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DEDICATION

To my parents and to the memory of my beloved brother, Vincent.

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## CHAPTER ONE

### THE STUDY

#### INTRODUCTION

The West Indian students with whom this research was concerned were immigrants, or were born in Canada of immigrant parents. On the basis of the writer's teaching and personal experience, and on evaluation within the Protestant School Board of Greater Montreal school system, it was found that many black students at all grade levels have difficulty coping with the present school curriculum. In recent years, there has been a growing concern by the Montreal black community over the academic success of black English speaking students in school; and black professionals in and out of the school system have been able to draw the attention of the Protestant School Board of Greater Montreal to the problem of black students in school.

Grades six and seven are known to be crucial years for any student in the Canadian school system for it is often during these years that decisions must be made by school personnel regarding the future of these youngsters. At these levels also, the immigrant students, many of whom are West Indians find themselves, set on a course which will be a major determining factor for their future careers. Grades six and seven were, therefore, considered to be a useful age range for investigating the academic achievement of West Indian students.

A review of literature about the academic achievement of West Indian immigrant students in this chapter reveals that educators need to have a basic understanding of the students' background, that is, of their cultural setting and social status, their parents' concerns, their language.

They need also, to have an understanding of other factors that are important for development of a good self image of these students.

A study by Roth (1973) showed that educators' awareness of the role that culture plays in the motivation and academic achievement of West Indian students was important to the success of these students in school. Studies documented by Ashworth (1975), Bhatnagar (1975), Bower (1976) and Silverman (1976) all showed that culture-conflicts experienced by immigrant students were major reasons for lower than normal academic achievement in school. If this is the case, with the passing of time, West Indian students would become adjusted to Canadian society, experience progressively less culture-conflicts, and their academic achievement would improve. One of the objectives of the study was, therefore, to empirically test if this was, indeed, the case.

The central purpose of this study was to determine if there were differences between the academic achievement of Recent West Indian immigrant students and Canadian West Indian students. For the purpose of this study, Recent West Indians were defined as students who had been in Canada for a period of five years or less and Canadian West Indians as students who were either born in Canada or had lived here for five years or more. A period of five years was considered long enough for students to become adjusted into Canadian society. A group of native white Canadian students was also studied for the purpose of making some comparisons.

Additional purposes of this study were to determine how (a) length of stay and (b) parental concerns affected the academic achievement of grades six and seven West Indian students in Montreal. In an attempt to determine the home and school variables that were related to the academic success of West Indian students, investigation was made of other variables namely: social class, West Indian dialect usage, and students'

satisfaction with school.

There are unique difficulties that exist for the West Indian student. If teachers are made aware of these, they may be better able to understand the problems which the student may encounter in school. For example, as a rule, we accept the fact that any youngster leaving his country for the first time and arriving in a new environment needs a certain period of time in which to become adjusted and fully at ease in the new society, and particularly in his new school environment. Hence, it was hoped that the findings of this study would provide information that could be of use to parents, teachers and administrators in trying to understand and alleviate the problems that the West Indian student faces in the Montreal School system.

#### REVIEW OF RELATED LITERATURE

Here in Montreal, and in Canada as a whole, empirical research data dealing with the achievement of West Indian students in school are limited. The writer will, however, through this review of literature, attempt to summarize some of the major research findings under the following topics: (1) West Indians as Immigrants, (2) Academic Achievement, (3) Methods of Teaching, (4) Evaluation and Programs, (5) Students' Satisfaction with School, (6) Social Class and (7) Language.

### West Indians As Immigrants

In an effort to understand the concerns that West Indian parents may have about their children's progress in school, an attempt was made to focus on West Indian parents and their children in particular, from the perspective of immigrants in Canada. Research on how West Indian students have performed in schools during the last two decades has been documented in Britain. Richard Wiley (1973), for example, referred to a series of inquiries by the National Foundation of Educational Research which indicated that immigrant children, particularly West Indians, are underachieving in British schools in relation to most underprivileged whites. In 1971, Inner London Educational Authority Research also indicated that with social class controlled, immigrants were reading, on the average, at least one year below non-immigrants. Little et al. (1971) found that West Indian students performed lower on group placement tests than did native children, and that their performance improved with their length of stay in England. One may infer, therefore, that students who are new to a school community may need time to adjust to that new environment. As a result, initially, they may not perform as well as they should on school tasks, but with passage of time performance may improve. The conclusion could therefore be made that:

Recent West Indians will show higher school achievement as their length of stay in Canada increases.

Hence, this study makes comparison between the achievement of Recent West Indians and the achievement of Canadian West Indian students.

In making reference to the attitude of West Indian parents with regard to the education of their children, Roth (1973) described them as

parents who see education as a means of escaping poverty and manual labour. His study of some of the cultural similarities and differences between West Indian immigrants and other Canadians which leads to his conclusions that West Indian parents are determined that their children do well in school and that they often put complete faith in the school system was observed to be the attitude generally taken by the many West Indian parents whom the writer of this study encountered. Many of them had a different kind of educational experience and did not have an opportunity to go very far in high school. Such parents, therefore, are sometimes unable to appreciate the difficult academic task that their children must bear, and the amount of time needed for homework or other preparation. As a result, many may be unable to create a home environment conducive to academic progress,

It is well known that homework is an important part of students' academic development. It can help foster good work habits and a positive attitude towards school work. More important is the proposition that, if homework was commonplace for West Indian students, it would give parents a chance to familiarize themselves with areas of their children's school curriculum, and as a result, enable parents to provide students with the help and guidance that lead towards success in school.

Similar conclusions were made by Stasiuk (1976) in her study of high school students in North York, Ontario. She noted that although most West Indian parents were anxious for their children to do well in school yet, because of their own very different experience, fail to realize the problems faced by their children. It is thus likely that parents who understand the workings of the school systems and who are sensitive to the problems that their children may encounter in school

would be better able to give them the encouragement and academic guidance that would constantly provide academic motivation.

Those parents, however, who do not understand the school system and all the demands it makes on the student might be unable to give their children the kind of motivation that fosters progress in school. It may be concluded, therefore, that:

Students who are motivated by parents will most likely show higher achievement scores than students who are not.

Bhatnagar (1970) studied the adjustment of immigrant students in Britain and found no evidence to suggest that, apart from initial underachievement in English, the educational potential of an average immigrant student was any less than that of native children. He cited Goldman (1967) as having made similar conclusions. In the opinion of Goldman (1967), since most immigrant parents took the initiative of emigrating from the West Indies when they could, they were perhaps above average in intelligence and motivation. Their children, given suitable measuring instruments, might well prove to be of above-average intelligence in the UK.

In his comparison of beliefs and values of native blacks and West Indian students in a Brooklyn college, Glantz (1972) found that West Indian students believed that hard work was a norm for students and a norm for success in general. In the final results of his study, he characterized West Indian immigrants as a dynamic ethnic group, not only within the black community but in the larger society as well, and as having a high level of ambition and a passion for hard work.

Although, in a limited sense in Canada, the majority of people are either immigrants or are born of immigrant parents, educators obviously have not come to terms with this condition. They seem to be constantly confronting

the problems and dilemmas or the issues and answers in educating immigrant children. One of the problems that the new West Indian student must overcome is that of adjustment in school and community. The extent to which he does this successfully and the facility with which he accomplishes it might reflect the degree of academic achievement he attains in school. Ashworth (1975) in her study outlined the problems of adjustment and achievement that the immigrant students encounters and concluded that the new Canadian family might have difficulty in making adjustment which could even be reflected in the kinds of conflicts that its children encounter in school.

Bhatnagar's (1970) study showed that among immigrant students, West Indians had the most difficulty with adjustment. He found that colour was a major factor in their social acceptance. His conclusions showed that the disparity between the adjustment of immigrant and English children was alarming enough to be reflected not only in achievement in school but in the work world as well. In the same study, West Indians were found to have a higher non-academic achievement, for example, in athletics for which they were highly motivated. This notion is supported by well documented studies such as that by Vernon (1972) which found that all human abilities, including cognitive abilities and sensory-motor skills are positively correlated. Bhatnagar suggested that it would, therefore, be unlikely that West Indian students would have an 'inferior potential' for intellectual tasks.

The new West Indian student is one who has lived all his life in an almost entirely black universe and comes from a school system where there are many differences, as opposed to those in Canada, in the methods of instruction used in schools and in the demands made on him

by teachers and parents. Bowen (1976) pointed out that as a child moves from a familiar cultural setting that has been supportive to his development and future outlook to one that is markedly different and generally non-supportive, social and personality conflicts arise and interfere with learning. In this regard, Bhatnagar (1975), in his study of the education of immigrant students in Montreal, found culture conflict to be a major reason for lower academic performance of immigrants.

Survey findings by Silverman (1976) showed that upon entering the school system, the West Indian student is often characterized as having "poorly developed skills or skills not seen as relevant, lowered performance on timed tests and in other situations in which speed is required." Silverman (1976) further emphasized the impact that culture shock has had on black immigrant children, adolescents and adults as a result of many differences between the immigrants' culture and the host culture. He was, therefore, not surprised that many immigrant children experience enormous difficulties in the early stages upon entering school in Canada. It could, therefore, be hypothesized that:

- (a) Canadian West Indians will show higher school achievement in Reading than Recent West Indians.

#### School Achievement

For the purpose of this study, the term "academic achievement", used interchangeably with the term "school achievement", is defined as scores which students attained in Reading and Mathematics on the Metropolitan



### Achievement Tests.

The question would obviously arise as to what causes poor school achievement. Socio-culturally, Biggs et al (1977) viewed it as stemming from the social impact of the individual's ethnic or racial heritage and environment, and on those attitudes and behaviours relating to "achievement, motivation, achievement values or educational occupational aspirations."

Educationally, Biggs et al revealed that poor school achievement might result from the students' reaction to differential treatment reflecting "teacher or administrator bias relative to social class, ethnicity, personality type or sex." Two examples of these would include covert messages in the classrooms and interaction between teacher and students. Also, encounters between parents and the system of community lead the student to define himself and his place within the educational system.

Obugu's (1978) research on achievement motivation among black students in the United States revealed an interesting paradox. He compared studies done by Rosen (1959), Mingione (1965) and Katz (1967). All of these showed that black students do not have a lower interest in education than white students. At the same time Katz (1967) found that they do not perform as well as whites on intellectual tasks.

Obugu (1978) concluded, however, that almost all explanations point to the failure of black socializations as the ultimate cause of lower achievement. He contended that the cognitive difference of blacks and whites are attributable primarily to the fact that the two groups have traditionally occupied different and unequal positions in both occupational and socio-political structures of the society.

It is well known that the conventional expectation of the West Indian student is one which often undervalues and underestimates the

potential of the student. Educators are not always sensitive to the conflicts manifested through linguistic, cultural and social obstacles that the students must overcome in order to achieve their highest potential in school. This literature review also focusses, therefore, on several factors that may influence the school achievement of some West Indian students. They are: (a) Methods of Teaching, (b) Evaluation and Programs, (c) Student Satisfaction with School, (d) Social Class and (e) Language.

#### Methods of Teaching

It is considered, by several researchers, that the differences in methods of teaching and curricular activities with which the new student must cope may result in lower than average achievement. There is little doubt that the lack of resources in many West Indian schools consistently fails to foster student participation that is as active as that experienced in many Canadian schools. The new West Indian student might, therefore, be overwhelmed by the audio-visual aids he might be required to cope with in his new classroom. With regard to school resources, Stasiuk's (1976) study pointed out that an over-saturation of visual aids may divert the new student, at least temporarily, from learning. Here in Montreal, teaching and learning are done generally through whole class instruction, in subgroups or with individual students. Teachers often employ different groupings and preferences. Also, depending on the teacher's grouping and individualization strategies, students may receive differential amounts of teacher time and this may have an impact on the students' achievement.

Harnsichfeger et al (1978) referred to Bloom's (1971) model of learning which is designed to maximize students' achievement and which they suggest is usable in empirical work which assesses classroom learning.

Harnischfeger et al pointed out the far reaching implications that Bloom's (1971) theory could have for educational policy and practice.

Bloom's (1971) model specified four dimensions by which learning outcomes are determined. First, he referred to knowledge, skills and competences which are specific prerequisites for learning a specific task. Secondly, he referred to characteristics such as motivation, enthusiasm, academic self concept and attitude towards school and learning as relevant to a specific learning task. Thirdly, he pointed to the need for relevancy in curriculum content that the student is expected to master. Fourthly, he pointed to the quality of instruction that will generate learning through effective communication between teacher and student. Though this model is widely used by teachers, generally, specific subject matter is expected to be mastered within fixed time periods.

Bloom's (1971) model was designed to overcome misplaced beliefs in the unchangeability of good, poor, fast and slow learners and to convince and help teachers to provide instruction which would give students the aid needed for successful learning. Implications for the immigrant student who joins the school system indicate that he would need more time than the average Canadian student since his learning process may be slowed down as a result of social adjustments that he has to make when simultaneously coping with school tasks.

### Evaluation of Programs

As a formal organization and due to the large number of students that must be processed at any one time, schools have found it expedient to categorize students. As a result, they continually select students

for academic and vocational careers..

Leiter (1976) investigated the practices that teachers used to assign students to classes having particular characteristics such as special or gifted, to place them into ability groups within classes and also to promote them to the next grade. His findings showed that categorization of students by means of test was done as early as kindergarten. His conclusions indicated that placement through testing at this early stage in the students' school life might cause schools to take the students' futures as given. These findings could suggest that for the new Canadian, immigrant status or social class background may make a difference on the type of education the school provides for the child.

D'Oyley (1977) made a survey of the education of West Indian students in Toronto and found that there is a great need for proper evaluation of these students. He was aware that there was consensus among the urban teachers that West Indian immigrant students read and perform below age-grade levels, but he was unable to find sufficient objective or even subjective comparative data within or across the school systems.

It would be relevant to note that within the school system of the Protestant School Board of Greater Montreal (PSBGM), present policy disallows the testing of any West Indian student for placement into a special class if he has been residing in Canada for less than two years. With regard to special programs for immigrant students, the PSBGM had set up welcoming classes to help West Indian students adjust to the school systems. These were not entirely successful and were recently closed. The PSBGM also responded to the concerns of black students in general by providing a black Liaison officer within the system. A Black Studies

course at the high school level was also implemented.

Public pressures about the education of immigrant students have often caused school systems to respond to the needs of their new immigrants. D'Oyley's (1977-78) study on school and ethnic rights revealed that one of the ways that some Toronto schools responded to the pressure of ethnic groups was by providing particularized programs in English Language instruction in both elementary and secondary schools.

On the subject of minority education, Obugu (1978) noted that in Britain efforts had been made to reform the educational system so that a variety of programs could be available to all groups including West Indians. Bhatnagar (1970) documented that in Britain specific schools had made some attempt to provide immigrant pupils with special language teaching through withdrawal or reception classes within the school. Ashworth (1975) found that such accommodation was also made for immigrant pupils in many Canadian schools. Thus, Bhatnagar (1970) and Ashworth (1975) concluded that many of these classes could result in poor models for adaptation if too many students of the same language and backgrounds are placed in the same groups. The implications that language competencies could have for the achievement of West Indian students will be discussed later in this chapter.

#### Students' Satisfaction with School

With regard to the West Indian, Bloom's theory as outlined earlier, might indicate to educators some of the problems involved and possibly suggest some solutions for helping the student to experience satisfaction and achieve maximum success in school. In terms of the new West Indian, Bogner (1976) noted that the

student's former educational experience might fail to prepare him for active participation in Canadian classrooms and suggested the need for teachers to look for positive abilities of students and not only weaknesses. Supportive work by Stasiuk (1976) pointed out the need for teachers to convince the West Indian student that he could succeed and that whatever he has to say in class could be worthwhile. The findings of her study made reference to the fact that new West Indian students share a common feeling of alienation, isolation and anonymity since they no longer live in a close community where there are always relatives and friends around.

An examination of students' regard for teachers and school in general might serve to give insight into some of the causes for academic success or failure. This notion has been supported by research conducted by Baird (1976) which indicated that self report grades could usually be believed and that some understanding of student achievement grades could be predicted through self report information, hence one reason for including Survey Questionnaire Appendix A Part B in this study.

The degree of satisfaction that students have with school and the relationship that is established between teacher and pupils might also influence how students learn in school. The conclusion could therefore be made that:

- (a) Within any social group, students who are satisfied with school would show higher achievement scores than students who are not.
- (b) Recent West Indians would find that differences in teaching methods and curriculum content would pose the greatest difficulty in their adjustment to school.

### Social Class

Social class system is generally classified into three classes, namely: lower, middle and upper class. Upper class will be omitted from the study since only a few West Indians are represented by this class among the 8% - 10% black population of the PSBGM schools.

It is now generally accepted that there is a positive correlation between social class and educational achievement. Traditionally, lower class students have not performed as well as middle or upper class students in schools and teachers are often known to have been told that they are as middle class oriented as are the institutions in which they teach. This notion leads us to wonder whether schools can really be culture free or whether it is possible for schools to be oriented to any social class other than the dominant one. Ornstein (1978) cited the "Lynd" study done in Middletown, Elmtown, and Rivercity, U.S.A. by Warner et al (1978). These investigators found that students of Lower SES group are penalized within the school system because they do not usually come to school adequately equipped to deal with the verbal symbols and behaviour traits that are most valued by the dominant middle class group.

Ornstein (1978) also revealed that, prior to the 1960s, interest in the relationship between social class and education was limited mainly to the academic community. The descriptions were non-political and were based primarily upon observations of community life. Since then, studies such as those conducted by Lynd et al (1978) cited by Ornstein (1978), have drawn educators into a debate about the existence of social differentiation and its influence on schools. The "Lynd" study concluded that parents, regardless of social class level, recognize the importance of education for their children. This finding is similar to the

conclusions made about immigrant parents by researchers whose work was cited earlier in this chapter.

The question is often raised as to whether or not West Indian students are given the same opportunity as other students to attain academic success within our school system. Educational equality and the policy designed to achieve it are usually based on the belief of ascriptive factors of the environment over which the child has no control. To cite a few examples, a child has no say about the economic level of the family into which he or she is born nor does he or she have any control over the social attitude towards the race of which he or she is a member. Such factors are sometimes allowed to be barriers to the realization of the student's full potential.

Although we may recognize that the ideal which lies behind the concepts of educational equality are truly noble ones, in so far as they can be associated with a concern for the achievement of a more socially just society than exists in Canada or elsewhere, we cannot ignore the fact that many in educational circles and in the community at large are disillusioned as a result of the ineffectiveness of the existing programs in school designed to bridge the gap between the academic success of children of different social classes or racial groups. Since schools are the chief vehicles for providing opportunity for a good education by developing skills and imparting knowledge to students, their tasks become most crucial for those groups of people who through economic or cultural differences, are least able to transmit to their children skills that will provide them opportunity in today's society.

Obugu (1978) found that the ability to achieve significant social mobility also depends upon one's educational level, which in turn enhances one's chances of getting a more desirable social and occupational position.



McEwen et al (1975) studied the language proficiency of students of a multi-racial junior high school in Britain and found that the parental socio-economic status influenced school performance and language competencies. They also cited corroborative work done by Bernstein (1961), Douglas (1964), Morris (1966) and Barker Lunn (1971). McEwen et al (1975) further showed that it is the socio-economic level prevailing at the time of measuring performance that counts, with its effects on the standard of living rather than parents' educational background. Very often academically qualified West Indians and other immigrants have had to take low status jobs because, in the host country, they could not obtain jobs commensurate with their qualifications.

Researchers such as Banks (1971) found that parental expectations for their children are related to achievement in school. This relationship and its implications for this study should cause concern for, and extend the reader's understanding of the process of school success or failure, particularly of the way in which patterns of child rearing are influenced by the position of the West Indian within the social structure.

Entwistle (1978), speaking on social class and education, found that success and failure in school bear some relationship to social class background. He indicated that research evidence showed that while lower class children were under-represented in academically oriented secondary schools and in higher education, middle class children were disproportionately successful in gaining the limited spaces in the same institutions.

There is no doubt that since a significant number of our immigrant students are children of working class parents, it would be difficult to educate them with any degree of success unless it is known how they

differ in outlook and learning styles from middle class children, and what handicaps them most in their school performance. It could, therefore, be hypothesized that:

- (a) There would be differences in school achievement between Canadian West Indians of Lower SES and Canadian West Indians of Middle SES.
- (b) There would be a substantial difference in school achievement between Recent West Indians of Lower SES and Recent West Indians of Middle SES.

#### Language

English as a language may be a subject area in which some West Indian students may have difficulty. Competency in this area is often measured by achievement in Reading and its related skills, word recognition, spelling, and comprehension, to name a few.

Many West Indian students are known to speak a dialect which is often downgraded in Canadian schools because of the insistence on the part of educators that it is not as effective for communicating as standard Canadian English or even as effective as our Canadian dialect. As a result, the acquisition of standard English must be accomplished rapidly and efficiently since the opportunity in a system which prizes independence and responsibility, and often promotes isolation, seems limitless once the barrier of language has been surmounted.

Beserve (1976), in his survey of adjustment problems of West Indian students in British and Canadian schools, identified linguistic difficulties as a factor affecting students' school achievement. He pointed out that the West Indians' use of dialect adversely affects their

perception, interpretation and use of standard English. These adverse effects are in turn manifested particularly in areas of syntax, grammar and vocabulary. Beserve's (1976) finding should, however, be applied with caution when dealing with the language of immigrant students for it would be necessary to differentiate between their use of language that is deficient and their use of language that is different. It is considered that educators for too long have confused differences in language with deficiencies on the part of the West Indian student. Beserve (1976) revealed further that in Britain, studies have shown that school achievement of West Indians consistently and significantly improves as their length of stay in Britain increases.

Labov (1968) studied the language differences of middle and lower class students and found that, in the case of black students, language that was different from that of middle class white students was not necessarily an indication of lower intelligence. He strongly suggested that teachers' attitudes towards the different language usage of the students might be the important factor in their success or failure.

Evidence was cited earlier in the literature review revealing that Canadian Education Authorities and the schools themselves have coped in various ways with the arrival of immigrant children for whom English is not the mother tongue or for whom standard English is not the dialect of the home. The success of these students in school is determined to a large degree by the competency they acquire with the language of the school. Therefore, however the process of educating the immigrant student is organized, the key to communication in school and in society should be put in the hands of those immigrant children who lack it. This theory has been supported by McEwen et al (1975). They stated:

"If minority group children in our schools are to learn effectively alongside English children, they must develop a command of English which is not sufficient simply to 'get by' but which is adequate for expressing and understanding concepts, figures of speech, humor, etc. Competence in standard English is fundamental to school activities and without it a minority group remains handicapped."

Speaking on this point, Caltri (1968) in his study which showed the relationship between the acquisition of human dignity and one's native language emphasized that:

"man's sense of self and his linguistic behaviour are inseparable. An attack on language is an attack on self. Therefore, any time an individual is made to understand that his language is unacceptable, he is also being made to understand that his being and his world are also inseparable. The corrections of the teacher, no matter how politely made and with what affection, are attacks on the child's sense of himself in the world."

Educators are well known to tend to forget that all black children do not manifest the same characteristics any more than do all white children, irrespective of their particular social class. Bowen (1976) found that research on the "disadvantaged" tend to categorize children from lower socio-economic backgrounds and black children in the same group regardless of origin. Seemingly, this should cause some speculation as to whether the achievement of some black students is not a result of their teachers' low expectation of them. Bowen (1976) further suggested that some of the requirements for school achievement are alien to West Indian students. She noted, for example, that in the West Indies, the student may succeed in school and later outside of school because the language he uses is functional and is supported by his culture. These same children in Canada may fail in and out of school because the

school setting is alien to the one which supported their language system and, consequently, non-supportive to the students' learning and achievement.

It is considered vital to the students' success that teachers be aware of the difficulties the students' native language may pose for them in some courses, so that they may be helped accordingly and prevent school from being a burden to them. Williams (1970) cited a study by Joan Baratz (1969) in which she assessed language development in young students. She found that the students' inability to acquire functional reading skills contributed to reading failure in school, encouraged dropping out and ensured failure in main stream job success. She warned, furthermore, of the danger that existed in the school systems of labelling students as intellectually inadequate as a result of the difficulty their "different" language poses for them, since this, in turn may only nurture low self worth and low social value.

Speaking on the need for educators to be more tolerant of differences among students, Zeigler (1978) criticized the Canadian school system for dealing with the problem of immigrants as if it were a recent phenomenon. She pointed out that Canada has always had immigrants but that, only in recent years, the number of foreigners who look and speak differently have become a burden to the school system. Racism and ethnocentricity might explain negative attitudes in the society at large Zeigler (1978) noted, but to the school system "children of other cultures present specific curriculum and achievement related difficulties, for which tolerance and a cosmopolitan attitude to differences, which, while they might be essential are not sufficient."

Further conclusions that Zeigler (1978) drew led the writer to assume that if West Indian students do not speak standard English, if the parents' child rearing practices are in conflict with those of teachers and administrators, if students' former schooling is different in structure and content from that which exists in their new Canadian schools, then these students may encounter difficulties, which if not ameliorated by the school system, will result in these students being over-represented in low ability streams or in special classes. Higher dropout rates would also exist for them and, in general, an inferior education and a negative self image.

Research findings by Ashworth (1975) revealed that many teachers do not feel competent to deal with students who cannot speak standard English well in regular class. She suggested that Canadian students, teachers and the community at large need to be encouraged to respect new Canadians of various ethnic or racial groups. Furthermore, she emphasized that Canadian students also have to be helped to understand that their new Canadian peers, with their cultural, linguistic or racial difference, have a right to be accepted.

On the whole, the new West Indian who comes from a middle socio-economic background comes from a private school whose educational standards are comparable to those of the Canadian system. His performance is usually satisfactory and he speaks mainly standard English. Hence, his adjustment to the Montreal school system might not take as long a period as that of the student who comes from a lower class background and frequently speaks a West Indian dialect. The new West Indian student who comes from a lower socio-economic background comes mainly from the public school system and would be part of a larger group of West Indian

students in Canadian schools where achievement is likely to be average or unsatisfactory. These students, more so than students from middle class backgrounds, may have more difficulty with Reading or English in school because of their frequent dialect usage. Mathematics is not considered to pose as much difficulty for students since this subject, except in the area of problem solving, demands less of students' verbal skills. Hence, it could be hypothesized that:

There would be no difference in school achievement in Mathematics between CWI and RWI students.

The Canadian West Indian of lower socio-economic background, despite dialect usage at home, may be more fluent in standard English than the Recent West Indian of Lower SES and, as a result, might experience less difficulty with school work, particularly English. Although the Canadian West Indian might not have the same adjustment experiences as the new immigrant, due to the fact that he is racially different and of a visible minority, the culture conflict between home and school would pose challenges to the school that are different from those posed by the general population but similar to those posed by the Recent West Indians. As a result of the findings from the literature surveyed on language, one could therefore draw the conclusion that:

Frequent dialect usage would have its greatest effect on school achievement in English and that there would be substantial differences in school achievement in Reading between students who speak dialect frequently and those who do not.

### SUMMARY OF THE LITERATURE REVIEW

The literature on the school achievement of West Indian students in Canada is not extensive, but from the studies surveyed it has been shown that the aspirations of the majority of immigrant parents are for success for their children within both school and community. Many of the studies revealed that there are real problems which the immigrant student must overcome. Variables such as length of stay in the host country, ability to use the host language with competence, and differences in previous home and school experiences might initially affect the immigrant's performance in school.

It has also been stressed that whatever the obstacles that the immigrant student must encounter, educators should discover how to make the maximum use of the student's educational potentialities in the direction of their criterion of success. Time, money, resources, number of students in classes might, however, determine how close the level of students' achievement comes to such an ideal.



## CHAPTER TWO

### RESEARCH PROCEDURES

#### INTRODUCTION

This study had two aims. The first was to determine the relationship between Length of Stay and Academic Achievement of black English speaking West Indian immigrants in schools of the Protestant School Board of Greater Montreal (PSBGM). The second aim of the study was to determine how home and school variables affect the students of each ethnic group.

#### RATIONALE

The literature surveyed in Chapter 1 has consistently shown that immigrant students often need a certain period of time in which to become fully adjusted to their new school environment, and that they may initially show lower school achievement than native children during this period. The literature has also illustrated that students' language competencies, social background, and parental interest in students' progress in school may have some effect on academic achievement. In this regard therefore, the writer postulated eight hypotheses to determine the relationship between (a) length of stay and academic achievement; (b) parental concerns and academic achievement of West Indian Immigrant children in Montreal. These hypotheses are listed in the next section.

HYPOTHESES

The hypotheses advanced are as follows:

1. Canadian West Indians will show higher school achievement in Reading than Recent West Indians.
2. There will be no difference in school achievement in Mathematics between CWI and RWI students.
- 3.a. There will be differences in school achievement between Canadian West Indians of Lower SES and Canadian West Indians of Middle SES.  
b. There will be a difference in school achievement between Recent West Indians of Lower SES and Recent West Indians of Middle SES.
4. Recent West Indians will show higher school achievement as their length of stay in Canada increases.
5. There will be differences in achievement in Reading between students who speak dialect frequently and those who do not.
6. There will be a positive correlation between parental concerns and school achievement in Reading.
7. There will be a positive correlation between parental concerns and school achievement in Mathematics.
- 8.a. There will be a positive correlation between Reading achievement and degree of school satisfaction.  
b. There will be a positive correlation between Mathematics achievement and degree of school satisfaction.  
c. Students will find that adjustment in the classroom and curriculum content will pose the greatest difficulty for them.

DESIGN

The following plan was tentatively designed to test the hypotheses advanced above.

<u>RECENT WEST INDIAN</u>				<u>CANADIAN WEST INDIAN</u>			
<u>(70)</u>				<u>(70)</u>			
Lower SES		Middle SES		Lower SES		Middle SES	
<u>(35)</u>		<u>(35)</u>		<u>(35)</u>		<u>(35)</u>	
male	female	male	female	male	female	male	female

WHITE ENGLISH CANADIANS

<u>(70)</u>			
Lower SES		Middle SES	
<u>(35)</u>		<u>(35)</u>	
male	female	male	female

Based on the model shown above an attempt was made to find PSBGM elementary and high schools in which there were large numbers of West Indian students and native white Canadians. It was not possible to get as many observations as anticipated from the selected schools and time did not permit the writer to carry out the research in other schools before the end of the school year. The following is a model of the final sample.

RECENT WEST INDIAN(63)

Lower SES

Middle SES

(43)(20)

male female

male female

CANADIAN WEST INDIAN(29)

Lower SES

Middle SES

(18)(11)

male female

male female

WHITE ENGLISH CANADIANS(75)

Lower SES

Middle SES

(37)(38)

male female

male female

SAMPLE DESCRIPTION AND SELECTION

The final sample (N = 167) was selected from four schools. The study was intended to test grade eight students as well but the testing procedures required six testing sessions. It became evident after discussion with the high school principals involved, that too many conflicts would arise with regard to students' and teachers' time tables. The idea was therefore abandoned and access to four elementary schools had to be obtained.

School No. 1: This school was situated in a predominantly working class area. Over 70% of its population were black students. A large number of these students were of native Canadian parents. Two grade six and two grade

seven classes from this school provided forty six students for the final sample.

School No. 2: This school was situated in an area of the city which could be termed middle class. At least 40% of its students were black West Indian students. A total of thirty four students from one grade six and one grade seven class in this school are included in the final sample.

School No. 3: The school was located in an area which could not clearly be defined as middle or lower class. The majority of students in this school were children of various ethnic immigrant parents. Thirty one students were selected for the sample from two grade six classes in this school.

School No. 4: The neighbourhood in which this school was located could not clearly be defined as either middle or lower class. Its population was made up of students from various ethnic groups. About 25% of the total school population were West Indians. Fifty one students were selected for the final sample.

To facilitate testing, and minimize disruption to class routine, tests were administered to all students (N = 219) in selected classes. All white students whose parents were not born in Canada and students

from all other ethnic groups, other than West Indians were subsequently eliminated from the study. A total of 167 students, 92 West Indians and 75 Canadians qualified for the final sample.

The following table shows how the students of the study sample were distributed according to school, sex, grade and age.

TABLE 2.1

Distribution of the 167 sixth and seventh grade students of the study sample according to School, Sex, Age and Grade

GROUPS	N	%
School No. 1	46	27.5
School No. 2	34	20.4
School No. 3	31	18.6
School No. 4	56	33.5
Total	167	100.0
Boys	91	54.5
Girls	76	45.5
Total	167	100.0
11 years	15	9.0
12 years	83	49.7
13 years	54	32.3
14 years	13	7.8
15 years	2	1.2
Total	167	100.0
Grade Six	94	56.3
Grade Seven	73	43.7
Total	167	100.0

## THE MEASURING INSTRUMENTS

### Rationale for Selection

The measuring instruments consisted of a specially designed questionnaire as shown in Appendix A and Subtests of the Metropolitan Achievement Test (MAT) battery as shown in Appendix C. The MAT was considered to be, by far the more important measuring instrument and will therefore be discussed separately.

The writer was aware that the Metropolitan Test Instrument could not provide a 'culture-free test' for West Indians. It was apparent that the tests were being administered to some West Indian students who had lived in Canada for less than two years and who, therefore, were not fully adjusted to the school system. However, since similar standardized tests had been used with native children particularly as a measurement of assessing age-grade performance in school, it was felt that the MAT would provide valuable information on the degree of intervention new students might require in school work.

In analysing the achievement of a particular sample of West Indian Immigrants by administering the MAT, it was also necessary to take into account other pertinent factors such as: (1) an assessment of students' problems and progress in school through self reporting, (2) students' assessment of parental concerns and (3) an assessment of the influence of West Indian Dialect on Reading performance.

Part B of Appendix A was designed with a five point scale to make the assessment of the variables just mentioned. Part A of Appendix A was designed to get background information on the students. Except for questions 7 and 8 which referred to West Indians only, the other questions were intended to make assessment of the general tendencies of

the total population sample. As indicated in the literature review students' satisfaction with school and parents' concerns can be applied to any ethnic status or SES group.

Werner's Revised Scale for rating occupation (1948) was used to determine the SES of the students and as a way of rating the occupations of their fathers (in applying this index, when there was no father the mother's occupation was used). Werner et al (1949) identified six variables: occupation, amount of income, source of income, type of house, dwelling area and level of occupation which in combination produced an index for measuring social class.

Werner's revised scale for rating occupations is as follows:

- Lower SES :
- a) skilled
  - b) semi-skilled
  - c) unemployed
- Middle SES:
- a) professionals
  - b) managerial workers
  - c) technical and semi professional workers

#### DESCRIPTION OF INSTRUMENTS

Table 2.2 indicates the instruments used in measuring the variables in this study.



TABLE 2.2  
MEASURING INSTRUMENTS

VARIABLE	MEASURING INSTRUMENTS
1. Academic Achievement	<ul style="list-style-type: none"> <li>- Metropolitan Achievement Tests: (MAT)</li> <li>- Subtests: 1, 2, 4, 5, 6, and 7 of:</li> <li>- Intermediate Battery Levels 5 - 6.9</li> <li>- Advanced Battery Levels 7.0 - 9.5</li> </ul>
2. Language Competence	- MAT Subtests: 1, 2, 4
3. West Indian Dialect Usage	- Survey Questionnaire Part B Questions 7 and 8
4. Parental Concerns for Students' Progress	- Survey Questionnaire Part B Questions 9 to 11
5. Socio Economic Status (SES)	Werner's Revised Scale for Rating Occupation
6. Student's Self Evaluation of School Problems and Progress	Survey Questionnaire Part B Questions 1 - 6, 12 and 13
7. Age	Survey Questionnaire Part A
8. Place of Birth	Survey Questionnaire Part A
9. Parents Place of Birth	Survey Questionnaire Part A
10. Length of Stay in Canada	Survey Questionnaire Part A

### A DESCRIPTION OF THE MAT

"Metropolitan Achievement Tests are a series of measures designed to tell teachers and administrators how much pupils have learned in important content and skills areas of the school curriculum. The tests are basically a source of information yielding comparable measures from one level to another. These features help educators in evaluating progress over the years and in identifying particular strengths and weaknesses." (Barlow, Irving H. et al, 1970, p. 3).

Because the norms of this test were developed so that each battery could be used in grades above and below those for which the battery was primarily intended, grade scores of individual students will not be analysed. For the purpose of this study, test scores will be analysed according to the total mean scores of each ethnic group based on the following subtests.

Word Knowledge of the MAT consists of 50 items which measure students' reading vocabulary. The items ask for synonyms, antonyms and classification of words.

Reading consists of 45 items which measure the students ability to comprehend written material. These items also test the students' ability to answer questions at the literal level, to draw inferences, identify main ideas, and determine word meaning from context.

Spelling consists of 50 items which measure the students' ability to recognize words that are spelled incorrectly.

Mathematics Computation measures students' ability to compute with fraction and natural numbers and involved 40 items.

Mathematics Concepts consists of 40 items and measures the student's understanding of mathematical principles and relationships. These include inequalities, sets, geometry and measurement, place value, etc.

Mathematics Problem Solving consists of 35 items. This subtest measures the students' ability to apply knowledge in solving numerical problems.

#### METHOD

The final sample includes 167 grade six and seven students from the four PSBGM schools previously described.

In April 1979, the Director of Student Services at the PSBGM was consulted. The proposed study was discussed and request was made for access to several schools in which the writer felt the investigation might be feasible. Subsequently, a letter was forwarded to the Student Services Department to formally request permission to conduct the research in elementary and/or high schools in which there was a large number of West Indian students as well as white native Canadians. A summary of the proposal of the study was also forwarded, and permission was granted. With the assistance of the Director, the writer set up appointments with the principals of the four schools selected. Upon the suggestion of the Director, the writer also requested permission from the Quebec Board of Black Educators (QBBE) to test West Indian students. An outline of the proposal was forwarded to its Chairman, and permission was granted.

Appointments were then set up with administrators of two high schools and two elementary schools. After discussion with the high school principals however, the writer found it more practical to conduct the research in elementary schools rather than high schools so as to eliminate timetable conflicts for both teachers and students.

With four elementary schools selected, the proposal of the study, the test instruments, and the times required for test sessions were discussed with the principals. They were assured that students would be guaranteed anonymity for the analysis of the study and be identified only by a coded number.

The next step was a discussion with individual teachers outlining what was proposed to be done in each of their classes. In two of the schools the briefings were held with the principal present. In the other two schools the principals informed the teachers of the study whilst the writer met with them at a later date.

During testing, an effort was made to put the students at ease as much as possible. They were told that their names would be discarded after the tests were completed, and the results recorded by code number. They were encouraged to do their best. They were also made aware that the information from the study might eventually enable teachers to provide better help to students, particularly those who were new to Canada and were not familiar with the schools.

Testing times and dates were arranged with individual classroom teachers. The measuring instruments for the six sessions were in two parts. The first was in the form of a survey questionnaire (see Appendix 1), Part A of which provided information which would enable the writer to select and group the students appropriately; and Part B which

gave self reporting information helpful to the writer to assess students' attitude towards school, parental concerns for students' achievement, and the effects of frequent dialect usage on English of West Indian students. Questions 7 and 8 applied only to West Indian students.

The second part of the test instrument consisted of six timed subtests selected from the Metropolitan Achievement Tests (see Appendix C) Intermediate level for grade six and Advanced level for grade seven. These were hand scored copies.

In most schools the questionnaire survey was carried out by the writer in a whole-class situation. The questions were reviewed with students before they completed the questionnaires. They were encouraged to ask questions. Subtest 1 of the MAT was administered in the same session.

The remaining five subtests were administered in five separate sessions by both the writer and the classroom teachers. All tests were given to the whole class in an effort to avoid supervision conflicts. In the case of Mathematics, a key was given on the blackboard for problems which involved "yards, feet or inches" since students had been working mainly with metric measurements. Students who were absent for test sessions were allowed to do the test at a later date.

Thereafter, it took the writer several weeks to score and code the tests. Once the coding was done, the data were statistically analysed at the Computer Centre of the Sir George Williams Campus of Concordia University.

## CHARACTERIZATION OF MAJOR VARIABLES

This section will describe the independent and dependent variables of this study.

Independent Variables

The independent variables studied are as follows:

1. West Indians:  
(WI) This group consisted of all English speaking black students of at least one West Indian parent who emigrated to Canada.
2. Recent West Indians:  
(RWI) This was a group of all English speaking black students who were born in the West Indies and who had resided in Canada for five years or less.
3. Canadian West Indians:  
(CWI) These were black students who were born in Canada of at least one West Indian immigrant parent or who had been WI immigrants here for longer than five years.
4. Canadians:  
(CAN) This was a group of English speaking white students who were born in Canada of non-immigrant parents.
5. Socio Economic Status:  
(SES) The socio-economic status of subjects was determined by Werner's scale for rating occupation as was explained earlier.
6. Length of Stay: This referred to the number of years of residence in Canada for West Indian students.

### Dependent Variables

The dependent variables studied are as follows:

- School Achievement:** For the purpose of this study, achievement refers to group mean scores attained on the Metropolitan Achievement subtests in Reading and Mathematics. Subtests scores may be referred to separately or combined.
1. **Reading:** This refers to students' performance in Word Knowledge, Spelling and Reading of the MAT subtests.
  2. **Mathematics:** This refers to students' performance in Mathematics Computation, Concepts and Problem Solving of the MAT subtests.

### RESEARCH LIMITS AND JUSTIFICATIONS

The study started by looking at schools that would provide subjects from the various SES groups. The sample drawn from four schools, was assumed to reflect the English speaking West Indian population generally found in Montreal area schools. One of the schools, however, designated as being located in a middle class area, provided more lower than middle SES subjects. It could never be generally assumed, therefore, that the geographical location of a school accurately determines the SES of the majority of its students.

Students face different life situations, and in adapting to them they may develop different sets of values, attitudes and motivation which in turn may be directly related to their achievement in school. If this study were to be repeated, therefore, certain changes would be necessary. A larger sample of CWI students would be necessary to provide for a more meaningful analysis of the relationship between SES and school achievement.

The works of contributing authors to D'Oyley's (1976) editor "Black Studies in Urban Canada" have been cited for their enlightenment of the plight of West Indian students in Canadian schools. The writer of this study is, however, aware of the non-empirical aspects present in some articles. The content of some of the articles was based on the authors' personal experiences in the teaching or counselling of West Indians and in talking to other people who work in the same capacity. The time is considered past when people talk from experience only. More research based on hard empirical data with students would be quite meaningful. Thus, this study was undertaken toward that end.



CHAPTER THREE  
FINDINGS AND DISCUSSIONS

INTRODUCTION

In this chapter the sample is described and the results and discussion are presented for hypotheses 1 to 8. For each of the 8 hypotheses, the results of statistical analysis are tabulated and discussed, and a conclusion is drawn. In developing the discussions and drawing the conclusions, references might be made to supportive findings of the other researchers cited previously in the literature review. Some of the data presented under Hypothesis 8, however, should be regarded as useful information rather than firm conclusions.

DESCRIPTION OF THE SAMPLE

The final sample consisted of 167 students from both Grades Six and Seven. The distribution according to ethnic group is shown in Table 3.1.

TABLE 3.1

Total Population Sample: Ethnic Status

GROUP	N
Recent West Indians	63
Canadian West Indians	29
Canadians	75
Total	167

The distribution of the final sample according to Socio Economic Status (SES) is shown in Table 3.2. Werner's Revised Scale for Rating Occupations (1949) as described under "Measuring Instruments" in Chapter Two, was used to determine the SES of students.

Table 3.2

Socio Economic Status

GROUP	LOWER SES		MIDDLE SES	
	N	%	N	%
Recent WI	44	69.8	19	30.2
Canadian WI	18	62.1	11	37.9
Canadian	53	70.7	22	29.3

SCHOOL ACHIEVEMENT: READING AND MATHEMATICS

This study investigated school achievement of West Indian Immigrant students. Achievement was measured by using a specially designed survey questionnaire and the Reading and Mathematics subtests of the Metropolitan Achievement Tests (MAT).

The MAT subtests were administered to the total sample and group mean scores for each of the three study groups were obtained. The distribution of the means and standard deviations for RWI, CWI and CAN students are presented in Table 3.3

TABLE 3.3

School Achievement:  
Group Means and Standard Deviations

VARIABLES	RWI N = 63		CWI N = 29		CAN N = 75		TOTAL N = 167	
	M	SD	M	SD	M	SD	M	SD
Word Knowledge	52.4	16.0	63.9	15.4	64.4	18.9	60.8	18.1
Reading	53.2	16.5	62.0	14.6	66.6	17.2	61.0	17.5
Spelling	54.1	19.6	61.5	16.2	62.4	21.6	59.1	20.3
Total Reading	52.6	14.7	64.4	12.7	66.1	18.1	61.0	17.1
Math - Computation	66.6	13.4	71.8	13.6	74.6	13.8	71.1	14.0
Math - Concepts	59.1	15.4	64.3	11.9	68.2	15.4	64.1	15.3
Math - Prob. Solv.	59.3	16.1	63.9	15.7	66.6	22.6	61.5	19.3
Total Math	61.3	12.4	66.4	11.8	69.6	13.6	66.0	13.3

M = mean

SD = standard deviation of means

A multiple Range test was used to determine the significance of the differences between means of the various groups. This data will be presented later in Table 3.4 and Table 3.5.

Total Reading as presented in Table 3.3 was determined for each student by combining their raw scores attained on Word Knowledge, Spelling, and Reading. The grade equivalent for each student was ascertained from the standardized MAT table. Group mean scores were then computed. The raw scores attained in Math Computation, Math Concept and Math Problem Solving were combined to give the total Math score. Group mean

scores were computed by the method described for Reading.

Subsequent references to achievement in Reading and achievement in Mathematics will refer to the score attained for Total Reading and Total Math respectively.

It can be seen from Table 3.3 that Recent West Indian students have a lower mean score in all areas of Reading and all areas of Math than either Canadian West Indians or Canadian students. The extent of the differences in Reading and Mathematics mean scores is indicated by the data presented in Table 3.4 and Table 3.5.

#### HYPOTHESIS 1: ACADEMIC ACHIEVEMENT - READING

Hypothesis 1 states that: Canadian West Indians will show higher school achievement in Reading than Recent West Indians. The results of the analysis are indicated by the data presented in Table 3.4.

TABLE 3.4

Differences in Mean Scores  
in School Achievement in Reading

GROUPS COMPARED	VARIABLES			
	Word Knowledge	Reading	Spelling	Total Reading
CAN vs CWI	0.5	4.6	0.9	1.7
CAN vs RWI	12.0*	13.4*	8.3*	13.5*
CWI vs RWI	11.5*	8.8*	7.4*	11.8*

\* denotes significance at 5% level

\*\* denotes significance at 1% level

A comparison of the Reading Achievement of Canadians and Canadian West Indians showed small differences in mean scores and these were not significant.

A comparison of Reading achievement of Canadians and Recent West Indian students revealed that Recent West Indians performed significantly lower than Canadians in all areas of Reading.

Recent West Indians also performed significantly lower than Canadian West Indians on Word Knowledge, Reading Comprehension, and Spelling. The difference was significant at the five percent level of confidence.

Hypothesis 1 that Canadian West Indians will show higher school achievement in Reading than Recent West Indians has therefore been confirmed.

Discrepancies caused by the differences between the language of one's culture and the language of the host school have been documented as a possible cause, initially, for lower than average school achievement of West Indian students in Reading and related subjects. The findings indicate that as new immigrants become more adjusted to the host society, the discrepancies in language will have less effect on their reading achievement.

Two of the Reading subsets that were administered tested the students' competencies in word recognition and word meaning. Canadian West Indian students who have lived in Canada for longer than five years are more likely to have acquired vocabulary and internalized word meanings that are influenced by Canadian culture. The acquisition of these competencies will in turn enable them to perform higher on verbal tasks or on standardized tests such as the MAT, which demand verbal competencies.

Many new immigrants adjust with little difficulty to school life

and school curriculum. The findings on Reading, therefore, should illustrate some important aspects to be considered in interpreting and using test scores of West Indian immigrant students. Firstly, factors that affect students' learning are numerous and their interaction is very complex, therefore, an attempt to ascribe Reading achievement to an unidimensional factor, would be unrealistic. Secondly, a large number of Recent West Indians who speak a dialect frequently, do go through a language adjustment phase. It would therefore, be meaningful to use the results from tests such as the MAT as instruments for measuring degree and type of teacher intervention that might be necessary to enable these students to achieve in Reading as their length of stay in Canada increases. The conclusion can thus be drawn that Reading may be partially explained as a function of years spent in Canada.

#### HYPOTHESIS 2: ACADEMIC ACHIEVEMENT - MATHEMATICS

Hypothesis 2 states that: There will be no difference in school achievement in Mathematics between Canadian West Indian Students and Recent West Indian Students. Table 3.5 shows the results.

TABLE 3.5

Differences in Mean Scores of  
School Achievement in Mathematics

GROUPS COMPARED	VARIABLES			
	Math Computation	Math Concepts	Math Prob. Solving	Total Math
CAN vs CWI	2.8	3.9	-1.3	3.2
CAN vs RWI	8.0*	9.1*	3.3*	8.3*
CWI vs RWI	5.2	5.2	4.6	5.1

\* denotes significance at 5% level

\*\* denotes significance at 1% level

No significant differences were found between Canadian and Canadian West Indian students in any area of Mathematics.

A comparison of achievement in Mathematics between RWI and CAN students revealed that except for Problem Solving RWI performed significantly lower.

A comparison of achievement in Mathematics between CWI and RWI students revealed no significant differences between the groups in any area of Mathematics. Hypothesis 2 that there will be no difference in school achievement in Mathematics between CWI and RWI students has therefore been confirmed.

### Mathematics

Unlike Reading, the skills required for Mathematics are more universal and less influenced by culture in that, there is less demand on students' verbal skills whether oral or written. Also, the problems that low language competencies might pose for Reading are minimized in Mathematics except in Problem Solving. As a result, students may experience less difficulty in this subject area. The outcome may be a higher school achievement than that which is attained in Reading. One could conclude therefore, that Mathematics is less influenced by culture than Reading. This may well be the reason that no differences were found for achievement in Math between CWI and RWI students.

The data in Table 3.5 revealed that RWI, CWI and CAN all scored higher on Math Computation than on the more verbally oriented areas of Math Concept and Math Problem Solving. This may be explained by the fact that in the early grades of elementary school, a large proportion of students' Math time is devoted to Math Computation in the form of drill or practice exercises.

### HYPOTHESIS 3: SOCIAL CLASS

- (a) There will be differences in school achievement between Canadian West Indians of Lower SES and CWI of Middle SES.
- (b) There will be a significant difference in school achievement between Recent West Indians of Lower SES and Recent West Indians of Middle SES.

This study had intended to compare the achievement of RWI and CWI students according to lower and middle SES but when students were grouped into subcells, the number obtained were too small for meaningful statistical analysis. The distribution of students according to SES is shown in Table 3.2. Chi square analysis showed no significant differences between the various groups in terms of Socio Economic status. Therefore differences between the groups on Academic Achievement cannot be explained by SES.

Statistical analysis on the total sample population however, supports the trend found in research evidence by Ornstein (1978), Entwistle (1978) and McEwen et al (1975) which was documented in Chapter Two and which showed that academic achievement was influenced by social class. Data on the total sample population are presented in Table 3.6. The correlations obtained in this study, although on the low side, were nonetheless all in the predicted direction.



**TABLE 3.6**

**Correlations Between Socio Economic Status and School Achievement Using Total Population Sample**

ACHIEVEMENT VARIABLES	CORRELATION COEFFICIENTS
Word Knowledge	.19**
Reading	.16*
Total Reading	.17*
Spelling	.13*
Math Computation	.01
Math Concepts	.04
Math Problem Solving	.16*
Total Math	.05

\* denoted significance at 5% level

\*\* denoted significance at 1% level

#### HYPOTHESIS 4: LENGTH OF STAY

Recent West Indians will show higher school achievement as their Length of Stay in Canada increases.

The literature review on Recent West Indian students documented earlier in this study, revealed that adjustment in both school and community is one of the problems the new West Indian students must overcome. The extent to which they can do this successfully and the facility with which they accomplish it may be reflected in their school achievement. Related data obtained in this study are presented in Table 3.7 to Table 3.10.

Table 3.7 indicates the period of residence in Canada for Recent West Indian students. Tables 3.8 and 3.9 respectively, show the mean scores in Reading and Mathematics for the number of years RWI students have lived in Canada.

TABLE 3.7.

West Indians: Length of Stay

LENGTH OF STAY (in years)	NUMBER OF STUDENTS	PERCENTAGE
2 year or less	21	33.3
3 years	21	33.3
4 years	12	19.0
5 years	9	14.3
Total	63	100.0

TABLE 3.8

School Achievement and Length of Stay of RWI:  
Reading.

Residence in Canada Number of Years	Word Knowl.		Reading		Spelling		Total Read.	
	M	SD	M	SD	M	SD	M	SD
2 years or less	50.1	17.3	47.8	17.4	56.3	15.5	49.2	15.4
3 years	49.4	15.7	54.8	15.2	49.7	24.3	51.6	15.4
4 years	63.0	12.5	55.9	17.3	57.8	18.4	58.9	13.8
5 years	50.7	13.9	58.4	15.7	54.0	18.8	54.8	16.7

M = Mean, SD = Standard Deviation of Means

TABLE 3.9

## School Achievement and Length of Stay of RWI: Mathematics

Residence in Canada Number of Years	Math Comp.		Math Concepts		Math Prob. Solv.		Total Math	
	M	SD	M	SD	M	SD	M	SD
2 years or less	66.7	14.7	60.4	17.0	57.3	17.1	60.6	12.6
3 years	65.2	14.0	58.8	16.1	61.6	16.1	61.5	14.3
4 years	68.3	12.8	60.8	12.0	64.9	15.1	64.6	11.1
5 years	67.3	11.0	55.1	15.5	50.6	13.3	58.7	10.1

M = Mean, SD = Standard Deviation of Means

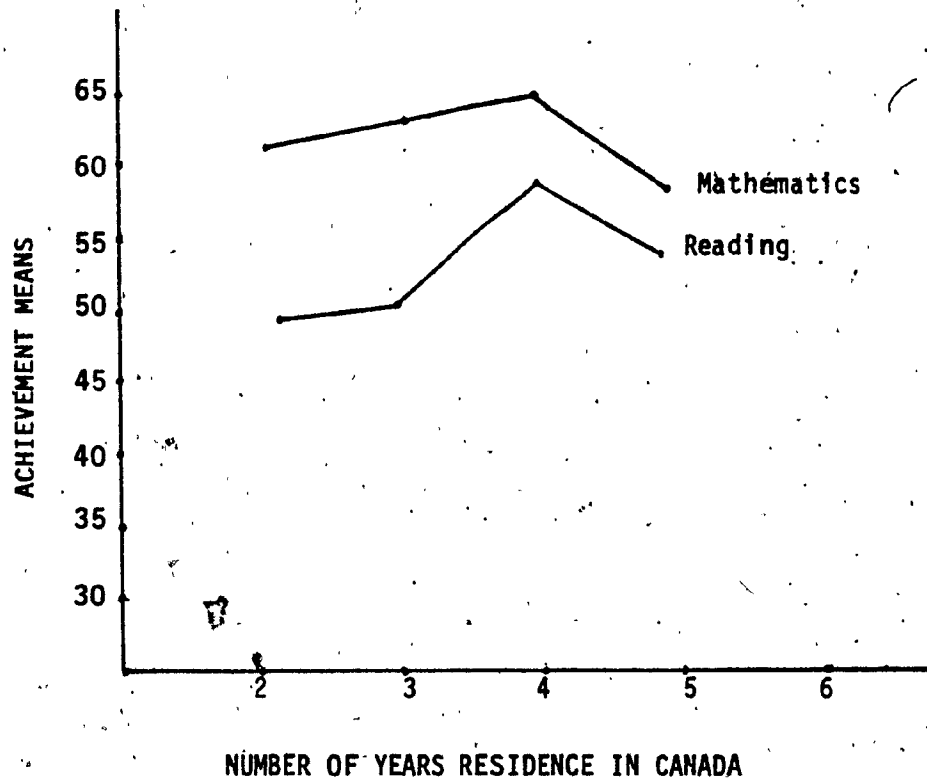
A cursory observation of the data in Table 3.7 showed that nearly seventy percent of West Indian students have been in Canada for three years or less, many of whom may have not yet adjusted to their new school system and community.

The data in Table 3.8 show some inconsistencies in achievement on the Reading subtests during the students' first four years in Canada. However, the means achieved in Total Reading show a consistent increase in achievement during the first four years in Canada and lower achievement during the fifth year. The data presented in Table 3.9 show a similar trend for achievement in Total Math. Hypothesis 4 that RWI will show higher school achievement as their Length of Stay increases has therefore been confirmed.

The mean scores for total Reading and Total Math are presented graphically in Figure 3.10 to show simultaneous progress in these two subject areas during students' first five years in Canada.

FIGURE 3.10

Graph Showing Length of Stay and School Achievement  
in Reading and Mathematics for Recent West Indians



The data in Figure 3.10 indicate consistent progress in both subject areas during the first four years and more so in Reading than in Mathematics even though scores in Mathematics are higher. The data also show that achievement decreased significantly after the fourth year for both Reading and Math. Had the study been able to survey the progress that WI have made over a longer number of years, the consistency of this trend could have been determined and more conclusive results would have been possible.

Several factors may, however, have contributed to the phenomenon indicated in Table 3.10. Students' performance after four years in Canada might be related to their self concept. The culture conflicts they continue to experience, the effects of their parents' disenchantment with their jobs might all have served to erode their initial motivation to succeed, a motivation that is peculiar to both new immigrant parents and students.

#### HYPOTHESIS 5: WEST INDIAN DIALECT USAGE

There will be differences in achievement in Reading between students who speak dialect frequently and those who do not.

Fifty nine (or 64.1%) of the West Indian students reported that they also spoke a West Indian dialect. Three tables will be presented later in this section to show: (a) the frequency with which dialect is used among West Indian students, (b) the Reading mean scores for speakers and non speakers of West Indian dialect, (c) differences in mean scores for students who speak dialect and those who do not. Table 3.11 shows the frequency with which dialect is spoken by West Indian students.

TABLE 3.11

West Indian Students (n = 92) - Dialect Usage:  
Frequencies and Percentages

RESPONSES TO: How Often Do You Speak Dialect?		Frequencies	%
With Parent(s)	always	6	6.5
	most of the time	11	12.0
	sometimes	26	28.2
	almost never	7	7.6
	never	42	45.7
	Total	92	100.00
With Brother(s) or Sister(s)	always	13	14.1
	most of the time	15	16.3
	sometimes	18	19.6
	almost never	6	6.5
	never	40	43.5
	Total	92	100.0
With Friend(s)	always	6	6.5
	most of the time	13	14.1
	sometimes	33	35.9
	almost never	10	10.9
	never	30	32.6
	Total	92	100.0

It can be seen from Table 3.11 that the majority of West Indian students who speak dialect do so only sometimes and particularly among friends. The findings also show that 6.5% of West Indians speak dialect all the time with their parents. The same percentage speak it frequently with friends, whereas about twice as many (14.1%) speak it frequently with their brothers and sisters. These data are shown below in Table 3.12.

TABLE 3.12

West Indian Students: (N = 92)  
High Frequency Users of Dialect

FREQUENCY	With Parent(s)		With Siblings(s)		With Friend(s)	
	N	%	N	%	N	%
Always	6	6.5	13	14.1	6	6.5
Most of the time	11	12.0	15	16.3	13	14.1

The data in Table 3.12 indicate that dialect is reinforced at home among high frequency users and particularly among siblings. The implications for school success could be a low competency in the use of standard Canadian English (Beserve 1876). This low competency could in turn be reflected in these students' achievement in Reading as a direct result, and in other subject areas as well.

To determine whether Reading achievement is affected by dialect usage, an analysis of variance was used. A comparison was made between

the mean scores of students who always speak dialect and those who never do. The results are represented by the first and last scores presented in Table 3.13.

**TABLE 3.13**

**West Indian Students  
Reading Mean Scores for Dialect Speakers and  
Non Dialect Speakers\***

Dialect: Frequency Spoken	With Parents		With Sibling(s)		With Friend(s)	
	M	SD	M	SD	M	SD
always	51.8*	12.9	49.5*	10.8	54.2*	14.4
most of the time	52.4	9.3	52.7	12.3	55.7	12.0
sometimes	54.1	13.1	60.2	16.5	53.8	16.0
almost never	59.4	12.3	61.5	11.0	62.7	15.4
never	63.5*	18.2	63.1*	18.0	63.8*	17.4

\* denotes significance at 5% level

\*\* denotes significance at 1% level

Whether or not dialect is spoken with parents, siblings or friends - except in one instance, the data in Table 3.13 point to a consistent trend, that is, Reading mean scores become progressively higher as the students' use of dialect becomes less frequent. However, only between those students who always use dialect and those who never do, that a statistically significant difference in achievement in Reading was found. Hypothesis 6 that there will be differences in achievement in Reading between students who use dialect frequently and those who do not has thus been confirmed.



Findings reported earlier showed that no significant differences existed between RWI and CWI students on the basis of social class; therefore, frequent dialect usage may be explained as a possible reason for lower achievement in Reading irrespective of the SES group to which the students belong.

The conclusion can be drawn that, outside the classroom, only when dialect is used almost entirely over standard Canadian English will achievement in Reading be adversely affected. If dialect is a factor in Reading, then, as a result, RWI and CWI students may show differences in achievement.

In order to determine if there were significant differences between mean scores of RWI and CWI students who use dialect; further investigation was done by means of the Turkey Multiple Range Test. A 5% probability was taken as level of significance. The results are shown in Table 3.14.

TABLE 3.14

Group Means of Students who use  
West Indian Dialect

GROUP	With Parents Mean	With Siblings Mean	With Friends Mean
RWI	3.54	3.22	3.29
CWI	4.17	4.07	3.93
Difference	0.73*	0.85*	0.64*

\* 5% level of significance

\*\* 1% level of significance

The inference could be made that as length of stay in Canada increases for West Indian students, West Indian dialect is used less often, while standard Canadian English is simultaneously used more frequently, hence the reason that CWI show higher mean scores than RWI. If dialect is used consistently among RWI or CWI, then the effects would be reflected in Reading Achievement.

On the whole, the findings show that dialect is used most frequently among siblings. The findings also show that it is among these students that the greatest effects of dialect usage on achievement in Reading occur.

#### PARENTAL CONCERNS

Test items in this area focussed on the type and degree of involvement that students perceived their parents have shown towards their progress in school. Responses to the questions asked are presented in Tables 3.15 to 3.17.

Students were asked to indicate the frequency with which parents assisted them with school work. Results of the responses are shown in Table 3.15.

TABLE 3.15

Degree of Parental Assistance with  
School Work

Students' Responses	GROUP					
	RWI		CWI		CAN	
	N	%	N	%	N	%
never	10	15.9	0	0.0	12	16.0
almost never	8	12.7	3	10.3	12	16.0
sometimes	28	44.4	7	24.1	33	44.0
most of the time	11	17.5	2	6.9	7	9.3
always	6	9.5	17	58.7	11	14.7
Total	63		29		75	

$$- \chi^2 = 2.3, df = 4, p = .319$$

Although chi square tests revealed no significant differences between groups, nevertheless, a visual inspection of the table does show some interesting responses. In the absence of the statistical significance, these patterns should be regarded as trends rather than firm conclusions.

The responses in Table 3.15 indicate that CWI students receive more assistance with school work from their parents than do RWI. Whereas all CWI students reported that they get assistance from their parents, 15.9 percent of RWI reported that their parents never assist them with school work. One reason for this finding could be explained by the fact that many new West Indian parents may be unfamiliar with the types of assignments their children are given in school and need time to familiarize themselves with the tasks given to their children in school. Another reason may be that parents are too busy trying to earn

a living and make ends meet, to have the energy to devote an adequate amount of time assisting their children with their school work.

Students were asked to indicate the degree with which parents insisted that they study. Results of the responses are shown in Table 4.11.

TABLE 3.16

Degree to which Parents Insist that their Children Study

Students' Responses	GROUPS					
	RWI		CWI		CAN	
	N	%	N	%	N	%
always	43	68.2	15	51.7	53	70.7
most of the time	5	7.9	4	13.8	11	14.7
sometimes	11	17.5	9	30.1	7	9.3
almost never	1	1.6	0	0.0	3	4.0
never	3	4.8	1	3.5	1	1.3
Total	63		29		75	

$$\chi^2 = 18.4, df = 4, p = .998$$

Chi square reveals the differences between group to be significant.

The data in Table 3.16 show that the majority of parents insist that their children study: 51.7 percent of CWI parents insisted, compared to 68.2 of RWI. These findings support the postulations made about the data in Table 3.16. New West Indian parents tell their children to study because as Banks (1971) suggests, most parents do have high aspirations for their children. However, only active involvement with their children's

school work would enable parents to provide students with the assistance and motivation that is crucial to their success in school.

Students were asked to indicate the degree to which they thought their parents value education. Results of the responses are presented in Table 3.17.

TABLE 3.17

Degree to which Students think  
Parents Value Education

Students Responses	Group					
	RWI		CWI		CAN	
	N	%	N	%	N	%
extremely so	31	49.2	17	58.6	39	52.0
very much	22	35.0	7	24.1	28	37.4
moderately	5	7.9	4	13.8	4	5.3
not at all	0	0.0	0	0.0	0	0.0
not sure	5	7.9	1	3.5	4	5.3
Total	63		29		75	

$$\chi^2 = 7.3, df = 4, p = .879$$

The data in Table 3.17 indicate that the majority of students felt that their parents placed a high value on education. Only one CWI reported that he was not sure and five RWI had doubts. Although chi square tests reveal no significant differences between the groups, nevertheless, a visual inspection of the table shows that the frequency of responses followed the expected trends. In the absence of statistical significance, the finding should be regarded as trends rather than firm conclusions.

Pearson correlation coefficients were computed to determine if there was any relationship between parental concerns and achievement in Reading and Mathematics. The data are presented in Table 3.18 and Table 3.19.

#### HYPOTHESIS 6: PARENTAL CONCERNS - READING

Hypothesis 6 states that there will be a positive correlation between Parental Concerns and School Achievement in Reading. The results are presented in Table 3.18.

TABLE 3.18

Correlations Between Parental Concerns  
and Achievement in Reading

VARIABLES	Correlation Coefficients		
	RWI	CWI	CAN
parents' assistance with school work	-.06	.04	-.12
parents' insistence on study	-.10	-.07	.15
parents' value on education	-.18	-.27	-.06

\* denotes significance at 5% level

\*\* denotes significance at 1% level

An inspection of Table 3.18 would reveal that for the three study groups, parental concerns were not significantly correlated with achievement in Reading. Hypothesis 1 that there would be a positive correlation between parental concerns and school achievement in Reading has not therefore been supported.

The non significant correlation found between parental concerns and achievement in Reading is surprising, and is contrary to research evidence by Ornstein (1978) and Banks (1971) documented earlier in the

study. One probable explanation could be that the majority of students were from lower SES backgrounds and parents, although wishing their children success in school, might not have been able to give them the educational support needed for success in school. The studies referred to, show that any effect on achievement would also be partially determined by the degree to which parents motivate their children.

HYPOTHESIS 7: PARENTAL CONCERNS - MATHEMATICS

There will be a positive correlation between Parental Concerns and School Achievement in Mathematics.

Table 3.19 shows correlation coefficients which indicate the relationship between parental concerns and achievement in Mathematics.

TABLE 3.19

Correlations Between Parental Concerns and Achievement in Mathematics

VARIABLES	Correlation Coefficients		
	RWI	CWI	CDN
parents' assistance with school work	.03	-.17	-.11
parents' insistence on study	.14	-.09	.29*
parents' value of education	.21*	-.10	.09

\* denotes significance at 5% level  
 \*\* denotes significance at 1% level

A positive correlation was found between parents' value of education and achievement in Mathematics for RWI students but no correlations were found for the other two groups. As in the case of Reading, a negative correlation was found between all variables of parental concerns and achievement in Mathematics for CWI students.

A highly positive correlation was found for Canadian students between parents insistence on study and achievement in Mathematics while a negative correlation was found between the other two variables of parental concerns. Hypothesis 7 that there would be a positive correlation between parental concerns and school achievement in Mathematics has only been confirmed with respect to RWI but not the other two groups.

Table 3.17 showed that a large percentage of the subjects in each study group reported that their parents value education highly, yet, only for RWI was a correlation found between parental value of education and achievement. This correlation was found only for Mathematics.

Generally, one would expect Parental Concerns to correlate positively with School Achievement but such was hardly the case in this study. It is not clear why correlations were generally negative. It may be that students overestimated their parents' concerns with regard to the actual progress that they were making in school. Thus, any further investigation of Parental Concerns should also involve direct interview with West Indian parents.



### HYPOTHESIS 8: STUDENTS' ADJUSTMENT AND SATISFACTION WITH SCHOOL

- (a) There will be a positive correlations between Reading Achievement and degree of School Satisfaction.
- (b) There will be a positive correlation between Mathematics Achievement and degree of School Satisfaction.
- (c) Students will find that adjustment in the classroom and curriculum content will pose the greatest difficulty for them.

Questions in this area were designed to assess students on certain variables. Results were analyzed to determine (a) if students' satisfaction with school was related to their achievement in Reading and Mathematics; (b) the difficulties that students were encountering with regard to school work, student teacher relationship and the curriculum; and (c) whether or not Recent West Indian students encountered more difficulties in school than Canadian West Indians. The findings relating to responses to the questions on these areas are given in Tables 3.20 to 3.30.

It was predicted that there would be a positive correlation between students' satisfaction with school, and achievement in both Reading and Mathematics. Pearson product moment correlation coefficients were calculated. The results are presented in Table 3.20 and Table 3.21.

TABLE 3.20

Correlations Between Students' Satisfaction with School and Achievement in Reading

VARIABLES TESTED	Correlation Coefficients		
	RWI	CWI	CAN
Satisfaction with School	.17	-.19	.20*

\* denotes significance at 5% level

\*\* denotes significance at 1% level

As shown in Table 3.20, a negative correlation was found between school satisfaction and achievement in Reading for both West Indian groups. A positive correlation was found for Canadian students.

TABLE 3.21

Correlations Between Students' Satisfaction with School  
and Achievement in Mathematics

VARIABLE TESTED	Correlation Coefficients		
	RWI	CWI	CAN
Satisfaction with School	.21*	-.07	.04

\* denotes significance at 5% level

\*\* denotes significance at 1% level

An inspection of Table 3.21 shows that only among RWI students was a positive correlation found between satisfaction with school and achievement in Mathematics. Hypothesis 8(a) that there will be a positive correlation between Reading Achievement and degree of school satisfaction and Hypothesis 8(b) that there will be positive correlation between Mathematics achievement and degree of school satisfaction have only been partially confirmed.

In an effort to determine students' satisfaction with school, students were asked to tell the degree with which they liked school. The responses are presented in Table 3.22.

TABLE 3.22

## Degree of Students' Satisfaction with School

RESPONSES TO DO YOU LIKE SCHOOL?	GROUP					
	RWI		CWI		CAN	
	N	%	N	%	N	%
like it very much	33	52.4	11	38.0	38	50.7
like it somewhat	16	25.4	11	38.0	26	34.7
not sure	9	14.3	5	17.2	4	5.3
dislike it somewhat	5	7.9	2	6.8	6	8.0
dislike it very much	0	0.0	0	0.0	1	1.3
Total	63		29		75	

$$\chi^2 = 5.3, df = 4, p = .742$$

Although chi square tests revealed no significant differences between groups, nevertheless, a visual inspection of Table 3.22 does show some interesting responses. In the absence of statistical significance, these responses should be regarded as trends rather than firm conclusions. A substantial percentage (52.4%) of RWI students reported that they liked school, 14.3% were not sure while 7.9% said they disliked it. The fact that a substantial number of RWI reported that they liked school should indicate that the school system ought to ensure that these students experience some measure of success as their length of stay in Canada increase so that they might not become disillusioned because of any initial inability to cope with school, both academically and socially. A smaller percentage (38%) of CWI students reported that they liked school while 24% were either not sure or disliked school somewhat.

Although chi square tests revealed no significant differences between groups, the data presented in Tables 3.23 to 3.26 and Tables 3.28 to 3.30 should be regarded as useful information rather than firm conclusions.

Students were asked to indicate the degree of difficulties they had with school work. Their responses are presented in Table 3.23.

TABLE 3.23

Degree of Difficulties Reported with School Work

Responses To Do You Find Your School Work Difficult?	GROUP					
	RWI		CWI		CAN	
	N	%	N	%	N	%
extremely so	1	1.6	2	6.9	1	1.3
very much so	1	1.6	2	6.9	1	1.3
moderately so	7	11.1	3	10.3	9	12.0
just a little	43	68.2	18	62.1	56	74.7
not at all	11	17.5	4	13.8	8	10.7
Total	63	100.0	29	100.0	75	100.0

$$\chi^2 = 8.0, \text{ df} = 4, \text{ p} = .908$$

Chi square revealed that there was a statistically significant difference between groups. A cursory survey of Table 3.23 indicates that only a small percentage of students reportedly have grave difficulties with school work, RWI 32.%, CWI 13.8%, and CAN 2.6%. Contrary to this finding, observations within the PSBGM school system indicate that a higher percentage of RWI are experiencing difficulties with school work.

In an effort to determine whether Reading posed more difficulty for students than Mathematics, students were asked to tell which of the two they found more difficult. Their responses are presented in Table 3.24.

TABLE 3.24

Students Responses to Whether They Found English or Mathematics Difficult

RESPONSES	GROUP					
	RWI		CWI		CAN	
	N	%	N	%	N	%
Neither	22	34.9	7	24.1	22	29.3
English only	10	15.9	5	17.2	10	13.3
Math only	14	22.2	5	17.2	22	29.3
Both	2	3.2	0	0.0	5	6.7
Not sure	15	23.8	12	41.5	16	21.4
Total	63		29		75	

$$\chi^2 = 7.7, \quad df = 4, \quad p = .896$$

A higher percentage (34.9%), of RWI students reported that they had no difficulty with either English or Math compared to 24.1% of CWI students. Fifteen point nine percent (15.9%) of RWI reported that they had difficulties with English only, compared to 22.2% who said that Math posed the greater difficulty for them. 17.2% of CWI reported that only English posed difficulty for them while the same number reported that Math was more difficult (see Table 3.24).

To determine the extent to which other school life would enable students to become more satisfied with school, they were asked to tell

the frequency with which they asked their teachers for help when they had difficulties with school work. Their responses are presented in Table 3.25.

**TABLE 3.25**

Frequency with which Students Requested Help from their Teachers when they had Difficulties with School Work

RESPONSES	GROUP					
	RWI		CWI		CAN	
	N	%	N	%	N	%
always	5	7.8	4	13.8	11	14.7
most of the time	8	12.7	6	20.7	17	22.6
sometimes	40	63.5	15	51.7	40	53.3
almost never	8	12.7	4	13.8	5	6.7
never	2	3.2	0	0.0	2	2.7
Total	63	100.0	29	100.0	75	100.0

$$\chi^2 = 10.4, df = 4, p = .998$$

Chi square revealed differences between groups to be significant. The data presented in Table 3.25 shows that the majority of students in the three study groups sometimes ask their teachers for help when they have difficulties. Two RWI students reported that they never ask their teachers for help.

Students were also asked to tell whether or not they found it easy to speak to their teachers. Their responses are presented in Table 3.26.

TABLE 3.26

Degree to which Students Spoke to their Teachers

RESPONSES	GROUP					
	RWI		CWI		CAN	
	N	%	N	%	N	%
always	14	22.2	7	24.1	20	26.7
most of the time	10	15.9	7	24.1	23	30.6
sometimes	21	42.9	15	51.8	29	38.7
almost never	7	11.1	0	0.0	0	0.0
never	5	7.9	0	0.0	3	4.0
Total	63	100.0	29	100.0	75	100.0

$\chi^2 = 19.6, df = 4, p = .999$

Chi square revealed differences between groups to be significant. Twelve RWI students (18%) reported that they were never at ease when speaking to their teachers. The implications are that many West Indian students will have problems both social and academic, that are compounded in school because they are too shy to speak to their teachers. School setting in the West Indies fosters a more passive relationship between student and teacher. It might, therefore, take some students a long period of time before they become at ease with their new teachers. No CWI students reported having this difficulty with their teachers. This might be an indication that they have become adjusted to the school system.

Students were asked to report the area of school adjustment which they found most difficult to cope with. The question was designed to

test Hypothesis 8(c) that students will find that adjustment in the classroom and curriculum content will pose the greatest difficulty for them. This hypothesis is supported by the data presented in Table 3.27.

**TABLE 3.27**  
**Areas of School Adjustment Students Found Most Difficulty to Cope with**

RESPONSES	1st Choice						2nd Choice					
	RWI		CWI		CAN		RWI		CWI		CAN	
	N	%	N	%	N	%	N	%	N	%	N	%
-teachers' instruction in class	16	25.4	13	44.9	18	24.0	9	14.3	3	10.3	3	4.0
-school subjects	16	25.4	4	13.8	8	10.7	10	15.9	4	13.8	11	14.7
-teachers' attitude toward you	3	4.8	5	17.2	9	12.0	9	14.3	1	3.4	2	2.6
-giving your opinions in class	18	28.6	4	13.8	19	25.3	12	19.0	6	20.7	8	10.7
-doing your homework	5	7.9	1	3.4	10	13.3	5	7.9	6	20.7	25	33.3
-no answer	5	7.9	2	6.9	11	14.7	18	28.6	9	30.1	26	34.7
<b>Total</b>	<b>63</b>	<b>100.0</b>	<b>29</b>	<b>100.0</b>	<b>75</b>	<b>100.0</b>	<b>63</b>	<b>100.0</b>	<b>29</b>	<b>100.0</b>	<b>75</b>	<b>100.0</b>

$\chi^2 = 0.5, df = 5, p = .007$      $\chi^2 = 0.4, df = 5, p = .004$



The data in Table 3.27 shows that 28% of Recent West Indians have difficulty giving their opinions in class compared to 13.8% of Canadian West Indians. As many as 25% of RWI have difficulty coping with teachers' instructions compared to a notably high percentage of CWI (44.9%). Only 10% of CWI reported difficulties with school subjects compared to 25.4% of RWI. The reported differences between the three study groups were also highly significant.

Table 3.28 shows the number of difficulties selected by students of each ethnic group.

TABLE 3.28

Number of School Difficulties selected according to Ethnic Groups

NUMBER OF DIFFICULTIES SELECTED	GROUP					
	RWI		CWI		CAN	
	N	%	N	%	N	%
two	18	28.6	9	31.0	6	8.0
one	40	63.5	18	62.1	57	76.0
none	5	7.9	2	6.9	12	16.0
Total	63	100.0	29	100.0	75	100.0

$$\chi^2 = 2.2, \text{ df} = 2, p = .667$$

The findings indicate that Recent West Indians have their greatest difficulties giving their opinions in class and coping with the instructions of their teachers. This problem might be most evident among students who speak mainly dialect. They might be aware that their teacher is unfamiliar with their language forms. Furthermore, they may be inhibited because they are sensitive to the fact that their different

language form might be causing confusion between themselves and the teacher, in that neither clearly understands the other. If this is the case, these students are not likely to participate fully in class when demands are made of their oral language.

Similar findings were shown for Canadian West Indian students. The large percentage (44.9%) of CWI students who have indicated that teachers' instructions posed the greatest for them indicates that there might be a communication gap between some West Indian students and their teachers for various reasons other than those suggested for RWI. These students also reported that teachers' attitude towards them was another major problem of adjustment. These findings could lead to the conclusion that CWI students are presently, not nearly as goal oriented as when they had been new immigrants. They might be "turning off" teachers because they see them as representing the larger work establishment in which their parents are making limited success.

Responses to the questions designed to determine (a) the number of evenings students do homework each week and (b) the amount of time spent on homework those evenings are presented in Tables 3.29 and 3.30 respectively.

TABLE 3.29

Number of Evenings each week that Homework  
was done

Reported Number of Evenings Students Did Homework	Group					
	RWI		CWI		CAN	
	N	%	N	%	N	%
0	0	0.0	0	0.0	0	0.0
1	2	3.2	0	0.0	2	2.6
2	2	3.2	3	10.3	7	9.3
3	20	31.7	7	24.1	15	20.0
4	9	14.3	4	13.8	16	21.3
5	30	47.6	15	51.8	35	46.7
Total	63		29		75	

$$\chi^2 = 2.29, df = 4, p = .425$$

All the subjects of the sample population reported doing homework. Approximately fifty percent (50%) of students, in each study group reported that they did homework five evenings each week. Thirty one point seven percent (31.7%) of RWI and twenty four point one percent (24.1%) of CWI did homework three evenings each week while fourteen point three percent (14.3%) of RWI and thirteen point eight percent (13.8%) of CWI did it four evenings each week.

TABLE 3.30

Amount of time Students spend per Evening doing Homework

Time Spent per Evening on Homework	GROUP					
	RWI		CWI		CAN	
	N	%	N	%	N	%
none	0	0.0	0	0.0	0	0.0
15 mins.	20	31.7	7	24.1	7	9.3
30 mins.	16	25.4	10	34.5	21	28.0
45 mins.	15	23.8	6	20.7	18	24.0
1 hr. or longer	12	19.1	6	20.7	29	38.8
Total	63		29		75	

$$\chi^2 = 4.2, df = 4, p = .620$$

Thirty one point seven percent (31.7%) of RWI and twenty four point one percent (24.1%) of CWI spend only fifteen minutes on homework as compared to nine point three percent (9.3%) of CAN. Nineteen point one percent (19.1%) of RWI and twenty point seven percent (20.7%) of CWI spend one hour or longer doing homework as compared to thirty eight point seven percent (38.7%) of CAN. The majority of students in each study group however, reportedly spend thirty to forty five minutes per evening on homework.

The substantial number of West Indian students who spend only fifteen minutes on homework are hardly likely to be students who were supervised by parents. It is also very unlikely that these students would be able to do any challenging school work within such a short period of time. Since a large percentage of students reportedly did

homework five evenings per week, (RWI - 47.6%, CWI - 8%), it seems that parents are provided with many opportunities to assist their children by providing them with adequate amounts of supervision with the homework.

## CHAPTER FOUR

## CONCLUSIONS

SUMMARY OF FINDINGS

Of the ninety two West Indian students studied, twenty nine had lived in Canada for more than five years and sixty three for five years or less. The majority of the students were from lower SES backgrounds. Only twenty nine students were from middle SES backgrounds.

No significant differences were found between the study groups on the basis of SES, consequently, school achievement could not be analysed on the basis of this independent variable.

The findings showed that RWI students performed significantly lower than CWI students on all areas of Reading. No significant differences were found, however, between the two groups in achievement in Mathematics.

While no significant differences were found between CAN students and CWI students in achievement, in either Reading or Mathematics, the performance of RWI students was significantly lower than CAN students in Reading and in all areas of Mathematics, except for Problem Solving.

Achievement in both Reading and Mathematics was found to increase as Recent West Indians' Length of Stay in Canada increased. This was, however, consistent only for the students' first four years in Canada.

While the majority of West Indian students spoke a dialect, only a small percentage spoke it frequently. As might be expected, high frequency users of dialect were found to have a significantly lower achievement in Reading than (a) students who never used dialect and (b) those students who use it only infrequently.

It is of interest to note that Parental Concerns were only partially correlated with achievement for both the study group and the control group. For CWI students, no positive correlation was found between Parental Concerns and achievement in either Reading or Mathematics. A positive correlation was found for RWI students when achievement in Mathematics was correlated with parents' value of education. A negative correlation was found for Reading.

In the case where parents' insistence on study was correlated with Achievement in Mathematics, a positive correlation was found only for CAN students. A negative correlation was found, however, between Parental Concerns and Achievement in Reading for CAN students.

The findings showed that RWI and CWI Students' Adjustment and Satisfaction with school was negatively correlated with Reading Achievement. The opposite was found for CAN students.

Among RWI students, satisfaction with school was found to be positively correlated with Achievement in Mathematics but negatively for CWI and CAN students.

An assessment of Students' Difficulties with school revealed that the majority of students reported that school work was not their greatest difficulty in adjusting to school. Giving their opinions in class was the most difficult aspect of School Adjustment for RWI students (Table 3.27), while teachers' instruction in class posed the greatest difficulty for CWI and CAN students like.

The majority of West Indian students did homework at least three evenings each week but a substantial number spent too little (< 15 mins.) on homework each evening (Table 3.30).

### IMPLICATIONS OF FINDINGS

This study found that there is a positive relationship between Length of Stay and Academic Achievement of West Indian Immigrant students. The findings show that for Recent West Indian students, achievement in Reading and Mathematics improved consistently during the students' first four years in Canada but declined in both subjects in the fifth year. Canadian West Indian students, however, performed as well as native Canadian students. What are the implications of these findings?

Educationists are constantly on the lookout for factors that would explain the apparent lower academic achievement among West Indian students. The most obvious explanation appears to be in terms of culture conflict. Rarely is an explanation based on the process of teacher, student and classroom interaction within the school.

The fact that no significant differences could be found between the academic achievement of CWI and CAN students indicate that despite their different cultural background, West Indian students have the potential to do well in Canadian schools. The CWI students performed at a level that was not significantly different from CAN students in both Reading and Mathematics. Despite the adjustment problems that the new West Indians encounter in school, this study has shown that it is erroneous to assume that West Indian students are potentially lower achievers than native Canadian children. Recent West Indian students performed significantly lower than CAN students in Reading and Mathematics. Reasons other than lower academic potential, however, should be sought to explain these differences in achievement.

Research in England by Little et al (1971) showed that when the performance of British children and West Indian children was compared, the



performance of new West Indian immigrants was initially lower. The findings of the present study indicate that differences in culture and the length of time West Indian students have spent in Canada are reasonable explanations for the differences in academic achievement between RWI and CAN students. Little et al (1971) arrived at a similar conclusion that initial differences in school performance between the West Indian and British groups was due largely to culture shock.

Length of Stay has a greater influence on the achievement of West Indian students than culture does. This is borne out by the fact that even though the Reading Achievement of RWI students was significantly lower than that of CAN students there was no significant difference between CWI and CAN students on these variables. This indicates that with the passage of time the achievement of RWI should become comparable to CAN students.

Many new West Indian students on entering the school system, have difficulty coping with the level of work with which they are presented in class. Difficulties will arise because of their different experiences or lack of experiences in certain skills which are required to enable them to make progress in class. Initially, many new West Indians, therefore, might not be able to master specific areas of the academic curriculum that are generally taught within a given term or school year in the average class. In some instances, many students might require twice as much time to cover that same work whilst they simultaneously adjust to their new school system. These are the students who are, thus, likely to show lower than normal achievement.

Two courses of action are possible to help those students who initially underachieve in the new school system but these might not be

without certain repercussions. The first course of action could be one that requires the students to repeat the school year so that they might be provided with an adequate amount of time to master the skills they lacked. The PSBGM school system does not allow for a student in the elementary school to repeat a grade more than once. Once a student has repeated a grade, thereafter, he is often promoted whether or not he can cope with the level of work for his class.

Many new West Indians of High School age are reading three to four years below grade level when they join the school system. For psychological reasons it might be unwise to place them in grades comparable to their abilities. If non-promotion of new West Indian students were to be taken as a possible course of action it would have to be done very cautiously so that it does not become the rule. It could not, however, be implemented without causing several questions to be raised by Black educators of Quebec.

The second course of action that could be helpful to West Indian students who are underachieving could be, intensive remediation in skills in which students are weak. Where possible, students should be worked with individually, or in small groups. Emphasis should be on language skills, and mastery of oral and written Standard Canadian English since these are areas in which West Indian students are shown to have their greatest difficulty. Whole classes of West Indian students should be avoided because they might eventually become "special classes."

Parental Concerns were found to influence the achievement of West Indian students only to a small degree. This was an unexpected finding. It has been well documented that social class is related to school achievement. Had the study been able to determine, therefore, the

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APPENDIX A

Your help is needed in completing the following questionnaire as accurately as you can. Your answers will provide information that might help teachers understand your feelings about school, and compare these with your progress in school.

AFTER USE THIS PAGE WILL BE DISCARDED  
TO RETAIN ANONYMITY. QUESTIONNAIRE  
WILL BEAR ONLY A SERIAL NUMBER.

SURVEY QUESTIONNAIREPART A

Name of Student \_\_\_\_\_

Male \_\_\_\_\_ Female \_\_\_\_\_

Age \_\_\_\_\_

Name of Teacher \_\_\_\_\_

Grade \_\_\_\_\_

Father's Occupation \_\_\_\_\_ Give Mother's if no

Father at home \_\_\_\_\_

Give previous occupation if parent is unemployed:

Father \_\_\_\_\_ Mother \_\_\_\_\_

For each of the following questions check one answer

Were you born in Canada? Yes \_\_\_\_\_ No \_\_\_\_\_

Check if your parents were born in Canada.

Father \_\_\_\_\_ Mother \_\_\_\_\_ Both \_\_\_\_\_

Check if your parents were born in the West Indies.

Father \_\_\_\_\_ Mother \_\_\_\_\_ Both \_\_\_\_\_

How long have you been living in Montreal?

less than 1 year \_\_\_\_\_

1 year \_\_\_\_\_

2 years \_\_\_\_\_

3 years \_\_\_\_\_

4 years \_\_\_\_\_

5 years \_\_\_\_\_

over 5 years \_\_\_\_\_

PART B

1. Do you like school:

like it very much \_\_\_\_\_

like it somewhat \_\_\_\_\_

not sure \_\_\_\_\_

dislike it somewhat \_\_\_\_\_

dislike it very much \_\_\_\_\_

2. Do you find your school work very difficult?

extremely so \_\_\_\_\_

very much so \_\_\_\_\_

moderately so \_\_\_\_\_

just a little \_\_\_\_\_

not at all \_\_\_\_\_

3. Which of the following do you find the most difficult to cope with? Write 1 for your first choice and 2 for second.

your teachers' instructions in class \_\_\_\_\_

your school subjects \_\_\_\_\_

teachers' attitude towards you \_\_\_\_\_

giving your opinions in class \_\_\_\_\_

doing your homework \_\_\_\_\_

4. Of English and Mathematics, which do you find difficult?

Neither \_\_\_\_\_

English only \_\_\_\_\_

Math only \_\_\_\_\_

Both \_\_\_\_\_

Not sure \_\_\_\_\_

5. Do you ask your teachers for help when you have difficulty with your work?

always \_\_\_\_\_  
 most of the time \_\_\_\_\_  
 sometimes \_\_\_\_\_  
 almost never \_\_\_\_\_  
 never \_\_\_\_\_

6. Do you find it easy to speak to your teacher?

always \_\_\_\_\_  
 most of the time \_\_\_\_\_  
 sometimes \_\_\_\_\_  
 almost never \_\_\_\_\_  
 never \_\_\_\_\_

7. Do you use West Indian dialect at home? Yes--- No---

With your parent(s)?

always \_\_\_\_\_  
 most of the time \_\_\_\_\_  
 sometimes \_\_\_\_\_  
 almost never \_\_\_\_\_  
 never \_\_\_\_\_

With your brother(s) or sister(s)?

always \_\_\_\_\_  
 most of the time \_\_\_\_\_  
 sometimes \_\_\_\_\_  
 almost never \_\_\_\_\_  
 never \_\_\_\_\_

8. Do you speak West Indian dialect with your friends?

always \_\_\_\_\_

most of the time \_\_\_\_\_

sometimes \_\_\_\_\_

almost never \_\_\_\_\_

never \_\_\_\_\_

9. How often do you get help from your parent(s) with school work?

never \_\_\_\_\_

almost never \_\_\_\_\_

sometimes \_\_\_\_\_

most of the time \_\_\_\_\_

always \_\_\_\_\_

10. Do your parents insist that you study?

always \_\_\_\_\_

most of the time \_\_\_\_\_

sometimes \_\_\_\_\_

almost never \_\_\_\_\_

never \_\_\_\_\_

11. How much do you think your parents value education?

extremely so \_\_\_\_\_

very much \_\_\_\_\_

moderately \_\_\_\_\_

not at all \_\_\_\_\_

not sure \_\_\_\_\_



12. How many evenings each week do you do school work?

0  1  2  3  4  5

13. How much time do you usually spend doing homework?

none

15 mins.

30 mins.

45 mins.

1 hr. or longer

APPENDIX BINSTRUCTIONS FOR ADMINISTERING METROPOLITAN ACHIEVEMENT TESTS:

Name of Subtest: \_\_\_\_\_

TO STUDENTS

This is a \_\_\_\_\_ MINUTE \_\_\_\_\_ test. Your scores on this test will not be used for any part of your school marks. However, you should try to do your best. Your answers are only intended to provide information on those areas of your school work in which you may need more help.

I will tell you when to start and when to stop the test. Try to work quickly, but carefully. Write in the booklet by circling the correct answers for each question. You may not finish the test, however, do as much as you can in \_\_\_\_\_ minutes. Ready! Start.

Starting Time -----

Time Limit -----

Stop pupils at -----

Metropolitan Achievement Tests

Advanced Form F Levels 7 - 9.5

Intermediate Form F Levels 5.0 - 6.9

<u>Subtests</u>	<u>Time</u>	<u>Items</u>
1. Word Knowledge	15 mins.	1 - 50
2. Reading	25 mins.	1 - 45
3. Spelling	15 mins.	1 - 50
5. Mathematics - Computation	35 mins.	1 - 40
6. Mathematics - Concepts	25 mins.	1 - 40
7. Mathematics - Problem Solving	25 mins.	1 - 35

## APPENDIX C

METROPOLITAN ACHIEVEMENT SUBTESTS:

1, 2, 4, 5, 6 and 7 of:

- Intermediate Battery

Levels 5.0 - 6.9

- Advanced Battery

Levels 7.0 - 9.5