is far from convincing and his conclusions are questionable and inconsistent. Moreover they assert both boys and girls benefit by having male and female teachers as role models. Objectors warn against vague generalizations which attempt to negate the fact of many students having expressed the view they were inspired by teachers of the opposite sex while recounting negative experiences with teachers of the same sex. They claim student success cannot be narrowed to the gender of the teacher; skilled teachers, excellent textbooks, smaller class sizes and modern equipment all

influence how boys and girls perform in class. Dissenters express the view even though, it may be a valid assertion as to the benefits accrued to students from exposure to teachers who look like them and who can identify with their culture, this is just one variable among many. Dee however disagrees and contends his research raises valid questions.

The educational attainments of Caribbean women in recent decades are significant milestones deserving of both acknowledgment and commendation. Unfortunately, changes in boys' education threaten to overshadow the afore-mentioned successes, underscoring the decline in male educational achievement. Some even suppose the progress made by Caribbean girls comes at the expense of Caribbean boys. This insinuation is significant and warrants careful analysis. Errol Miller published "The marginalization of the black male: insights from the development of the teaching profession" in 1986. His thesis focused on the marginalization of Caribbean men by social forces beyond their control. Interest in this issue has in no wise waned in 20 plus years since his work was published. Miller's thesis has drawn the criticism of some scholars over the years and has engendered strong debate in academic circles. Chevannes (1999) arrived at the following conclusion regarding the issue of male marginalization when the question was posed. His response was in the negative if the main factor under consideration was power. Mark Figueroa (2004) had a different perspective of changes in male educational outcomes being affected not on the issue of marginalization but of traditional male privilege. Women were constrained to private domestic space while males freely accessed and dominated public space. Male privileging of public space did not support academic endeavors; conversely, being confined to the domestic sphere saw women essentially better placed to study. While Figueroa's thesis shifts the focus of the debate from marginalization to male privilege, he also appears to propagate the linking of girls' achievements and boys' shortcomings by asserting the

greater level of female involvement in traditionally male academic subjects significantly reduces the choices available to boys. Ultimately, boys will find that they can do little without bringing their masculinity into question. Boys' education and men's academic aspirations were once privileged male domains and reasons as to why boys have departed from this area with apparent haste is yet forthcoming. Present research data broadens the scope of analysis regarding the educational achievements of Caribbean boys, underscoring findings which link the development of masculine identity to physicality and an affinity with public space.

Present-day Caribbean territories appear to have embraced rigidity, forcefulness, and dominant masculinity as the quintessence of manhood. In recent years gang culture and music filled with violent references have become more prevalent. Research data also alludes to the creation of certain social no-go zones for young men, based on the influence of masculine taboos education it appears is a casualty of this creation.

Findings indicate a surprising emergence where boys with academic inclinations have to come face to face with issues of stigmatization and homophobia. These issues are by no means minor nor a diversion but an ongoing entrenched occurrence. The issue of homophobia may seem farfetched in relation to academics however, research has found homophobic abuse primarily keeps watch over manhood by stigmatizing the transgressions of boys and failed masculinities and is only secondarily concerned with sexual practice (Plummer 2007).

Homophobia is fittingly viewed as being a gender prejudice when engaged as a storehouse for failed manhood and as a mechanism for keeping watch over the standards of masculinity, one which impacts on the lives of all men. Gender in development programmes therefore need to take a much more active interest in it. The developing of male identity requires concurrent repudiation of ineffective masculinity and adoption of universal symbols of masculinity. If boys

are being marginalized this is likely a self propagating act aimed at escaping the stigmatization of masculine taboos. Allegations of feminizing and homophobic taboos have plagued education in recent times and corresponded with strides in education by girls. This correlation lacks merit since greater female access to education should not equate fewer males accessing educational opportunities. Boys are estranged from social life which has the potential to positively impact them as a result of misogynistic and homophobic taboos. Activities at variance with existing taboos and which are not recognized as part of the group manufactured norms of manhood are at the heart of group policing. The group manipulates masculinity under the guise of purporting it as acceptable to the wider social construct. According to Chevannes (1999) in a way we are all culpable. We (society) provide the building blocks on which the young people design and erect their own structure.

Limitations

Since this review focuses mainly on Trinidad and not necessarily Tobago, a segment of the nation is not represented. In the absence of surveys the only thoughts, feelings and opinions offered are those previously recorded and now represented in print, therefore the perspectives of current educators, teachers and/or students are not represented. Access to local literature on the subject was not readily forthcoming.

Conclusions

Much of the literature on this topic of male academic performance holds to the view there have been negative external and internal factors affecting the ability of students to perform. There is however dissenting points of view by those who believe young males have not been unduly affected by a lack of significant role models and are still capable of transcending those negatives in their academic experiences. The literature does however offer clues as to ways

forward. In this regard, there are a number of possibilities. First, while some have sought to establish links between the accomplishments of girls' and the difficulties of boys' it is important to note this does not have to be the case. If any link exists between the two elements it stems from masculine taboos which tend to make synchronized achievement by males and females mutually exclusive (the predominant taboos in the literature are misogyny - hatred or dislike of women or girls and homophobia - negative attitudes and feelings towards lesbians, gay and in some cases bisexual and transgender individuals). In the case of these taboos, the problem clearly stems from the prejudices programmed into men and boys rather than with girls and women being conscientious (they are as much victims of these prejudices as are the boys but in different ways). As long as these concepts influence the development of the identity of young men, they will impact upon educational outcomes.

Conversely, if those taboos can be abated then boys should find it easier to connect with the education system in more productive ways. Consequently this specific social domain of education will no longer be viewed as belonging to one or the other gender but as a place where both sexes can develop in satisfying and significant ways. The educational accomplishments of girls need to be commended and sustained and a much more strategic approach to boys' education is also necessary. Popular modern-day masculinities are both biased and rigid and leave young men in a difficult position and men need to understand this. Masculinity is at the root of many of the educational problems of boys, therefore, rigid, narrow, polarized masculinities must be discarded. Well rounded, diverse male role models need to be visible and available. Concepts of masculinity need to be re-established and linked with educational achievement. The multifaceted influential role of male peer groups necessitates careful study and skilled strategies developed to mediate in their anti-social potential. Taboos must be

confronted in order to facilitate progress. On the basis of evidence from the present research and supporting evidence from other Caribbean studies this must necessarily include dealing with misogyny and homophobia.

Effecting a shift in gender roles and relations in order to relieve the huge pressure of conformity to established notions of masculinity is critical in addressing the issue of boys' underperformance. This is particularly important in countries or localized areas which have greatly succeeded in expanding access to opportunities for female participation in schooling. Increased participation of girls in situations where education was not their traditional domain such as welding, masonry signifies a shift in gender relations. Men begin to view this as a contracting of their territory and commence the search for new domains which are exclusively for men and therefore masculine. Excelling in educational performance is categorized as feminine and not working hard but doing well acceptable by boys. Another critical area revealed in the literature addresses notions about maleness, masculinity and boys' ability to process themselves as males. Research has indicated that effective curricula processes are more important and are more crucial than having male teachers or all-male classrooms. Additionally, policy makers must address teachers in terms of their attitude and aptitude when engaging in pedagogy. The literature examined did not provide definite indicators regarding single-sex school. Although the absence of girls appeared to have helped the boys, the presence of girls did not emerge as the most important reason for low performance in mainstream Secondary schools. Boys' academic underperformance has its roots in general issues and characteristics of societies as well as education systems. It is widely accepted that a child's achievement at school will be determined by factors both internal and external to the school environment. The major question

for many Ministries of Education remains, what can be done within the education system to improve the attendance and performance of boys.

Recommendations

This paper has attempted to outline the issue of academic underachievement of boys at school, particularly within a Trinidadian context. The paper discussed some of the possible causes and analyzed some of the initiatives that appear to have addressed the issue. Some broad policy and programmatic suggestions were also examined though on a lesser scale. However, it is clear that a lot more research has to be conducted in order to facilitate greater understanding and more pointed policy recommendations. Some of these recommendations for further research include:

1. Detailed qualitative gender analysis of administrative and instructional practices in Secondary schools operating under diverse situations and contexts including: co-education, single-sex for boys, single-sex for girls, female majority teachers, mixed-sex teachers and male-majority teachers. This could be undertaken in several countries following the same research design but with an understanding of the social and economic background in which the school operates and the nature of the boys' underachievement prevalent in that particular country or region.
2. A study of teenage boys in diverse situations and contexts to understand the construction of masculinities and its impact on educational choices and processes.
3. A study of the relationship between boys' underachievement and gender privilege in diverse situations and contexts through analysis of statistics from different countries using both education (participation as well as performance data) and socio-economic and political indicators.

4. Identification of best practices, including the application of open, distance and technology-mediated learning and associated challenges and potentials.

Additional recommendations which may address the issue in lieu of research findings and recommendations include:

- I. Expanding the number of school spaces and facilities as well as challenging established notions of gender roles, relations and stereotypes using all possible interventions internal and external to the school.
- II. Promoting cooperation and respect and questioning gender stereotypes. Schools can make a difference provided they focus on certain processes that promote changes in schools' curricula regarding gender bias.
- III. A stimulating and engaging learning environment which promotes high levels of teacher and student interaction may contribute towards increased levels of involvement in the learning process by male students. Improvement in the learning environment along with a combination of strong leadership, pedagogical reform and inclusion of all education stakeholders (Governmental Agents such as the Minister of Education and School Supervisors, Teachers, Teachers' Union and parents) can help schools to achieve desired results regarding male academic performance.
- IV. Aspects of gender equality could also be integrated into the process of pedagogical reform in an attempt to help the school counter what is seen as a negative societal influence. Schools should promote sharing, cooperation, mutual learning, experimentation and continuous growth in an attempt to reduce the isolation and inertia that alienates boys from school and the education processes.

- V. While there is a need for more research in order to develop a more comprehensive understanding of male academic underachievement, there is also need for the realization that the issue of boys' underachievement is not de-linked from the issue of the social positioning of both genders. Consequently school reforms based on the principle of gender equality can go a long way in addressing the root of the problem.

References

- Ashton, P. (1985). Motivation and teacher's sense of efficacy. In C. Ames & R. Ames (Eds.), *Research on motivation in education: Vol. 2. The classroom milieu* (141-174). Orlando, FL: Academic Press.
- Atthill, C., & Jha, J. (2009). *The gender-responsive school: An action guide*. London: Commonwealth Secretariat.
- Ayodike, T. (1989). Images of women in selected CXC literature. Paper presented at gender and Education Seminar. Faculty of Education and Women and Development Studies. UWI, Mona.
- Bailey, B. & Parkes, L. (1995). Gender: The not so hidden issue in Language Arts materials used in Jamaica. *Journal of Caribbean Studies*. 17(2):265-278.
- Bailey, W. (1998). *Gender and the family in the Caribbean*. Mona, Jamaica: Institute of Social and Economic Research.
- Bailey, W., Branche, C., McGarrity, G., Stuart, S. (1998). *Family and the quality of gender relations in the Caribbean*. Mona, Jamaica: Institute of Social and Economic Research.
- Bailey, B., & Brown, M. (1999). "Schooling and Masculinity: Boys' Perceptions of the School Experience," *Caribbean Journal of Education*, Vol. 21, No.1.
- Bailey, W., Branche, C., Henry-Lee, A. (2002). *Gender, contest and conflict in the Caribbean*. Mona, Jamaica: SALISES.
- Baker, D., Riordan, C., & Schaub, M. (1995). The effects of sex-grouped schooling on achievement: The role of national context. *Comparative Education Review*, 39(4), 468-481.

- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman and Company.
- Benavot A. & Tanner E. (2008). *The growth of national learning assessments in the world, 1995-2006*, Background Report for the Education for all Global Monitoring Report 2008, Education for All by 2015; will we make it? Paris: UNESCO.
- Brandon, D. P. (2000). *Self-efficacy: Gender differences of prospective primary teachers in Botswana*. *Research in Education*.
- Campbell, J. R., C. M. Hombo, and J. Mazzeo. (2000). *NAEP 1999 Trends in Academic Progress: Three Decades of Student Performance*. NCES 2000-469. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Chevannes, B. (1999). *What we sow and what we reap – problems in the cultivation of male identity in Jamaica*. Kingston, Jamaica: Grace, Kennedy Foundation.
- Chevannes, B. (2001). *Learning to be a man: Culture, socialization and gender identity in five Caribbean communities*. Mona, Jamaica: UWI Press.
- Connell, R. W. (1996). Teaching the boys: New research on masculinity, and gender strategies for schools. *Teachers College Record* 98(2), 206-235.
- Connell, R. W., & Messerschmidt, J. W. (2005). Hegemonic masculinity: Rethinking the concept. *Gender & Society*, 19(6), 829–859.
- Crichlow, W. E. A. (2004). History, (Re)Memory, Testimony and Biomythography: Charting a Buller Man's Trinidadian Past. In *Interrogating Caribbean masculinities: Theoretical and Empirical Analyses*, edited by Rhoda E. Reddock. Mona, Jamaica: University of the West Indies Press.

- Dahl, G., B. & Moretti, E. (2004). "The Demand for Sons: Evidence from Divorce, Fertility, and Shotgun Marriage." NBER Working Papers," 10281, National Bureau of Economic Research, Inc.
- Davis, J. (2002) "Boys to Men: Masculine Diversity and Schooling". Paper presented at the School Leadership Centre of Trinidad and Tobago.
- Dee, T. S. (2006). The Why Chromosome: How a Teacher's Gender Affects Boys and Girls *Education Next* Fall 6(4).
- De Lisle, J., Smith, P., & Jules, V., (2005). Which males or females are most at risk and on what? An analysis of gender differentials within the primary school system of Trinidad and Tobago. *Educational Studies* 31(4), 393-418.
- De Lisle, J., Smith, P., & Jules, V. (2010). Evaluating the geography of gendered achievement using large-scale assessment data from the primary school system of the Republic of Trinidad and Tobago. *International Journal of Educational Development*, 30(4), 405-417.
- Drayton, K. (1997). White men's knowledge: sex, race and class in Caribbean English Language textbooks. Kingston, Jamaica: Ian Randle Publishers.
- Duryea, S., Sebastian G., Hugo N., & Claudia P. (2007). *The educational gender gap in Latin America and the Caribbean*. IADB Research Department Working Paper No. 300. Retrieved from www.nip-lac.org/uploads/Hugo_Nopo.pdf
- Einarsson, C., & Granström, K. (2002). Gender-biased Interaction in the Classroom: The Influence of Gender and Age in the Relationship between Teacher and Pupil. *Scandinavian Journal of Educational Research*, 46, pp. 117 – 127.

- Epstein, D., Elwood, J., Hey, V., & Maw, J. (1998). *Failing boys? Issues in gender and achievement*. Buckingham, Open University Press.
- Evans, G.R. (1999). *Calling Academia to Account: Rights and Responsibilities*. Buckingham: The Society for Research into Higher Education and Open University Press.
- Evans, H. (2001). *Inside Jamaican schools*. Mona, Jamaica: University of the West Indies Press.
- Feniger, Y. (2010). The gender gap in advanced Math and Science course taking: Does same-sex education make a difference? *Sex Roles* [online first] (5 August 2010), 1- 10-10.
- Figueroa, M. & Handa, S. (1996). Female Schooling Achievement in Jamaica: A Market and Non-Market Analysis. Mimeographed paper. Dept. of Economics, UWI, Mona.
- Figueroa, M. (2000). "Making Sense of the Male Experience: The Case of Academic Underachievement in the English-Speaking Caribbean". *IDS Bulletin*, 31(2).
- Figueroa, M. (2004). Male privileging and male academic underperformance in Jamaica. *Interrogating Caribbean masculinities: Theoretical and empirical analyses* (137-166). Mona, Jamaica: University of the West Indies Press.
- Ford, D. (1992). Self-perceptions of underachievement and support for the achievement ideology among early adolescent African Americans. *Journal of Early Adolescence*, 12, 228–252.
- Fordham, S., & Ogbu, J. (1986). Black students' school success: Coping with the burden of "acting White." *The Urban Review*, 18, 176–206.
- Gersten, R., & Hitchcock, J. (2009). What is credible evidence in education: The role of What Works Clearinghouse in informing the process. In S. I. Donaldson, C. A. Christie, & M. M. Mark (Eds.), *What counts as credible evidence in applied research and evaluation practice?* (78-95). Thousand Oaks, CA: Sage Press.

- Gibson, S., & Dembo, M. H. (1984). Teacher efficacy: a construct validation. *Journal of Educational Psychology, 76*, 569-582.
- Gosine, A. (2007). Marginalization myths and the complexity of “men.” Engaging critical conversations about Irish and Caribbean masculinities. *Men and Masculinities, 9*(3), 337-357.
- Graham, S., Taylor, A., & Hudley, C. (1998). Exploring achievement among ethnic minority early adolescents. *Journal of Educational Psychology, 90*, 606–620.
- Hopf, D. & Hatzichristou, C. (1999). Teacher Gender-Related Influences in Greek Schools. *British Journal of Educational Psychology, 69*, 1 – 18.
- Hudley, C., & Graham, S. (2001). Stereotypes of achievement striving among early adolescents. *Social Psychology of Education, 5*, 201–224.
- Hunte, K. (2002). “Gender Equality, Male Under-Achievement”. *MOE Insight*, Ministry of Education, Guyana. Available at www.education.gov.gy.
- Hyde, J. S., Fennema, E., & Lamon, S. J. (1990). Gender Differences in Mathematical Performance: A Meta-Analysis, *Psychological Bulletin, 107*, 139-155.
- Irving, M. A., & Hudley, C. (2005). Cultural mistrust, academic outcome expectations and outcome value among African American males. *Urban Education, 40*, 476–496.
- Isom, D. A. (2007). Performance, resistance, caring: Racialized gender identity in African American boys. *Urban Review, 39*, 405–423.
- Jackson, C. K. (2010). Do students benefit from attending better schools? Evidence from rule-based student assignments in Trinidad and Tobago. *The Economic Journal, 120*(549), 1399–1429.

- Jacob, B. A. (2002). "Where the Boys Aren't: Noncognitive Skills, Returns to School and the Gender Gap in Higher Education." *Economics of Education Review* 21(6):589-98.
- Jones, S. M. & Dindia, K. (2004). "A Meta-analytic Perspective on Sex Equity in the Classroom." *Review of Educational Research* 74(4):443-71.
- Jordan, W. J., & Sanders, M. G. (2000). *Schooling students placed at risk: Research, policy, and practice in the education of poor and minority adolescents*. Mahwah, NJ: Erlbaum.
- King, R. & Morrissey, M. (1988). *Images in Print: Bias and Prejudice in Caribbean Textbooks*. Institute of Social and Economic Research. UWI, Mona.
- Kunjufu, J., Lomax, P., (1986). *Motivating and Preparing Black Youth to Work*. Chicago: African American Image.
- Kutnick, P. (1999). Quantitative and case-based insights into issues of gender and school based achievement: Beyond simplistic explanations. *Curriculum Journal*, 10(2), 253- 282.
- Kutnick, P., Layne, A., & Jules, V. (1997). *Gender and school achievement in the Caribbean*. Department for International Development, Education Paper No.21. London: DfID.
- Lindsay, K. (2002). Is the Caribbean male an endangered species? *Gendered realities: Essays in Caribbean thought*. Kingston: University of the West Indies Press.
- Mael, F., Alonso, A., Gibson, D., Rogers, K., & Smith, M. (2005). *Single-sex versus coeducational schooling: A systematic review*. Washington, D.C.: U.S. Department of Education: Office of Planning, Evaluation and Policy Development.
- Miller, E. (1986). *The marginalisation of the black male: insights from the development of the teaching profession*. Kingston, Jamaica: Institute of Social and Economic Research.

- Miller, E. (2000). Education for All in the Caribbean in the 1990s: Retrospect and Prospect. (Ed.) Quamina_Aiyejina. *EFA in the Caribbean: Assessment 2000*. Monograph Series. Kingston, Jamaica. UNESCO.
- Miller, E., (2003). *The Prophet and the Virgin: The Masculine and Feminine Roots of Teaching*. Miami: Ian Randle Publishers.
- Mulholland, J., Hansen, P., & Kaminski, E., (2004). Do single-gender classrooms in coeducational settings address boys' underachievement? An Australian study. *Educational Studies*, 30 (1), 19-33.
- Noguera, P. A. (2003). The trouble with Black boys: The role and influence of environmental and cultural factors on the academic performance of African American males. *Urban Education*, 4, 431–459.
- Ogbu, J. (1991). Minority coping responses and school experience. *Journal of Psychohistory*, 18, 433–456.
- Parry, O. (2000). *Male Underachievement in High School Education*. Kingston: Canoe Press.
- Parry, O. (2004). Masculinities, Myths and Educational Underachievement: Jamaica, Barbados and St Vincent and the Grenadines. In *Interrogating Caribbean Masculinities: Theoretical and Empirical Analyses*, edited by Rhoda E. Reddock. Mona, Jamaica: University of the West Indies Press.
- Plummer, D. (2007). *Is learning becoming taboo for Caribbean boys?* Paper based on the research on Masculinities commissioned by Commonwealth Secretariat. Trinidad & Tobago: University of the West Indies.

- Pollard, V. (1989). Images of women in some modern Caribbean texts. Paper presented at a Gender and Education Seminar. Faculty of Education and Women and Development Studies. UWI, Mona.
- Reddock, R.E. (2004). *Interrogating Caribbean masculinities*. Mona, Jamaica: University of the West Indies Press.
- Riordan, C. (1999). "The Silent Gender Gap." *Education Week*, November 17, p. 46, 49.
- Rogers, P. J. (2008). Using programme theory for complicated and complex programmes. *Evaluation: The International Journal of Theory, Research and Practice*, 14(1), 29- 48.
- Sanderson, I. (2009). Intelligent policy making for a complex world: Pragmatism, evidence and learning. *Political Studies*, 57, 699-719.
- Schanzenbach, D. Whitmore (2006). "Classroom Gender Composition and Student Achievement: Evidence from a Randomized Experiment," mimeo, University of Chicago.
- Sommers, C. Hoff. (2000). *The War Against Boys: How Misguided Feminism is Harming Our Young Men*. New York: Simon and Schuster.
- Spencer, S. J., Steele, C. M., & Quinn, D. M. (1999). "Stereotype Threat and Women's Math Performance." *Journal of Experimental Social Psychology* 35(1):4-28.
- Swars, S. L. (2005). Examining perceptions of mathematics teaching effectiveness among elementary preservice teachers with differing levels of mathematics teacher efficacy. *Journal of Instructional Psychology*, 32(2), 139-147.
- Terrell, F., & Terrell, S. L. (1981). An inventory to measure cultural mistrust among Blacks. *Western Journal of Black Studies*, 3, 180-185.

- Trong, K.L. (2009). *Using PIRLS 2006 to measure equity in reading achievement internationally*. Unpublished doctoral dissertation. Boston: Boston College.
- UNESCO. (2008). "Paper commissioned for the EFA Global Monitoring Report, Education for All by 2015: will we make it."
- West, P. (1999). "Boy's underachievement in school: Some persistent problems and some current research". *Issues in Educational Research*, 9(1).
- Whiteley, P. (1996). The gender fairness of Integrated Science textbooks used in Jamaican high schools. *Physics Education*. 31(5):309-313.
- Whitmire, R. (2010). *Why boys fail: Saving our sons from an educational system that's leaving them behind*. New York: AMACOM.
- Woolfolk, A. E., & Hoy, W. K. (1990). Prospective teachers' sense of efficacy and beliefs about control. *Journal of Educational Psychology*, 82, 81-91.