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THE RELATIONSHIPS BETWEEN SOCIOECONOMIC STATUS, SEX, SELF-
CONCEPT, ACADEMIC ACHIEVEMENT, AND COURSE SELECTION OF
URBAN BLACK TENTH-GRADE STUDENTS

The College of William and Mary in Virginia

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SOCIOECONOMIC STATUS, SEX, SELF-CONCEPT,
ACADEMIC ACHIEVEMENT, AND COURSE SELECTION
OF URBAN BLACK TENTH-GRADE STUDENTS

A Dissertation

Presented to

The Faculty of the School of Education
The College of William and Mary in Virginia

In Partial Fulfillment
Of the Requirements for the Degree
Doctor of Education

by

Earl Birges Chappell III

November 1979

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SOCIOECONOMIC STATUS, SEX, SELF-CONCEPT,
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OF URBAN BLACK TENTH-GRADE STUDENTS


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Dedication

This study is dedicated to my wife and to my students. My wife, Mary — because she has endured long hours of silence, extra chores, and high levels of emotional involvement. My students — because without their needs the purpose and results of this study would seem inconsequential.

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Chapter 1

Introduction

Overview Statement

The diversity of the American educational system has been viewed as a cornerstone by some and as a stumbling block by others. Historically, a foremost concern of American educators has been to develop educational programs which meet the needs of individuals, groups, and the society-at-large. However, new educational programs which lead to a rapid expansion of the curriculum may not only satisfy the variable needs of society but they may also cause often unforeseen, grave problems. The freedom of an individual student to select courses which are not geared to developing the potential of that individual is perhaps as damaging to his intellectual development as the freedom of an individual to select those courses that result in failure.

Statement of Problem

The purpose of this study was to identify and to analyze the relationships that exist between course selection, self-concept, academic achievement, sex, and socioeconomic status of similar IQ urban black tenth-grade students.

There are several pertinent questions which this study has attempted to answer. Are intellectually capable black students selecting courses which are inferior to their potential in such large degree that future educational opportunities may be severely curtailed? Do black students who select higher level courses experience greater academic success and increased self-concept than those who select lower level courses? Does one educational program which is specifically designed to meet the many needs of a diversified student body really benefit the minority student and thereby lead to significant numbers of students prepared to meet the demands of higher education? Are lower socioeconomic status (SES) black students predisposed to a lower achievement level because of life style, choice, or a combination of these and other yet-to-be-identified factors?

Theoretical Rationale

Festinger (1954) postulated a theory of social comparison processes whereby an individual selected membership in a particular group because the individual could make favorable comparisons between himself and similar others on those traits important to him.

Byrne and Nelson (1965) proposed a theory of similarity and reinforcement whereby an individual is attracted to others who support and reinforce his own life style. Because of the initial attraction based on similarity of

life style, the reinforcement brought about through subsequent contact would deepen the interpersonal attraction and enhance the similarity between these individuals.

The basic difference between the Festinger and the Byrne approaches is that Festinger's theory states that an individual will engage in activity allowing for self-evaluation to occur. If the other party is too dissimilar within and among the traits considered to be important, then the individual making the evaluations will cease comparing himself with the other and break the relationship. Byrne's approach suggests that a relationship will not occur unless there are some grounds for initial attraction, such as similar life styles. Byrne, Clore, and Worchel (1966) found that persons of similar attitudes and socioeconomic status are more attracted to each other than those possessing dissimilar attitudes and socioeconomic status.

Based on the theories of Festinger and Byrne, one may hypothesize that favorable comparisons or initial attraction will increase one's self-concept through a positive reinforcement of the traits that one considers important. Recently, many studies have determined relationships between self-concept and socioeconomic status, self-concept and ethnic group membership, and other similar comparisons.

Hypotheses

The testing of the following hypotheses was to determine

the existence of statistically significant relationships in the various relational areas that are stated in the problem:

1. There will be no significant difference between socioeconomic status (SES) and the course selection (track) that a black student (IQ = 90-110) will make.

2. There will be no significant difference in the self-concepts of black male and female students when IQ is held between 90 and 110.

3. There will be no significant difference between black males and females on the selection of upper and lower academic tracks.

4. There will be no significant difference in the self-concepts of lower and middle SES black students when IQ is held between 90 and 110.

5. There will be no significant difference in the academic achievement of low and middle SES black students when IQ is held between 90 and 110, regardless of the track selection.

6. There will be no significant difference between sex and academic achievement when IQ is held between 90 and 110.

Sample and Data Gathering Procedures

From an urban school system with a 55 percent black secondary-school enrollment, low and middle SES, similar IQ black students were measured for self-concept and

analyzed for academic achievement and course selection. The Piers-Harris Children's Self Concept Scale (PH) (Piers & Harris, 1969) was administered. Upper and lower academic tracks were determined by a review of the students' course selection sheets. Socioeconomic status was determined from biographical data. Academic achievement information was collected from school records. The sample consisted of only those students who were in attendance in the school division for the previous three years.

Definition of Terms

The following terms were used in the study:

Socioeconomic Status (SES). A student was considered to have a low SES if the head-of-the-household was working as an unskilled laborer or was a welfare recipient. A student was considered to have middle SES if the head-of-the-household had an occupation reflecting trade, professional, or managerial status.

The operational definitions used approximate those used by Telegdy (1974) in a study on the relationship between SES and school readiness. This study differs in that it does not consider the educational level of the head-of-the-household. Burnes (1970), Green and Rohwer (1971), Zirkle and Moses (1971), and Jantz (1974) represent notable research efforts in areas related to this research and they operationally defined SES only according to the occupation

of the head-of-the-household.

Upper-track course. An upper-track course was defined as being academically oriented or college preparatory. A student taking an upper track had a schedule reflecting the selection of English, possibly social studies, a core science (biology, chemistry, physics), a foreign language, and a higher math (geometry, intermediate algebra, math analysis).

Lower-track course. A lower-track course was defined as an array of diverse offerings. A student pursuing a lower track was taking selected English offerings, lower level physical science, biology, or consumer chemistry, and an array of filler courses, such as art, homemaking, and industrial arts. This student did not typically opt for a foreign language, upper level English grammar and composition courses, or math beyond the elementary algebra level.

Self-concept. The Piers-Harris Children's Self Concept Scale (Piers & Harris, 1969) was analyzed to determine the general self-concept of the student. This scale determines the way a student feels about himself in areas such as academics, physical appearance, and attitude.

Similar IQ. A Short Test of Educational Ability (STEA) quotient of 90 to 110 was used. It was assumed that students in this range would have only moderate difficulty in mastering most core high school subjects, including higher

level maths, languages, and sciences. The STEA (SRA, 1972) was administered to the subject students in the fall semester of the eighth grade. The major difference between the STEA quotient and the traditional IQ is that the STEA quotient provides for grade-based and not age-based comparisons. For students whose ages are within two years of the typical age for a particular grade, the STEA quotient and the traditional IQ are similar.

Academic Achievement. Academic achievement was defined as the composite grade-level achievement on the SRA achievement tests and the academic grade-point average (AGPA). The SRA achievement tests were administered during the fall semester of the eighth grade. The AGPA was a computation of the eighth through tenth year grades in English, foreign languages, social studies, science, and mathematics.

Limitations of Study

Because of indications that grade level would affect self-concept (Trowbridge, 1972a & 1972b), the grade-level variable was held constant. The tenth-grade black student in the IQ range of 90 to 110 was used to facilitate the identification of upper and lower track course designs at the time students were presented an array of subject choices and were making decisions regarding the pursuit of higher educational goals. Because the study attempted to use relatively unobtrusive means to secure data, no attempts

were made to influence the normal activities of guidance counselors and classroom teachers in the assistance they rendered in helping students to select courses. In this regard, no ethical questions should arise since the student was in no way influenced by the researcher to select one course of study over another. The self-concept measure was administered at the same time that all tenth-grade students within the selected school signed for their courses so that no individual other than the researcher and his assistants actually knew the selected students. Therefore, a near normal course preregistration occurred; the only difference was the administration of the self-concept measure.

Because the school selected for the study reflects an inner-city public school population (approximately 55 percent black) and an open curriculum composed of a large number of mini-courses and phases, the applicability to other situations is questionable; however, this limitation does not necessarily diminish the significant results of a study that attempted to obtain evidence that might help to resolve some of the basic questions of a previously segregated school system, such as, why do blacks tend to continue to score poorly on standardized tests? and why do blacks continue to provide so few honor graduates relative to their white counterparts?

Overview

The pertinent literature is reviewed in Chapter 2. The study design is described in Chapter 3. The findings and analyses of the results are contained in Chapter 4. Conclusions based on the results of this study are presented in Chapter 5.

Chapter 2

Review of Related Literature

Need for Study

A school board chairman recently noted that students were "electing themselves out of an education" and suggested that students opt for the easiest courses (Sage, 1978). If valid, the future impact on all students could be large; but the potential impact on underprivileged students could be even larger. One might expect upper and middle socioeconomic status students to tend to select higher level courses in response to strong parental pressure. Conversely, the absence of a family tradition of scholarship would appear to make the average IQ lower class (predominantly black in the study area) student particularly vulnerable to poor course selection.

Furthermore, colleges, industry, and government are actively seeking minority persons to fill vacancies to comply with the various Equal Employment Opportunity Commission and Department of Health, Education, and Welfare guidelines. Unfortunately, too many employers and college administrators are finding that there are seemingly too few qualified blacks to fill the many positions that are available for minorities since high prestige universities and businesses

can entice the limited supply of qualified blacks and leave other institutions and businesses an apparently shallow talent pool.

The need in the research area, then, is to determine whether a large number of potentially capable black students are being inadequately prepared, either through self-determination or through a flaw in our educational system, to meet the competition for higher level educational programs and for higher level job opportunities.

Background

The high school represented by this study has remained a neighborhood school even though a segment of the student population is bused from a distant neighborhood. Over the past decade, a large portion of lower-class housing north of the school has been demolished and replaced by an interstate highway and by middle-class apartments, townhouses, and single-family dwellings. Except for approximately 15 blocks of low-class housing, all housing within a 20-block radius of the school is middle class. The distant neighborhood is lower class. Also, at least 60 percent of the communities adjacent to the selected school are integrated while the distant neighborhood is almost totally black.

The subject students have a male head-of-the-household in 26 percent of the low SES homes and in 61 percent of the middle SES homes. Even though the sex

of the head-of-the-household may have some relationship to course selection, academic achievement, and general self-concept scores of students, there is nothing a school or a student can do to change this variable. Even though this study considered this factor in the analysis of the data, it sought to identify those relationships that could lead to new short- as well as long-term educational strategies.

In 1958, the school division was desegregated. Since that time such adjectives as watered-down, unstructured, fragmented, innovative, responsive, and necessary have reflected the status of the public educational curriculum. Much media coverage since the integration of the district has highlighted the innovative program of phase electives that was introduced into a few select secondary schools in 1972 and was implemented in 1976 in all secondary schools, including the school selected for this study. Indeed, this innovative program has probably stirred up more controversy among educators and lay people than did the desegregation process. Whereas the desegregation issue revolved around equal protection and guaranteed rights under the law, the innovative educational program has no legal backing but must rely solely on one segment of society to control the educational fate of the total society.

The 1954 Brown decision stirred much controversy and many whites believed then, and many still believe, that

blacks are an inferior ethnic group, if only slightly inferior. Attorney General Robert Kennedy set the stage for equal employment opportunities for minority status and underprivileged Americans when he announced in the early 1960's that the Justice Department would hire more minority individuals as long as they were qualified. Unfortunately, the concept of "qualified" has often been overlooked, and there is no doubt that much friction still exists between groups of different ethnic and cultural backgrounds when the hiring and promotion practices of many employers appear to bypass qualified whites in favor of the perceived less than adequately qualified minority persons.

This study concentrated on the relationships that possibly exist between subgroups within one national minority ethnic group, the blacks, for the purpose of providing a direction for the revision of administrative and counseling procedures in the educational planning and guidance that is offered to the subjects of this study project.

Theory

Festinger (1954) proposed a theory of social comparison processes suggesting that people will evaluate and compare themselves with others. However, when the opinions and abilities of the others are determined to be too different from one's own, then one may cease the comparison.

Consequently, to preserve cognitive consistency, one may tend to avoid those situations where others are very divergent in abilities and opinions. Byrne and Nelson (1965) in a compatible statement to Festinger's suggested that persons are attracted to others who tend to support their life style. Since people possessing similar life styles will tend to support each other, Byrne (1974) stated that selective breeding was occurring in humans in that a 0.5 correlation existed between the IQ's of husband-wife pairs. Byrne suggested that this correlation is explained by two basic reasons:

(1) intellectual similarity increases the chance for similar interests and abilities that are based on intelligence, and (2) similar IQ individuals have a greater tendency to come into contact with each other in such places as colleges, technical schools, and neighborhoods. He further suggested, "Whether human beings are directing themselves toward a distant future with bright and dull subpopulations is a matter of speculation" (p. 235).

Thus the theoretical problems begin to emerge. Do individuals choose others based on similar IQ (explaining only 25 percent of the statistical relationship for husband-wife pairs), opinions, abilities, life styles, or an intricate combination of these and other unidentified variables? If IQ alone may be used to determine the climb

up the social ladder, then will lower class individuals stand an equal chance to reach the top as similar IQ others who may have higher class standing? Apparently legislative efforts in this country reflect the opinion that this is in all likelihood not the case. Similar interests, opinions, aptitudes, and backgrounds possibly account for much of the lack of upward mobility experienced by many individuals. Because blacks represent a distinctly visible ethnic minority, their shortcomings are highly advertised and their "place" in society has been somewhat predetermined except for the gradual changes brought about through legislative and judicial processes. Indeed, Festinger and Byrne would hold that IQ similarity is only one of many points on which an individual may be attracted to another.

Summary of Rationale and Relationship to Problem

Festinger and Byrne have provided the theoretical bases for this study. Even though both theories involved are in many respects compatible, there is a point of crucial difference. Do different socioeconomic background students select courses based on similarity in life style as would be reflected by similarity in socioeconomic status or do they select courses based on similarity in intelligence and abilities?

The review of the research revealed that low SES groups possess a higher self-concept than high SES groups and that

there is a strong tendency for high achieving students to have a higher self-concept than low achieving students within the same SES grouping. Then, what is the tendency in self-concept if similar IQ individuals achieve well but at two radically different academic levels? Although the research appears to be silent on this question, the answer could provide the key to preparing more, better-prepared, intelligent, and low SES participants for positions of responsibility.

Research

A study by Rubin, Krus, and Balow (1973) found that "Socioeconomic status was the one factor that significantly ($p < 0.05$) differentiated between low IQ regular and special class pupils of both average and low I.Q., with the special class subjects obtaining lower socioeconomic index scores" (p. 531). Results of this study indicated that low IQ regular class pupils performed significantly better than special class pupils even though the special group had a higher average IQ. Rubin, Krus, and Balow suggested that substantiation was found for "the belief that low socioeconomic status predisposes to special class placement when IQ and achievement levels are held constant" (p. 531), even though the pupils were placed primarily according to IQ. The study unfortunately did not support or refute the fact that the pupils were placed based solely on background by some person predisposed to such placement practices.

Green and Rohwer (1971) designed a study to test for the differences between SES levels and learning and ability tests in black pupils. The subjects were 112 black children in a fourth grade population of 118. SES ratings of low, lower-middle, and middle revealed that only two SES ratings — low SES and middle SES — were significantly important in interpreting the results of the study. The results of the paired-associative tasks revealed no significant difference between SES levels; yet the digit span and Raven tests indicated significant differences between the low SES group and the middle SES group and the low SES group and the lower-middle SES group, favoring the middle SES group. Background analysis revealed that reading grade, math grade, SAT reading, and Lorge-Thorndike IQ were significantly correlated with SES groups — a positive relationship between increased SES and higher scores. This study used as a targeted population a group of pupils in an elementary school located in a predominantly black neighborhood.

Several studies (Soares and Soares, 1969; Trowbridge, 1972a; and Smith, Zingale, and Coleman, 1978) revealed that low SES pupils yielded significantly higher self-concept scores than other SES levels. Soares and Soares (1969) tested for the direction and intensity of self-perceptions of disadvantaged children, and compared them with children who were not disadvantaged. Selecting 514 subjects

from the public elementary schools in an urban school system, 229 from a school in a disadvantaged area and 285 from a school in an advantaged area, they administered a self-concept device similar to that which they had used in previous studies. Of the significant differences reported, the pertinent one was that disadvantaged pupils had higher self-concept scores than did advantaged pupils.

Trowbridge (1972a) concluded that the relationship between self-concept and SES remained undetermined. Using the Coopersmith Self Esteem Inventory (CSEI) and a non-random selection of 133 classrooms representing 42 elementary schools, both urban and rural, and of varying SES classifications, Trowbridge reported a significantly higher mean CSEI for low SES classes than for middle SES classes (in support of Soares and Soares), a significant inverse correlation between age-grade level and mean CSEI, a significant relationship between population density and mean CSEI (the higher CSEI favoring the rural areas), and a significant relationship between race and mean CSEI (blacks scoring higher than "others"). A further analysis of her work revealed that there was a significant relationship between self-concept scores and achievement within SES levels; i.e., the higher self-concept scores favored the higher-achieving pupils. This conclusion was later supported by Smith, Zingale, and Coleman (1978).

Selecting pupils from eight elementary schools in a

large metropolitan area, Smith, Zingale, and Coleman (1978) tested the effect of failure on self-concept among different SES groups. Only special pupils were used; i.e., these pupils had pronounced academic deficiencies, but were not handicapped in any other way. After removing the non-white population (17%) from the targeted group to homogenize the sample, the researchers administered the PH, the Wechsler Intelligence Scale for Children-Revised, and the Metropolitan Achievement Test. Statistical results revealed support for the work of Trowbridge (1972a) where higher achieving pupils possessed higher self-concept within SES groups. Also there was a significant difference between self-concept scores and high and low achievers in the high SES category (low achievers possessing significantly lower self-concept scores than high achievers).

Out of the heterogeneous-homogeneous grouping controversy has evolved a plethora of research. Students are ability-grouped by whatever criteria seem to be appropriate at that time. Four review studies (Borg, 1965; Ogletree and Ujlaki, 1971; Ziller, 1972; and Esposito, 1973) have presented often contradictory indications of the research in this area. Some recent studies tend to indicate that achievement and achievement motivation are significantly better for students in heterogeneous (random) grouping situations than in homogeneous grouping situations (Williams, 1972; Rubin, Krus, and Balow, 1973; and

Thompson, 1974). Since variable levels of a single grade or course will tend to provide a built-in system for homogeneous grouping whether by intent or by freedom-of-choice selection by students, the theories of Festinger and Byrne tend to predict a course selection based on similarities among the students involved. Byrne, Clore, and Worchel (1966) reported a statistically significant ($p < 0.001$) relationship between similarity-dissimilarity of economic status and attraction to strangers where similarity was directly related to attraction. The implication here is that students may opt to select courses based on perceived similarities between themselves and the types of individuals who will also tend to choose the course. Even though ability-grouping per se is not an issue here, it could and does exist where multiple levels of a course are taught. Ability-grouping provides the researcher with a variable that has been linked to similarity-dissimilarity comparative relationships between individuals. Festinger's theory predicts that a student will select a group where opinions and abilities will be similar. Byrne's theory supports the similarity of life style indicating that low SES students will select lower level courses because the chances for being attracted to and reinforced by similar others is much greater.

Summary of Research and Relationship to the Problem

The research reveals an inverse relationship between

self-concept scores and socioeconomic status (Soares and Soares, 1969; Trowbridge, 1972a; and Smith, Zingale, and Coleman, 1978). The research also reveals relationships between IQ and achievement (Smith, Zingale, and Coleman, 1978), achievement and self-concept (Smith, Zingale, and Coleman, 1978), ethnic group and self-concept (Zirkel & Moses, 1971; Powers, Drane, Close, Noonan, Wines & Marshall, 1971; and Trowbridge, 1972). Based on the research, there has been contradictory significant evidence found in the relationship between sex and self-concept. Soares and Soares (1969) and Trowbridge (1972a) reported no significance, while Wylie (1963) reported that white girls were more modest than white boys in estimating their own ability.

In general, the pertinent research has not dealt specifically with the focal point of this study. Green and Rohwer (1971) represent the only research employing a totally black sample for a topic related to this study. Even though they were able to demonstrate significant variances in IQ, reading achievement, and course grades as functions of socioeconomic status, Green and Rohwer made no attempt to compare similar IQ pupils from the different SES groups.

A theoretical relationship to this study is the research of Byrne, Clore, and Worchel (1966) and Byrne, Griffitt, and Stefaniak (1967) who pointed out the positive

relationship that exists between economic similarity on interpersonal attraction and the positive relationship that exists between attraction and similarity of personality characteristics, respectively. These two studies and others (chiefly, Byrne & Nelson, 1965; Zander & Havelin, 1960; Zimbardo & Formica, 1963; Griffitt, 1966; Deutsch & Solomon, 1959; and Brock, 1965) have suggested positive correlations between attraction and similar others with respect to opinions, abilities, emotional states, self-descriptions, and performance evaluations.

Since the urban area represented in this study is integrated to a high degree and since the high schools (grades 10-12) have approximately the same racial mix, the predicted SES effect on course selection (i.e., low SES students opting to select lower level courses) may not be the case because a larger portion of the influential black population may be visible in the middle class and in some instances the upper-class spectrum. However, the question remains, are the low SES, average intelligence (IQ = 90-110) black students predisposed to the lower level courses (as may be inferred from Rubin, Krus, & Balow, 1973) or are they opting for a higher quality education, especially in the freedom-of-choice arena that exists in the school system in question? Smith, Zingale, and Coleman (1978) asserted that disadvantaged youth

maintain high self-concept even in the face of failure because of an adjustment to the expectation levels of their culture. What have such individuals to lose by taking higher level courses? This study sought to identify significant trends toward upward mobility by low SES, average intelligence "normal" secondary school black students who may be influenced by a possibly different set of cultural expectations from the expectations that normally hold for disadvantaged and oftentimes handicapped youth.

Chapter 3

Methodology

This study attempted to correct a possible shortcoming of earlier studies by concentrating on a sample of a population of students that have been generally overlooked in the assessment of the self-concept/achievement relationship and the aptitude (intelligence)/course selection relationship.

Population and Selection of Sample

The population consisted of all black high school tenth graders who are classified as low or middle SES and have average intelligence (IQ = 90-110) in an urban public high school which is approximately 55 percent black and 45 percent white and is located in the southeastern section of Virginia. The unexpectedly small size of the population resulted in using the entire population as the sample.

Procedures

Those students possessing a listed STEA quotient within the 90 to 110 range were identified using permanent record data. If a black student were identified possessing the essential IQ criterion, he was given a form to complete which indicated his willingness to participate in the

study. The biographical data sheet was used to determine the SES of the student. The student was classified as either low or middle SES. There were no students identified as upper SES. Refer to Appendix A for the sample biographical data sheet.

The Piers-Harris Children's Self Concept Scale (PH) was used to determine the general self-concept of the selected students. This instrument was administered at the same time that the students signed up for the fall phase of their eleventh year. The phase sign-up sheets contributed the data for determining whether the students had selected lower-track or upper-track courses. A panel of appropriately qualified professionals decided the track selection of each student.

Data were collected regarding each student's age and academic grade-point average (AGPA).

Instrumentation

The PH (The Way I Feel about Myself, WIPAM) was developed to measure general self-concept (Piers & Harris, 1964). According to the review by Shavelson, Hubner, and Stanton (1976), the internal consistency coefficients of reliability "indicate stable rank orderings of students on total scores: (a) KR₂₁ coefficients for 95 items used in a standardization study ranged from 0.78 to 0.93 for boys and girls in grades three, six, and ten; (b) corrected split-half coefficients for the total score were 0.90 and 0.87

for grade[s] six and ten . . . respectively" (p. 430). Test-retest reliability coefficients of 0.71 to 0.77 are reported with the higher reliability reported on the current 80-item version of the PH. As a result of factor analysis (Piers & Harris, 1964), ten factors were found to account for 42 percent of the total test score variance with six factors judged sufficiently large to be interpretable: (1) behavior, (2) intellectual and school status, (3) physical appearance and attributes, (4) anxiety, (5) popularity, and (6) happiness and satisfaction. Even though insufficient data might hamper the complete reliance on the factor analysis aspects of the PH, Shavelson et al report that the total instrument apparently provides a general self-concept that is a stable characteristic of the individual.

Statistical Procedures

The population of students was divided into subpopulations based on sex and socioeconomic status. The main population and subpopulations were analyzed by Pearson correlation statistics (Nie et al, 1975) to determine statistically significant ($p < 0.05$) correlations between sex, socioeconomic status, general self-concept, academic grade-point average, standardized achievement test scores, and course selection. The subpopulations, which were based on sex and socioeconomic status, were compared on the above listed factors as well as other biographic

data such as area of residence, desired diploma, and head-of-household to ascertain significant differences between and within subpopulations. Analysis of variance techniques were used to determine whether two or more means were significantly different ($p < 0.05$).

Because of the general nature of the problem and since the hypotheses used did not predict differences between subpopulations, two-tailed tests were employed where needed, resulting in a statistically reduced ability to achieve significant differences and thereby enhancing the interpretability of those differences that were determined to be statistically significant.

Specific Hypotheses

The research results of Byrne, Clore, and Worchel (1966) would imply course selection based on similar SES; i.e., since lower SES students would tend to identify more with the students in the lower level courses, lower SES students, regardless of relative intelligence, would tend to select lower track courses. This inference has been supported in part by the work of Rubin, Krus, and Balow (1973). Conversely, it is generally accepted that higher IQ individuals are apt to reflect higher levels of achievement (supported by Green and Rohwer, 1971; Powers, Drane, Close, Noonan, Wines, & Marshall, 1971; and Smith, Zingale, & Coleman, 1978). Therefore, it may be inferred that higher track courses may be more appealing to lower

SES students who have the intelligence and aptitude for such courses than lower track courses. With contradictory implications available, we have

Hypothesis 1: There will be no statistically significant difference between socioeconomic status of black students (IQ = 90-110) and the selection of lower and upper academic tracks.

Even though Soares and Soares (1969) and Trowbridge (1972a) report no apparent relationship between sex and self-concept, Wylie (1963) and Pfeiffer (1966, 1967) indicated a possible relationship between sex and self-concept. Wylie indicated that girls were less self-confident; whereas, Pfeiffer indicated that girls tended to select the more academic English classes. With contradictory implications available, we have

Hypothesis 2: There will be no statistically significant difference between the self-concepts of male and female students when IQ is held between 90 and 110.

Hypothesis 3: There will be no statistically significant difference between males and females on the selection of upper and lower academic tracks.

Smith, Zingale, and Coleman (1978) pointed out in their analytic summary that even though the average self-concept score was inversely related to SES, the high achievers possessed similar self-concepts, regardless of

SES. Even though others (Soares & Soares, 1969; Trowbridge, 1972a) have shown a significant similar relationship between SES and self-concept, the following hypothesis must be advanced due to inconclusive evidence based on an educational system using multiple levels of instruction:

Hypothesis 4: There will be no statistically significant difference in the self-concepts of lower and middle SES black students when the IQ is held between 90 and 110.

Smith, Zingale, and Coleman (1978) reported that there were apparent differences in achievement between high-mean and low-mean IQ students in the middle and low SES groupings. The high achievement favored the high-mean IQ students. Also, there appeared to be a tendency for similar mean IQ individuals to achieve differentially based on SES. The relationship between course selection and SES is not reported. The following hypotheses are offered:

Hypothesis 5A: There will be no statistically significant difference in the academic achievement based on standardized achievement test scores of low and middle SES black students when IQ is held between 90 and 110 regardless of the track selection.

Hypothesis 5B: There will be no statistically significant difference in the academic achievement based on academic grade-point average of low and middle SES black students when IQ is held between

90 and 110, regardless of the track selection.
Hypothesis 6A: There will be no statistically significant difference between sex and academic achievement based on standardized achievement test scores when IQ is held between 90 and 110.

Hypothesis 6B: There will be no statistically significant difference between sex and academic achievement based on academic grade-point average when IQ is held between 90 and 110.

Summary of Methodology

All average IQ (90 - 110) tenth-grade black students in a public high school comprised the sample. The PH was administered to the selected students at the time of pre-registration for the eleventh grade. Target students met the following criteria: (1) black, (2) average IQ, 90-110 range, and (3) either low or middle SES.

The key variables of socioeconomic status, sex, course selection (track), academic achievement (standardized test scores and academic grade-point average), and self-concept scores were correlated for both the total population of selected students as well as the subpopulations based on sex and SES. Pearson's correlation statistics and one-way analyses of variance were performed on the pertinent data to test the hypotheses.

Chapter 4

Analysis of Data and Findings

The initial screening performed to identify the targeted subjects revealed that of a group of 376 tenth-grade black students, 112 fell into the range of this study. The final population of 102 students resulted when five students (3 males and 2 females) did not wish to participate and five students (4 males and 1 female) withdrew from school during the period of the study.

All students within the IQ range (90-110) of this study met the socioeconomic status restrictions. Table 1 reveals the STEA quotient (IQ) makeup of the tenth-grade black student population in the selected school.

The following analyses by hypothesis were performed by using all of the 102 subjects that remained in the population.

Analysis of Data and Findings

Hypothesis 1. Hypothesis 1 states that there will be no statistically significant difference between socioeconomic status of black students (IQ = 90-110) and the selection of lower and upper academic tracks.

An analysis of variance of the data revealed a significance level of $p = 0.07$ which was insufficient to

Table 1

Breakdown by IQ* of All Black Tenth-Grade Students
in Selected School

| Sex | IQ | | | | | | | | not avail. | Totals |
|--------|--------------|---------------|---------------|---------------|--------------|-------------|-------------|---------------|-----------------|--------|
| | 60-69 | 70-79 | 80-89 | 90-99 | 100-110 | 111-120 | 121-130 | | | |
| Male | 12 (3.2%) | 37 (9.9%) | 39 (10.4%) | 37 (9.8%) | 11 (2.9%) | 0 (0.0%) | 1 (0.3%) | 23# (6.1%) | 160 (42.6%) | |
| Female | 14 (3.7%) | 49 (13.0%) | 57 (15.1%) | 47 (12.5%) | 17 (4.5%) | 7 (1.9%) | 0 (0.0%) | 25# (6.7%) | 216 (57.4%) | |
| Totals | 26 (6.9%) | 86 (22.9%) | 96 (25.5%) | 84 (22.3%) | 28 (7.4%) | 7 (1.9%) | 1 (0.3%) | 48 (12.8%) | 376 (100.0%) | |

*STEA quotient received on SRA tests given in fall of 8th grade

#16 males and 14 females were transfer students.

reject the hypothesis at the $p < 0.05$ level. However, further analyses of the data revealed that there was a moderate number of students whose SES level did not correspond with the SES level of the community in which they lived. A $p < 0.001$ was achieved when the community of the student was correlated to the student's course selection. Table 2 presents an analysis of the findings. Table 3 indicates that only 4.3 percent of the students who are classified as low SES and living in a low SES area selected upper track courses; whereas 41 percent of the students who are classified as middle SES and living in a middle SES area selected upper track courses. See Appendix B for a map showing the breakdown by area.

Hypothesis 2. Hypothesis 2 states that there will be no statistically significant difference between the self-concepts of male and female students when IQ is held between 90 and 110. The findings revealed that the general self-concept as measured by the Piers-Harris Children's Self Concept Scale (1969) is not significantly different between the sexes. The males possessed a slightly higher average self-concept (64.7) than the females (63.3). This trend held even between the sexes in the different SES categories. The middle and lower SES males averaged 64.4 and 65.0 respectively; whereas the middle and low SES females averaged 63.3 and 63.4 respectively.

Table 4 presents the statistical findings.

Table 2

Socioeconomic Status (SES) and Area
by Course Selection (Track)

| | N | Track Mean | Standard Deviation |
|----------------------|-----|---------------|-----------------------|
| SES: Low | 35 | 1.1714 | 0.3824 |
| Middle | 67 | 1.3433 * | 0.4784 |
| Entire Population | 102 | 1.2843 | 0.4533 |
| Area: Low SES | 29 | 1.0345 ** | 0.1857 |
| Low-Mid SES | 25 | 1.2800 | 0.4583 |
| Middle SES | 48 | 1.4375 ** | 0.5013 |

* $p=0.07$

** $p<0.001$

Table 3

Frequency Distribution of Course Selection (Track)
by Socioeconomic Status (SES) and
Neighborhood (Area)*

| SES | Area | Track | | Totals |
|--------|-------------------|---------------|---------------|-----------------|
| | | Low | High | |
| Low | Middle SES | 0 (0.0%) | 2 (2.0%) | 2 (2.0%) |
| | Low-Middle SES | 7 (6.9%) | 2 (2.0%) | 9 (8.8%) |
| | Low SES | 22 (21.6%) | 1 (1.0%) | 23 (22.5%) |
| Middle | Middle SES | 27 (26.5%) | 19 (18.6%) | 46 (45.1%) |
| | Low-Middle SES | 12 (11.8%) | 5 (4.9%) | 17 (16.7%) |
| | Low SES | 5 (4.9%) | 0 (0.0%) | 5 (4.9%) |
| Totals | | 73 (71.6%) | 29 (28.4%) | 102 (100.0%) |

* Partial Correlation controlling for IQ = 0.66, $p < 0.001$

Pearson Correlation coefficient = 0.67, $p < 0.001$

Table 4
 Self-Concept by Sex and by Subpopulations

| Sex | SES | General Self-Concept | Standard Deviation | N |
|--------|--------|-------------------------|-----------------------|----|
| Male | - | 64.7 [*] | 8.1 | 41 |
| Female | - | 63.3 | 9.7 | 60 |
| Male | Low | 65.0 [*] | - | 18 |
| | Middle | 64.4 [*] | - | 23 |
| Female | Low | 63.4 [*] | - | 17 |
| | Middle | 63.3 | - | 43 |

*Not significant

Hypothesis 3. Hypothesis 3 states that there will be no statistically significant difference between males and females in the selection of upper and lower academic tracks. At the $p < 0.05$ level of statistical significance, an analysis of variance of the means reveals that hypothesis 3 can be rejected. Females tended to select the higher track more often than did the males.

Table 5 presents the findings.

Hypothesis 4. Hypothesis 4 states that there will be no statistically significant difference in the general self-concepts of lower and middle SES black students when IQ is held between 90 and 110. The mean general self-concepts between lower and middle SES black students (IQ = 90-110) of 64.2 and 63.7 respectively is not statistically significant. Hypothesis 4 is accepted.

Table 6 presents the findings.

Hypothesis 5A. Hypothesis 5A states that there will be no statistically significant difference in the academic achievement based on standardized achievement test (SRA) scores of low and middle SES black students when the IQ is held between 90 and 110, regardless of track selection. Even though the middle SES black students had a mean score of 7th year 1st month compared to a mean score of 6th year 6th month for low SES black students, the statistical significance failed to reach the $p < 0.05$ level. Hypothesis 5A is therefore upheld.

Table 5
Course Selection (Track) by Sex

| Sex | Track | | Track Mean | Standard Deviation |
|-------------|-------|------|------------|--------------------|
| | Low | High | | |
| Male | 34 | 7 | 1.17* | 0.38 |
| Female | 39 | 22 | 1.36* | 0.48 |
| Entire Pop. | 73 | 29 | 1.28 | 0.45 |

* Analysis of variance (two-tailed): $F = 4.45$; $p < 0.05$

Table 6

Self-Concept (GSC) by Socioeconomic Status (SES)

| SES | GSC Mean | Standard Deviation | N |
|--------|----------|--------------------|----|
| Low | 64.2* | 7.8 | 35 |
| Middle | 63.7 | 9.4 | 66 |

*Not significant (p=0.??)

This finding held fairly constant for both males and females across the SES lines. Also, even though the SRA scores correlated more closely with the area of domicile, the correlation did not reach statistical significance.

Table 7 presents the findings.

Hypothesis 5B. Hypothesis 5B states that there will be no statistically significant difference in the academic achievement based on the academic grade-point average (AGPA) of low and middle SES black students when the IQ is held between 90 and 110, regardless of the course selection. The mean AGPA for lower and middle SES black students is 1.9490 and 2.2741 respectively. A statistical significance level of $p < 0.05$ is achieved. Hypothesis 5B is rejected.

See Table 8 for findings.

Hypothesis 6A. Hypothesis 6A states that there will be no statistically significant difference between sex and academic achievement based on standardized achievement test scores when IQ is held between 90 and 110. With means of 6th year 4th month and 7th year 3rd month for males and females respectively, a statistically significant $p < 0.01$ was obtained. Hypothesis 6A is rejected.

Table 9 presents the findings.

Hypothesis 6B. Hypothesis 6B states that there will be no statistically significant difference between sex and academic achievement based on academic grade-point average when IQ is held between 90 and 110. AGPA means of 1.8600

Table 7

Standardized Achievement Test Score (SRA)
by Socioeconomic Status (SES)
and by Subpopulations

| Sex | SES | SRA Mean | Standard Deviation | N |
|--------|--------|----------|--------------------|----|
| - | Low | 6yr6mo * | 1yr3mo | 35 |
| - | Middle | 7yr1mo | 1yr3mo | 67 |
| Male | Low | 6yr4mo * | 1yr3mo | 18 |
| | Middle | 6yr5mo | 1yr3mo | 23 |
| Female | Low | 6yr9mo * | 1yr2mo | 17 |
| | Middle | 7yr4mo | 1yr2mo | 44 |

*Not significant

Table 8

Academic Grade-Point Average (AGPA)
by Socioeconomic Status (SES)

| SES | AGPA Mean | Standard Deviation | N |
|--------|---------------------|-----------------------|----|
| Low | 1.9490 [*] | 0.7013 | 35 |
| Middle | 2.2741 | 0.6320 | 67 |

*F = 5.642 (two-tailed), $p < 0.05$

Table 9
Standardized Achievement Test Score (SRA)
by Sex

| Sex | SRA Mean | Standard Deviation | N |
|--------|----------|-----------------------|----|
| Male | 6yr4mo * | 1yr3mo | 41 |
| Female | 7yr3mo | 1yr2mo | 61 |

* $F = 11.4$ (two-tailed), $p < 0.01$

and 2.3659 for males and females respectively reached a statistical significance of $p < 0.001$. Hypothesis 6B is rejected.

Table 10 presents the findings.

Other Findings

The testing of the above hypotheses revealed that there was a significant difference between sexes and SES on the following variables: course selection, academic grade-point average, and standardized achievement test scores. The researcher therefore divided the population into sub-populations based on all male, all female, low SES, middle SES, low SES male, middle SES male, low SES female, and middle SES female. To assist in the interpretation of the findings, correlations were obtained between the dependent variables (global self-concept, AGPA, SRA, and course selection). Table 11 summarizes these findings. See Appendix C for individual tables which display the results.

Interpretation of Findings

The determination of socioeconomic status based on the occupation of the head-of-the-household does not seem to reflect as nearly the similarity in life style as does the neighborhood in which the family lives. There is significant evidence based on this study that those students classified as middle SES who live in low SES neighborhoods select the lower academic track which is

Table 10

Academic Grade-Point Average (AGPA)
by Sex

| Sex | AGPA Mean | Standard Deviation | N |
|--------|-----------|-----------------------|----|
| Male | 1.8600 | 0.6971 | 41 |
| Female | 2.3659 | 0.5744 | 61 |

* $F = 16.0$ (two-tailed), $p < 0.0001$

Table 11

Summary by Subpopulations of Other Findings Relating to Academic Grade-Point Average (AGPA), Socioeconomic Status (SES), Standardized Achievement Test Score (SRA), Course Selection (Track), Head-of-Household, General Self-Concept (GSC), Neighborhood (Area), and IQ Using Pearson Correlations

| Variables | Male | Female | Low SES | Middle SES | Low SES Male | Middle SES Male | Low SES Female | Middle SES Female | Middle SES Male | Low SES Female | Middle SES Female |
|--------------------|-------------|-------------|-------------|-------------|--------------|-----------------|----------------|-------------------|-----------------|----------------|-------------------|
| AGPA by SES | * p<.10 | n.s. | - | - | - | - | - | - | - | - | - |
| SRA by SES | n.s. | n.s. | - | - | - | - | - | - | - | - | - |
| Track by Head-of-H | n.s. | n.s. | n.s. | n.s. | n.s. | n.s. | n.s. | n.s. | n.s. | n.s. | n.s. |
| SRA by Track | # p<.10 | # p<.01 | # p<.01 | # p<.01 | n.s. | n.s. | n.s. | n.s. | n.s. | # p<.05 | # p<.05 |
| GSC by Track | n.s. | p<.10 | n.s. | p<.10 | n.s. | n.s. | n.s. | n.s. | n.s. | n.s. | n.s. |
| AGPA by Track | # p<.001 | # p<.001 | # p<.01 | # p<.001 | # p<.01 | # p<.01 | n.s. | n.s. | # p<.01 | n.s. | # p<.01 |
| Track by Area | # p<.05 | # p<.05 | # p<.001 | n.s. | - | n.s. | # p<.10 | n.s. | n.s. | # p<.10 | n.s. |
| IQ by Track | # p<.05 | # p<.05 | n.s. | p<.05 | n.s. | n.s. | n.s. | p<.05 | n.s. | n.s. | n.s. |
| IQ by SES | n.s. | n.s. | - | - | - | - | - | - | - | - | - |
| AGPA by SEX | - | - | ● p<.01 | ● p<.05 | - | - | - | - | - | - | - |
| SRA by Sex | - | - | n.s. | ● p<.01 | - | - | - | - | - | - | - |
| IQ by Sex | - | - | n.s. | n.s. | - | - | - | - | - | - | - |

* Higher rating favors middle SES student.

Higher rating favors high track.

● Higher rating favors females.

comparable to the fact that only one out of 23 low SES students living in a low SES neighborhood selected an upper track. Based on the evidence, there is a statistically significant relationship between the neighborhood in which a student lives and the academic track that a student selects. This relationship is reduced when one works solely with the occupation of the head-of-the-household.

The suggestion that higher IQ individuals would select the higher track was generally found to be true. One group, the lower SES male, indicated virtually no difference between IQ and track selection. But in the middle SES male, lower SES female, and middle SES female groups, the IQ differences of 6.5 ($p < 0.05$), 2.8 (n.s.), and 2.6 (n.s.) respectively reflected that the higher IQ individual tended to select the upper academic track. With higher IQ and life style correlating with course selection, support for Festinger's and Byrne's theories is found.

The findings of this study support those of Soares and Soares (1969) and Trowbridge (1972a) in that no significant relationship was found between sex and self-concept. There was a slightly higher (1.3 points) general self-concept for males than for females which supports the tendency reported by Wylie (1963).

With only 17 percent of the males and 36 percent of the

females selecting upper academic courses, a statistically significant $p < 0.05$ indicated that Pfeiffer's (1966, 1967) results apply not only to selection of English classes but also to the selection of an entire course of study.

This study does not support the contention that self-concept is higher for lower SES students than for middle SES students as advanced by Smith, Zingale, and Coleman (1978), Soares and Soares (1969), and Trowbridge (1972a). The 64.2 to 63.7 average general self-concepts for lower SES and middle SES students respectively are essentially the same. A warning is advanced by Piers (1969) that lower SES students may respond defensively to the self-concept inventory by responding according to the way they would like to feel. Even though this unexamined tendency may be operating within this population of students, a frequency distribution of general self-concept scores by socioeconomic status and track reveals a tendency for students selecting a lower academic track to have poorer self-concepts than those selecting upper track courses. See Table 12 for these frequencies. Approximately 33 percent of the students selecting a lower track have general self-concept scores below 60 and only 11 percent of the students selecting an upper track have general self-concept scores below 60. The suggestion here is that the statistical means do not indicate the whole picture.

Table 12

Frequency Distribution of General Self-Concept Scores by Socioeconomic Status (SES) and Track*

| Track | SES | General Self-Concept Scores | | | | |
|-------|--------|-----------------------------|-------|-------|-------|-------|
| | | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 |
| Lower | Low | 1 | 0 | 4 | 17 | 7 |
| | Middle | 0 | 5 | 14 | 10 | 15 |
| Upper | Low | 0 | 0 | 0 | 5 | 1 |
| | Middle | 0 | 1 | 2 | 10 | 9 |

*Analysis of Variance indicates $p < 0.10$.

Although the findings of this study indicate that there is no statistically significant difference between middle and low SES students in terms of standardized achievement test scores, there is a tendency for low SES students to have lower scores than middle SES students — 7th year 1st month and 6th year 6th month respectively — a 5-month difference. A much greater difference in achievement was noted for low SES males when the mean IQ was the same: lower track students scored 6th year 2nd month and the upper track students scored 7th year 5th month. This difference failed to reach the accepted level of statistical significance because of the small sample size in the upper track. Though the strong correlation between standardized achievement test results and IQ is supported by this study, the significant correlation between academic track and achievement test results must be reported. Based on the strength of the relevant correlations indicated in Table 13, academic grade-point average is correlated more closely with achievement test results than is IQ and has a much higher correlation to academic track than IQ. The fact that the IQ difference between the sexes is so insignificant with females scoring significantly better on standardized achievement tests and making better grades than males indicates that IQ is not the single-most important determinant of achievement.

Table 13

Correlations between IQ, Achievement Test Scores (SRA), Academic Grade-Point Averages (AGPA), Sex, and Academic Track based on Pearson Correlation Coefficients Using a Two-tailed Test Design

| | IQ | SRA | AGPA | Sex | Track |
|------|----------------------|------------------------|------------------------|------------------------|------------------------|
| IQ | xx | * r=0.58 p<0.001 | * r=0.34 p<0.001 | ● r=0.02 p<0.85 | # r=0.28 p<0.01 |
| SRA | * r=.58 p<.001 | xx | r=0.64 p<0.001 | @ r=0.32 p<0.001 | # r=0.39 p<0.001 |
| AGPA | * r=.34 p<.001 | r=0.64 p 0.001 | xx | @ r=0.37 p<0.001 | # r=0.52 p<0.001 |
| Sex | ● r=.02 p<.85 | ● r=0.32 p<0.001 | ● r=0.37 p<0.001 | xx | ● r=0.21 p<0.05 |

*Higher rating favors high IQ.

#Higher rating favors upper track.

@Higher rating favors females.

A correlation of slightly above $p = 0.05$ was achieved between IQ and socioeconomic status and a significant $p < 0.05$ was achieved for the difference in mean academic grade-point averages of lower and middle SES students which indicated that the middle SES black student had an improved opportunity to achieve due to a slightly superior IQ.

Summary of Findings

The neighborhood or area in which a student lives as well as IQ correlates significantly with the tendency of a student to choose an upper academic track.

Self-concept is not significantly different between the sexes or between the socioeconomic groups studied. However, there is a slight tendency for females and the middle SES group to possess a lower self-concept than males or lower SES group respectively.

Females select an upper academic track more frequently than do the males.

No significant correlation was identified between socioeconomic groups and standardized achievement test scores. However, there was a significant correlation found between academic grade-point averages between lower and middle SES students, the high AGPA favoring the middle SES student and an even stronger correlation favoring higher AGPA in a middle SES neighborhood.

Females had a statistically significant superiority

over males in terms of academic achievement based on standardized achievement test scores and on academic grade-point averages in spite of a slight IQ disadvantage.

Chapter 5

Conclusions

Implications

A specific implication from the findings of this study is that a middle SES black female will do better on standardized achievement tests and academic grade-point average than will black middle SES males or low SES black males and females. The middle SES black female will accomplish these results by taking more advanced courses (selecting the upper academic track) even though she does not possess an IQ advantage over the middle SES males.

Generally, black students selecting the upper track have a higher self-concept, a significantly higher academic grade-point average, a significantly higher standardized achievement test score, a significantly higher IQ, and live in a better neighborhood than black students who select the lower track. However, there is some evidence to support the contention that an average IQ (90-110) black student might benefit by selecting an upper academic track. A problem that remains is how to encourage black students who live in low-middle and low socioeconomic neighborhoods to select the more challenging courses. All indications are that these students should not experience

the failure that is so often predicted for such disadvantaged students.

Why black students are not graduating as honor students can be explained only in part by the very few above-average IQ (greater than 110) black students. Only 27 percent of the average IQ black students are opting to select upper academic courses. Of course, no cause-effect relationships can be precipitated from a correlational study, but the implication is that many average IQ black students are predisposed to a lower academic track based on considerations other than intellectual ability. The fact that the average IQ black student taking lower track courses is not achieving a much higher grade-point average than average IQ black students who are selecting a track normally reserved for above-average intelligence students indicates that such students are not benefiting from higher grades by selecting a lower academic track.

Guidance counselors and school administrators ought to consider statistics that reveal the type of significant relationships that are presented in this study. Specifically, directive assistance should be given to students who need the extra push toward excellence. Special educational programs should be analyzed to assure that targeted students are benefiting from such programs and are not becoming the "dumping grounds" for a large number of undecided, or apparently uninterested, students.

If the inadequacies of multi-levels of courses for the same grade continue and if the lower levels serve the purpose of offering a "low-resistance" to a high school diploma for average intelligence black students, then one may question the adequate preparation of these young persons to meet the rigors of advanced educational opportunities and the qualifications for responsible positions in the private and public sectors.

Possibly one of the most startling implications of this study is the correlation between track and academic grade-point average. It would appear that to select an easier program to preserve a high grade-point average is a myth. If anything, lower grade-point averages may follow such a choice.

Suggestions for Further Research

Since this study points out that student self-concept is not significantly related to socioeconomic status, academic achievement, and intelligence level of lower and middle class average IQ black students, then perhaps future researchers who attempt to deal with the performance of these students should not rely on self-concept in attempting to address student motivational problems. There are at least two opposing factors that are continuously operating on the individual student: (1) to take the courses that do not require much effort and (2) to take those courses that may require much personal

effort but also produce great internal and external satisfaction based on anticipated outcomes. Many students from advantaged situations may tend to possess more of the second factor than the first factor. Students from underprivileged situations may possess more of the first factor than the second factor.

Research needs to be done on students who are following a low achievement pattern to determine whether the implications of this study can be supported statistically.

In general, black students living in low socioeconomic neighborhoods need to be encouraged to take higher-level programs and their progress needs to be monitored at regular intervals (every two years or so) to evaluate the effectiveness of such programs on the achievement of the disadvantaged. Comparisons can be made with students who are matched on selected traits so that any cause-effect relationship may be strengthened.

Summary

In this study of black, tenth-grade, similar IQ (90-110) students, statistically significant differences were indicated between socioeconomic status and academic grade-point average, sex and standardized achievement test scores, sex and academic grade-point average, sex and course selection, course selection and neighborhood, course selection and standardized achievement test scores,

and course selection and academic grade-point average. Differences between socioeconomic status and standardized achievement test scores, socioeconomic status and course selection, socioeconomic status and self-concept, standardized achievement test scores and self-concept, course selection and self-concept, and sex and self-concept were insignificant.

Tables 14 and 15 summarize the findings of this study. Table 14 indicates the correlations between socioeconomic status, standardized achievement test scores, academic grade-point average, course selection, neighborhood, general self-concept, IQ, and sex. Table 15 indicates the above correlations when IQ is controlled statistically.

It is concluded that the significant relationships identified should be studied with an intent to encourage more black students to select upper-level courses based on the assumption that these students could possibly achieve significantly higher standardized test scores and grade-point averages, thereby improving their ability to secure entrance into higher educational programs and professional jobs. Life style, based to a greater extent on the neighborhood in which the student lives and to a lesser extent on the occupation of the head-of-the household, is apparently a significant correlator with academic success, but the effects of IQ are also

Table 14

Pearson Correlation Coefficients (Two-tailed Test) for Socioeconomic Status (SES), Standardized Achievement Test Scores (SRA), Academic Grade-Point Average (AGPA), Course Selection (Track), Neighborhood (Area), General Self-Concept (GSC), IQ, and Sex

| | SES | SRA | AGPA | Track | Area | GSC | IQ | Sex |
|-------|-----|------|------------------|------------------|------------------|----------------|------------------|------------------------|
| SES | xx | n.s. | r=.231 p<.05 | r=.181 p<.10 | r=.670 p<.001 | n.s. | r=.194 p=.05 | n.s. |
| SRA | - | xx | r=.642 p<.001 | r=.388 p<.001 | r=.210 p<.05 | n.s. | r=.580 p<.001 | ** r=.320 p<.001 |
| AGPA | - | - | xx | r=.517 p<.001 | r=.345 p<.001 | n.s. | r=.338 p<.001 | ** r=.371 p<.001 |
| Track | - | - | - | xx | r=.374 p<.001 | r=.18 p<.10 | r=.283 p<.01 | ** r=.206 p<.05 |
| Area | - | - | - | - | xx | n.s. | n.s. | n.s. |
| GSC | - | - | - | - | - | xx | n.s. | n.s. |
| IQ | - | - | - | - | - | - | xx | n.s. |

* Direct relationship

** Higher rating favors females

Table 15

Partial Correlation Coefficients (Two-Tailed Test)
Controlling for IQ

| | SES | SRA | AGPA | Track | Area | GSC | Sex |
|-------|-----|------|-----------------------|-----------------------|-----------------------|------|------------------------|
| SES | xx | n.s. | n.s. | n.s. | * r=.659 p<.001 | n.s. | n.s. |
| SRA | - | xx | * r=.609 p<.001 | * r=.321 p<.01 | n.s. | n.s. | ** r=.383 p<.001 |
| AGPA | - | - | xx | * r=.466 p<.001 | * r=.293 p<.01 | n.s. | ** r=.386 p<.001 |
| Track | - | - | - | xx | * r=.371 p<.001 | n.s. | ** r=.205 p<.05 |
| Area | - | - | - | - | xx | n.s. | n.s. |
| GSC | - | - | - | - | - | xx | n.s. |

*Direct relationship

**Higher rating favors females.

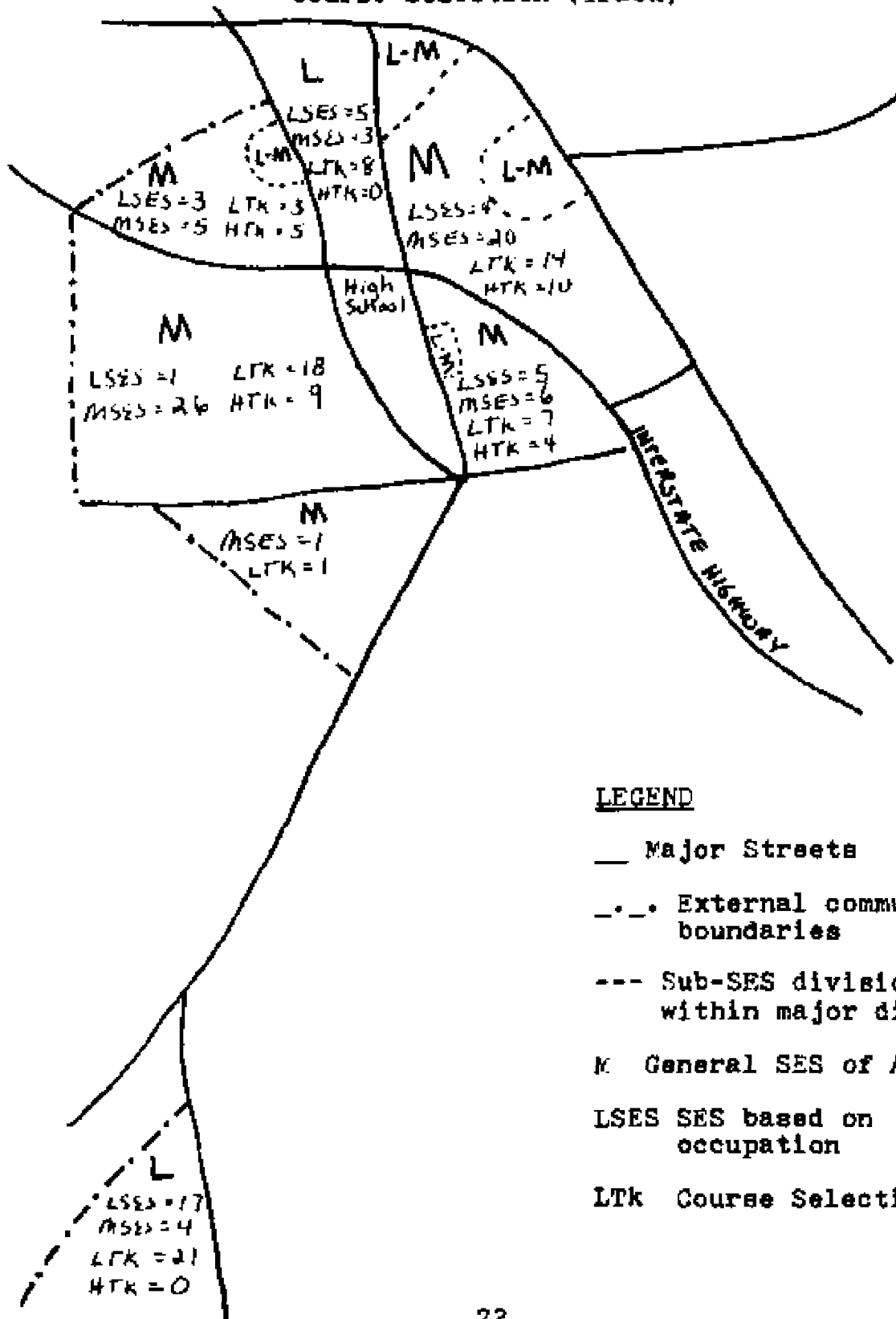
significant. Byrne's theory of similarity and reinforcement to a greater degree and Festinger's theory of social comparison processes to a lesser degree are supported by the results of this study.

Since the IQ range was restricted in this study, the correlational strength of the usually very few IQ points of difference between various subpopulations should be viewed critically, otherwise educators may continue to use only one measure to predispose a student to a particular program. The correlations of this study should encourage guidance counselors to urge many borderline black students to take upper level courses and should send a warning to administrators and curriculum specialists that programs be designed to meet an identified need and have built-in safeguards to assure that lower level courses do not become a haven for students who are looking for an easy way out of their current status.

APPENDICES

Appendix B

Socioeconomic Status Map of Area Served
by Selected School, including
Course Selection (Track)



LEGEND

- Major Streets
- .- External community boundaries
- Sub-SES divisions within major divisions
- M General SES of Area
- LSES SES based on occupation
- LTK Course Selection

Appendix C

Other Findings by Subpopulations

Subpopulation: All Male (N=41)

| <u>Variable</u> | <u>by Variable</u> | <u>Means(N)</u> |
|-----------------|--------------------|--|
| AGPA | SES | Low SES = 1.6680 (18) * Mid SES = 2.0338 (23) |
| SRA | SES | Low SES = 6yr4mo Mid SES = 6yr5mo |
| Track | Head-of-Household | Father = 1.15 (20) Mother = 1.19 (16) Step-Father = 1.00 (2) Female Guardian = 1.33 (3) |
| SRA | Track | Low Track = 6yr3mo (34) * High Track = 7yr3mo (7) |
| GSC | Track | Low Track = 64.1 (34) High Track = 67.3 (7) |
| AGPA | Track | Low Track = 1.6620 (34) *** High Track = 2.8219 (7) |
| Track | Area | Low SES Area = 1.00 (14) ** Low-mid SES Area = 1.15 (13) ** Middle SES Area = 1.36 (14) |
| IQ | Track | Low Track = 95.1 (34) ** High Track = 99.9 (7) |
| IQ | SES | Low SES = 94.3 (18) Middle SES = 97.1 (23) |

*p<.10
**p<.05
***p<.001

Subpopulation: All Female (N=61)

| <u>Variable</u> | <u>by Variable</u> | <u>Means(N)</u> |
|-----------------|--------------------|--|
| AGPA | SES | Low SES = 2.2782 (17) Middle SES = 2.3997 (44) |
| SRA | SES | Low SES = 6yr9mo (17) Middle SES = 7yr4mo (44) |
| Track | Head-of-Household | Father = 1.40 (20) Mother = 1.36 (33) Step-Father = 1.29 (?) Female Guardian = 1.00 (1) |
| SRA | Track | Low Track = 6yr9mo (39) *** High Track = 7yr9mo (22) |
| GSC | Track | Low Track = 61.8 (39) * High Track = 66.2 (21) * |
| AGPA | Track | Low Track = 2.1918 (39) **** High Track = 2.6744 (22) |
| Track | Area | Low SES Area = 1.07 (15) ** Low-Mid SES Area = 1.42 (12) ** Middle SES Area = 1.47 (34) |
| IQ | Track | Low Track = 95.1 (39) ** High Track = 97.9 (22) |
| IQ | SES | Low SES = 94.9 (17) Middle SES = 96.5 (44) |

*p < .10

**p < .05

***p < .01

****p < .001

Subpopulation: Low Socioeconomic Status Students (N=35)

| <u>Variable</u> | <u>by Variable</u> | <u>Means (N)</u> |
|-----------------|--------------------|--|
| AGPA | Sex | Male = 1.6380 (18) Female = 2.2782 (17)* |
| SRA | Sex | Male = 6yr4mo Female = 6yr9mo |
| GSC | Track | Low Track = 63.7 (29) High Track = 66.7 (6) |
| Track | Head-of-Household | Father = 1.00 (9) Mother = 1.26 (23) Female Guardian = 1.00 (3) |
| SRA | Track | Low Track = 6yr4mo (29)* High Track = 7yr9mo (6) |
| AGPA | Track | Low Track = 1.7836 (29)* High Track = 2.7482 (6) |
| Track | Area | Low SES Area = 1.04 (24) ** Low-Mid SES Area = 1.25 (8)** Middle SES Area = 2.00 (3) |
| IQ | Track | Low Track = 94.3 (29) High Track = 96.0 (6) |
| IQ | Sex | Male = 94.3 (18) Female = 94.8 (17) |

*p<.01

**p<.0001

Subpopulation: Middle Socioeconomic Status Students (N=67)

| <u>Variable</u> | <u>by Variable</u> | <u>Means (N)</u> |
|-----------------|--------------------|--|
| AGPA | Sex | Male = 2.0338 (23) ** Female = 2.3997 (44) |
| SRA | Sex | Male = 6yr5mo (23) Female = 7yr4mo (44) *** |
| GSC | Track | Low Track = 62.3 (44) * High Track = 66.4 (22) |
| Track | Head-of-Household | Father = 1.35 (31) Mother = 1.35 (26) Step-Father = 1.22 (9) Female Guardian = 2.00 (1) |
| SRA | Track | Low Track = 6yr8mo (44) *** High Track = 7yr7mo (23) |
| AGPA | Track | Low Track = 2.0515 (44) **** High Track = 2.7000 (23) |
| Track | Area | Low SES Area = 1.00 (5) Low-Mid SES Area = 1.29 (17) Middle SES Area = 1.40 (45) |
| IQ | Track | Low Track = 95.6 (44) ** High Track = 99.0 (23) |
| IQ | Sex | Male = 97.1 (23) Female = 96.5 (44) |

*p<.10

**p<.05

***p<.01

****p<.0001

Subpopulation: Low Socioeconomic Status Male (N=18)

| <u>Variable</u> | <u>by Variable</u> | <u>Means (N)</u> |
|-----------------|--------------------|--|
| IQ | Track | Low Track = 94.4 (16) High Track = 94.0 (2) |
| AGPA | Track | Low Track = 1.4968 (16)* High Track = 2.7674 (2) |
| GSC | Track | Low Track = 65.1 (16) High Track = 64.5 (2) |
| SRA | Track | Low Track = 6yr2mo (16) High Track = 7yr5mo (2) |
| Track | Head-of-Household | Father = 1.00 (6) Mother = 1.20 (10) Female Guardian = 1.00 (2) |
| Track | Area | Low SES Area = 1.00 (13) Low-Mid SES Area = 1.00 (3)# Middle SES Area = 2.00 (2) |

*p<.01

#no analysis

Subpopulation: Middle Socioeconomic Status Male (N=23)

| <u>Variable</u> | <u>by Variable</u> | <u>Means (N)</u> |
|-----------------|--------------------|---|
| IQ | Track | Low Track = 95.7 (18) High Track = 102.2 (5)* |
| AGPA | Track | Low Track = 1.8088 (18) High Track = 2.8437 (5)** |
| GSC | Track | Low Track = 63.3 (18) High Track = 68.4 (5) |
| SRA | Track | Low Track = 6yr3mo (18) High Track = 7yr2mo (5) |
| Track | Head-of-Household | Father = 1.21 (14) Mother = 1.17 (6) Step-Father = 1.00 (2) Female Guardian = 2.00 (1) |
| Track | Area | Low SES Area = 1.00 (1) Low-Mid SES Area = 1.20 (10) Middle SES Area = 1.25 (12) |

*p<.05

**p<.01

Subpopulation: Low Socioeconomic Status Female (N=17)

| <u>Variable</u> | <u>by Variable</u> | <u>Means (N)</u> |
|-----------------|--------------------|---|
| IQ | Track | Low Track = 94.2 (13) High Track = 97.0 (4) |
| AGPA | Track | Low Track = 2.1365 (13) High Track = 2.7386 (4) |
| GSC | Track | Low Track = 62.1 (13) High Track = 67.8 (4) |
| SRA | Track | Low Track = 6yr6mo (13)** High Track = 8yr3mo (4) |
| Track | Head-of-Household | Father = 1.00 (3) Mother = 1.31 (13) Female Guardian = 1.00 (1) |
| Track | Area | Low SES Area = 1.09 (11) * Low-Mid SES Area = 1.40 (5) * Middle SES Area = 2.00 (1) |

*p<.10

p<.05

Subpopulation: Middle Socioeconomic Status Females (N=44)

| <u>Variable</u> | <u>by Variable</u> | <u>Means (N)</u> |
|-----------------|--------------------|---|
| IQ | Track | Low Track = 95.5 (26) High Track = 98.1 (18) |
| AGPA | Track | Low Track = 2.2195 (26) ** High Track = 2.6601 (18) |
| GSC | Track | Low Track = 61.7 (26) High Track = 65.8 (17) |
| SRA | Track | Low Track = 7yr2mo * High Track = 7yr8mo |
| Track | Head-of-Household | Father = 1.47 (17) Mother = 1.40 (20) Step-Father = 1.29 (7) |
| Track | Area | Low SES Area = 1.00 (4) Low-Mid SES Area = 1.43 (7) Middle SES Area = 1.45 (33) |

*p<.05

*p<.01

REFERENCES

- Ability grouping. NEA Research Bulletin, 1968, 46, 74-76.
- Adler, S. Articulatory deviances and social-class membership. Journal of Learning Disabilities, 1973, 6, 650-654.
- American Psychological Association. Publication Manual of the American Psychological Association (2nd ed.). Washington, D.C.: Author, 1976.
- Balow, B. & Curtin, J. Ability grouping of bright pupils. The Elementary School Journal, 1966, 66, 321-326.
- Barber, B. Research on research on human subjects; problems of access to a powerful profession. Social Problems, 1973, 21, 103-112.
- Bilby, R.W., Brookover, W. B., & Erickson, E. C. Characterizations of self and student decision making. Review of Educational Research, 1972, 42, 505-524.
- Borg, W. R. Ability grouping in the public schools: a field study. The Journal of Experimental Education, 1965, 34 (2), 1-97.
- Brock, T. C. Communicator-recipient similarity and decision change. Journal of Personality and Social Psychology, 1965, 1, 650-654.
- Burnes, K. Patterns of WISC scores for children of two socioeconomic classes and races. Child Development,

- 1970, 41, 493-499.
- Byrne, D. E. An Introduction to Personality Research, Theory, and Application (2nd ed.). Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1974.
- Byrne, D., Clore, G. L., Jr., & Worchel, P. Effect of economic similarity-dissimilarity on interpersonal attraction. Journal of Personality and Social Psychology, 1966, 4, 220-224.
- Byrne, D., Griffitt, W., & Stefaniak, D. Attraction and similarity of personality characteristics. Journal of Personality and Social Psychology, 1967, 5, 82-90.
- Byrne, D., London, O., & Griffitt, W. The effect of topic importance and attitude similarity-dissimilarity on attraction in an intrastranger design. Psychonomic Science, 1968, 11, 303-304.
- Byrne, D. & Nelson, D. Attraction as a linear function of proportion of positive reinforcements. Journal of Personality and Social Psychology, 1965, 1, 659-663.
- Byrne, D. & Nelson, D. The effect of topic importance and attitude similarity-dissimilarity on attraction in a multistranger design. Psychonomic Science, 1965, 10, 449-450.
- Coleman, J. S. Responsibility of Schools in the Provision of Equal Educational Opportunity. Baltimore, MD: John Hopkins University, 1968. (ERIC Document Reproduction Service No. ED 023 729).

- Coleman, J. S., Campbell, E. Q., Hobson, C. T., McPartland, J., Mood, A. M., Weinfeld, F. D., & York, R. L. The locus of control and academic performance among racial groups. In S. S. Guterman, Black Psyche the Modal Personality Patterns of Black Americans. Berkeley, CA: The Glenssary Press, Inc., 1972.
- Coopersmith, S. A method for determining types of self-esteem. Journal of Abnormal and Social Psychology, 1959, 59, 87-94.
- Dalton, S. Predictive validity of high school rank and SAT scores for minority students. Educational and Psychological Measurement, 1974, 34, 367-370.
- Deutsch, M. & Solomon, L. Reactions to evaluations by others as influenced by self-evaluations. Sociometry, 1959, 22, 93-112.
- Esposito, D. Homogeneous and heterogeneous ability grouping: principal findings and implications for evaluating and designing more effective educational environments. Review of Educational Research, 1973, 43, 163-179.
- Fallers, M. Choice is not enough. School Review, 1970, 78, 229-239.
- Festinger, L. A Theory of Cognitive Dissonance. Evanston, IL: Row, Peterson and Company, 1957.
- Festinger, L. A theory of social comparison processes. Human Relations, 1954, 7, 117-140.
- Gampel, D. H., Gottlieb, J., & Harrison, R. H. Comparison

- of classroom behavior of special-class EMR, integrated EMR, low IQ, and nonretarded children. American Journal of Mental Deficiency, 1974, 79, 16-21.
- Green, R. B. & Rohwer, W. D. SES differences on learning and ability tests in black children. American Educational Research Journal, 1971, 8, 601-609.
- Griffitt, W. H. Interpersonal attraction as a function of self-concept and personality similarity-dissimilarity. Journal of Personality and Social Psychology, 1966, 4, 581-584.
- Hauser, R. M. & Featherman, D. L. Equality of schooling: trends and prospects. Sociology of Education, 1976, 49, 99-120.
- Jantz, R. K. The effects of sex, race, I.Q. and SES on the reading scores of sixth graders for both levels and gains in performance. Psychology in the Schools, 1974, 11, 90-94.
- Lefkowitz, L. J. Ability grouping: de facto segregation in the classroom. The Clearing House, 1972, 46, 293-297.
- Nie, N. H., Hull, C. H., Jenkins, J. G., Steinbrenner, K., & Bent, D. H. Statistical Package for the Social Sciences (2nd ed.). New York: McGraw-Hill Book Company, 1975.
- Pfeiffer, I. L. Teaching ability grouped classes. Education, 1966, 87, 88-93.

- Pfeiffer, I. L. Teaching in ability grouped English classes: a study of verbal interaction and cognitive goals. The Journal of Experimental Education, 1967, 36, 33-38.
- Piers, E. V. Manual for the Piers-Harris Children's Self Concept Scale (The Way I Feel about Myself). Nashville, TN: Counselor Recordings and Tests, 1969.
- Piers, E. V. & Harris, D. A. Age and other correlates of self-concept in children. Journal of Educational Psychology, 1964, 55, 91-95.
- Piers, E. V. & Harris, D. B. The Piers-Harris Children's Self Concept Scale (The Way I Feel about Myself) Nashville, TN: Counselor Recordings and Tests, 1969.
- Powers, J. M., Drane, H. T., Close, B. L., Noonan, M. P., Wines, A. W., & Marshall, J. C. A research note on the self-perception of youth. American Educational Research Journal, 1971, 8, 665-670.
- Schrank, W. R. The labeling effect of ability grouping. The Journal of Educational Research, 1968, 62, 51-52.
- Rubin, R. A., Krus, P., & Balow, B. Factors in special class placement. Exceptional Children, 1973, 39, 525-532.
- Sage, C. Chesapeake to phase-out mini-courses. The Ledger-Star, June 28, 1978, p. B1.
- Science Research Associated. Interpretive Manual Short Test of Educational Ability STEA Levels 3-5. Chicago,

- IL: Author, 1972.
- Shavelson, R. J., Hubner, J. J., & Stanton, G. C. Self-concept: validation of construct interpretations. Review of Educational Research, 1976, 46, 407-441.
- Simpson, R. L. Theories of Social Exchange. Morristown, NJ: General Learning Press, 1972.
- Smith, A. Minicourses in schools: idea whose time is over. The Virginian-Pilot, July 19, 1978, pp. A1, A4.
- Smith, M. D., Zingale, S. A., & Coleman, J. K. The influence of adult expectancy/child performance discrepancies upon children's self-concepts. American Educational Research Journal, 1978, 15, 259-265.
- Smith, N. P. Who should do minority research? Social Casework, 1973, 54, 393-397.
- Soares, A. T. & Soares, L. M. Self-perceptions of culturally disadvantaged children. American Educational Research Journal, 1969, 6, 31-45.
- Sweet, P. R. & Nuttall, R. C. The effects of a tracking system on student satisfaction and achievement. American Educational Research Journal, 1971, 8, 511-520.
- Telegdy, G. A. The relationship between socioeconomic status and patterns of WISC scores in children with learning disabilities. Psychology in the Schools, 1973, 10, 426-430.
- Telegdy, G. A. The relationship between socioeconomic

- status and school readiness. Psychology in the Schools, 1974, 11, 351-356.
- Thompson, G. W. The effects of ability grouping upon achievement in eleventh grade American history. The Journal of Experimental Education, 1974, 42, 76-79.
- Trowbridge, N. Self concept and socioeconomic status in elementary school children. American Educational Research Journal, 1972a, 9, 525-537.
- Trowbridge, N. T. Socioeconomic status and self-concept of children. Journal of Teacher Education, 1972b, 23, 63-65.
- Wylie, R. C. Children's estimates of their school work ability as a function of sex, race, and socioeconomic level. Journal of Personality, 1963, 31, 203-224.
- Ziller, R. C. Homogeneity and heterogeneity of group membership. In C. G. McClintock (Ed.), Experimental Social Psychology, New York: Holt, Rinehart, and Winston, Inc., 1972.
- Zirkel, P. A. & Moses, E. G. Self-concept and ethnic group membership among public school students. American Educational Research Journal, 1971, 8, 253-265.

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Abstract

THE RELATIONSHIPS BETWEEN SOCIOECONOMIC STATUS, SEX, SELF-CONCEPT, ACADEMIC ACHIEVEMENT, AND COURSE SELECTION OF URBAN BLACK TENTH-GRADE STUDENTS

Earl Birges Chappell III, Ed.D.

The College of William and Mary in Virginia, November 1979

Chairman: Professor Robert Maidment

The purpose of this study was to identify and to analyze the relationships that exist between course selection, self-concept, academic achievement, sex, and socioeconomic status of similar IQ urban black tenth-grade students. Festinger's theory of social comparison processes and Byrne's theory of similarity and reinforcement provided the conceptual framework for the study.

A population of 112 students was identified with measurements being recorded on 102 students in the selected urban high school located in southeastern Virginia. The Fiers-Harris Children's Self-Concept Scale, academic grade-point average, standardized achievement test scores, and course selection (academic track) were correlated with sex and socioeconomic status.

Six hypotheses were tested for statistically significant ($p < 0.05$) relationships between (1) SES and course selection, (2) self-concept and sex, (3) course selection and sex, (4) self-concept and SES, (5) academic achievement and SES, and (6) academic achievement and sex.

Significant relationships were found between sex and course selection (higher track favors the female), SES and academic grade-point average (direct relationship), sex and standardized achievement test scores (higher scores favor females), and sex and academic grade-point average (higher AGPA favors females).

It is concluded that the significant relationships identified should be studied with an intent to encourage more black students to select upper-level courses. This conclusion is based on the assumption that these students could possibly achieve significantly higher standardized test scores and grade-point averages, thereby improving their ability to secure entrance into higher educational programs and professional jobs.