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A study of the relationship between parental academic guidance, reading habits exhibited in the home, parental level of aspiration for the student and scholastic aptitude test scores of a selected group of high school students

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A STUDY OF THE RELATIONSHIP BETWEEN PARENTAL ACADEMIC
GUIDANCE, READING HABITS EXHIBITED IN THE HOME,
PARENTAL LEVEL OF ASPIRATION FOR THE STUDENT
AND SCHOLASTIC APTITUDE TEST SCORES OF A
SELECTED GROUP OF HIGH SCHOOL STUDENTS

AN ABSTRACT

SUBMITTED TO THE FACULTY OF THE SCHOOL OF EDUCATION,
ATLANTA UNIVERSITY IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF
SPECIALIST IN EDUCATION

BY

GLORIA MASON WEBB

ATLANTA UNIVERSITY
ATLANTA, GEORGIA
JULY, 1982
ABSTRACT

Purpose

The purpose of this study was to determine the correlation between parental academic guidance, reading habits exhibited in the home, parental level of aspiration for the student, and the Scholastic Aptitude Test (SAT)—verbal and mathematic—scores for a selected group of students.

Hypotheses

The following hypotheses were tested:

\( H_1: \) There is no statistically significant correlation between SAT-Verbal scores and parental academic guidance.

\( H_2: \) There is no statistically significant correlation between SAT-Verbal scores and reading habits exhibited in the home.

\( H_3: \) There is no statistically significant correlation between SAT-Verbal scores and parental level of aspiration for the student.

\( H_4: \) There is no statistically significant correlation between SAT-Math scores and parental academic guidance.

\( H_5: \) There is no statistically significant correlation between SAT-Math scores and reading habits exhibited in the home.

\( H_6: \) There is no statistically significant correlation between SAT-Math scores and parental level of aspiration for the student.
Method

A selected group of subjects who took the SAT in October, November and December of 1981 was studied. The Home Influence Factor Questionnaire (HIFQ) was developed by the researcher and psychometric experts to quantify the data. The HIFQ was administered to the selected group of subjects simultaneously after school by the researcher. The HIFQ was scored by the writer. The Pearson Product Moment Coefficient of Correlation was utilized to test the null hypotheses at the .05 level of significance.

Findings

1. The degree of correlation between SAT-Verbal and parental academic guidance was -.291326.

2. The degree of correlation between SAT-Verbal and reading habits exhibited in the home was -.074411.

3. The degree of correlation between the SAT-Verbal and the parental level of aspirations for the student was .039179.

4. The degree of correlation between the SAT-Math and parental academic guidance was -.346094.

5. The degree of correlation between the SAT-Math and reading habits exhibited in the home was -.142485.

6. The degree of correlation between the SAT-Math and parental level of aspiration was -.223689.

Conclusions

The findings from this study seem to warrant the conclusions listed below. Each null hypothesis is listed separately.
1. The null hypothesis: There is no statistically significant correlation between SAT verbal scores and indices of parental academic guidance. The hypothesis was rejected (r = -.291326).

2. The null hypothesis: There is no statistically significant correlation between SAT verbal scores and indices of home reading habits. The hypothesis was accepted (r = -.074411).

3. The null hypothesis: There is no statistically significant correlation between SAT verbal scores and indices of parental level of aspirations. The hypothesis was accepted (r = .039119).

4. The null hypothesis: There is no statistically significant correlation between SAT mathematical scores and indices of parental academic guidance. The hypothesis was rejected (r = -.346094).

5. The null hypothesis: There is no statistically significant correlation between SAT mathematical scores and indices of home reading habits. The hypothesis was accepted (r = -.142485).

6. The null hypothesis: There is no statistically significant correlation between SAT mathematical scores and indices of parental level of aspirations. The hypothesis was accepted (r = -.223689).

Implications

The conclusions drawn from the findings of this study seem to warrant the following implications:

1. The subjects experienced a conflict between their parents' academic guidance and their performance on the verbal part of the Scholastic Aptitude Test. This fact may occur because of the nature of the adolescent.

2. A conflict was also revealed between subjects' parental academic guidance and performance of the mathematical part of the Scholastic Aptitude Test. Again, this may have occurred because of the nature of the adolescent.
Recommendations

The implications inherent in the conclusions drawn for this study seem to warrant the following recommendations:

1. That parents provide academic guidance for the student early during school years and allow more freedom in choices of courses and occupations when the student becomes an adolescent.

2. That parents study the causes of the conflict between their children's performance on the Scholastic Aptitude Test and the academic guidance provided by the parents and adequately adjust this academic guidance so they supplement or compliment each other.
A STUDY OF THE RELATIONSHIP BETWEEN PARENTAL ACADEMIC GUIDANCE, READING HABITS EXHIBITED IN THE HOME, PARENTAL LEVEL OF ASPIRATION FOR THE STUDENT AND SCHOLASTIC APTITUDE TEST SCORES OF A SELECTED GROUP OF HIGH SCHOOL STUDENTS

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Gloria M. Webb
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CHAPTER I

INTRODUCTION

Rationale

The Scholastic Aptitude Test scores are used by many institutions of higher learning to determine whether to admit or reject a student. The scores are usually used in combination with grade point average and percentile rank in class. But even in this combination, the test scores are weighted heavily.\(^1\) If a student plans to attend a specific college he must make the desired SAT score before he is admitted. If he fails to make the required score, he may be admitted to a remedial program in the institution or be rejected.

Richard Noll, in *Playing the Private College Admission Game*, feels that there is too much talk about College Board Averages among the faculties of schools. This talk erroneously defines and describes entire freshman classes by the median score.\(^2\)

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Another current attitude about the SAT which causes groups to look at it critically is the claim of racial and class bias. This simply means that non-whites and poor students have a much lower median score than white students from high-income families. The evidence that poor and minority students do not perform as well as middle-class wealthier whites has led some critics to conclude that the SAT systematically and intentionally discriminates against these groups.¹

Colleges and universities do not employ SAT scores as sole entrance requirements. However, the fact that these scores are used in conjunction with other criteria was reason enough to warrant further study of factors that may influence performance on the Scholastic Aptitude Test.

Admission officers often regard the SAT score as the most significant data even though they claim to review the complete record.² In many instances these scores are used as tools of rejection. The SAT score can be an obvious cause of frustration to the students who score poorly yet have maintained good high school grades.


This study sought to determine the correlation between parental academic guidance, reading habits exhibited in the home, parental level of aspiration for students, and verbal and mathematical Scholastic Aptitude Test scores of a selected group of students in a suburban Atlanta high school.

Subjects

The subjects for the research were taken from a total population of 182 seniors enrolled in a suburban Atlanta high school during the 1981-1982 academic school year. This senior class consisted of 103 female and 79 male students. From this population, a selected group of students who took the Scholastic Aptitude Test in October, November, and December was used as the target population of the study. This target group was composed of 41 females and 25 males, making a total of 66 persons. At the time of the study one female and four males had withdrawn from the school to attend another high school or attend college on an early-admissions program. As a result, 40 females and 21 males were final subjects for the study, for a total target group of 61. The average age of the group was 17 years. Of the students, 60.7 percent lived with both parents while 39.3 percent lived with single parents because of death, separation, or divorce. Fifty-six percent of the fathers had fourteen or more years of education. Thirty-seven percent of the mothers had fourteen or more years of
education. Each of these students was enrolled in general and/or advanced classes and their mean grade point average was 3.2.

**Definition of Terms**

For this study, the terms listed below were defined as follows:

1) **SAT**—Scholastic Aptitude Test Verbal and Quantitative Scores.

2) **Academic Guidance**—refers to the extent to which the parent or primary adult caretaker is involved in helping guide the student with regards to occupation, post-secondary choices, and/or course selection while in high school.

3) **Parental Aspiration Level for Student**—the occupational level and/or educational level which the parent or primary caretaker desires for the student.

4) **Reading Habits Exhibited in the Home**—refers to the amount of reading which occurs in the home as well as the quality and amount of literature found in the home.

**Evolution of the Problem**

This problem evolved from the questions of anxious students and parents concerning scores on the Scholastic Aptitude Test. Parents and counselees questioned counselors as to how the SAT scores could be raised. The writer believes that the family is an important instrument which affects students' educational achievement. Consequently, she was interested in identifying home factors that might possibly help raise SAT achievement scores. Parental academic guidance, reading habits in the home, and parental
level of aspiration for students were selected to study because these factors can be provided in most families regardless of economic status.

**Contributions to Educational Knowledge.**

**Theory and/or Practice**

This study has tremendous implication for the theory and practice of education. The study could be used to impact change in students' home environment and activities to enhance academic performance as measured by the Scholastic Aptitude Test. Parents will be presented with data which demonstrate a potential link between SAT scores and certain home factors causing them to be more accepting of making changes in the home. Research findings make suggestions seem less biased and more objective.

Many studies have indicated that the family is the place where all education begins. Studies have related socio-economic levels to high performance and positive cognitive development. William Turnbull, President of Educational Testing Services, states that "the relationship between family income and a variety of indicators of educational achievement is a fact of life in our society and there is a correlation between family income and educational achievement."\(^1\)

Bronfenbrenner concludes that more parents should spend more time with children, consequently rejuvenating some of the techniques of learning of yesteryear. He supports a Fair Part-Time Employment Act which would prohibit discrimination in job opportunities, rate of pay, fringe benefits, and status for parents who are engaged in part-time employment. This would allow parents to spend more time teaching and disciplining American children.¹

According to this author, every line of social and psychological research points to the family as the foremost influence in what we might call character formation, cultural education, or upbringing. He explores the changes in the American family which he believes to be the cause in many of the problems faced by America today. Bronfenbrenner supports social policy that would dictate shorter working hours and part-time work. If this social policy existed, parents could provide quality guidance and time to teach children, two factors which are known to cause high academic performance.²

Bridget Plowden in her foreword to Educational Opportunity and the Home points out that parental attitude appears to have a separate influence on academic performance because strong parental attitudes are not monopolized by any class.


²Ibid.
She notices that manual workers encourage and support their children's efforts to learn more often than some "non-manual" parents.\footnote{Gordon W. Miller, Educational Opportunity and the Home, with a Foreword by Lady Bridgett Plowden (Great Britain: Hazel Watson and Viney Ltd., 1971), p. ii.}

Educational Testing Service has studied family income as related to SAT scores in Test Scores and Family Income: A Response to Charges in the Nader/Nadrin Report on ETS and in A Review of Data Available Regarding Family Income and Financial Aid Characteristics of Students by J. E. Nelson. However, after reviewing available literature, it appears that specific home factors such as parental guidance, parental level of aspiration, and reading habits exhibited in the home as they affect academic performance measured by the SAT have not been studied apart from other variables such as social class.

The results of this study are important to the Educational Testing Service as it acknowledges additional reasons for the declining scores on the SAT. In the face of extreme public criticisms because of the score decline and claims of test bias, ETS may be interested to empirically show that the family can help students perform better on the SAT by providing academic guidance, reading materials, and high aspirations and expectations for the students over the years.
The most important function of this study is that the results are significant to educators and parents as they help students make decisions about their future educational plans upon graduating from high school. The findings will also aid counselors in planning guidance programs for the students and the community. This study contributes to the theory and practice of counseling in that it will serve as the basis for evaluating some of the needs of the students as they begin their college careers.

Statement of the Problem

This study focused on the problem of isolating and testing home factors which relate to the standardized test performance of secondary school students. Specifically, the study sought to determine the correlation between parental academic guidance, reading habits exhibited in the home, parental level of aspiration for students, and the Scholastic Aptitude Test scores of a selected group of students in a suburban Atlanta high school.

Purpose of the Study

The major purpose of this study is to test the following hypotheses:

1. There is no statistically significant correlation between SAT verbal scores and parental academic guidance.

2. There is no statistically significant correlation between SAT verbal scores and reading habits exhibited in the home.
3. There is no statistically significant correlation between SAT verbal scores and parental level of aspiration for the student.

4. There is no statistically significant correlation between SAT math scores and parental academic guidance.

5. There is no statistically significant correlation between SAT math scores and reading habits exhibited in the home.

6. There is no statistically significant correlation between SAT math scores and parental level of aspiration for the student.

**Research Procedures**

The descriptive survey method of research was employed using the Home Influence Factor Questionnaire (HIFQ) designed by the writer and the Scholastic Aptitude Test. The HIFQ was designed to quantify information regarding parental academic guidance, reading habits exhibited in the home, and parental level of aspiration for the students. To accomplish the study, the following steps were taken:

1. Permission to conduct the study was secured from the appropriate administrative personnel (see Appendix A).

2. A survey of pertinent literature was made and reviewed. This included theses, journals, books and other materials.

3. The Home Influence Factor Questionnaire was constructed with the help of psychometric experts to yield quantitative information regarding parental academic guidance, reading habits exhibited in the home, and parental level of aspiration for the students.

4. Subjects and their parents were contacted by telephone and letter to secure permission for participation and use of Scholastic Aptitude Test scores (see Appendix B).
5. The Home Influence Factor Questionnaire was administered to all students simultaneously after school by the writer (see Appendix C).

6. The 61 (100 percent) questionnaires were returned and scored by the researcher using the designed scale.

7. The hypotheses were tested.

8. Data obtained were analyzed and presented in statistical and narrative forms.

9. The findings of the study were given and conclusions drawn.

10. On the basis of the findings and conclusions, implications, recommendations and suggestion for further study were made.

Limitation of the Study

It is felt that the following factors will limit this investigation and should be considered when generalizing the findings of this study to other research:

1. The focus of this study was on senior high school students. Therefore, generalizations based upon the findings should be limited to populations with similar characteristics.

2. The data are self-reported.
CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

The literature was reviewed in order to determine the current state of research in the area of familial/environmental influences on academic performance as reflected by Scholastic Aptitude Test scores. In this way the writer gained additional insight into:

1) the existing theories being used or espoused to explain environmental influences on achievement, 

2) the significance and relevance of the proposed research, and 

3) how the proposed research findings might fill gaps or expand on the existing literature.

In the American society, many people feel that a college education has become a stepping stone to securing jobs that will provide a secure, comfortable, future for each citizen. Today, employers are demanding more education and experience. It is reported that 60 percent of all high school graduates are attending post secondary institutions. With a steadily rising demand for higher education, Radner and Miller in Demand and Supply in U.S. Higher Education have designed a hypothetical two year college plan so that 90
percent of the high school graduates will be attending post-secondary schools by 1988.¹

With the trend of attending colleges ever present, some students want to attend post-secondary schools that have a medium selectivity process, but many students are unable to gain admission because of low Scholastic Aptitude Test scores. The SAT is required by most colleges and universities as part of the admissions process, coupled with recommendations from counselors and records of high school transcript. It is a recognized fact that some colleges and universities are more selective than others. The more selective an institution is, the higher the SAT score must be to gain admission into that school. According to Frank Bowles, a highly selective institution will require an average verbal and quantitative score of 575 to 600 on each part. A second level of selectivity depends on good high school grades in academic courses and an average SAT score of 475 to 550 on each part.²

Many students are interested in attending schools of the second level of selectivity. Research leads us to believe that parental academic guidance, reading habits exhibited in the home and parental level of aspiration are


important factors in helping students perform well academically. This performance is reflected in tests like the Scholastic Aptitude Test.

**Parental Academic Guidance**

Parental academic guidance refers to the extent to which the parent or primary adult caretaker is involved in helping the student make decisions regarding occupation, post-secondary plans, and course selections while in high school. It includes encouragement by the parents and a democratic atmosphere in which the guidance is provided. Parental encouragement and knowledge about students' grades, school activities, and academic course work taken in high school are important if the family is to give support and guidance to the student and the school. Alvin Coleman reported that parents of academically successful high school males, low and high economic levels, provided guidance in both academic and non-academic areas. Parents in both economic levels utilized praise and encouragement with their sons rather than blame and disparaging remarks.¹

Children's achievement, school-leaving age and future occupations are related to both parents' social class and school attainment. It appears that middle class parents foster behaviors and attitudes considered conducive to successful school performance, such as reading books,

studying in spite of encouragement by peers to indulge in other activities, and thinking in the long term rather than the short term. Middle class parents also foster a feedback system between school and home which is vital to academic success of a child. Finlayson writes that parents have to continually observe their child's behavior and progress in school to determine the effectiveness of their guidance.¹

Dorothy Rich writes that the last ten years of educational research substantially supports the idea that the critical educational institution is the home, not the school. The home and community have been identified as the vital variables, intimately linked with school success.²

Studies by Benjamin Bloom in Stability and Change in Human Characteristics, indicate that children's academic and cognitive development can be traced to the values placed on education in the family and specifically to parental reinforcement in the home or children's activities at school.³

Carol and Donald Auster conclude that the family is the first and foremost influence of children's lives. It is the primary agent of socialization and the determination


of a child's place in the social stratification system. According to these researchers, parental attitudes, values and behaviors have direct influence on educational and occupational socialization of children.\(^1\)

Studies indicate overwhelmingly that the traditional family is a significant component to a student's achievement, academic performance and aspiration. One can infer that the change in parental guidance and the family's role in American society has resulted in decreased academic performance among high school students today. This decrease in academic performance has been reflected in the SAT scores for the past fourteen years. A South Carolina Task Force reports in "Improving Scholastic Aptitude Test Scores in South Carolina Public School Students" that the primary reason for declining scores is the breakdown in the home conditions, which subsequently resulted in adversely affecting student achievement.\(^2\) It appears that if the parents had consistently maintained the role of providing guidance, high expectations and support as they had done in the past, the level of achievement of today's students would


\(^2\)South Carolina Department of Education, Improving the Scholastic Aptitude Test Scores of South Carolina Public School Students (South Carolina: Department of Education, 1980), p. 11.
be similar to that of fourteen years ago or perhaps enhanced.

Society has caused the role of the family to change in many instances. Coleman points out that even if the family is intact, the parents are still involved in the rat-race of modern society. Instead of staying home with the children providing guidance and structure, along with reading to the children, both parents are working to meet the high cost-of-living demands. Consequently, the children are more often left with a passive baby sitter instead of a participating parent. Coleman also concludes that achievement and academic performance are products of family background as it is defined in the family's relationship to the school, community and work.¹

Researchers agree that the home and parental academic guidance are necessary factors for successful academic performance.

Reading Habits Exhibited in the Home

Academic performance and achievement are couched in cognitive development as measured by reading ability. Educators conclude that reading allows a student to become a more knowledgeable and verbal individual. Reading matter in the home has been one criteria used for judging verbal

ability in the family. Verbal ability is specifically measured on the Scholastic Aptitude Test.

Several studies support the fact that high verbal ability is necessary for academic success, and a child's verbal ability is closely linked with the verbal stimulation provided by the parents. Norman Freedburg and Donald Payne found that the verbal patterns established by the mother aid in determining the verbal proficiency of the child. Included in the verbal patterns, according to Freedburg, are the manner or "style" of communication imparted to the child and the opportunity for verbal stimulation provided by the home. Verbal stimulation is provided for by the sheer amount of verbal activity and manipulation. It is also provided by the access of books, reading materials, word games and other learning devices which supply a wide range of opportunity for language usage.¹

Freedburg describes a study by Milner, 1951, which shows a significant correlation between students who scored high on the Haggerty Reading Examination and Language Factor Subtest of the California Achievement Test of Mental Maturity, and children who expressed appreciation for parental behavior related to reading, for example, "I enjoy the times mommy reads to me."²

²Ibid., p. 70.
Alvin Coleman concludes that regardless of socio-economic levels, academically successful males had been strongly encouraged to read regularly by their parents.¹

Verbal ability and reading ability, as tested by Elizabeth Bing, is influenced by certain factors in the home. Bing concludes that students who had high verbal abilities were from homes where the mother also rated high in verbal skills. The mothers of the high verbal children were rated high in helping behavior, high in giving help sooner than mothers of children with lower verbal ability. High verbal mothers gave their children more verbal training during infancy and early childhood. They allowed their children to participate fully in mealtime conversation, bought more books for them, and read to their children regularly as compared with mothers whose children rated low in verbal abilities. Children who rated high verbally had parents who were more restrictive. The fathers' reading time was significantly higher for high verbal girls. Bing concludes that discrepant verbal ability is fostered by a close relationship with a demanding and somewhat intrusive mother, while discrepant non-verbal abilities are enhanced by allowing the child a considerable degree of freedom to experiment his own.²


Walberg and Majoribank conclude that earlier reading scores have a powerful influence on later reading achievement. Research indicates fully that reading is crucial to verbal abilities and academic success. A number of studies report that the time parents spend reading to their children is directly related to the reading achievement of the child. Research shows that factors such as the number of books in the home, the quality of reading material, and the time spent reading to children is directly related to academic performance.

Today parents are encouraged to provide the same stimuli promoted twenty years ago to foster efficient verbal and reading skills for children. At a conference on "The Family as a Learning Environment" several home factors were discussed which correlate with reading achievement. These factors were verbal interaction with (by) child and adult, amount of reading to child by parents, the quality of parents' reading material, and the value placed on reading by parents. Other factors related to a child's reading ability were the amount of tutoring directly received from older siblings and time spent watching "Sesame Street" which attribute to certain pre-reading skills.

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All evidence points to reading as one of the major criteria for academic success. This is an important factor to high school students because the Scholastic Aptitude Test is by design, one-half, a reading test. The verbal section of the SAT measures a student's ability in antonyms, work analogies, reading ability and vocabulary. It is to the family's advantage to inculcate reading into family activities from early stages of growth in an effort to emphasize academic excellence for the children.

Parental Level of Aspiration for Student

Parental level of aspiration for the study refers to the occupational and/or educational level which the parents or primary caretaker desires for the student. Research shows that parents who have high educational and occupational aspirations for their children tend to produce students who want to live up to those levels of expectations. This relates to the theory that people generally perform at the level expected of them by significant others.

Joseph A. Kahl shows that occupational success is highly related to educational achievement and aspiration levels of the parents. In his "Common Man" study, he found that male students who had the ability to attend college and coerced by their parents tended to enter college. On the other hand, male students who had the ability and were not expected by their parents to attend college did not pursue college careers. This article concludes that when
a "common man" (laborer) has a son who indicates ability, that child should be encouraged by the parents to move to educational and occupational opportunities beyond those of the parents.¹

Parental stress on college was a significant factor in attending college when socio-economic level was controlled in a study by David Bordua.² Simpson concludes that parental advice is a much better predictor of a boy's high ambition than social class.³

In a study where 143 parents and their children were interviewed to determine the parents' aspiration for the student and the child's own aspiration, Dole found that when the parents and child agreed on the same aspiration, the student was likely to pursue a high occupational aspiration. The student was also more likely to attend college or technical school after graduation from high school. He also found that when parents' aspirational levels were low for the student, the child generally did not pursue education after high school. The student also


tended to flounder in his efforts to establish a career plan.¹

A recent study by Dillard and Campbell which involved Puerto Ricans, Blacks, and Anglo parents and adolescents concluded the following:

1. The aspiration of Black adolescents and their parents' level of aspiration for them were significantly correlated for high aspirations. Also the aspiration level of Black parents for their child related highly to the career expectation of the Black adolescent.

2. Puerto Rican adolescents' career expectation and their parents' aspiration level for the students were significantly correlated. The aspiration level of student and aspiration level of parent for student were not significant.

3. Neither the parents' aspiration nor parents' career values, significantly predict Anglo adolescents' career aspirations.²

These findings may be caused by the social status or place that each group has progressed in the history of this country.

All of these studies indicate that parents' level of aspiration for the child is significant in helping the student perform well academically and in the world of work. It can be inferred that if the parents expect academic success and if they provide academic guidance and learning


opportunities, the student will be capable of performing well on the SAT.

Parental aspirations and academic aspiration as well as parental support are positive factors described by Miller in achieving high academic performance.¹

Nature of the Scholastic Aptitude Test

Since the SAT is a vital admissions tool employed by the colleges, it is necessary to review the related literature discussing the nature and composition of the Scholastic Aptitude Test.

In 1900, the College Board sought to standardize college admission requirements on a national level. The first action of the College Board after its organization was to establish a set of standardized college entrance examinations to replace the many examinations used by different colleges. In 1926, the Scholastic Aptitude Test was designed by Carl Brigham especially for college admissions. In 1930 this test had been divided into a mathematical section and a verbal section.²

The Scholastic Aptitude Test was designed to measure basic reasoning abilities in mathematic and verbal areas. Angoff describes it as follows:

It is a broad gauge instrument providing effective discrimination over most of the range of academic ability of college-bound students. It is aimed at serving the decision of the institutions that have high scoring candidates and it is aimed at describing levels of ability among low scoring candidates for admission to college.¹

In *On Further Examination: A Report of the Advisory Panel on the Scholastic Aptitude Test Score Decline*, it is clearly stated that the SAT has been used since the 1920's to help determine high school students' apparent preparedness for college. The SAT is primarily taken by twelfth-grade students, although a large number of juniors do take the test. The verbal and math sections of the SAT are computed and reported separately on a scale of 200 to 800. Two and one-half hours are allowed for test taking. The mathematical portion of the Scholastic Aptitude Test requires a background of mathematics typically taught in grades one through nine. It depends less on formal knowledge than on reasoning; it measures students' problem-solving ability in areas of arithmetic reasoning, elementary algebra, and geometry. The verbal portion is designed to assess reading skills and understanding of word relationships covering four areas—antonyms, analogies, sentence completion, and reading comprehension. The material for this test is drawn from

¹Ibid., p. 15.
social, political, scientific, artistic, philosophical, and literary writings.¹

Edson, in Why Scholastic Aptitude Scores are Falling, says it is the belief of an official of the College Board that;

... skills and abilities measured by the SAT are developed slowly over a youngster's lifetime—both in and out of the school setting. It is evident that many factors including family, and homelife, exposure to the mass media, and other cultural and environmental factors are associated with students' performance.²

DuBois claims that the SAT is perhaps the best tool that can be devised with present psychometric technology. No attempt has been made to adjust the SAT for sex, socio-economic status, race, or educational background. He feels that the SAT is a good instrument used for college admission and for predicting scores for the freshman year. It helps to pick those who fit a particular program and supplements other admission information.³

Summary of Literature

The literature reviewed discloses the importance of the home environment on the child's academic performance.


²Edson, Why Scholastic Aptitude Scores Are Falling, p. 13.

High achieving students tend to be products of home environments which provide parental academic guidance, quality and appropriate reading materials, and high parental aspirations for the child. These factors are related to academic performance and achievement. Academic performance and achievement are related to the students' SAT scores. Much of the literature points to these factors as significant criteria for academically successful students.
CHAPTER III

METHODOLOGY

This section provides descriptions of the community, subjects, target school, instruments used, and statistical procedures utilized in the analysis of data.

Selection of the Subjects

The subjects were selected from a suburban high school in Georgia which serves a broad spectrum of family incomes. Most of the families in the area are working-class families with a median income of $12,000.¹ The median income for the target county is $12,127.² The school is also served by another more affluent community with a population of 2,000 and a median income of $30,000.³

The school from which the subjects were selected consists of grades eight through twelve with a student population of 1,250. The faculty is composed of 75 degreed personnel. On May 19, 1980, the student population reflected

³Brown, Interview.

-27-
a racial make-up of 55.5 percent black and 42.0 percent white. The remaining 2.5 percent are identified as orientals, Spanish-Americans, and others.\(^1\)

The curriculum of the school is composed of advanced, general and basic courses. The advanced classes serve students who consistently score two or more grade levels above the mean on the California Achievement Test. The classes include enriched and accelerated course work for the students. The general classes are designed to meet the needs of the average student who is scoring about grade level on the California Achievement Test. These classes will provide academic structure and course work that is necessary for entering college. The basic classes are designed to meet the needs of students who are scoring two or more grade levels below the norm on the California Achievement Test.

The subjects for the research were taken from a total population of 182 seniors enrolled during the 1981-1982 academic school year. This senior class consisted of 102 female and 79 male students. From this population, a selected group of students who took the Scholastic Aptitude Test in October, November, and December was used as the target population of the study. This target was composed of 41 females and 25 males, making a total of 66 persons.

\(^1\)Interim Evaluation of Avondale High School, DeKalb County, Georgia, 1980, p. 13.
At the time of the study one female and four males had withdrawn from the school to attend another high school or attend college on an early-admissions program. As a result, 40 females and 21 males were final subjects for the study, for a total target group of 61. The average age of the group was 17 years. Of the students, 60.7 percent lived with both parents while 39.3 percent lived with single parents because of death, separation, or divorce. Fifty-six percent of the fathers had fourteen or more years of education. Thirty-seven percent of the mothers had fourteen or more years of education. Each of these students was enrolled in general and/or advanced classes and their mean grade point average was 3.2.

**Description of the Instruments**

The Home Influence Factor Questionnaire

The Home Influence Questionnaire was designed and constructed by the writer after an exhaustive review of existing instruments.¹ The purpose of the HIFQ was to aid in quantifying information regarding parental academic guidance, reading habits exhibited in the home, and parental level of aspiration for students. The Home Influence Factor Questionnaire was constructed with careful steps taken to insure credibility of the questionnaire. Validity is the most important attribute of a questionnaire.² This questionnaire was


carefully examined by psychometric experts to insure content and face validity. Items were also examined for consistency and ease with which respondents could answer them.

The HIFQ consists of fifty-seven items; eight are identifying items, fifteen related to hypotheses one and four, twenty-two related to hypotheses two and five, and twelve relate to hypothesis three and six. The items were designed to yield quantitative responses for each question. Each possible response has a numerical weight assigned to it. The raw indices for each item is totalled and grouped into one of three subscores:

1. PAG indices (Parental Academic Guidance)
2. HRH indices (Home Reading Habits)
3. PLA indices (Parental Level of Aspiration for Student)

The PAG indices were derived by summing the raw numerical index of questions 45 through 57. The HRH indices were derived by summing the raw index of items 23 through 44. The PLA indices were yielded from summing the raw index of items 9 through 22.

The Scholastic Aptitude Test

The SAT contains verbal ability and mathematical ability sections. Separate scores are yielded in each area. The purpose of this instrument is to aid in assessing students' competence for achievement in college. SAT scores are reported with a mean of 500 and standard deviation of 100. The psychometric characteristics of the SAT are above
reproach. Internal consistency reliability coefficients are regular .91 for the SAT-V and .90 for SAT-M. The verbal section (SAT-V) comprises 90 items in two separately timed parts with a total time of 75 minutes. The SAT-M contains 60 items, also in two parts with a total time of 75 minutes. ¹

**Treatment of Data**

The investigation involved collecting and comparing two separate measurements, SAT scores and HIFQ scores. A scattergram was constructed to determine the appropriate use of the Pearson product-moment coefficient of correlation. The most important requirement for the legitimate use of the Pearson $r$ is that the trend of the relationship between $Y$ and $X$ are rectilinear—a straight line regression. ² When the scatter diagram was constructed, the distribution of the cases within the correlation appeared to be elliptical, without any indication of decided bending of the ellipse. Thus, Pearson product-moment coefficient of correlation was determined as the proper statistical procedure for this study. This procedure is appropriately applied to the data because they involve "two sets of linearly


distributed interval data." The Scholastic Aptitude Test (SAT) scores are continuously distributed between scores of 200 to 800. The Home Influence Factor Questionnaire (HIFQ) indices are continuously distributed between ranges of 49 to 147. There are numerous formulas and computer programs which easily compute Pearson (r). However, the basic formula used was,

\[
r = \frac{\sum XY}{\sqrt{\left(\sum X^2 - \frac{(\sum X)^2}{N}\right) \left(\sum Y^2 - \frac{(\sum Y)^2}{N}\right)}} - \frac{(\sum X)(\sum Y)}{N}
\]

Where \( r = \) Pearson r

\( \sum X = \) The sum of the scores of the SAT distribution

\( \sum Y = \) The sum of the HIFQ distribution

\( \sum XY = \) The sum of the products of paired X- and Y-scores

\( \sum Y^2 = \) The sum of the squared scores in Y distribution

\( \sum X^2 = \) The sum of the squared scores in X distribution

\( N = \) The total number of subjects
CHAPTER IV

THE FINDINGS

The SAT scores and Home Influence Factor Questionnaire indices were correlated in this study. The Pearson Product Moment Coefficient of correlation was employed to test each of the null hypothesis in this research project. The .05 level of significance was used to test the null hypotheses.

Analysis of Data

The findings of this study are presented so as to coordinate with the organization of the null hypotheses under investigation (see table 1).

TABLE 1

CORRELATION BETWEEN HOME INFLUENCE FACTORS AND SAT VERBAL AND MATHEMATICAL SCORES OF ALL SUBJECTS

<table>
<thead>
<tr>
<th>Variables</th>
<th>(df = 61-2)</th>
<th>$r_s$</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT-V/PAG</td>
<td>59</td>
<td>-.291326+</td>
</tr>
<tr>
<td>SAT-V/HRH</td>
<td>59</td>
<td>-.074411</td>
</tr>
<tr>
<td>SAT-V/PLA</td>
<td>59</td>
<td>.039119</td>
</tr>
<tr>
<td>SAT-M/PAG</td>
<td>59</td>
<td>-.346094</td>
</tr>
<tr>
<td>SAT-M/HRH</td>
<td>59</td>
<td>-.142485</td>
</tr>
<tr>
<td>SAT-M/PLA</td>
<td>59</td>
<td>-.223689</td>
</tr>
</tbody>
</table>

$+p < .05 \quad r = .271 \text{ at .05 level of significance}$
Key:  PAG = Parental Academic Guidance Indices  
HRH = Reading Habits Exhibited in Home Indices  
PLA = Parental Level of Aspiration for Student Indices  
SAT-V = Verbal Scholastic Aptitude Test Score  
SAT-M = Mathematical Scholastic Aptitude Test Score

The most salient feature of the data in table 1 is the statistically significant correlations between SAT verbal and mathematical scores and parental academic guidance indices. The rs are -.291326 and -.346094, respectively.

Correlation Between SAT-Verbal Scores and Parental Academic Guidance Indices

Hypothesis 1: There is no statistically significant correlation between SAT verbal scores and parental academic guidance.

A Pearson Product-Moment Correlation Coefficient was utilized to test this hypothesis. A coefficient of -.291326 was obtained for the SAT-V and PAG indices. This coefficient was statistically significant at the .05 level.¹

Correlation Between SAT-Verbal Scores and Home Reading Habit Indices

Hypothesis 2: There is no statistically significant correlation between SAT verbal scores and reading habits exhibited in the home.

A Pearson Product Moment Correlation Coefficient analysis was utilized to test this hypothesis. A coefficient

of -.074411 was obtained (see Table 1). This coefficient did not reach the .05 level of significance.

Correlation Between SAT-Verbal Scores and Parental Level of Aspiration Indices

Hypothesis 3: There is no statistically significant correlation between SAT-V scores and the parental level of aspiration for the student.

A Pearson Product-Moment Correlation Coefficient analysis was utilized to test this hypothesis. A coefficient of .039179 was obtained (see Table 1). This coefficient did not reach the .05 level of significance.

Correlation Between SAT-Math Scores and Parental Academic Guidance Indices

Hypothesis 4: There is no statistically significant correlation between SAT-math scores and parental academic guidance.

A Pearson Product-Moment Correlation Coefficient analysis was utilized to test this hypothesis. A coefficient of -.346094 was obtained. This coefficient was statistically significant at the .05 level.

Correlation Between SAT-Math Scores and Home Reading Habit Indices

Hypothesis 5: There is no statistically significant correlation between SAT math scores and reading habit exhibited in the home.

A Pearson Product-Moment Correlation Coefficient analysis was utilized to test this hypothesis. A coefficient of -.142485 was obtained. This coefficient did not reach the .05 level of significance.
Hypothesis 6: There is no statistically significant correlation between SAT-math scores and the parental level of aspiration for the student.

A Pearson Product-Moment Correlation Coefficient analysis was utilized to test this hypothesis. A coefficient of -.223689 was obtained (see Table 1). This coefficient did not reach the .05 level of significance.

Summary and Discussion of Findings

The survey of the literature suggests that several home factors relate to achievement as measured by the Scholastic Aptitude Test. The factors were identified as parental academic guidance, reading habits exhibited in the home, and parental level of expectation for the student.

Based on the findings of this study, parental academic guidance correlated significantly with SAT scores and SAT-M at the .05 level of significance. The correlation was of an inverse nature which indicates that as the SAT scores increased, the PAG indices decreased. This could mean that parental academic guidance is most important during early school years. James S. Coleman states that the family impact on the child has its greatest effect in the earliest years.¹

The correlation may have been inverse because of the nature of the adolescent. At this age, students do not always view parents' advice as academic guidance. During the adolescent stage of life, teenagers are engrossed in their search for identity, establishing themselves in adult roles, and in achieving their independence. Many times the adolescent resents the controls of the parents, and prefers adult-adult relationships with parents rather than child-parent transaction.\(^1\)

Coleman points out that the effects of the teenager's peer group upon a student's achievement are most effected by the proficiency of the peer group.\(^2\) Ohlsen states that most adolescents are controlled by peers rather than by their family's values and traditions.\(^3\) These factors have a definite influence on how information from parents is received by adolescents.

The home and the school are influential in the achievement of the student. Research indicates that the home is the first academy of learning and perhaps some of the motivational goals and achievement patterns should be attributed to the school as the students establish secondary and tertiary relationships.


\(^2\)Coleman, Equality of Educational Opportunity, p. 300.

\(^3\)Ohlsen, Group Counseling, p. 178.
This concurs with Bloom's conclusion that the rate of development is greater in the early years and reaches relative stability by age 12. Development is most easily modified during the period of most active growth, giving credence to the belief that early intervention may produce desirable results.\(^1\)

Also Baumer-Malloy concludes that significant correlation exists between importance which parents place on academic preparation and child achievement patterns. Specifically, the academic planning and establishing goals with the student in earlier years will influence the academic pursuit of the child.\(^2\) Once the parent has provided academic guidance consistently during the child's early years, the parents' values become ingrained in the student. As a result, in later years the child does not regard the parents' instructions as guidance. The role of diminishing returns may come into play at this time. The student has been taught to make the right decision early in his school career. If the parents continue to tell the student what decisions to make, the adolescent may begin to feel that the parents are nagging. Then the child will rebel.

\(^1\)Bloom, *Stability and Change in Human Characteristics*, p. 98.

\(^2\)Marjorie Baumer-Malloy, "A Study of the Relationship of Certain Home Environmental Factors to High or Low Achievement in Reading Among Black Primary Age Pupils of Low Socioeconomic Status" (Ph.D. dissertation, University of Maryland, 1977), p. 82.
The correlation for the home reading habits, SAT-V, and SAT-M scores did not reach the .05 level of significance. This coefficient was of an inverse nature also. The reasons can only be speculated. The literature substantiates that reading habits in the home are important criteria for academic achievement. Reading habits exhibited in the home may not be as significant as reading habits of the student who took the SAT. These may be the criteria to use in a future study of this kind. Studies support reading materials availability in the home as significant, but more importantly is what is done with those materials in the home. When parents take an active teaching role in helping children learn to read, the child becomes more responsive to the learning. When the first group of 61 was divided into a male and a female group, neither group's HRH indices correlated at the .05 level of significance with SAT-V or SAT-M scores. This could be attributed to the construction of the questionnaire. This instrument may need refining if it is to be employed in such a study again. According to Sheldon and Carillo, many items related to factors that contribute to reading ability were included in the questionnaire. These factors are number of books in the home, educational level of parents, and size of family.¹

Hess concludes that these factors are essential to developing reading and verbal skills as well as experiences in speech, facilitative behavior by adults, pressure to achieve, the reward structure of the family and by other parental behavior that affect the child's interest in relevant elements to reading.¹

The reason for the inverse nature and the fact that the coefficient did not reach .05 level of significance can only be surmised. It must be pointed out that the data is self-reported. Coleman found that sometimes the relative importance of educationally related attributes (parents' educational level and reading materials available) are not as significant as the economic level of the family.²

The correlation between parental level of aspiration for the student PLA index and SAT-V and SAT-M scores was not statistically significant at the .05 level.

Historically studies have indicated that parental level of aspiration for students has been an important criteria for achievement. Miller listed parental aspiration and parental support as positive factors which influence academic performance in Educational Opportunity and the Home.³ A possible reason that an insignificant negative


²Coleman, Equality of Educational Opportunity, p. 302.

³Miller, Educational Opportunity in the Home, p. 309.
correlation was obtained may relate to the changes taking place in society today. As America becomes more technical, complex and mobile, parents and students may not be communicating with each other as well as they have in the past. It is possible that students fail to perceive their parents' interest and level of aspiration for them. Parents, on the other hand, may not be effectively translating their aspirational desires for their children into practices that support the student's view of his goals and objectives. The changing theories of parenting and education could have some effect on parent and children communicating desired goals. Parents are encouraged to allow students to make decisions and choices many times in the wake of too many choices. Parents are sometimes coerced to provide freedom and leisure, when structure and discipline are needed. Another factor that may relate to these findings could be the data were self-reported by adolescents who have not recognized their dependency on parents for encouragement, advice and goal-setting behaviors.

When female scores were considered separate from the total group scores, the correlation between SAT verbal scores and parental academic guidance was statistically significant (see Appendix D).

When males' scores were considered separate from female scores, the correlation coefficient reached the .05 level of significance for SAT-M/PAG, (see Appendix D).
There was no statistically significant correlation between female SAT scores and PLA index.

The statistically significant level of correlation between SAT math and PLA scores for males in the study may infer information about double sexist standards that are a traditional part of child-rearing practices in the American society.

In conclusion, several factors may be considered when reviewing the findings of this study. The nature of parenting and educational theories in the American society may need to be considered when relating specific home factors that correlate with achievement as measured by the Scholastic Aptitude Test. Some other important factors that may have influenced the findings are the self-reported data, the design of the Home Influence Factor Questionnaire, which did not have verified validity and reliability, and the nature of the adolescent in a changing society.
CHAPTER V

SUMMARY OF FINDINGS, CONCLUSIONS, IMPLICATIONS
AND RECOMMENDATIONS

Recapitulation of Research Design

This study was made to determine the correlation between SAT verbal and mathematical scores, parental academic guidance, reading habits exhibited in the home, and parental level of aspiration for children.

Subjects

The subjects consisted of sixty-one high school students. Forty were females and twenty-one were males. The subjects took the Scholastic Aptitude Test in October, November, and December of 1981-1982 school year.

Instruments

The instruments consisted of the Scholastic Aptitude Test and a Home Influence Factor Questionnaire developed by the writer.

Summary of the Related Literature

The related literature suggests strongly that parental academic guidance, reading habits exhibited in the home and
parental level of aspiration for the student affect achievement at all ages. Researchers concluded that the home is the first academy of learning and parents are the first teachers. Parents are the primary agent of socialization and are initially important in helping determine the child's place in the social stratification system. Parental academic guidance has been an effective factor throughout the study of many successful young men and women.

Reading habits exhibited in the home can cause young children to develop strong reading habits by imitating parents and older siblings. This factor has been supportive in viewing successful student achievement on many achievement tests.

Historically, studies indicate that parental level of aspiration for the student is most influential in a student's successful educational goal or career goal. This perhaps applies to the idea of "high expectation for individuals." If parents expect good performance and serve as role models for students, the students will respond to their parents' expectations.

Much of the literature points to these factors as having a positive influence on high achievement for students from early age throughout the educational and professional careers.
Purpose of the Study

This study was made to test the null hypotheses listed below.

1. There is no statistically significant correlation between SAT-V scores and PAG.
2. There is no statistically significant correlation between SAT-V scores and HRH.
3. There is no statistically significant correlation between SAT-V scores and PLA.
4. There is no statistically significant correlation between SAT-M scores and PAG.
5. There is no statistically significant correlation between SAT-M scores and HRH.
6. There is no statistically significant correlation between SAT-M scores and PLA.

Findings

The study produced the following findings:

1. A correlation of -.291 was found between SAT-V/PAG.
2. A correlation of -.074 was found between SAT-V/HRH.
3. A correlation of +.039 was found between SAT-V/PLA.
4. A correlation of -.346 was found between SAT-M/PAG.
5. A correlation of -.142 was found between SAT-M/HRH.
6. A correlation of -.224 was found between SAT-M/PLA.

Conclusions

The findings from this study seem to warrant the conclusions listed below. Each null hypothesis is listed separately.
1. The null hypothesis: There is no statistically significant correlation between SAT verbal scores and indices of parental academic guidance. The hypothesis was rejected \((r = -0.291326)\).

2. The null hypothesis: There is no statistically significant correlation between SAT verbal scores and indices of home reading habits was accepted \((r = -0.074411)\).

3. The null hypothesis: There is no statistically significant correlation between SAT verbal scores and indices of parental level of aspirations was accepted \((r = 0.039119)\).

4. The null hypothesis: There is no statistically significant correlation between SAT mathematical scores and indices of parental academic guidance was rejected \((r = -0.346094)\).

5. The null hypothesis: There is no statistically significant correlation between SAT mathematical scores and indices of home reading habits was accepted \((r = -0.142485)\).

6. The null hypothesis: There is no statistically significant correlation between SAT mathematical scores and indices of parental levels of aspirations, was accepted \((r = -0.223689)\).

**Implications**

The conclusions drawn from the findings of this study seem to warrant the following implications:

1. The subjects experienced a conflict between their parents' academic guidance and their performance on the verbal part of the Scholastic Aptitude Test. This fact may occur because of the nature of the adolescent.

2. A conflict was also revealed between subjects' parental academic guidance and performance of the mathematical part of the Scholastic Aptitude Test. Again, this may have occurred because of the nature of the adolescent.
Recommendations

The implications inherent in the conclusions drawn for this study seem to warrant the following recommendations:

1. That parents provide academic guidance for the student early during school years and allow more freedom in choices of courses and occupations when the student becomes an adolescent.

2. That parents study the causes of the conflict between their children's performance on the Scholastic Aptitude Test and the academic guidance provided by the parents and adequately adjust this academic guidance so they supplement or complement each other.
HOME INFLUENCE FACTOR QUESTIONNAIRE

Directions: Answer each question as accurately as possible.

1. Sex:
   A. Male [ ]
   B. Female [ ]

2. Age last birthday: [ ]

3. Number of persons living in your household: [ ]

4. How many siblings do you have?
   A. Sisters [ ]
   B. Brothers [ ]

5. What is the highest formal education of your father or male guardian?
   A. Below 8th grade [ ]
   B. Two years high school [ ]
   C. High school graduate [ ]
   D. Graduate of technical school [ ]
   E. Two years college [ ]
   F. College graduate [ ]
   G. Attended graduate school [ ]
   H. Completed professional/graduate degree [ ]

6. Is your father or male guardian
   A. Living in the home? [ ]
   B. Deceased? [ ]
   C. Out of the home? [ ]

7. What is the highest formal education of your mother or female guardian?
   A. Below 8th grade [ ]
   B. Two years high school [ ]
   C. High school graduate [ ]
   D. Graduate of technical school [ ]
   E. Two years college [ ]
   F. College graduate [ ]
   G. Attended graduate school [ ]
   H. Completed professional/graduate school [ ]

8. Is your mother or female guardian
   A. Living in the home? [ ]
   B. Deceased? [ ]
   C. Out of the home? [ ]
9. What grades do your parents expect you to make in high school?
   A. All A's ( )
   B. All B's ( )
   C. All C's ( )
   D. All D's ( )
   E. Enough to get by ( )

10. To what extent are your parents pleased with your academic progress?
    A. Very pleased ( )
    B. Pleased ( )
    C. Accepting ( )
    D. Not pleased ( )
    E. Very displeased ( )

11. How far would your parents like for you to go in school?
    A. Graduate or professional degree ( )
       (law, medicine, Ph.D, Masters)
    B. Bachelor's Degree (4 years college) ( )
    C. Technical or Associate Degree ( )
    D. High School Diploma ( )
    E. Graduate Equivalency Diploma (GED) ( )

12. What kind of work do your parents want you to do?
    A. Professional (doctor, lawyer, teacher, etc.) ( )
    B. Technical (draftsman, electrician, plumber, etc.) ( )
    C. Clerical (secretary, clerk, etc.) ( )
    D. Laborer (assembly line worker, warehouse stocker, etc.) ( )
    E. Other Specify ___________________

13. What kind of work would your parents NOT want for you?
    A. Professional (doctor, lawyer, teacher, etc.) ( )
    B. Technical (draftsman, electrician, plumber, etc.) ( )
    C. Clerical (secretary, clerk, etc.) ( )
    D. Laborer (assembly line worker, warehouse stocker, etc.) ( )
    E. Other Specify ___________________

14. To what extent would your parents be disappointed if you did not reach the educational level they desire for you?
    A. Very disappointed ( )
    B. Disappointed ( )
    C. Slightly disappointed ( )
    D. Not disappointed ( )
    E. Don't know ( )

15. What kind of grades do your parents expect you to make in your post-secondary educational institution?
    A. All A's ( )
    B. All B's ( )
    C. All C's ( )
    D. All D's ( )
    E. Enough to get by ( )
16. To what extent has your parents' educational level influenced your educational plans for yourself?
A. Very much ( )
B. Somewhat ( )
C. Very little ( )
D. Not at all ( )
E. Undecided ( )

17. To what extent has your parents' occupation level influenced your occupation plans for yourself?
A. Very much ( )
B. Somewhat ( )
C. Very little ( )
D. Not at all ( )
E. Undecided ( )

18. To what extent do your aspiration levels for yourself and your parents' aspiration level for you coincide?
A. Very much ( )
B. Somewhat ( )
C. Very little ( )
D. Not at all ( )
E. Undecided ( )

19. Who or what was most influential in helping you discover your career choice?
A. Parents ( )
B. Counselor ( )
C. Teacher ( )
D. Friend ( )
E. Other Specify __________

20. At what age did your parents begin discussing careers with you?
A. Six years or younger ( )
B. Eleven years old ( )
C. Fourteen years old ( )
D. Seventeen years old ( )
E. Don't know ( )

21. How much education is required to reach your career goal?
A. Professional/Graduate Degree ( )
B. Bachelors Degree ( )
C. Technical/Associate Degree ( )
D. High School Diploma ( )
E. On-the-job Training ( )

22. To what extent have your parents prepared financially for you to achieve your post-secondary goals?
A. Very much ( )
B. Somewhat ( )
C. Very little ( )
D. Not at all ( )
E. Don't know ( )
How often do you read the following? Always Generally Frequently Sometimes Never

23. News magazines (e.g., Time) ( ) ( ) ( ) ( ) ( )
24. Sports Magazines ( ) ( ) ( ) ( ) ( )
25. Magazines like National Geographic ( ) ( ) ( ) ( ) ( )
26. Magazines like Ebony ( ) ( ) ( ) ( ) ( )
27. Women's Magazines ( ) ( ) ( ) ( ) ( )
28. Men's Magazines ( ) ( ) ( ) ( ) ( )
29. Magazines like Saturday Review ( ) ( ) ( ) ( ) ( )
30. Newspaper ( ) ( ) ( ) ( ) ( )

31. Outside of assigned school readings, how often do you read?
   A. Almost always ( )
   B. Frequently ( )
   C. Sometimes ( )
   D. Rarely ( )
   E. Never ( )

32. What are your favorite leisure reading materials?
   A. Novels ( )
   B. Poetry ( )
   C. Newspaper ( )
   D. Magazines ( )
   E. Other Specify ________

33. At what age did you begin to read?
   A. Five years or younger ( )
   B. Six years ( )
   C. Seven years ( )
   D. Later than eight years ( )
   E. Do not know ( )

34. At what age did you get a public library card?
   A. Six years ( )
   B. Seven years ( )
   C. Eight years ( )
   D. Later than seven years ( )
   E. Do not know ( )

35. How often did your parents read to you when you were young?
   A. Nightly ( )
   B. Two times a week ( )
   C. Once a week ( )
   D. Every two weeks ( )
   E. Never ( )

36. To what extent do your parents read in their leisure time?
   A. Almost always ( )
   B. Frequently ( )
   C. Sometimes ( )
   D. Rarely ( )
   E. Never ( )
37. To what extent do your sisters and brothers read in their leisure time?
A. Almost always ( )
B. Frequently ( )
C. Sometimes ( )
D. Rarely ( )
E. Never ( )

38. How many books are in your home?
A. More than 400 ( )
B. More than 300 ( )
C. More than 200 ( )
D. Less than 100 ( )
E. None ( )

39. At what age did you get your first dictionary?
A. Six years or younger ( )
B. Seven years ( )
C. Eight years ( )
D. Nine years or older ( )
E. Never received one ( )

40. How often did your parents help you use the dictionary when you were small?
A. Almost always ( )
B. Frequently ( )
C. Sometimes ( )
D. Rarely ( )
E. Never ( )

41. Which of the following reference books are found in your home? (Check all that apply)
A. Dictionary ( )
B. Encyclopedia ( )
C. Almanac ( )
D. Atlas ( )
E. Other Specify ( )

42. How often does your family use the encyclopedia other than for assigned school work?
A. Almost always ( )
B. Frequently ( )
C. Sometimes ( )
D. Rarely ( )
E. Never ( )

43. How many different magazines can be found in your home?
A. Four or more ( )
B. Three ( )
C. Two ( )
D. One ( )
E. None ( )
44. To what extent does your family discuss items in the newspaper?
   A. Almost always ( )
   B. Frequently ( )
   C. Sometimes ( )
   D. Rarely ( )
   E. Never ( )

45. When you were in elementary school how often did your parents help you with your homework?
   A. Almost always ( )
   B. Frequently ( )
   C. Sometimes ( )
   D. Rarely ( )
   E. Never ( )

46. How often do your parents discuss grades with you?
   A. Almost always ( )
   B. Frequently ( )
   C. Sometimes ( )
   D. Rarely ( )
   E. Never ( )

47. How often do your parents see your report card?
   A. Almost always ( )
   B. Frequently ( )
   C. Sometimes ( )
   D. Rarely ( )
   E. Never ( )

48. How often do your parents see your midquarter report?
   (Progress report)
   A. Almost always ( )
   B. Frequently ( )
   C. Sometimes ( )
   D. Rarely ( )
   E. Never ( )

49. How often do your parents discuss your post-secondary educational plans with you?
   A. Almost always ( )
   B. Frequently ( )
   C. Sometimes ( )
   D. Rarely ( )
   E. Never ( )

50. Are your parents aware of schedule changes made in selection of academic courses?
   A. Almost always ( )
   B. Frequently ( )
   C. Sometimes ( )
   D. Rarely ( )
   E. Never ( )
51. How often do your parents discuss occupational plans with you?
   A. Almost always ( )
   B. Frequently ( )
   C. Sometimes ( )
   D. Rarely ( )
   E. Never ( )

52. Who most often helps you select your academic course of study?
   A. Parent ( )
   B. Counselor ( )
   C. Teacher ( )
   D. Friend ( )
   E. Other Specify ______

53. How many colleges and other post-secondary institutions have you and your parents visited?
   A. Four or more ( )
   B. Three ( )
   C. Two ( )
   D. One ( )
   E. None ( )

54. Do your parents give permission to change academic schedule based on knowledge of courses needed for post-secondary plans?
   A. Almost always ( )
   B. Frequently ( )
   C. Sometimes ( )
   D. Rarely ( )
   E. Never ( )

55. How much time do your parents spend providing direct help to you in solving school problems during a week?
   A. Four hours or more ( )
   B. Three hours ( )
   C. Two hours ( )
   D. Less than one hour ( )
   E. None ( )

56. Do your parents know which classes you take each year in high school?
   A. Almost always ( )
   B. Frequently ( )
   C. Sometimes ( )
   D. Rarely ( )
   E. Never ( )

57. How many job sites have you and your parents visited that may interest you as possible employment opportunities?
   A. Four or more ( )
   B. Three ( )
   C. Two ( )
   D. One ( )
   E. None ( )
Scoring the Home Influence Factor
Questionnaire for Questions 9-57

Response A = 5 points
Response B = 4 points
Response C = 3 points
Response D = 2 points
Response E = 1 point
Appendix A

Agency Clearance Letter
March 5, 1981

Memo to: Mr. Ames Kitchens
From: Leland C. Thomas
Reference: Research Study

Mrs. Gloria Webb, a counselor at Avondale High School, has requested permission to do research on her 6-year program at Atlanta University involving 80 students randomly selected from those who took the SAT this school year.

Please discuss her research with her and, subject to your approval, she may use the sample which she requests. It is understood that the students will remain anonymous in the study and that no classroom instructional time will be used in the process.

If you wish to discuss this with me, please call. It is also understood that if any student selected does not wish to participate, an alternate will be selected.

cc: Mrs. Gloria Webb
Appendix B

Letter to Parents and Students
Dear

You have been selected to participate in a research project concerning home factors that may affect SAT scores. I am excited about conducting a study to help determine ways to improve the academic performance of our students.

Dr. Leland Thomas, Director of Accreditation, DeKalb County School System, has given me permission to conduct the research and share the findings with the Avondale High School Community. All identities in the study will remain anonymous and all information given in the study is guaranteed to be confidential.

The questionnaire will be issued to your son/daughter after school on March 16. It will take a maximum of twenty minutes of their time.

Please indicate your willingness to participate by granting permission on the attached form and returning it in the enclosed stamped envelope immediately. You will receive a summary of the findings as soon as the questionnaires are returned, tabulated and analyzed.

Thanks for your cooperation.

Sincerely,

GMW:j1

Gloria M. Webb
Counselor

"THE SCHOOL CANNOT LIVE APART FROM THE COMMUNITY"
Appendix C

Home Influence Factor Questionnaire
Appendix D

1. Subject Scores on SAT-Verbal and Mathematics and Home Influence Factor Questionnaire Indices

2. Correlation Between Home Influence Factors and SAT-Verbal and Mathematical Scores of Female Subjects

3. Correlation Between Home Influence Factors and SAT Verbal and Mathematical Scores of Male Subjects
TABLE 2

SUBJECTS' SCHOLASTIC APTITUDE VERBAL AND MATHEMATICAL SCORES AND INDICES OF PARENTAL ACADEMIC GUIDANCE, HOME READING HABITS, AND PARENTAL LEVEL OF ASPIRATION INFORMATION

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### TABLE 3

**CORRELATIONS BETWEEN HOME INFLUENCE FACTORS AND SAT VERBAL AND MATHEMATICAL SCORES OF FEMALE SUBJECTS**

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\(+P < .05\)  
\((r = .313\text{ at } .05\text{ level of significance})\)

**Key:**  
PAG = Parental Academic Guidance Indices  
HRH = Home Reading Habit Indices  
PLA = Parental Level of Aspiration for Student  
SAT-V = Verbal Scholastic Aptitude Test Score  
SAT-M = Mathematical Scholastic Aptitude Test Score

The data in Table 3 reveal a statistically significant correlation between SAT verbal scores and parental academic guidance indices.
### TABLE 4

**CORRELATIONS BETWEEN HOME INFLUENCE FACTORS AND SAT VERBAL AND MATHEMATICAL SCORES OF MALE SUBJECTS**

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*P < .05  (r = .433 at .05 level of significance)*

Key: PAG = Parental Academic Indices  
HRH = Home Reading Habits Indices  
PLA = Parental Level of Aspiration for Student  
SAT-V = Verbal Scholastic Aptitude Test Score  
SAT-M = Mathematical Scholastic Aptitude Test Score

The data in Table 4 reveal a statistically significant correlation between SAT mathematical scores and parental level of aspiration.
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BIBLIOGRAPHY

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