DOCUMENT RESUME

ED 045 774 UD 011 104

AUTHOR Levine, Daniel U.; And Others
TITLE Opportunities for Higher Education in a Metropolitan Area: A Study of High School Senior in Kansas City, 1967.
INSTITUTION Mid-Continent Regional Educational Lab., Inc., Kansas City, Mo.; Missouri Univ., Kansas City. Center for the Study of Metropolitan Problems in Education.
PUB DATE 70
NOTE 74p.

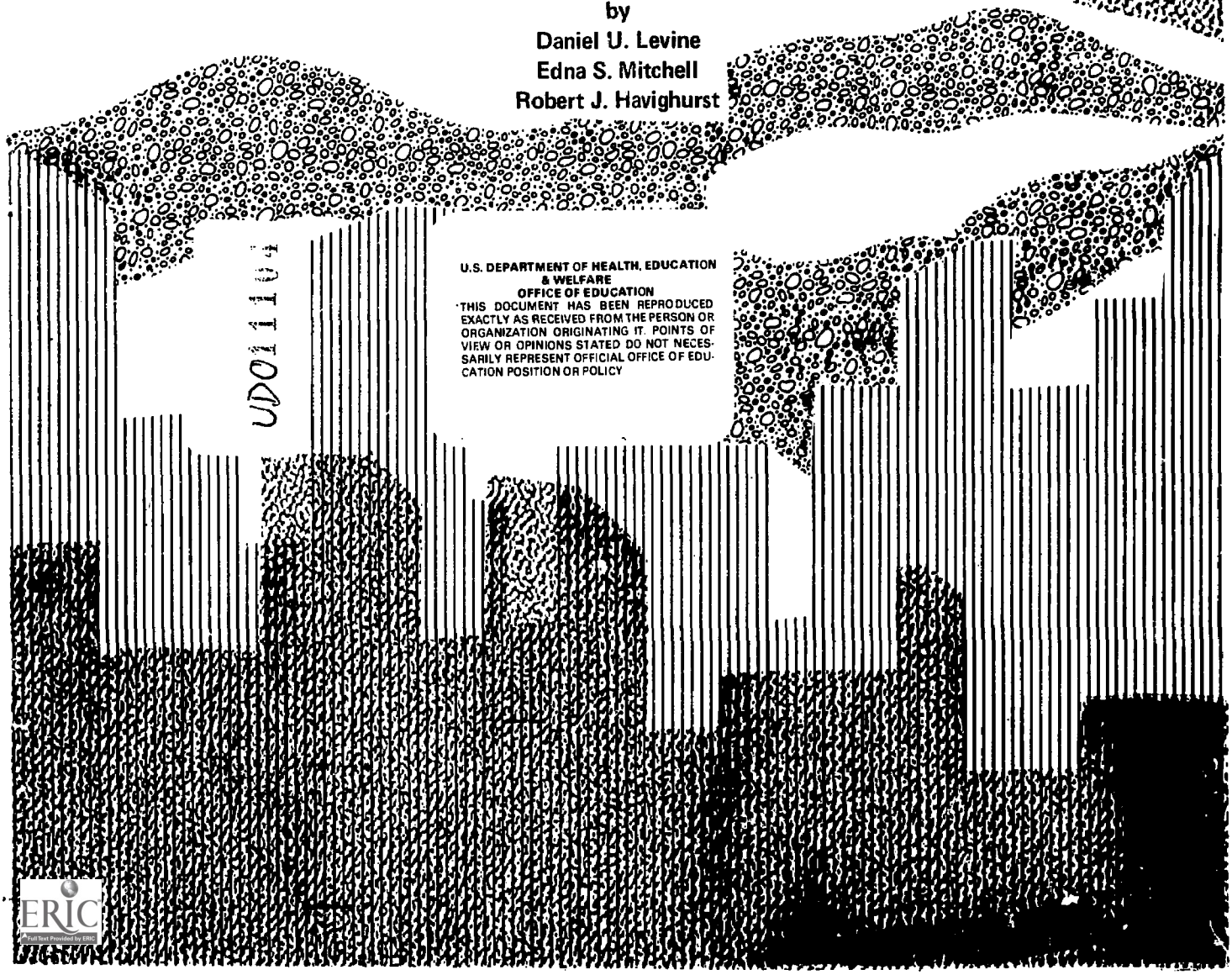
EDRS PRICE EDRS Price MF-$0.50 HC-$3.80
DESCRIPTORS Academic Achievement, *Academic Aspiration, *College Bound Students, *Higher Education, High School Role, High School Students, Laborers, Lower Class Students, Negro Students, *Seniors, *Social Class, Student Attitudes
IDENTIFIERS Kansas City, Missouri

ABSTRACT

This study explores factors related to the transition from high school to college in the Kansas City metropolitan region. Determinants of college attendance such as scholastic achievement, financial resources, sociceconomic status (SES), school climate, and race were studied. It is shown that the composition of high schools is correlated with the college aspirations of seniors graduating from high school. A chapter is also devoted to the working class high school student and the differences in college attendance plans and enrollment of the schools such students attend. Relatively high college aspirations coupled with relatively high college enrollment rates in schools attended by black students of working class SES suggest that there may be a trend for black students' participation in higher education. However, it is considered that caution should be exercised against overstating the improving picture for blacks. It is pointed out that standard indices of social class do not often adequately explain differences in aspiration or achievement. Indications are that low SES blacks have higher aspirations than comparable whites. There are also definite indications that both black and white working class students are expressing goals which they intend to achieve. (Author/JW)

OPPORTUNITIES FOR HIGHER EDUCATION IN A METROPOLITAN AREA: A STUDY OF HIGH SCHOOL SENIORS IN KANSAS CITY, 1967

by
Daniel U. Levine
Edna S. Mitchell
Robert J. Havighurst



ACKNOWLEDGMENTS

Chapter One provides a description of the types of schools and the data collection methods used in conducting the research reported in this monograph. The study was undertaken early in 1967 as a joint project by the Center for the Study of Metropolitan Problems in Education of the University of Missouri--Kansas City's School of Education, the Mid-continent Regional Educational Laboratory (McREL), and the Kansas City Regional Council on Higher Education (KCRCHE). The Center took responsibility for project methodology and overall guidance of the project. McREL provided financial sponsorship as well as many forms of technical support. KCRCHE helped establish access to data sources and provided the nucleus for a committee to advise on research methods and inter-institutional cooperation. We are deeply grateful to these two organizations for their support and assistance in initiating and carrying out the project.

Originally this project was intended to be a comprehensive exploration of factors related to the transition from high school to college in the Kansas City Metropolitan Region. For example, plans were made to carry out extensive analyses which would examine types of colleges attended and characteristics of college environments in relation to the characteristics of high schools and their student bodies in differing parts of the metropolitan area. In addition, it was hoped that a number of conferences could be held to bring together high school and college personnel to work out improvements in counseling and placement procedures and that continuing arrangements could be made to collect longitudinal information and feed it back into decision processes in the high schools and colleges.

During 1967 plans also were made for data analysis and data collected in the spring were prepared for computer analysis the following year. We estimate that the project was supported at an approximate level of $50,000 per year during this first full year of operation, mostly through funds and supporting services provided by McREL.

However, in 1968 regional educational laboratories were required to henceforth focus their efforts on a single area of educational concern of central importance to their respective regions or to the nation's educational system. Since McREL regretfully could no longer support the project, we were forced either to drop the study entirely or to continue it as best we could with our own limited resources. We chose to carry out as much of the project as possible at an expenditure level which averaged about $5,000 per year for each of the next two years, but this made it necessary to drop most of our original plans for a full analysis of the data using complex statistical techniques to examine many questions and issues which might have been explored with our data.

Final analysis of the date reported in this monograph was made possible through a $1,000 grant from Phi Delta Kappa. We are much indebted to Phi Delta Kappa's Commission on Higher Education for this support in completing the project and for its cooperation in making this study available to educators, social scientists and laymen who may be interested in its results.

CHAPTER I

FACTORS AFFECTING OPPORTUNITY FOR HIGHER EDUCATION IN A METROPOLITAN AREA

Increasing numbers of Americans during the present century have come to look upon a college education as a necessity. The vast majority of upper-middle-class vocational positions are now occupied by college-educated men and women, and the number of these positions is increasing rapidly. As a consequence, there is need not only for young people born in middle-class families, but also for young people from lower-middle and working-class families, to obtain college educations. College is the avenue of upward mobility for growing numbers of young people.

In the modern post-industrial society there is and will be great stress on educational opportunity as a means of promoting democracy and stability of the society.

With universal education up to 16 years of age, the important differentials in amount of education will exist at the points of high school graduation, college entrance, college graduation, and to a lesser extent, post-graduate college work.

Various national commissions have stated "national goals" in education from time to time. These goals have been elevated as the needs for college level manpower and the financial affluence of the society have increased. Probably a commission meeting today would set goals approximately as follows for the decade of the 1970s.

High school graduation	85 percent of the appropriate age group
College entrance	50 percent
College graduation	25 percent

1. Provide manpower for a rapidly expanding work force at the professional and technical job areas.
2. Provide the educational base for a necessarily high level of socio-economic-political knowledge which is contributing to civic competence.
3. Increase the level of taste and sophistication in the consumption of goods, services, and leisure.

The levels of education noted above describe in broad terms the educational "opportunity structure" of the United States. But they do not give the complete picture, because they do not indicate who will be located at or who will achieve the various levels. Most important of all, they do not indicate to what extent the children of the lower half of the population in income will move into the upper half in terms of educational level.

We know in a general way that there will be some net upward socio-economic mobility and a great deal of net upward educational mobility between the generation of young adults in the 70s and their parents. The labor market needs more college-trained people now than it did 10 or 30 years ago. The

proportion of middle-class people in the population (defined in the usual terms of occupation and income) has been increasing throughout the present century.

We also know that there is some downward socioeconomic mobility in our society, but not very much. A study of inter-generation social mobility in the Kansas City area in the early 1950s showed that there was a 36 percent upward mobility (one step or more in a 5 step scale) and 13 percent downward mobility, leaving a net upward mobility of 23 percent. (Coleman and Neugarten, 1967)

Ideally, all youth should have equal chances in the competition for the higher educational levels. Free education is aimed to equalize these chances. But a number of factors combine to limit this kind of opportunity. The family factor is the principal limiting factor. Many young people are deprived of opportunity because their families have not given them the family environment and the educational aspirations that enable them to reach the higher levels. The family factor favors the higher status children and disfavors the children from homes lower in the socioeconomic scale.

The community factor is a complex one which we are only now beginning to understand. Some communities get twice as many of their youth into college as other communities. This is partly due to different family composition of the various communities, but only partly. A community with a free junior college gets more of its youth into college than one without such a college, other conditions being equal.

The school factor has been explored in recent years, in the light of reference group theory which says that a person's aspirations and actions are influenced by the group with which he associates. Therefore a school where the majority of students expect to go to college will tend to influence "marginal youth" (who are on the borderline of college-going intention) toward going to college, and, conversely, a school in which the majority are not going to college will tend to turn marginal students away from college.

The Metropolitan Area as a Unit for Study

For a study of educational opportunity, the metropolitan area is a useful and convenient area. There are 230 such units in the United States, containing about two-thirds of the country's population. The Bureau of the Census defines a "standard metropolitan statistical area" as any county containing a city of 50,000 or more population, together with secondary counties that are tied to the central county by close socioeconomic relations.

The Kansas City metropolitan area is one of the larger ones, 22nd in population size, with about a million and a quarter inhabitants living in seven counties, four in Missouri and three in Kansas. Included in this area are two fairly large cities--Kansas City, Missouri with a half-million and Kansas City, Kansas with 120 thousand population. There are several medium-sized and many suburban towns. There are more than 30 school districts with high schools.

This area contains a good deal of rural agricultural land, and several small high schools serve farm youth and the youth of families living in semi-rural towns.

On the Missouri side, the University of Missouri at Kansas City is available for very small tuition fees to residents of the state, and the Central Missouri State University at Warrensburg, less than 100 miles away, has an extension center at Independence, just to the east of Kansas City. The Metropolitan Junior College serves a district including Kansas City, Missouri, and a substantial suburban area.

On the Kansas side, the University of Kansas at Lawrence, is only an hour's automobile drive from Johnson County, which is a middle-class suburban area. Wyandotte County, with the predominantly industrial population of Kansas City, Kansas, did not have a free public college at the time of this study.

The Kansas City Metropolitan area is rather typical of those extending from about a half-million to about 2 million in population. Its pattern of opportunity for higher education includes low-cost public state and community colleges together with private and church-related colleges that charge tuition fees of $500 to $1500 per year. Students with automobiles at their disposal can easily commute to a public institution. Those dependent on public transportation have a more limited range.

A substantial fraction of college-going youth attend college outside the metropolitan area, but only a small fraction go beyond a radius of 100 miles from Kansas City.

Determinants of College Attendance

At the time this study was made, in the spring of 1967, approximately 75 percent of young people in the Kansas City area were completing high school. These young men and women were asked whether they expected to go to college. They also answered a number of other questions about their educational experience and plans. Sixty percent of them said they expected to attend college. These figures are close to the average figures for the country on high school graduation and college attendance.

There are six principal determinants of college attendance. This study aimed to explore each of these factors.

1. Scholastic achievement, measured by rank in class or by achievement or aptitude tests. Between two and three times as many students in the top third of the class to go to college compared with students in the bottom third.

2. Financial resources, or socioeconomic status. Approximately 90 percent of upper-middle class students enter college, while about 40 percent of the small group of lower-working class students who reach 12th grade enter college.

3. School climate. A school has a climate of aspirations and expectations that influences its students in all social classes. Thus a school with a majority of upper-middle-class students tends to encourage all students to go to college. Some 80 percent of working-class students in such a high school plan to enter college. In contrast, in a school with a majority of working-class students, some 40 percent plan to enter college, and only about 65 percent of upper-middle-class students in such a school plan to enter college.

4. Propinquity to a college that will accept the student in question. The probability that a marginal person (one with relatively low scholastic aptitude from a working-class family who has attended a working-class school) will attend college depends greatly on the accessibility of a low-cost college with liberal entrance requirements. Therefore the presence of a public junior college greatly increases the probability of entering college for a youth of this type; whereas it does not affect the probability that a high status youth of superior intellectual ability will enter college.

5. Sex. There is a slightly greater probability of a boy going to college than a girl. This is true at all socioeconomic levels, and most striking at the upper-working-class level.

6. Race. There is a tendency, not well documented, for Negroes of working-class background to say they expect to attend college in greater proportions than whites of the same socioeconomic level. A major purpose of this study was to explore the black-white differences in college-going.

The influence of socioeconomic status on college attendance is shown for a national sample of high school seniors as of October 1965, in Table 1. Here we see that 47 percent of the group of high school seniors actually entered college, and we see that attendance was closely related to family income and to father's occupation.

The Sample that Was Studied

A questionnaire for high school seniors was developed and pilot-tested during the winter of 1966-67. In the spring of 1967 it was administered to seniors in fifty-five high schools in seven counties in the Kansas City Metropolitan area. Some high schools chose not to participate in the study for a variety of reasons which included anxiety over scheduling the test in the spring of the year when seniors are very busy, feelings of frustration with constant testing programs being conducted in the schools, general suspicion about invasion of privacy by research groups, and reaction against any suggestions of cooperation in metropolitan studies at a time when school reorganization plans were coming before the state legislature. Three of the suburban school districts agreed to give the test, if it were shortened, in the fall of the year to the next group of seniors.

During the spring of 1967, 9,249 seniors answered the questionnaire in the fifty-five schools. The schools included three Middle Class, seventeen Comprehensive, seven Working Class, twenty Small, and eight Catholic. Six more Comprehensive schools were added in the fall of 1967, bringing the total number of respondents to 11,595.

High schools not included in the study were two large public schools in the Jackson County area, four public schools in Wyandotte County, four Catholic schools, two private schools, and five small high schools in the rural fringe. The seniors in these schools totaled approximately 2,800. These schools would probably not have changed the results significantly, although their inclusion would have made it possible to study the aspirations of a larger number of black students in Comprehensive schools.

Determination of Socioeconomic Status (SES) for Individual Students

Socioeconomic status for individual students was determined from their answers to four questions which provided information about educational level of the head of the household, occupation of father or head of household, the respondent's estimate of number of books in the house, and a description of family finances.

Occupation and education are two most frequently used indices for establishing an estimate of socioeconomic status. Occupational level was given a weight of 3, education 2, and the other questions each weighted 1. The two additional questions on income and books have been used in some studies (see Berdie, 1954) as extra factors which yield reliable data in combination with education and occupation.

Each of these indices was the basis for a 5-point scale. The occupation of the father was rated with the aid of a dictionary of status levels of occupations developed by W. L. Warner and his students for use in Chicago. Educational level of the father was rated, and rating scales were developed for numbers of books in the home and for estimated income level of the respondent's family. The five categories of occupation were as follows:

1. Professional, managerial, owners of large business, and teachers.
2. Salesmen.
3. Office workers, technicians, small business and farm owners.
4. Skilled workers, salesworkers, police, postal employees, firemen.
5. Factory workers, unskilled and service workers.

Social Status of Schools

The high schools were classified according to social characteristics of the families of their students. This was done for the public high schools by using the socioeconomic data for the families. For each high school there was computed an entity known as the Socio-Economic Ratio (SER) from the formula

$$SER = \frac{2A - B}{C - 2D}$$ where

A = Professional occupations

B = Salesmen (large orders on expensive merchandise), managers or owners of large businesses or farms, technical workers, office personnel, school teachers, etc.

C = Government employees, firemen, policemen, skilled or highly trained workers, self-employed in small businesses or small farms.

D = Service workers; barbers, beauticians, waitresses; factory workers; sales workers in small stores and shops, farm laborers, semiskilled and unskilled laborers.

The SER range for the schools was 4.4 (high) to .05 (low). School types were named and characterized as follows:

No. of Students	School Type	Characteristics
1422	Middle Class	Predominantly students from SES levels 1 and 2
6753	Comprehensive	Wide spread of SES, but very few from level 5
1521	Working Class	Students mainly from levels 3, 4, and 5
828	Small and Rural	Schools in sparsely populated suburban areas
804	Catholic	Much like Comprehensive schools in SES composition
11328		

The average SES score of the school determined whether it fell into one of the first three types. Middle-class schools ranged in SER from 4.4 down to 1.54, with less than 10 percent of the parents engaged in service, sales, and factory work. More than 60 percent reported parents with at least some college work, and less than 15 percent reported parents as not completing high school.

The Comprehensive schools ranged from 1.1 down to 0.19. More than 15 percent but less than 35 percent reported parents' occupations in the service, sales, or factory occupations. Less than 50 percent but more than 15 percent of the parents were in the professional and managerial category. Educational levels ranged from 15 to 40 percent with some high school but not high school graduation and 20 to 50 percent with at least some college work.

Working-class high schools ranged from .23 to 0.9 in SER. More than 40 percent of the parents were employed in factory, service work, or minor sales work. The proportion of parents in managerial or professional occupations was less than 10 percent. No more than 50 percent had completed high school, and no more than 20 percent had attended college.

Schools labeled "Small" and "Catholic" were categorized on other bases. The Small schools had less than 100 in the graduating class. Their socioeconomic characteristics were similar to those of Working-class schools. The Catholic schools were similar to the Comprehensive schools in SER.

The socioeconomic status of students in the five types of high schools is shown in Table 2. This Table also shows the authors' estimates of the socioeconomic distribution of all American youth of high school age.

Plans for College

The 12th grade students answered the questionnaire in May, 1967 and were asked to respond to the following item.

Mark the one plan you are now most seriously considering for next year:

(1) Get a job
(2) Go to college
(3) Go to business, trade, or other school
(4) Join the Service
(5) Get married and become a homemaker

The percentages of the various SES groups who said they expected to go to college are shown in Table 3, for each type of school, and for blacks and whites separately in the Working-class schools. The percentage figures marked with an asterisk are based on numbers less than 100, and therefore are not reliable. This Table shows clearly that the socioeconomic type of school does interact with the student's own socioeconomic status to influence his educational plans.

TABLE 1

COLLEGE ATTENDANCE IN RELATION TO FAMILY SOCIOECONOMIC STATUS

Experience of High School Seniors of October, 1965, who were asked in February, 1967 whether they had attended college.

	Percent Attending College
Occupation of Household Head	
White-collar worker	64.1
Manual or service worker	36.9
Farm worker	36.1
Unemployed or not in labor force	31.2
Family Income	
Under $3,000	19.8
$3,000 to $3,999	32.3
$4,000 to $5,999	36.9
$6,000 to $7,499	41.1
$7,500 to $9,999	51.0
$10,000 to $14,999	61.3
$15,000 plus	86.7
Total Group	46.9
Male	51.8
Female	41.9
White	48.1
Black	34.8
Residence	
Metropolitan	50.9
In Central City	53.4
Outside Central City	49.2
Non-Metropolitan	40.4

Source: U.S. Census, Current Population Reports. P-20. No. 185, July 11, 1969

TABLE 2

SOCIOECONOMIC COMPOSITION OF HIGH SCHOOLS IN A METROPOLITAN AREA

Percentage Composition Within High School Types--12th Grade Students

Type of High School	Socioeconomic Status I(Hi)	II	III	IV	V(Lo)	Total No.	Total %
Middle Class	33	34	29	5	-	1422	12.6
Comprehensive	12	18	37	29	4	6753	59.6
Working Class	3	11	28	45	13	1521	13.4
Black	4	11	28	42	14		
White	3	11	27	47	13		
Small	3	11	33	42	12	828	7.3
Catholic	8	17	32	37	6	804	7.1
Total	13	19	33	29	6	11328	100.0
All American Youth (est.)	10	15	27	38	11		

TABLE 3

COLLEGE EXPECTATIONS IN RELATION TO SOCIAL CLASS AND TYPE OF HIGH SCHOOL

12th Grade Students in Kansas City Metropolitan Area
Percent Expecting to go to College

	Socioeconomic Status					
Type of High School	I(Hi)	II	III	IV	V(Lo)	Total
Middle Class	87	87	80	70*	-	84
Comprehensive	80	68	61	40	22	58**
Working Class						
Black	47*	54	58	56	40	54
White	74*	58*	55	33	25	42
Small	74*	58	52	29	30	41
Catholic	80*	74	69	53	46*	63
Total	81	72	63	42	30	59

*Number too small to be a reliable base.
**Computations for the comprehensive high schools in this table do not include students in the schools sampled in the fall rather than the spring of 1967.

CHAPTER II

THE INFLUENCE OF SOCIAL STATUS AND HIGH SCHOOL TYPE ON COLLEGE PLANS

The purpose of the analysis reported in this chapter was to determine whether the socioeconomic status of the high schools attended by students in our sample of 1967 graduating seniors had a noticeable influence on their college aspirations. The measures of socioeconomic status, high-school type, college aspirations, and student background variables used in the analysis already have been described in Chapter I.

Many studies have been and are being conducted by researchers concerned with determining how or how much schools influence the behaviors, attitudes, and understandings of the students who attend them. Studies of this type generally are being classified under the generic heading "school effects" research. The usual approach taken in such studies is to examine the relationships between inputs, institutional characteristics, and outputs of the schools. The most commonly used measures of input are ability and previous achievement of students, social-class and family background of students, and financial data such as revenue collected or expenditure per pupil. (The latter variables are frequently used to measure institutional characteristics rather than inputs.) Among the most commonly used measures of institutional characteristics are indices describing curriculum, facilities, staff, etc., in the schools, organizational properties of schools, and institutional climate--particularly as inferred from socioeconomic status of the student body--of the school. Commonly used output measures are achievement or gains in achievement, attitudes or changes in attitudes of students, dropout rates, and aspirations for further education or mobility. Aspiration most frequently has been measured by assessing the college plans of high school students. The present study, as indicated above, is concerned with determining how the college aspirations of graduating seniors are related to type of high school attended (as indexed by social class) after account is taken of the social class and family background of students in the sample.

One of the major reasons for attempting to identify relationships between school type and aspiration is to help determine how the educational system can be organized so as to maximize aspiration and increase the educational attainment of social groups which are not achieving sufficient education to share in the rewards of a productive, technological economy. As social-class stratification has increased in the cities and metropolitan areas where a large proportion of the U. S. population now lives, many educators and laymen have expressed the fear that stratification is having an adverse effect on the educational performance of disadvantaged groups in which educational attainment already is too low to allow much chance for advancement in this type of economy. The general reasoning which has led to growing concern with the effects of stratification on the schools has been succinctly summarized by Sewell and Armer as follows:

> Much evidence has accumulated to indicate that ecological processes in large cities result in socioeconomic segregation. . . Since high school enrollment areas represent functioning subcommunities for high school youth within larger urban complexes, it

> may be expected that informal mechanisms, such as normative climates or modal levels of aspiration, would emerge and would have some pervasive influence on the aspirations of all youth residing in the neighborhood, regardless of the socioeconomic status or ability levels of the youth. In other words, the prediction would be that the socioeconomic status of the high school district--since it presumably reflects the shared norms and aspirations of its members--would have an important effect on the educational aspirations of its youth over and above that of family socioeconomic status or individual ability (1966, pp. 161-162).

Related Research

Many studies examining the relationship between socioeconomic status of high schools and college aspirations of their students have been conducted during the past ten years. These studies vary a good deal in their conclusions as well as in their samples and methods of analysis. For example, some studies have used a national sample of students, others a state sample, and still others a sample limited to a city or metropolitan area. Most studies in this area have been cross-sectional, but one or two have been longitudinal. College aspirations can be and have been measured in many different ways, ranging from vague expectations and hopes expressed by seventh graders to the presumably firmer intentions of graduating seniors to indices of college entrance after graduation. Social status of the school or the community in which it is located also has been measured in a variety of ways, and, as in the case of sampling differences and aspirations measures, the measure of social class used may have an important bearing on the conclusions reached.

The purposes of this brief review of part of the literature bearing on the present study are to summarize some of the general findings reported by other researchers and to provide background material for relating our findings to those obtained in several of the most important studies conducted elsewhere. We have not attempted to provide a detailed analysis of all the numerous studies which have been concerned in one way or another with the relation between school social status and college aspirations or to critique the approaches used in each and every one and compare them with our own; to do so would have been a large-scale study in its own right. However, we have tried to include a fairly comprehensive listing of pertinent studies and papers in the section on references at the end of this monograph, to provide a starting point for other researchers and educators interested in the topics explored in this study.

In studying the relation between high-school status and college aspiration, researchers customarily begin by recognizing and taking account of the well-established fact that the social class background of students is related to their expectations for attending college and the likelihood that they will attain this goal. Of course it is not a student's social and economic status *per se* that makes it more or less likely that he will go to college, but rather the circumstances and situation in his family and home which provide or fail to provide him with attitudes, skills, and language habits needed to get a good start in existing school programs (Farquhar, 1965; Tulkin, 1968; Brown and Fleming, 1969). However, it is much more difficult to measure a student's family environment than his social class, and for this reason most large-scale studies must use socioeconomic background variables as proxy variables for more meaningful measures

of family background. But probing somewhat beyond the association which obviously exists between social class and educational attainment in the United States and other countries, researchers also have shown that components of social class and variables closely associated with social class are differentially related to college aspirations and attainment in predictable and explainable ways. Rehberg and Westby (1967), for example, found that "paternal education and occupation /each/ influence adolescent educational expectancies both through parental encouragement and independently of it" (p. 374), and Adams and Meidam (1968) report that number of siblings and, in certain cases, ratio of brothers to sisters and spacing of brothers and sisters in the family each have an influence in determining a student's chances for attending college.

One other relationship which needs to be explicitly underlined at this point is the well-established association between social class background and performance on ability tests. That is, students with higher social-class background tend to score higher on measures of ability than students from low status families, so that any fairly sizable group of high status students will contain a much higher proportion of students in the upper quartile or upper half in academic ability (as measured by tests) than will a similar-sized group of low status students. Since students who test high in ability are more likely to succeed in high school and go to college than students with low ability scores, these relationships must be taken into account in conducting or interpreting research relating social status of the school to college aspirations.

The most striking thing about the research which has been conducted relating school type to college aspirations is the diversity of conclusions reported by investigators in differing studies. More specifically, a few studies have indicated that the socioeconomic status of a high school or the community which it serves has little or no independent effect on college aspirations after the social background and ability level of each student has been taken into account, but the majority have indicated that the socioeconomic status of the student body does have an effect on college aspirations over and beyond the individual characteristics of students, and still others conclude that school context (i.e., average socioeconomic status of the school) has differential effects on college aspirations depending on the sex and family background of students in a particular school.

A Synthesizing Generalization

Richard P. Boyle (1966) has made a careful analysis and comparison of several of the most pertinent studies which were conducted prior to 1966 and has tried to identify the underlying differences in samples and methods which appear to explain many of the differences in conclusions reached in these studies. Because his analysis is persuasive in accounting for many otherwise inexplicable contradictions in the conclusions reported by other researchers and because it helps to clarify the fundamental issues with which we are concerned in the present study, his conclusions are worth quoting at some length. In essence, after reviewing studies conducted by Wilson (1959), Ramsoy (1961), Turner (1964), and Coleman (1962), Boyle concluded that:

> The effect of population composition on the aspirations of high-school students is considerable, but it varies according to the size of the community in which the school is

> located. In large cities, the effect of the high school is roughly the same as the effect of the family, but in smaller communities this effect is much weaker. Finally, the influence of high school appears to be fairly similar for both sexes, although slightly less important for girls (p. 630).

Proceedings to analyze the findings of these studies in greater detail, Boyle suggested that two types of explanations might account for the differences in results reported by researchers concerned primarily with small cities as compared with those concerned primarily with large urban areas. First, it appeared that school districts in a large metropolitan area might be much more diverse in "educational standards and practices" than would be true in a small city; differences in standards and expectations to which students were subjected in differing parts of the large urban area, in turn, could account for differences in performance on ability and achievement tests shown by students of the same social class in school districts of differing status. An alternative and not necessarily competing explanation (i.e., both explanations could operate jointly), Boyle pointed out, is that the greater diversity of high schools in the large urban area might mean that "informal social pressures" would have a much more clear-cut effect on college aspirations than likely would be the case in the more heterogeneous high schools of smaller cities.[1] High schools in a large metropolitan area, that is to say, might be expected to be more homogeneous in social class as a result of areawide trends toward socioeconomic stratification than is true with respect to smaller communities; thus informal pressures favoring college aspiration in the middle-class school and discouraging it in the working-class school would have a much greater impact in a metropolitan sample of schools than in high schools located in small cities. After reporting data from a Canadian study which shed additional light on these two explanations, Boyle concluded that:

---

[1]Both these explanations are compatible with a more general principle regarding the relatively more inequitable effects (for the poor) of stratification in larger urban areas which economist Wilbur Thompson has described as follows:

> The distinctive residential and political spatial patterns formed as the urban area grows to large size not only hamper the redistribution of income through local public services, they also hobble further economic development, both local and national. Even though residential segregation by income class may be practiced no more strictly in large urban areas than in small areas, sheer size itself may create a difference in kind. In a large urban area the slum section may be so extensive that the slum child may almost never participate in or even witness bourgeois socioeconomic phenomena. His counterpart in the small town at least occasionally plays with the children of the middle-and-upper-income classes and regularly attends the same comprehensive high school as they do. Some of the cultural advantages of a superior home environment may, therefore, be acquired indirectly by the slum child as he is exposed to experiences which may both implant higher aspirations and, by providing good examples, show the way. (Thompson, 1965, 0. 80)

> . . . (1) The population composition of a high school does have an important effect on the aspirations of its students, but a much stronger effect in large cities than in smaller communities. (2) One important, but (at least in metropolitan areas) partial explanation for this effect is the differential success of high schools in developing the scholastic abilities of their students. (3) The failure of scholastic ability to explain all of the effects of metropolitan high school points to the existence of other explanations, such as the influence of the peer group, but occupational or social class values do not provide this explanation (p. 639).

One additional comment that should be made here in connection with Boyle's synthesis of the research prior to 1966 is that if Boyle is correct in concluding that high school type tends to affect college aspiration in a large metropolitan area but not a smaller city, it might also follow that studies using a national sample would find little or no relationship between the two variables. The reason for this, essentially, is that a metropolitan area is an ecological entity but is also part of a larger region. Since the quality of education and students' aspiration levels appear to vary significantly from region to region, utilizing a national sample would tend to confound the relationship between high school type and college aspirations. Stated differently, students of a given social class in one region (or in a sub-region of a region) might have significantly higher aspirations than students of the same social class in another region (or sub-region) merely because the social and educational histories and opportunities of the regions or sub-regions are very different from one another; hence relationships between the variables would be obscured unless regional effects were taken into account either by limiting a sample to one large urban area or by separately analyzing school effects for a large sample of schools in each of several regions.

How well do Boyle's generalizations regarding geographic location as a primary factor affecting the relation between school type and college aspirations hold up in research reported in the literature since 1966? Studies examining the relationship between these two variables which have been reported in the literature during or after 1966 include the following:

McDill, Rigsby, and Meyers (1966; 1969) - McDill, Rigsby, and Meyers conducted one of the most comprehensive and important studies of the relationships between inputs, school characteristics, and outputs that has been undertaken in American educational research. As regards school type and college aspirations, no significant relationships were found to exist between socioeconomic status of high schools and college attendance plans of students in these schools (1966, pp. VII - 6 - VII - 10). However, the results in this study are based on a national sample of twenty schools in seven different geographical regions and eight states; hence they do not contradict the conclusion that high school type and college aspirations tend to be related only within regional samples.

Hauser (1969) - In a study utilizing a sample of 17,000 public school students in grades seven to twelve in the Nashville metropolitan

area, Hauser concluded that "differences in student-body composition . . . account for moderate proportions of the variations" in aspiration levels (p. 611). The clarity of this finding may be viewed as somewhat surprising in view of the fact that Hauser's six-grade sample includes many students for whom educational aspirations are much more difficult to measure accurately than is true with respect to high school seniors who generally have concrete plans concerning whether or not they will enter college after graduation.

Sewell and Armer (1966) - Sewell and Armer's study of thirteen central city and seven independent suburban high schools in Milwaukee County rejected the hypothesis that ". . . the neighborhood in which the student resides has an important influence on his educational plans in addition to that of his sex, measured intelligence, and the socioeconomic status of his family" (p. 163). However, Michael (1966) reanalyzed the data reported in this study and found that ". . . the schools in Milwaukee's white-collar neighborhoods induce college plans among many youth who in other schools in poor neighborhoods would be planning to discontinue their education" (p. 704), while Boyle (1966) reconstructed the same data in another way and reported that in terms of college aspirations, neighborhood context had an effect "about the same in magnitude as the effect of socioeconomic status" (p. 706) and that this effect of neighborhood or school social status on college aspirations was manifested in two major ways: 1) through neighborhood effect on intelligence scores of students in middle-status as compared with low-status neighborhoods; and 2) through direct effects on aspirations of students living in high-status as compared with middle-status neighborhoods.

Haller and Anderson (1969) - Haller's and Anderson's study of educational aspirations among 9th to 12th graders in Ontario schools is particularly interesting because the measure of aspirations used assessed changes in plans reported by students who moved from one school to another between 1959 and 1963. The authors report that tracking within the schools studied accounted for a possibly-inflated 10 percent of the variation in aspirations and that school type accounted for only a small part of the remaining variance. On the one hand Haller and Anderson argued that the centralized organization of schools in Canadian provinces means that the schools in a given province may be viewed as constituting a coherent region in almost the sense that the metropolitan area does in the United States, but on the other hand the "rigid" tracking which characterized schools throughout the sample makes it difficult to view them as comparable to schools in most metropolitan areas in the U. S.

U. S. Commission on Civil Rights (1967) - Utilizing data from the Equality of Educational Opportunity survey, Armour conducted a study for the U. S. Commission on Civil Rights which was published in the Appendices to the Commission's report on Racial Isolation in the Public Schools. Comparing data on the college aspirations of black and white seniors with varying family background in high-and-low-status

high schools in the Northeast metropolitan region, Armour found a consistent pattern showing that male and female students of both races in high status schools were much more likely to have definite college plans than were students of comparable background in low status schools (pp. 160-161).

Mayeske, et. al. (n.d.) - Mayeske and his associates conducted additional analysis of the data on between-school variance collected in the equal opportunity study and reported (in confirmation of the earlier conclusions of Coleman, et. al.) that except at the twelfth grade level, student body variables play a much larger role than school variables in affecting educational expectations as well as other school output measures.

Reviewing these studies, Boyle's hypothesis suggesting there is a discernable relationship between school type and educational aspirations in large urban areas but not in less socioeconomically-stratified smaller cities is compatible with the pertinent research conducted since he published his review of major studies prior to 1966.

However, as Boyle is careful to point out, finding a relationship between high school type and college aspirations (or other output measures) in a metropolitan area does not necessarily prove that school context has an independent effect on student attitudes or behaviors over and beyond family background factors. Primarily, this is because social class is not a direct measure of family variables which influence student performance. That is, it is possible and indeed likely, at least to some extent, that families of a given social class which live in one part of the metropolitan area differ in important respects from similar-social class families in another part of the area. For example, working-class parents who move to relatively high-income suburbs may do so precisely in order to enroll their children in high-status schools, and one might hypothesize that the difference in press for achievement between this family and another working-class family in the inner city would account for differences in aspiration between working-class students in middle-class suburban as compared with inner city schools. (As Boyle also goes on to argue, however, one would not expect middle-class families to move to or stay in the inner city in order to keep their children in predominantly low-income schools there; thus differences between the aspirations of students from middle-class families in inner city as compared with other types of schools are not easily accounted for except in terms of school-climate effects on the motivation and performance of students in these schools.)

Both these considerations were of direct and explicit concern to us in undertaking the analysis reported in this chapter. First, our study used as complete a sample as we could obtain of all the graduating seniors in one of the nation's larger metropolitan areas. The study itself developed out of our conviction that the metropolitan area is an interdependent community which in many respects must be treated as a single unit if we are to understand the forces that shape the quality of life in an urban society and to utilize these understandings in order to help maintain and improve good living conditions and opportunities for all citizens. As regards higher education, for example, most colleges and universities theoretically serve a metropolitan or regional clientele and must

do so in fact if each institution is to utilize its specialized resources efficiently, but at the same time failures in communication, inequalities in elementary and secondary schooling, and parochialism may result in inefficient regional utilization of existing or potential resources for higher education. In addition, we also start from the premise that our society already is predominantly metropolitan in character and will become still more so in the future; hence it is more important to learn how well social institutions are working at the metropolitan level than at smaller or larger levels in contemporary society.

Second, the analysis reported in this chapter is specifically intended to help evaluate the hypothesis that family differences within social-class levels are responsible for spurious relationships reported in studies concluding that high-school social-status is positively associated with college aspirations. As far as we have been able to determine, the only previous study addressed explicitly to this hypothesis is one conducted ten years ago by Alan B. Wilson (see below). In effect, the study described in this chapter is a replication, with variations, of Wilson's study. Before reviewing Wilson's methods and results, however, a number of additional observations concerning the related literature may prove of some value to readers unfamiliar with research in this area.

Dynamics of High School Climate

If it is true that the socioeconomic status of a high school has, in some situations, an independent effect on aspirations, achievement, behaviors, and values of its students, intervening variables must be postulated to explain how a school composed of a particular social-class "mix" of students could be relatively more effective or less effective than another school differing only in student composition. As noted above, Boyle has postulated two kinds of dynamics which might be at work in differing high schools, one focusing on the standards and expectations to which students are held by adults in the school (or community) and the other focusing on norms and values reinforced within the student culture. Both these explanations are compatible not only with reference group theories and research[2] but also with the experiences and perceptions of literally thousands of educators. In the working-class school, for example, it is not at all uncommon for a teacher to say that "nothing" he does is of any real help to his pupils, because "no one" in the school expects the students to perform to the best of their ability and/or because peer group values are mostly detrimental to achievement and high performance.

Both types of explanations, however, can be and have been analyzed in much greater detail in attempts to identify "climate" variables that operate within the social system of a school. The task which a researcher faces in trying to classify school climate and understand its effects becomes particularly

---

2e.g. Kemper (1968); Herriott's (1963) finding that the "highest relationship with educational aspiration . . . was with expectation perceived from one's best friend" (p. 172); Campbell and Alexander's (1965) data showing that the key variable effecting the college aspirations of high school seniors is the aspirations of a student's friends and that low status students have higher status friends (i.e. friends with higher aspirations) in a high status than a lower status school.

complicated if he simultaneously tries to relate institutional characteristics such as curriculum, facilities, instructional methods, etc., to climate variables, student characteristics, and other measures. The task is made somewhat easier, on the other hand, by the fact that most school effects studies agree in concluding that student background characteristics and school context variables account for a large share of the variation in school outputs. Stated differently, schools in general are not now very potent institutions in the sense that expenditures and programs in the educational system play a much smaller part in determining educational outcomes than do student background and school context variables.[3] What this means, in turn, is that for many purposes it is useful to consider and examine school climate as an intervening variable between student inputs (e.g.; social class of family) and outputs without worrying a great deal about the effects of institutional characteristics such as expenditure per pupil or breadth of curriculum.

Some of the measures of school climate which recently have been reported in the literature can be very helpful in determining and understanding how the culture of a school enhances or depresses the performance of its students and hence in explaining relationships which might be found between high school type and college aspirations. Among the most precise of these measures are questionnaire instruments developed by McDill, Rigsby, and Meyers (1966) and by Mitchell (1968). Research conducted by the former three authors has resulted in the development of a questionnaire to measure six major climate variables of the high school: Academic Emulation; Student Perception of Intellectualism-Estheticism; Cohesive and Egalitarian Estheticism; Scientism; Humanistic Excellence; and Academically Oriented Student Status System. Mitchell identified four major climate dimensions which had high factor loadings using the thirty item High School Characteristics Index (HSCI) developed by George C. Stern: Strong Intellectual Orientation; School Activities; Negative Attitude Toward the Environment; and Strong Environmental Control. Mitchell's study is particularly relevant for the present paper because it was carried out in a single metropolitan area and because he found that low status schools tended to be characterized by low achievement press and achievement press in turn was highly correlated with college aspirations.

Other studies which can help us understand the dynamics of school climate in differing types of schools in the metropolitan area include those which directly examine relationships between social class backgrounds, student attitudes, and college aspirations. Brodie and Suchman (1968), for example, have found that high school students from working-class homes in a large metropolitan area (Pittsburgh) tend to have relatively little commitment to education as a goal in and of itself and relatively negative attitudes toward the schools they attend and that low expressive valuation on education and low evaluation of school attended are independently related to aspirations for additional education later in life. Based on such findings, it is easy to envision working-class schools in metropolitan areas as being characterized by peer cultures

---

[3] The well-known criticism by Bowles and Levin (1968) of the Equality of Educational Opportunity Study is based on what to us is an empirically untenable premise, namely that the schools a priori have a greater influence on outputs than do student background characteristics with which teachers and administrators in the schools are so frequently preoccupied.

(school climates) which reinforce hostility toward the school and devaluation of the intellectual goals of education to a greater degree than is typical in higher status schools: a student of whatever social class who attended such a school would be in an environment obviously detrimental to teaching and learning.

Lest this attempt to cite some school climate variables which may enhance or depress the performance of students in differing types of schools (as characterized by social-class composition) seem too abstract and theoretical, it is useful to be a little more descriptive concerning the kinds of learning conditions which tend to develop in schools in various parts of a stratified metropolitan area. As one example, a school board president in Syracuse has done just this in reporting the results of interviews with low-income students who were bussed to a middle-status school after having been enrolled for several years in low-status schools in their own neighborhoods:

> Each one was interviewed by the staff of our compensatory project and was asked essentially the same question: 'Last year you were in a small class, with many special services, and still you didn't do very well. Now you're in another school, with no one paying any special attention to you and you're doing much better. How come?'
>
> The answers boiled down to this. The kids said that if, in the predominantly nonwhite /inner city/ junior high school, they cooperated with the teacher and did their homework, they were regarded by their classmates as 'kooks.' In their present school if they didn't cooperate with the teacher and do their homework they were regarded by their classmates as 'kooks' (quoted in Chandler, 1967).

Examining these kinds of school dynamics from the viewpoint of a social scientist, James S. Coleman (1969) has commented that

> . . . it is necessary to examine not one, but two, concepts of inputs to an educational program: inputs as disbursed by the educational system, and inputs as received by the child. These inputs may systematically differ, undergoing a loss between disbursement and reception. If textbooks are used for four years in a school, and if in a lower class school 20 percent are lost or destroyed the first year, compared to 10 percent in a middle class school, then the second year a given child in the lower class school receives a lesser input, though the inputs as disbursed from the superintendent's office are the same as in the middle class school. Or to take a more important example: one of the most important inputs of school is the teaching time of teachers. But if, in a lower class school, teachers spend only a part of each class hour teaching, while in the middle class school they spend a large fraction of the hour teaching, the inputs of teaching as experienced by the students differ greatly. Similarly, a resource provided by

> schools is periods of quiet that allow for undistracted work. But this input as received by students may be transformed into periods of noise and distraction provided by other students . . . In this case, a student experiences diseconomies imposed by his fellow students, diseconomies that ordinarily take the form of creating a loss of input between its disbursement by school authorities and its reception by a given student.

Methodology and Findings

The fundamental question explored in this chapter is whether school type or school context as indicated by the social-class composition of high schools in a metropolitan area has an independent effect upon the college aspirations of graduating seniors. The measures of social class and school type and the data collection methods used in this part of the study already have been described in Chapter I. To examine the relationship between school type and college aspirations, a series of comparisons were made of the answers students in differing types of schools gave in response to the item, "Mark the one plan you are now seriously considering for next year: Get a job; Go to college; Go to business, trade, or other school; Join the service; Get married and become a homemaker." The second response, "Go to college," was considered to be the best measure obtained on the questionnaire of the effective college aspirations of students about to graduate from high school.

In order to avoid confounding the comparisons by introducing variables with an unknown influence on college aspirations, only the questionnaires filled out by white students in the schools sampled in the spring of 1967 were included in this part of the study; thus the responses of black students and of students in the schools sampled in the fall of 1967 are not included in the comparisons in Table 4 and the following tables in this chapter.

Table 4 shows the proportion of male and female students in each of the five social class categories in the three types of schools classified by socioeconomic composition (middle class; comprehensive; working class) who indicated they were seriously considering enrolling in college after graduating in the spring of 1967.

The data in Table 4 generally confirm the findings of previous investigators who report a positive relationship between high school type as measured by social class composition of high schools in a metropolitan area and aspirations or plans to attend college on the part of students graduating from these schools: with individual social-class status held constant, students in middle-class high schools are more likely to plan on attending college than are students in comprehensive schools, and students in the latter schools more frequently plan on

attending college than do students in working-class high schools.[4] All eight of the comparisons that can be made between middle-class high schools and comprehensive high schools[5] favor the middle-class schools, and seven of these eight comparisons are statistically reliable at the .05 level. Of the eight comparisons that can be made between comprehensive high schools and working-

---

[4]If SES 1 and SES 2 students are combined to obtain a more satisfactory number of subjects in the working-class cells, an interesting pattern emerges:

Proportion of Males Expecting to Attend College

	Middle Class Schools	Comprehensive Schools	Working Class Schools	% MC-WC
SES 1 & 2	88	78	78	12
SES 3	84	67	58	26
SES 4	75	46	39	36

Proportion of Females Expecting to Attend College

	Middle Class Schools	Comprehensive Schools	Working Class Schools	% MC-WC
SES 1 & 2	86	70	46	30
SES 3	77	56	46	31
SES 4	64	35	25	39

It should be noted that for males but not for females the "spread" between SES 1-2 subjects and SES 4 subjects planning to go to college is larger in the working class schools than in the comprehensive schools. For males, then, these data tend to support Michael's (1961) conclusion that "Socio-educational status plays the least effective role in that high school climate comprised largely of youngsters from less privileged homes" (p. 594).

The fact that the patterns differ for males and females indicates that school type has differential importance for the two sexes. For males, attending a higher status school is more important (in terms of college aspirations) for SES 4 subjects than for SES 3 and, especially, SES 1-2 subjects, but this difference is not so clear for females, for whom differences in college aspiration rates in differing types of schools are not as great between social classes. This finding agrees in general with that of Sewell and Armer (1966), who reported that "neighborhood context is associated more with the educational aspirations of girls than boys and is strongest for girls from high socioeconomic status families" and who speculate that the reasons for this difference may be because "high socioeconomic status parents who place a high value on college education for their daughters are likely to insist on living in high status neighborhoods where their daughters can attend superior high schools" or because "since high educational aspirations are generally less common for girls than for boys and are less salient in terms of future occupational careers, girls are more susceptible to the influences of the social milieu than boys" (pp. 166-167).

[5]There are too few SES 5 students in middle-class schools to justify any sort of comparison with other schools.

class high schools,[6] five favor the comprehensive schools and three favor the working class schools;[7] all three of the statistically significant differences favor the comprehensive schools. The average, equal-weighted difference in the eight comparisons between the middle-class schools and the comprehensive schools is 18.3 percentage points in favor of the former. The average equal-weighted difference in the eight comparisons between comprehensive schools and working-class schools is 8.4 percentage points in favor of the former. In the six comparisons that might be made between middle-class and working-class schools, furthermore, the average, equal-weighted difference in college aspiration rate in favor of the former is 31.8 percent, suggesting that school type has an affect on college aspirations more than half the magnitude of the affect of social-class background itself (i.e. as indicated by differences in aspiration rates shown in Table 4 between SES 1 and SES 5 students).

As indicated in the preceding section, the factor which is not considered in the comparison shown in Table 4 is whether families which live in one type of community and send their children to a particular type of school differ in important respects from families of similar socioeconomic status who live elsewhere and send their children to another type of school. It is quite possible, for example, that lower middle-class families who live in predominantly upper middle-class areas have made it a point to move there in order to enroll their children in middle-class schools; if so, differences in the educational performance and aspirations of lower middle-class children in differing types of schools might primarily reflect differences in family values and expectations rather than school-related variables. Actually it is certain that these kinds of differences do differentiate, to some extent, between families of similar socioeconomic status, and for this reason the patterns shown in Table 4 should be attenuated when account is taken of possible family influences other than social class. In evaluating the influence of school type, the fundamental question then becomes whether school effects still persist within these attenuated patterns.

The best previous study known to us which tried to control for inter-class family differences in making comparisons to assess the relationship between school type and college aspirations is Wilson's study of the aspirations of white male students in eight high schools in the San Francisco-Oakland Bay area (1959). By classifying each subject according to mother's education as well as father's education and occupation, Wilson was able to make comparisons between groups of students of similar social class (as indicated by the customary approach of using data on the father) but different family background in three types of

---

[6]There are too few SES 1 students in working-class schools to justify any sort of comparison with other schools.

[7]Two of the three reversals are between the SES 5 males and females, respectively. One possible reason why college expectations among SES 5 students may depart from the general trend shown between comprehensive and working-class schools is that only the most persistent and education-oriented SES 5 students may be staying through the senior year in working-class schools. One might also speculate, however, that presumably more permissive academic standards and expectations in the working class schools may be working to make college seem more realistic for SES 5 students in working class than in comprehensive schools.

schools classified by social composition.[8] Since maternal influence is known to affect the educational aspirations of children in some social classes and since similar-status families in which the mother is a college graduate probably are different on the average than families in which the mother has not completed high school, the influence of inter-class family differences presumably is at least partially controlled in these comparisons. Wilson's data for categories in which he judged there were enough students to justify comparisons between differing types of schools are shown in Table 5.

Wilson summarized the findings shown in Table 5 by pointing out that "of the nine comparisons clearly available, seven clearly substantiate the hypothesis, while the two reversals are small. The average percentile differences between adjacent groups are as great within these homogeneous groups as in the

---

[8]Wilson's three types of schools, which he labeled A, B, & C, were similar to the schools we categorized as "middle class," "comprehensive," and "working class" in the present study. For example, the distribution of white male students by father's level of education in the schools is Wilson's sample and the schools analyzed in this study are as follows:

Father's Education	Wilson Type A	Middle Class
Some college or more	65%	61.8%
High school graduate	20%	32.2%
Some high school or less	14%	05.6%
Not available	02%	.2%

Father's Education	Wilson Type B	Comprehensive
Some college or more	35%	33.8%
High school graduate	29%	42.7%
Some high school or less	32%	22.3%
Not available	03%	.9%

Father's Education	Wilson Type C	Working Class
Some college or more	14%	14.4%
High school graduate	26%	38.9%
Some high school or less	54%	40.8%
Not available	06%	05.7%

In each of the comparisons, a higher proportion of students in our sample came from homes in which fathers are high school graduates than was true in Wilson's sample. This difference probably reflects an increase in the percentage of students finishing high school which has been occuring during recent decades.

In addition, Wilson's sample apparently cut across grade levels rather than being limited, as our's was, to seniors, and many of the lower-level students who dropped out in our sample of schools probably were drawn disproportionately from families in which fathers were not high school graduates.

coarser groupings" which took into account only father's occupation and education. These comparisons helped to justify Wilson's conclusion that school type is an important consideration in assessing the educational opportunities available to students in a large urban area: "The de facto segregation brought about by concentrations of social classes in cities results in schools with unequal moral climates which likewise affect the motivation of the child . . ." (p. 845).

In the present study we proceeded by picking out groups of students from families with distinctive combinations of father's occupation, father's education, and mother's education and comparing the college aspirations of students from these groups who attended middle class, comprehensive, and working class schools, respectively. A "distinctive" family was defined as one which was unusual because the mother had more education than the father. The assumption in this procedure is that a family which is discrepant in this respect tends to have distinctive values and stresses which set it apart from other families of the same social class. In effect, we select families with a distinctive "life style" inferrable from unusual configurations involving education of the parents and occupation of the father. By comparing the aspirations of students from among families chosen on this basis which live in differing types of school communities, the potentially distorting effects of differential family values and life styles on the relationship between school type and college aspiration have been minimized to a greater extent than is possible in comparisons based only on global socioeconomic status of the family as a whole. Data showing the proportions of males and females with college aspirations for family-configuration groups in which there were 11 or more subjects in at least two adjacent types of schools are shown in Table 6.

The data in Table 6 can be analyzed in a number of ways in assessing the impact of school type or aspirations among the students included in the sample.[9] One alternative is to make separate comparisons of aspiration rates between adjacent school types (middle-class and comprehensive; comprehensive and working-class). As shown in Table 6, 14 of the 16 comparisons favored the hypothesis that students in high status schools are more likely to plan to attend college than are students in lower status schools, and there was only one reversal greater than one percentage point favoring a lower status school over a higher status school.

Another way to assess the trends shown in Table 6 is to give an equal weighting to each proportion in categories in which data are available for all three types of schools and then compute the average aspiration rate for each school type. (To include proportions for the first two entries on which data are not available for working-class schools would put these schools at a disadvantage since students whose mothers are college graduates presumably have higher-than-normal college aspirations.) The mean scores thus obtained for

---

[9] Small frequencies in many of the cells in Table 6 made it meaningless to use statistical tests of significance to evaluate trends appearing in the table. However, these trends do appear sufficiently clear to indicate their fundamental direction even without statistical testing.

the three types of schools are as follows:

School Type	Mean Equal-Weighted Proportion of Males and Females Planning to Attend College for Groups of Students for Which Entries Appear in all 3 School-Type Categories in Table 6.	
	M	F
Middle Class	87	86
Comprehensive	63	57
Working Class	54	39

Thus we conclude that even when some account is taken of family or "life style" differences among families of similar socioeconomic status, social context of the high school continues to be related to students' plans to attend or not attend college.

Supplementary Analysis

Although we regard the foregoing comparison of college expectancy rates among students from families with similar life styles as our best test of the hypothesis that school type exerts an effect independent on college aspirations, four additional comparisons were made of college expectancy rates for groups of students matched on variables known to be associated with college attendance. These comparisons do not differentiate among families as precisely as we were able to do by comparing families in which fathers' occupations were similar and mothers' education was discrepant from the fathers', but they do have the advantage of yielding larger groups for which it is meaningful to run statistical tests of significance. The four additional comparisons are described and analyzed on the following pages.

a) Father's Occupation and Books in the Home

The first of these comparisons was of college expectancy rates for students in the three types of schools matched on father's occupation and on respondents' answers to the item, "Approximately how many books does your family have in your home? (Do not count paperbacks. Include even those which you do not use)." Response categories for estimated number of books in the home were: 0-9; 10-24; 25-49; 50-99; 100-up.

Although there is likely to be a good deal of error and exaggeration in responses to this item, it is not likely that systematic bias is operating in a manner that would favor one of the school types over the other two.[10] That is,

[10]Although some might argue that students in higher-status schools would tend to overestimate number of books in the home in living up to an image of cultural superiority, others could argue that students in lower-status schools would exaggerate even more to compensate for the low status of their schools.

we do not believe there is any good reason to assume that students of any given social status would overestimate books in the home any more in one type of school than in the other, particularly in the case of high school seniors who presumably share at least a minimal commitment to the value of education. Thus we believe that students' estimates of books in the home can be used as a measure of home support for education and intellectual values in general in comparing college aspiration rates in differing types of schools, even though it is not as good a measure of family environment as the "life style" approach used in the preceding section.

As before, the approach taken in making these comparisons was to compare college expectancy rates between students in middle class and comprehensive schools on the one hand and comprehensive and working class schools on the other in cases where at least thirty respondents were available for comparison in two adjoining schools. Comparisons were made between groups of respondents whose fathers were in the same occupational category and who said there were either more or less than 50 books in their homes.

For six of the eleven comparisons between middle class and comprehensive schools, percentage differences were reliable at the .05 level. All six favored the middle class schools. In addition, all five of the remaining comparisons were in directions that favored the middle class schools. One of the five comparisons between comprehensive and working class schools was statistically significant in favor of the comprehensive schools; two of the remaining four were in the direction favoring the comprehensive schools; one showed virtually no difference between the two types of schools; and the fifth was in the direction favoring the working class schools. In general, these results tend to support the conclusion that school type has an independent effect on college aspirations in favor of higher status schools.

b) Father's Occupation and Residential Status

Another way to take family situation into account is to classify respondents not only by father's occupation but also by type of residence. Other social characteristics being equal, a family which chooses to rent housing presumably may be different in important respects from a family which chooses to buy a house. In the present case we used responses to the item "Which one /of the following responses/ best describes the kind of housing you have at present?" to distinguish between respondents whose families lived in rented houses or apartments on the one hand and respondents whose families were buying or had purchased their homes on the other. College expectancy rates for groups of 30 or more respondents in adjacent-type schools from families with various occupational and home-ownership characteristics are shown in Table 8.

Eight of the eleven differences between middle class and comprehensive schools were statistically significant, all of them in favor of the middle class schools. In addition, each of the remaining three differences were in directions favoring the middle class schools. The one significant difference between comprehensive and working class schools favored the comprehensive schools, and all of the remaining five comparisons also were in directions favoring the comprehensive schools. In general, these results again support the hypothesis that school type has an independent effect on college aspirations in favor of higher status schools.

c) Father's Occupation and Education

A third way to take family background into account in studying college aspirations in differing types of schools is to break social class (SES) down into two or more of its major components and compare expectancy rates for groups of students whose fathers are in the same categories on each component. In the present study father's occupation and education were the two most important components used to determine the social class of respondents in the sample. College expectancy rates for groups of 30 or more students who attend differing types of schools but whose fathers were designated as being in similar occupations and as having similar amounts of education are shown in Table 9.

Four of the thirteen comparisons between middle class and working class schools show statistically significant differences in favor of the middle class schools; all of the remaining differences are in directions that favor the middle class schools. None of the seven differences between comprehensive and working class schools are statistically significant, but the three that approach significance are in favor of the comprehensive schools and only one is in a direction favorable to the working class schools. In general these differences tend to support the conclusion that school type has a small independent effect on college aspirations in favor of higher status schools.

d) SES and Rank in Class

A fourth way to refine our classification of respondents in order to account for background variables which affect college attendance rates is to categorize respondents by rank in graduating class as well as social status before comparing college expectancy rates for groups of 11 or more in adjacent-type schools. Although it would have been preferable to use achievement or ability test scores rather than class rank for this purpose, test information was not available to us for correlation with other information in the sample. However, class rank is likely to have an independent effect in determining whether a student feels he can or cannot succeed in college, and therefore in determining whether he will aspire to enroll in college. Thus controlling for rank in class helps to isolate the effect of other variables such as individual social class and school type.

Even when SES IV and SES V respondents were combined into one group, in no case were there as many as 30 respondents in two adjacent-type schools after groups also were classified in top, middle, or bottom thirds by rank in class. Thus no comparisons for SES IV and SES V respondents were available for inclusion in Table 10.

Twelve of the 18 comparisons between middle class and comprehensive schools were statistically significant in favor of the middle class schools, and the remaining six comparisons all were in directions favoring these schools. All three of the comparisons between comprehensive and working class schools were in directions favoring the comprehensive schools, and two of these three comparisons approached statistical significance at the .05 level.

As did the preceding analyses of college expectancy rates in middle class, comprehensive, and working class schools, these results tend to support the

hypotheses that students in higher status schools are more likely to expect to go to college than students in lower status schools, even after account is taken of family variables that are known to have a major influence on college aspirations and attendance. Thus these analyses tend to confirm the conclusion that type of school has an independent effect on college aspirations which works to the disadvantage of students who attend lower status schools.

Summary and Discussion

Data were collected on the college aspirations of male and female white seniors in middle-class, comprehensive, and working-class schools in the Kansas City Metropolitan Area in the spring of 1967. In agreement with other studies which have taken a large urban area as the unit of analysis, comparison of the college aspiration rates with social-class background controlled indicated that type of high school (as portrayed in terms of socioeconomic composition) has an independent effect on plans to attend college.

Comparing college aspiration rates among seniors of similar social class in differing types of schools does not take into account, however, the possibility that families of similar social status in differing neighborhoods and school communities may differ in important ways that influence the aspirations of their children. Using an approach reminiscent of Wilson's earlier study among white male students in the San Francisco-Oakland Bay Area, families were identified in which discrepancies between father's and mother's education can be assumed to reflect a particular family situation of "life style" more specific than can be obtained with relatively global measures of social class. Comparisons of the college plans among students from these families in the three types of schools indicated that school type continues to have an independent effect on college aspirations after adding this additional control for family background.

Four additional sets of comparisons were made between students in adjacent-type schools after respondents were matched for 1) father's occupation and education; 2) father's occupation and residential status; 3) father's occupation and number of books in the home; and 4) family SES and rank in class. In general, these four analyses tended to provide added confirmation that school type has an independent effect on college aspirations in favor of higher status schools.

The analysis of data performed in this chapter does not permit us to make a precise estimate of the degree to which the socioeconomic composition of differing types of high schools in a sizable metropolitan area serves to increase or depress the college asipirations of the students who attend them. However, we can obtain a very rough estimate by reviewing the data in Table 4 and computing equal-weighted differences, with social class controlled, between middle-class and comprehensive schools on the one hand and comprehensive and working-class schools on the other. Computed separately for males and females and excluding differences among SES 5 students and among SES 1 students (because of the very small numbers of SES 5 students in middle-class schools and SES 1 students in working class schools), these figures bearing on the influence of school type on college aspirations are as follows:

School Type	Proportion Planning College Among Males and Females	
	M	F
Middle Class	82	76
Comprehensive	65	52
Working Class	58	36

In agreement with the findings of previous research, these rough estimates suggest that school type has a slightly greater effect on the aspirations of females than of males, probably because a college career tends to be more vital for the future success of males than females (Sewell and Armer, 1966). More specifically, our data suggest that attending a comprehensive school as compared with a working-class school tends to be associated with a gain of about four percentage points in college aspirations for males and about 16 percentage points for females. For students attending middle-class schools as compared with comprehensive schools, the differences appear to be much greater than those found between comprehensive and working-class schools.

At this point one is compelled to consider whether these results are large enough to be of practical importance. Granted that attending a middle-class school apparently gives students a substantial advantage over students of similar background who attend a comprehensive school; still, there are relatively few middle-class schools, only a relatively small proportion of students can attend them before they cease to be middle-class schools, and the advantage to students of similar background in attending a comprehensive school as compared with a working-class school may be only about five or ten percentage points. Is this a large enough difference to occasion concern about the effects of neighborhood and community stratification on the educational opportunities available to students in differing parts of the metropolitan area?

For several reasons we believe that it is. For one thing, a difference of only five or six percentage points in favor of students in the comprehensive schools actually gives it a differential nearly 10 percent greater than the working-class school in terms of the relative levels of college aspirations in the two types of schools (e.g. a proportion of 60 is 10 percent greater than a proportion of 50).

More important, it also must be remembered that our data deal only with aspirations among graduating seniors, and thus do not take into account the entire school career of students from kindergarten through twelfth grade and particularly the differentials in dropout rates that may be associated with differences in school type. Although we do not have data on the dropout rates in the schools in our sample that would allow us to estimate the effects of school type or holding power with individual social background of students controlled, we suspect that the same school climate factors that depress aspirations also operate to increase the dropout rate.

In addition to the direct effects of school type on aspirations and dropout rate, previous research indicates that school type indirectly affects college-going patterns in other ways as well. Figure I graphically portrays some of the ways in which school context directly and indirectly influences the

aspirations and college entrance rates of students in differing types of high schools. Although the diagram is based primarily on Hauser's recent path-analysis study of students in the Nashville Metropolitan Area, it also takes into account reviews of the literature (e.g. Boyle, 1966) on college aspirations as well as the findings of researchers (e.g. Coleman, et al., 1966; Wilson, 1967; Mayeske, et al., n.d.) who have conducted studies on the influence of schools and found that students in predominantly low-income schools suffer a performance deficit over and beyond that which can be attributed to individual disadvantage in social status.

The striking thing underlined in such models summarizing the results of studies of social background, school context, and educational aspirations is the cumulative disadvantage experienced by working-class students who live in low-income neighborhoods and attend working-class schools. In addition to the predictable deficit in school performance directly associated with low status background, further deficits in aspirations are incurred by low status students who attend low status schools. Add to this small amounts of cumulating disadvantage attributable to the effects of school type or school context on ability and achievement scores (especially in the elementary grades), holding power, and other variables which eventually influence enrollment or non-enrollment in college and it is evident that enrolling economically disadvantaged students in working class schools forges the last, hard link in a chain of circumstances which makes it unlikely that youngsters from working-class families will take advantage of opportunities for higher education in the metropolitan area.

Another point to keep in mind in considering the influence of school type on educational aspirations is that the majority of studies which have delineated this relationship have been conducted in middle-sized urban centers (Nashville, Milwaukee, San Francisco-Oakland, Kansas City, Pittsburgh). In the nine or ten largest urban regions (New York, Chicago, Los Angeles, etc.) the educational system probably is considerably more stratified, and the effects of school type on educational performance and aspirations may well be correspondingly greater. In general, there is reason to believe that the young people who suffer the greatest disadvantage from living in low-income communities and attending predominantly working class schools are those who live in the largest and most stratified poverty ghettoes in the more industrialized parts of the United States. One major reason for this is because occupational success is more dependent on education in a heavily urbanized area than in other parts of the country. A major study of longitudinal data carried out by Blau and Duncan (1967) has shown that "education has been becoming a more important factor in occupational achievement in recent decades" (p. 180), primarily by inducing "variation in occupational status that is independent of initial status" (p. 201); thus it is not surprising to find that a year of schooling yields a higher monetary return in a state like New York than in a state like Alabama (Morgan and Sirageldin, 1968). Since college attendance has a much greater effect on intergenerational mobility than does the type or nature of the curriculum studied in high school (Todd, 1969), it is easy to understand why finishing high school and enrolling in college has come to be regarded as a major prerequisite for success in more heavily urbanized parts of the country.

In these same urbanized areas, however, are found the largest concentrations of youngsters living in predominantly low-income neighborhoods and attending predominantly working class schools. Since we have seen that attendance at

working class schools results in cumulating disadvantages in the form of reduced aspirations and performance over and above the disadvantages associated with low social status per se, it is not difficult to understand why one recent study of poverty areas in a big city found that the poor "derive less benefits in occupational status from their educational attainment than the rest of society." (Institute for Community Studies, 1969, p. 72)

The problem of attaining occupational success while living in working-class neighborhoods and attending working class schools appears to be even more difficult, moreover, for black Americans than for white Americans. Blau and Duncan, for example, reported that "Education, a path to upward mobility for all, is not as effective a route up for nonwhites as it is for whites" (p. 210), except in the case of nonwhites who have managed to obtain a college education. But it is precisely the very low incidence of college attendance which clearly differentiates between the careers of young people in working-class neighborhoods--many of which are largely black--in the big cities and the careers of young people in other parts of large metropolitan areas.

Examining the implications of the various studies of occupational and educational attainment which have been cited above, it would be difficult to overestimate the plight of young people growing up in the expanding working class neighborhoods in larger, highly stratified metropolitan areas. McDill, Stinchcombe, and Walker (1968) have shown that in a large SMSA the "effects of segregation of Negroes into the central city--their exclusion from suburbs--and their segregation into public schools . . . are more important than segregation" (p. 239) within the public schools. Segregation of lower-working-class whites into relatively homogeneous central city neighborhoods may have effects nearly as negative as does segregation based on race. For many working class youngsters in big cities the initial mistake of being born into a low-income family has been greatly compounded by the mistake of living in a low-income community and attending a predominantly low-income school. In today's metropolitan areas, such mistakes apparently last for life.

TABLE 4

PROPORTION OF WHITE SENIORS WITH PLANS TO ENROLL IN COLLEGE, BY FAMILY SOCIAL CLASS, SEX, AND TYPE OF SCHOOL (SPRING, 1967)

Family Social Class	Middle Class		Comprehensive		Working Class	
			Males			
SES 1	89	213/240	82	237/288	70	7/10*
SES 2	87	214/247**	73	280/382	77	27/35*
SES 3	84	169/202**	67	496/741	58	64/110
SES 4	75	27/36**	46	246/536	39	68/176
SES 5	—	—	28	18/65*	31	11/36*
			Females			
SES 1	85	190/224	78	196/251	75	9/12*
SES 2	87	201/232**	64	231/361**	38	18/47
SES 3	77	160/208**	56	419/749**	46	55/119
SES 4	64	21/33**	35	187/540**	25	43/171
SES 5	—	—	16	12/74*	21	5/24*

*Number too small to be a reliable base.

**Denotes comparisons on which the percentage differences between adjacent school-type groups are significant at the .05 level or beyond using a two-tailed X^2 test.

TABLE 5

PERCENTAGES OF MALE STUDENTS ASPIRING TO GO TO COLLEGE BY SCHOOL GROUPS* WITHIN EDUCATIONAL AND OCCUPATIONAL STRATA SAN FRANCISCO-OAKLAND BAY AREA, 1959

Father's education / Father's occupation	Mother's Education: College Graduate — School Group A	College Graduate — School Group B	High School Graduate — School Group A	High School Graduate — School Group B	High School Graduate — School Group C	Less than High School — School Group B	Less than High School — School Group C
College graduate							
Professional	92	78	-	-	-	-	-
Upper White collar	86	94	83	62	-	-	-
High School graduate							
Upper White collar	-	-	85	65	-	-	-
Lower White collar	-	-	-	50	20	-	-
Manual	-	-	60	54	32	32	35
Less than High School							
Lower White collar	-	-	-	60	27	-	-
Manual	-	-	-	-	-	36	26

*A schools are high in status; B schools are middle status or mixed schools; C schools are low in status

Source: Alan B. Wilson, "Residential Segregation of Social Classes and Aspirations of High School Boys," American Sociological Review, N. 24 (1959), 836-845.

TABLE 6

PERCENTAGE OF WHITE SENIORS WITH PLANS TO ENROLL IN COLLEGE, BY FAMILY BACKGROUND COMBINATIONS, SEX, AND TYPE OF SCHOOL, KANSAS CITY METROPOLITAN AREA, SPRING, 1967

Males

Maternal Education / Father's occupation / Father's education	Type of School: Middle Class %	Middle Class N	Comprehensive %	Comprehensive N	Working Class %	Working Class N
College graduate						
Salesman, sales worker, government employee, or office worker						
Less than high school graduation	96.00	48/50	78.05	32/41		-
Self-employed in small business, skilled worker, or technical worker						
Less than high school graduation	90.91	20/22	85.00	17/20		-
High School Graduate or Some College						
Salesman, sales worker, government employee or office worker						
Less than high school graduation	79.21	80/101	72.64	154/212	57.12	12/21
Self-employed in small business, skilled worker, or technical worker						
Less than high school graduation	88.23	45/51	65.57	80/122	58.33	7/12
Service worker or factory worker						
Less than high school graduation	92.31	12/13	51.97	79/152	45.65	21/46

TABLE 6 (Continued)

	Females					
	Middle Class		Comprehensive		Working Class	
	%	N	%	N	%	N
College graduate						
Salesman, sales worker, government employee, or office worker						
Less than high school graduation	83.87	26/31	93.33	28/30		-
Self-employed in small business, skilled worker, or technical worker						
Less than high school graduation	93.33	14/15	85.71	12/15		-
High School Graduate or Some College						
Self-employed in small business, skilled worker, or technical worker						
Less than high school graduation	93.62	44/47	66.67	76/114	51.85	14/27
Salesman, sales worker, or office worker						
Less than high school graduation	82.64	100/121	61.95	127/205	21.43	3.14
Service worker or factory worker						
Less than high school graduation	81.82	9/11	41.36	67/162	42.86	21/49

TABLE 7

PROPORTION OF WHITE SENIORS WITH PLANS TO ENROLL IN COLLEGE, BY FATHER'S OCCUPATION, NUMBER OF BOOKS IN THE HOME, SEX, AND TYPE OF SCHOOL, KANSAS CITY METROPOLITAN AREA, SPRING, 1967.

	Males					
Father's Occupation	Type of School					
Number of Books in the Home	Middle Class %	N	Comprehensive %	N	Working Class %	N
Factory worker or service worker; 49 or less			38.53	69/180	37.18	29/78
Factory worker or service worker; 50 or more			50.37	135/268	44.71	38/85
Government employee; 50 or more	90.32	28/31**	68.38	93/136		
Salesman; 50 or more	85.44	88/103**	72.37	110/152		
Skilled worker; 50 or more	75.00	24/32	61.67	140/227	55.56	20/36
Manager or owner of large business; 50 or more	88.24	150/170	81.11	146/180		
Self-employed in small business; 50 or more	86.79	46/53	75.00	72/96		
Professional; 50 or more	92.04	104/113**	83.33	150/180		
			Females			
Factory worker or service worker; 49 or less			20.67	43/208	23.61	17.72

**Denotes comparisons on which the percentage differences between adjacent school-type groups are significant at the .05 level or beyond using a two-tailed X^2 test.

TABLE 7 (Continued)

	Middle Class		Comprehensive		Working Class	
	%	N	%	N	%	N
Factory worker or service worker; 50 or more			42.35	108/255	34.88	30.86
Government employee; 50 or more	90.91	30/33**	66.44	99/149		
Salesman; 50 or more	80.20	81/101	73.17	90/123		
Skilled worker; 49 or less			40.35	46/114**	18.18	6/33
Manager or owner of large business; 50 or more	88.62	148/167**	74.21	118/159		
Self-employed in small business; 50 or more	95.56	43/45**	66.28	57/86		
Professional; 50 or more	90.59	77/85	80.39	123/153		

TABLE 8

PROPORTION OF WHITE SENIORS WITH PLANS TO ENROLL IN COLLEGE, BY FATHER'S OCCUPATION, RESIDENTIAL STATUS, SEX, AND TYPE OF SCHOOL, KANSAS CITY METROPOLITAN AREA, SPRING 1967

Males

Father's Occupation	Type of School					
Residential Status	Middle Class		Comprehensive		Working Class	
	%	N	%	N	%	N
Factory worker or service worker; rented house or apartment			38.46	30/78	30.00	12/40
Factory worker or service worker; buying home or own home			47.50	171/360	44.26	54/122
Government employee; buying home or own home	83.78	31/37	65.77	98/149	58.62	17/29
Salesman; buying home or own home	86.24	94/109**	72.62	122/168		
Skilled worker; buying home or own home	76.92	30/39**	58.33	168/288		
Manager or owner of large business; buying home or own home	91.11	164/180**	83.16	158/190		
Self-employed in small business; buying home or own home	88.71	55/62**	73.04	84/115		
Professional; buying home or own home	90.91	100/110	83.44	126/151		

**Denotes comparisons on which the percentage differences between adjacent school-type groups are significant at the .05 level or beyond using a two-tailed X^2 test.

TABLE 8 (Continued)

	Females					
	Middle Class		Comprehensive		Working Class	
	%	N	%	N	%	N
Factory worker or service worker; rented house or apartment			27.37	26/95	20.59	7/34
Factory worker or service worker; buying home or own home			35.14	123/350**	30.83	37/120
Government employee; buying home or own home	80.49	33/41**	61.27	106/173		
Salesman; buying home or own home	80.91	89/110**	64.63	95/147		
Skilled worker; buying home or own home			47.15	124/263	34.48	20/58
Manager or owner of large business; buying home or own home	88.07	155/176**	71.51	128/179		
Self-employed in small business; buying home or own home	89.29	50/56**	63.71	79/124		
Professional; buying home or own home	89.01	81/91	82.40	103/125		—
Office worker; buying home or own home	84.85	28/3**	50.00	31/62		

TABLE 9

PROPORTION OF WHITE SENIORS WITH PLANS TO ENROLL IN COLLEGE, BY FATHER'S OCCUPATION, FATHER'S EDUCATION, SEX, AND TYPE OF SCHOOL, KANSAS CITY METROPOLITAN AREA, SPRING 1967

Males

Father's Occupation / Father's Education	Type of School: Middle Class %	Middle Class N	Comprehensive %	Comprehensive N	Working Class %	Working Class N
Factory worker or service worker; did not graduate high school			41.88	98/234	38.26	44/115
Factory worker or service worker; high school graduate or more			49.76	105/211	47.92	23/48
Government employee; high school graduate or more	84.62	33/39	73.53	100/136		
Salesman; high school graduate or more	84.82	95/112	74.85	125/167		
Skilled worker; high school graduate or more			64.84	142/219	52.78	19/36
Manager or owner of large business; some college or more	85.81	127/148	84.03	121/144		
Self-employed in small business; some college or more	87.80	36/41	81.82	45/55		
Professional; some college or more	92.73	102/110	85/47	153/179		
Office worker; some college or more	91.67	22/24	73.33	33/45		

TABLE 9 (Continued)

	Females					
	Middle Class		Comprehensive		Working Class	
	%	N	%	N	%	N
Factory worker or service worker; did not graduate high school			23.53	52/221	20.79	21/101
Factory worker or service worker; high school graduate or more			42.92	97/226	47.17	25/53
Government employee; high school graduate or more	88.89	32/36**	64.02	105/164		
Salesman; high school graduate or more	82.35	98/119**	67.11	102/152		
Skilled worker; did not graduate high school			33.63	38/113	18.42	7/38
Skilled worker; high school graduate or more	71.88	23/32	52.48	106/202	38/71	12/31
Manager or owner of large business; some college or more	87.67	128/146	83.64	92/110		
Self-employed in small business; some college or more	91.89	34/37**	71.79	28/39		
Professional; some college or more	91.21	83/91**	80.77	126/156		
Office worker; some college or more	82.61	19/23	60.53	23/38		

**Denotes comparisons on which the percentage differences between adjacent school-type groups are significant at the .05 level or beyond using a two-tailed X^2 test.

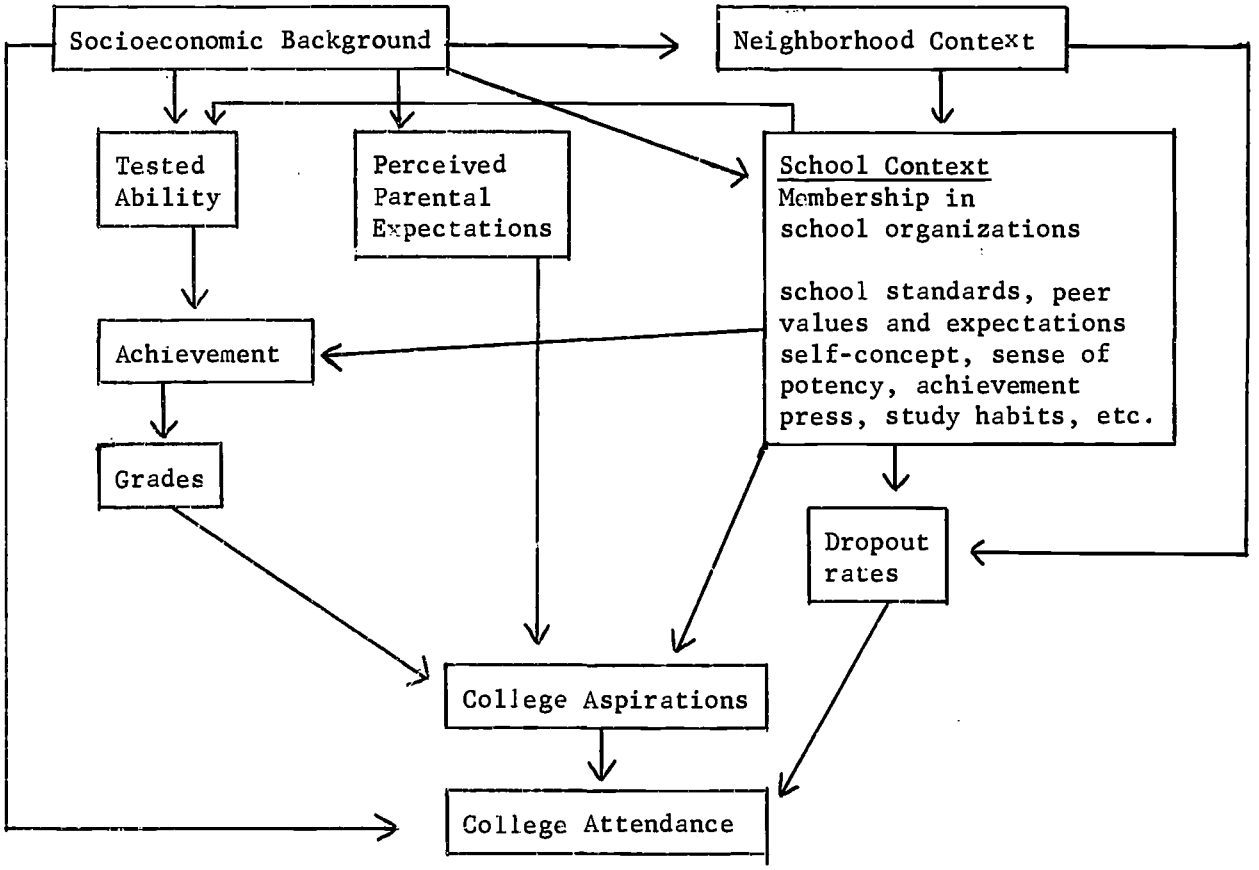
TABLE 10

PROPORTION OF WHITE SENIORS WITH PLANS TO ENROLL IN COLLEGE, BY SES, RANK IN CLASS, SEX, AND TYPE OF SCHOOL, KANSAS CITY METROPOLITAN AREA, SPRING 1967

Social Class	Type of School					
Rank in Graduating Class	Middle Class		Comprehensive		Working Class	
	%	N	%	N	%	N
			Males			
I; upper third	93.83	76/81	95.12	117/123		
II; upper third	92.75	64/69	96.06	122/127		
III; upper third	97.56	40/41	92.96	185/199	82.35	28/34
I; middle third	90.47	76/84	83.72	72/86		
II; middle third	95.35	82/86**	78.12	100/128		
III; middle third	98.61	71/72**	74.19	207/279	57.14	20/35
I; lower third	81.43	57/70**	62.90	39/62		
II; lower third	72.94	62/85**	46.36	51/110	35.90	14/39
III; lower third	68.23	58/85**	38.91	93/239		
			Females			
I; upper third	93.58	76/81	91.49	129/141		
II; upper third	96.20	76/79**	81.98	141/172		
III; upper third	93.26	83/89**	76.35	255/334		
I; middle third	86.57	58/67**	72.31	47/65		
II; middle third	91.30	84/92**	60.34	70/116		
III; middle third	78.08	57/73**	46.85	119/254		
I; lower third	62.22	28/45	45.95	17/37		
II; lower third	67.80	40/59**	23.81	15/63		
III; lower third	45.00	18/40**	25.00	35/140		

**Denotes comparisons on which the percentage differences between adjacent school-type groups are significant at the .05 level or beyond using a two-tailed χ^2 test.

FIGURE I



Model of Influences on College Aspirations and College Attendance Rates Suggested by Research Concerned with Socioeconomic and School Context Variables in Metropolitan Area Schools.

CHAPTER III

COLLEGE ATTENDANCE ASPIRATIONS AND SUBSEQUENT ENROLLMENT OF SENIORS IN WORKING CLASS HIGH SCHOOLS IN THE KANSAS CITY METROPOLITAN AREA

Introduction

Chapter I described the socio-economic composition of high school graduating classes within a metropolitan area. It was shown that the composition of high schools is correlated with the college aspirations of their graduating seniors. Chapter II examined the effect of school type, as previously defined, on college aspirations. In Chapter III the working class high school is the focus of attention. The purpose of this chapter is to describe differences in the college attendance plans and the actual college enrollment of students in working class high schools. Variations in educational aspiration, herein defined by expressed plans to attend college, will be examined by race, socio-economic level, and sex. To our knowledge, there has been no similar previous analysis designed to produce a profile which delineated the relationships between aspirations to attend college and subsequent fulfillment of those aspirations for different groups of students within the senior class in working class schools.

In order to do this, data were collected on the college aspirations of 1521 seniors in seven working class high schools in the Kansas City metropolitan area in the spring of 1967. The data obtained were from the questionnaire described in Chapter I. Forty-eight percent (N = 732) of the seniors in these schools indicated that they planned to attend college following graduation from high school. Two years later, in 1969-70, additional data were collected to determine which of the above group had actually enrolled in college. These data permitted the examination of several important issues which heretofore have not received sufficient attention in studies of the college aspirations of working class high school students.

Two questions of central importance in the study were: 1) Do significantly higher percentages of black students as compared to white students report plans to attend college? 2) Do significantly higher percentages of black students as compared to white students in these high schools overaspire to attend college in the sense of having college attendance aspirations which they are unable to fulfill? Several recent studies have reported a tendency among black students to be overly compliant with presumed expectations of school authority figures, particularly when answering a questionnaire dealing with college aspirations which is administered in a school setting. It is frequently argued that although education promises to be the most successful route for upward social mobility, it is the avenue most often closed to black members of our society. These arguments suggest that it is important to determine whether black and white students of similar social background take equal advantage of opportunities for higher education, or whether black students have inflated aspirations and are not relatively as successful in realizing their college goals.

Related Literature

A number of pertinent studies that attempted to identify factors which affect aspiration to attend college were summarized in Chapter II. Although most of these studies also were pertinent to the questions examined in this chapter, the review of related literature in this chapter will be limited to studies which have dealt specifically with the college aspirations and attendance of black and/or working class students.

Racial Differences in College Enrollment

The national picture of the enrollment of black students in colleges and universities in our nation remains disheartening to many observers. Statistics on black enrollment and attrition in institutions of higher education vary with each report and, of course, change yearly. Even taking into account changes as well as differences in reporting statistics, the percentage of blacks enrolled in college is disproportionately low in comparison with other groups which comprise the college-age population.

The Chronicle of Higher Education (April 24, 1968), for example, described a U.S. Office of Civil Rights Survey which showed that only 5.15 percent of the undergraduates in the nation were black. All but 2 percent of these were enrolled in all-black colleges and universities. John Egerton (1968) reported on a State University Survey, covering 98 universities, conducted by the National Association of State Universities and Land Grant Colleges with the Assistance of the Southern Education Reporting Service. This report gave an even more pessimistic picture of college attendance rates among black Americans. Slightly less than 2 percent of the undergraduates in the white universities studied were black students. Almost half of the black students enrolled were freshmen. Atkinson, Etzioni and Tinker (1969) report that while blacks comprise about 12 percent of the college age population, only six to seven percent of the nation's college students are black. Furthermore, almost half of these black college students are enrolled in black colleges.

High school enrollment and dropout statistics describe the black-white retention and attrition patterns which lead to the above imbalances in college enrollment. A U.S. Department of Commerce Report (1969) states that black seniors are less likely to graduate from high school than are white seniors, and black girls are more likely to finish their senior year of high school than are black males. The white male graduate is more likely to attend college than the white female graduate. Population statistics suggest that the reverse of this is true for black students, with the black female more likely to attend college than the black male. Bayer and Boruch (1969, p. 15) showed that the majority of black students in colleges are women (54 percent), but less than half (43 percent) of the non-black students are women.

Overaspiration and Racial Differences in Aspiration

Overaspiration of black students compared to whites was indirectly observed in the Chicago School Survey (Havighurst, 1964, pp. 208-209). Tables comparing pupil achievement and socio-economic area indicated that college attendance plans in twenty-five high schools reflected what appeared to be unrealistically high aspirations of working class blacks.

The equality of opportunity study conducted by Coleman et. al. (1966, pp. 63-64) also reported more black students than white expressing a desire to go to college even though lower proportions of blacks had seen a college catalog or corresponded with college admissions personnel. Coleman, et. al. concluded that, ". . . having the need to overstate the degree of one's educational interest on an anonymous questionnaire is in itself a fact of much significance. Values and goals have been internalized, but not the behavioral mechanisms for obtaining them . . . as part of his adjustment to failure, the low-achieving Negro student learns to use expressions of interest and ambition as a verbal substitute for behaviors he is unable to enact."

Veroff and Peele (1969) also hypothesized the existence of overaspiration among black students in responding to questionnaires about college aspirations. Assessing motivation through paper-pencil techniques is difficult in general, but difficulties are made even more complex by racial differences. Veroff and Peele found overcompliance to authority by the black student to be a significant factor when questionnaire techniques are utilized.

Bennett and Gist (1964) reported a high level of "fantasy" in the educational aspiration of urban students, particularly those in lower socio-economic groups. About 71 percent expressed plans to continue their education beyond high school. This percentage was closer to 83 percent when one-half of those who were undecided were added to the designated proportions. Yet the national average for urban high school students who actually attend college, as reported by Bennett and Gist, was closer to 47 percent. Black and white aspirations were not separately examined in this study.

Holloway and Berreman (1959) found significant differences between aspirations of black and white male students between middle and lower class aspirations. The fact that their sample used an elementary school age population limits the usefulness of their conclusions with respect to comparison with seniors in working class high schools.

With research literature pointing to overaspiration and population reports reflecting low college attendance by black students, we decided to examine the degree to which overaspiration (i.e., unfulfilled desires for a college education) was characteristic of black youth of low socio-economic resources in our sample. The question is of particular importance because of the high level of frustration and despair of black youth which presumably would be associated with setbacks encountered in striving for higher education goals that turned out to be unattainable.

Working Class High Schools in the Sample

The schools in the study are listed here by subgroups in order to aid the reader in making comparisons among them as he reads the individual descriptions. Names of schools have been changed in order to maintain the anonymity of these schools.

White Central City Working Class Schools

1. Rosehill
2. Naples

White Metro-fringe Working Class Schools
3. Sleepy Waters
4. Pioneer

Black Central City Working Class Schools
5. Midtown
6. Carver
7. Roosevelt

The schools were very much alike in the socio-economic ratios of families represented as indexed by the variables described in Chapter I. In each of these seven working class schools, 40 percent or more of respondents' parents were engaged in low status occupations such as factory work, service work or low prestige sales work. Fewer than 10 percent were in managerial or professional occupations. Parents' educational levels ranged from 20 percent or less with some college education to 50 percent and more who were not high school graduates. These percentages were based on figures reported for the father or head of the household.

Each school was somewhat distinctive, however, in other ways which contributed some variability to the data. For example, the two metro-fringe schools had higher percentages of students whose fathers were farm laborers, thus reflecting the rural influence in the settings in which they were located.

The following description of the seven schools listed above provides a background against which to understand the data reported later in this chapter. The descriptions of the schools are necessarily subjective in many instances, reflecting personal impressions and observations. Each school had its own set of traditions and problems, some unique and some held in common with the other working class high schools.

Rosehill

Rosehill High serves a stable, nearly all-white community of factory workers and homeowners. Although some racial transition began to take place the following year, at the time of the study (1967) the school was essentially an all-white school. Parents at Rosehill are generally factory workers, or skilled laborers, earning wages rather than salaries. Only 8 percent of the parents are reported in professional or managerial occupations. The nearby industrial area employs many people in the community in a variety of factories several of which are large national manufacturing companies associated with the steel and electrical industries.

Most of the families live in single family dwellings which they own or are purchasing. While the number of transient families seems to be increasing, 81 percent of the 1967 graduating class had been enrolled at Rosehill at least since their sophomore year. The students reported 71 percent living with both father and mother; however, counselors commented that many of the parents are divorced or remarried. No concrete data were available to verify or disprove that claim.

A college preparatory program prevails in spite of the fact that less than 40 percent of the graduates are college bound: only 40 percent of the

seniors planned to enter college in the fall. Almost one-third of the class planned to get jobs immediately following graduation.

In recent years a change in college attendance patterns has been noted by counselors. Formerly many students were accepted by prestige colleges out-of-state but now most students plan to attend college within the metropolitan area. The Metropolitan Junior College enrolls the largest single group from Rosehill.

The counselors assumed that the college attendance distribution was divided equally between girls and boys, although they anticipated a higher dropout rate for girls many of whom they expected will marry within a year after graduation.

Our own data show that 45 percent of the males but only 34 percent of the females at Rosehill said they planned to enroll in college. Ninety percent of the boys but only 63 percent of the girls in the upper third of the graduating class planned to attend college.* This difference persists even more dramatically in the lower third where 22 percent of the boys and only 4 percent of the girls plan to go to college.

Naples

A bleak and foreboding structure greets the visitor to Naples High School. Tall old trees, feebly struggling to remain alive and burdened with many dead branches, line the street. The school yard is spotted with patches of green grass reminiscent of what may have been a luxurious lawn in years gone by, but now the grounds are littered with paper and packed down by unauthorized paths tramped out by many feet. The high school itself is a massive structure of traditional three story design built of stone, brick, and cement. The building might look like a 19th century factory if it were not for the long tiers of steps leading up to the pillared doors at the main entry to the building.

Naples High is situated in an old, but relatively unchanging part of the city. Small frame houses, probably 30 to 50 years old, built close together with small, well-kept lawns, typify an intimate neighborhood. This community, with many third generation residents, has been perhaps the most stable in Kansas City. Many of the families would not wish to live anywhere else in the city, although some of the younger families are moving away to suburban areas. Many of the students' parents were Naples High graduates.

The families are typical working class people who have accepted the practice of mothers having jobs. Industrial plants employ some of the parents, others work in offices or are self employed. The community supports a large number of small neighborhood businesses, particularly family grocery stores. There were fewer service workers (waitresses, barbers, etc.) and fewer skilled laborers than among the Rosehill parents, a slightly larger percent of government

---

*Class rank data supplied by the schools in the sample were used to categorize students into upper, middle, and lower thirds within their respective schools.

employees and factory workers, and about three percent more engaged in managing large businesses.

The counselors reported that the income of the parents is just high enough to make getting financial aid difficult. However, parents are reported to feel a strong sense of pride in educating their own youngsters.

The college attendance expectations of seniors, reported at 40 percent on the questionnaire, were consistent with counselor estimates of 35 to 40 percent. As at Rosehill, many girls who ranked in the upper third of their class reported they did not expect to attend college. The counselors, however, believed that some of the girls who were competent students would decide during the summer, through influence of their peers, to go on to college, though no empirical evidence was offered to support this belief.

The counselors were all relatively new at Naples, since the counseling program was only begun in 1962. Most of the faculty also were recent arrivals, with eleven or twelve years being the longest tenure for any faculty member. The counselors viewed the faculty as being somewhat disunified, and as being able or willing to take time to help only the more promising students.

Sleepy Waters

Sleepy Waters High is the only high school in our sample of working class high schools which was located in a placid little town joined to the metropolitan area by an express highway. The site on which the town was built is physically unique for the region. Steep rocky cliffs overlook the town. Stores and houses are situated on streets which wind along an old river bed down into the valley. This picturesque scene, coupled with the added feature of a wide variety of mineral springs, enabled the town to become a health spa and resort area. The reputation lives on in the mind of the community, although the hot baths are now relatively deserted. The old hotels have grown shabby from disuse. Only sporadic attempts to attract industry, or revive the tourist trade, occupy the city council. The largest of the old hotels is now converted to a county home for the aged as well as a private nursing home for those who are able to pay. A musty odor of decay permeates the old buildings and adds another touch of wistfulness and despair to the town.

Life continues to revolve around several large clinics which hold to the old traditions, and which provide employment for the townspeople. There is some light industry in the area: two plastics plants and a large laundry employ local unskilled labor. A major manufacturing plant is located nearby and draws employees from Sleepy Waters and Pioneer City. Many people commute to work in the central city, now only a half-hour drive on the interstate highway.

Although the majority of families are in a lower income bracket, a substantial group of professional people associated with health clinics and government agencies still remain. Sleepy Waters has preserved its downtown shopping area even though a small shopping center has been built at the edge of town. The old shops on the crooked streets in the center of town are still operating, though much of the town's business has been drawn increasingly to Kansas City since the highway made the city more quickly accessible to residents of the area.

The metropolis is growing out toward Sleepy Waters, but the few new housing developments have not yet affected the high school. The high school is an old sprawling building, traditional two story brick in style, without the almost square appearance of Rosehill or Naples. Several additions seem to have emerged without planning. Half-planned spaces, casually arranged displays, and general deterioration of the building seem to be little noticed by students or teachers.

The school atmosphere seemed casual, rather than strictly academic or foreboding. Students visited cheerfully in the halls with each other and with the staff in the school office. Neither students nor teachers seemed compelled to keep a rigid schedule. There was no sense of impending vandalism in the school, as there had been in the guarded situation at Naples. The attitude seemed to be one of marking time, with relatively little special concern for the present or the future.

College attendance plans were indicated less often by boys at Sleepy Waters than was true at any of the other six working class schools: only 41 percent of the boys and 37 percent of the girls planned to attend college. The counselor reported that in 1968, the year following the survey, 44 percent of the graduating seniors enrolled in college, but actual follow-up data to verify this assertion apparently were not available. The increase was interpreted as a peer group effect. Although the counselor seemed to be devoting his attention predominately to the boys, not one male in the lower third of the class (N = 26) was planning to attend college. Sleepy Waters also has the lowest percentage (63%) of high ability (upper third) males planning to attend college. One-third of the boys who were planning to go to work ranked in the upper third.

Motivation toward college which comes directly from the school appears to be the responsibility of the counselor. Little active college recruiting had been done, other than visits by a few college representatives at the College Day program. College bulletins, announcements, flyers and testing manuals were stacked in the counselor's office but he lacked space and secretarial help for organizing these materials. The counselor was a conscientious, but overworked individual in a chaotic environment with almost no privacy.

The college choices most frequently reported were state colleges rather than colleges within the metropolitan area. Commuting to the central city would be expensive and time consuming. Sleepy Waters students who planned to attend college seemed to rely more on parents for support than did students in some of the other schools. They saw their parents as being able to finance a college education some distance from home.

Pioneer High

Pioneer High is located in the middle of a former pasture surrounded by fields of corn and alfalfa. The school is a large, low, modern, buff-colored brick building in a consolidated district. Its attendance boundaries encompass several small communities, including one medium-sized town, all within the limits of the Standard Metropolitan Statistical Area.

The building is spacious, attractive, and well lighted, in contrast to most of the other schools described in this chapter. Energy, vitality, and

youthful exuberance seemed to permeate the school. Students were "horsing around" in the halls, visiting gaily but briefly in the office, and moving rapidly and cheerfully between classes. An ample parking lot near the building was enveloped in a cloud of dust after school, as students "buzzed" in and out apparently in no real hurry to leave.

According to one teacher there had been no students at Pioneer High whose fathers had been in professional fields such as law or medicine. The community has been, for one hundred years, typical of rural pioneer Missouri with its small farm centers and its little river-towns settled chiefly by German immigrants. Forty percent of the Pioneer parents are factory workers, about the same proportion as at Naples, a central city school near the industrial area. The opportunity for a livelihood from farming has diminished; as a result many residents commute to work in plants in the central city or to an automobile plant in a nearby suburb. The percentage of skilled laborers is higher for Pioneer High than for any other working class school in our sample.

Change is taking place rapidly as the metropolis grows out to meet this farmland. The cornfields and pastures are being peeled back. Housing developments with newly named streets are being laid out. Most of these developments are small low-cost housing projects and multi-family units, although a few large suburban homes are also appearing.

College counseling at Pioneer High is done on a personal and informal basis. When college representatives drop in at the high school, students who indicate an interest in talking with them are released from class for interviews. The school has no special plan for acquainting students with college opportunities, although it does participate with a neighboring district in a College Night program. The counselors were skeptical about the value of this activity for their students, however.

Fifty-two percent of the Pioneer seniors planned to attend college--a proportion which was higher than those reported in other white working class schools in our sample and which counselors at Pioneer believed to be realistic. This evidence of relatively high college aspirations at Pioneer High can be attributed to a clear sex difference: all five of the males in the SES I and II groups planned to attend college, and even in SES IV three-fourths of the males (N = 24) planned to attend college.

Midtown High

Midtown High is the second oldest high school west of the Mississippi River and one of the largest high schools in the central city. Its history is the familiar one of residential change within cities. Originally an all white high school of predominantly lower middle class families, it is now 99 percent black. The pride of a long history and tradition is still important to some faculty as they remind students and visitors of Midtown's famous graduates. A tradition of athletic excellence persists, exhibited in state basketball championships and first place track teams in city and state competition.

The school building is situated on a large campus-like site with a spacious front lawn gently terraced to the shady boulevard. Midtown High appears quietly removed from the hub-bub of the busy street. In contrast, the rear of

the school is cramped by a narrow street and small residences crowded together. No parking facilities have been provided for students and almost none for teachers. The school is old and upon closer inspection shows clearly the signs of deterioration which accumulate faster than can be deterred by routine repair.

The general mood of the school seemed to be one of barely contained energy and buoyancy. There may be underlying depression and despair, but the students seem to push to the limit their freedom to joke and be informal with the faculty. The school was visited by the writer three times during this study, and each visit further deepened the first impression of camaraderie, openness of expressed feelings, and youthful energy readily available. The sense of latent energy was neither ominous nor reassuring; it suggested potential for action which could be channeled in one of several directions.

Many of the houses are old, single family dwellings converted for multiple occupancy. This is in violation of the city code, which is largely ignored by the community. There are no major low-cost housing projects in this attendance district. Such projects are located in the inner-city neighborhoods touching upon this one.

Families are large. The average black family at Midtown, according to one counselor there, is at least twice as large as the average white family. The profile of parents' occupational and educational background shows a marked difference at Midtown in comparison with the other working class high schools, both black and white. For example, parents who are employed by the government (either local or federal) comprise 19 percent of the breadwinners at Midtown; other schools in the sample have 10 percent or less in government occupations. The educational level of parents is also higher than for the other black schools. Midtown reports a higher percentage (22%) of parents with "some college or more" than any other working class high school in this study. At the same time, the senior counselor described the family structure as basically matriarchal even in families where the mother and father are living together. Many families have only one parent in the home.

Midtown has a larger percentage of boys planning to attend college (58%) than the two other black high schools. When the girls are included the overall average is 54 percent. The boys who rank in the upper-third of their class are planning to attend college at the rate of 87 percent, which is about 10 percent higher than the comparable figures for any other black working class school in our sample. The high school counselors believed the actual enrollment in college would be closer to 33 percent than 54 percent, ar that many who did enroll would drop out during the first term.

Midtown has six counselors, two white and four black. Three counselors have been in the school more than five years; the other three, two years or less. The black counselors are among those more recently appointed. The counselors interpret their role broadly as that of providing guidance to the student, personally, vocationally and educationally. While college counseling is important, it fits into a larger philosophy of student guidance which emphasizes building a sense of self worth and developing aspiration.

These are well-worn cliches, but the counselor interviewed gave several examples which supported his claim. He had letters from former students, one

now in Vietnam, who had responded to personal letters he had sent to them. Students were constantly dropping in just to say "hello" as he was talking. He had on his desk a paper written for him that day by a sophomore boy who was reportedly failing in several classes. The boy was extremely bright and very capable academically but he wanted to be an athlete, not a scholar, and he was too small for the athletic teams At the counselor's request, he had written on one side of the paper a list of things he considered "good" about himself; on the other side he put the less admirable traits. On the positive side he had written, "I am able to make good grades easily" but on the negative side the words "don't spend much time studying" were scratched through and replaced with "don't study." His list of negative characteristics was twice as long as the positive, ending with the words "too little for football or sports." The counselor was working to get the boy out for track but was not neglecting his academic problems.

The choice of colleges was not much different from that in the white central city schools. The largest single group of college bound students from Midtown planned to attend Metropolitan Junior College On the original questionnaire 55 from Midtown were planning to enroll at Junior College; in the fall 98 actually enrolled. Large groups also planned to attend Central Missouri State College at Warrensburg, Missouri and Lincoln University, an all black college, in Jefferson City, Missouri Fourteen planned to attend the University of Missouri at Kansas City, and 21 from Midtown did enroll there in the fall. Some colleges were reported as making an effort to recruit black students from Midtown. Tarkio, a college in northwestern Missouri, has recruited energetically, but since it is not on a railroad or busline it was difficult to persuade students to enroll there. Kansas Wesleyan also has vigorously recruited Midtown students. Their admissions officer, impressed by one student from Midtown who had attended Kansas Wesleyan, told the counselor, "We'll take anybody you send us." The counselor told of trying to find financial aid for two academically able Negro girls. He contacted the admissions director at Kansas Wesleyan who said no scholarship money was then available but other possibilities would be investigated. The admissions director then drove out of town to visit a wealthy farmer who, after hearing about the girls, agreed to pay expenses for both of them. The girls both subsequently graduated from Kansas Wesleyan. All this had happened before it became popular for colleges to recruit black students.

Two top ranking students from the 1967 graduating class at Midtown were accepted at the Air Force Academy. These appointments were viewed as special honors for the school as well as for the individual students involved.

Carver High School

The neighborhood around Carver High School has changed radically in recent years with almost all of the old houses near the school having been cleared away. Rubble strewn vacant lots now used as parking lots occupy what was formerly an area of large old deteriorating houses. The school itself is a crisp red brick four story building standing high on a hill with a large terraced lawn at the front. A long row of steps lead up to the front entrance. The school has three floors for classrooms and a fourth floor for the cafeteria. An annex has been built recently on one side of the school. The counselors' offices were located in the annex. The light, pleasant, modern surroundings

contrasted with the dinginess of the old part of the high school.

Carver was not crowded in the same sense that many inner city schools are cramped and lawnless and without gathering places for students. There is an appearance of spaciousness in the front of the school but the rear of the building is blocked by the school sports area. There is virtually no parking for students who have frequent confrontations with the owners of the many nearby commercial parking lots.

The school serves one of the poorest and most transient communities within the city. Nearly all mothers work, leaving no one in the home during the day. The bulk of the parents are day laborers. The students reported 21 percent of their parents were in service occupations such as maid, waitress, and barber--a proportion higher than at any other working class school in the study. Two percent of the parents are in professions.

College aspirations were expressed by nearly 50 percent of the seniors with an additional 18 percent planning to go to a trade or vocational school. The counselor believed these percentages were realistic but indicated many students would drop out of college during the first year. The counselors attempt to provide continuous assistance in college counseling and job placement. Visits to home rooms are scheduled, as well as group information periods and the typical College Day program. The cooperation of teachers in a school-wide effort to build aspiration and achievement was seen as fragmented and uneven. However, the teachers have initiated their own scholarship fund to provide financial aid to needy students. No other faculty in this study was reported as having made such an effort.

The turnover rate among teachers and counselors is high. Approximately one-third of the teachers are new to the school each year, and most of these are beginning teachers. Of the three counselors at the school, only one is black. Three years is the longest period any of the three counselors has worked at Carver.

Counselors reported student choices of colleges were influenced by proximity to college, financial aid, and counselor's assistance. It was further reported that some counselors tend to encourage students to choose their own alma mater.

The schools most frequently selected are Central Missouri State at Warrensburg, Metropolitan Junior College (24 planned to attend but 40 enrolled) and Lincoln University. Several popular Carver students had attended C.M.S.C. and this drew other students there. A few had gone to Northwest Missouri State at Marysville, but were disappointed to find themselves almost isolated in an all white school.

A surprisingly small number expressed interest in the University of Missouri at Kansas City. The counselor's explanation of this low interest was that while U.M.K.C. had designed a program to assist the disadvantaged, students in the program had not experienced satisfaction. No tutoring had been provided and the cost of attending U.M.K.C. was almost prohibitive for students from the Carver area.

Students at Carver High are severly disadvantaged financially, in the Counselor's judgment, and all need financial assistance. Many of the students are working at government-subsidized jobs in the Youth Opportunity Program. This includes the Bendix Corporation, the post office, hospitals, and offices in the Federal Building. The Neighborhood Youth Corps also enrolls more than four hundred youth. Their family income must be less than $4,000 to be eligible for this program.

Students' estimates of their family financial conditions show they view their situations as stringent, with most of them anticipating very little help from their parents in financing college.

Roosevelt High School

Roosevelt is most similar to Carver High in having always been a black school rather than a school of changed racial composition, as was Midtown. The community has a tradition of stability and residential pride. The school is located in the heart of the inner city and on the edge of an industrial area. Homes near the school include small one family dwellings, old homes converted into multi-family units, and new housing developments including high rise apartments. The community retains some of its former identity as a small town even though the city has grown away from the old downtown site and the community has become less desirable for families with children.

Efforts to prevent further deterioration of the area are underway through urban renewal and Model Cities' programs. A new recreation center has been built. A new swimming pool, baseball diamond and picnic facilities were to be opened in 1970. A movie theater and bowling alleys are available but they are too expensive for students to use frequently. The school itself is being maintained in minimal fashion since the school board plans to abandon Roosevelt when it builds a new high school. There is almost no space around the school for students to gather, and the streets are crowded with students coming and going in cars throughout the day.

The community is economically dependent upon industry. Parents are predominantly factory workers. Factories which make products of fiberglass, steel, and electric materials are concentrated along the old river bottom near the school. A few parents are doctors, lawyers, or teachers. Many are domestic day laborers. There are many families on welfare. A number of families have experienced divorce, abandonment, and death, as well as financial and emotional problems. According to the counselor, the mother is the central figure in many of these homes.

College plans were expressed by 56 percent of the seniors at Roosevelt, although the counselor believed only 50 percent would actually attempt to go to college. There were no figures available showing how many could be expected to finish college. It was believed that about 12 to 15 percent attend four-year colleges, with the remainder (about 35 percent) going to the local junior college.

Roosevelt High has a reputation for outstanding achievements in athletics and it is besieged by college recruiters looking for athletes. In addition, interest in the black student in general has increased and, as previously

osberved, some colleges are making a special effort to recruit students from black high schools. Tarkio and Central Missouri State College were named as Missouri schools which make the most obvious effort to enroll disadvantaged black students from Roosevelt. Other institutions which recruit there include Emporia State, Wichita University, Kansas University, Kansas State, Iowa University, Oklahoma University, Drake, Duke, and the University of Louisville. The counselor remarked wryly that some college recruiters flew in from great distances in private planes landing at a nearby air field looking for potential athletes regardless of grades, while the academically able student with no uniquely salable talent was overlooked. He leafed through a stack of student transcripts and applications while illustrating the point with examples of students who showed promise but for whom he had not been able to obtain scholarships.

The counselors find that their work is becoming increasingly hard to coordinate. Getting information to teachers and coordinating vocational-educational counseling with classroom activity is a constant problem. Roosevelt used to have the most stable faculty in the city school system, but now the faculty turnover is about 20 percent each year. Most of the older career teachers are gone and have been replaced by many younger teachers whom some of the older teachers feel are not career committed. The new teachers now coming in seem less mature, the counselor thought, than were new teachers in the past.

The counselors are obviously overworked in this school. The senior counselor was responsible for handling all paper work on the Neighborhood Youth Corps, which enrolled approximately 40 students--clerical help is badly needed for implementing this program. He was also responsible for much of the vocational placement. The factories in the community provide in-service training programs for youth, and the Chamber of Commerce operates a summer employment program in which high school students may work for various business firms in the city. Jobs are available but no one provides accompanying guidance for students on how to use their financial resources. The counselor expressed a feeling of futility about the fact that more boys from Roosevelt do not go to college. He saw opportunities for boys as being greater than for girls, but he thought that fewer boys take advantage of them. As at many other working class schools, there were more girls than boys in the senior class at Roosevelt.

College Attendance Plans

The total number of respondents in our sample of seniors in the seven working class schools described above was 1521, 741 of whom were in the white schools and 780 in the black schools. The first question with which we were concerned in this study was whether a higher proportion of black students than white students expressed intentions to enroll in college the following fall. As shown in Table 11, 54 percent of the black students but only 42 percent of the white students stated that they planned to attend college the following semester. Since this difference was significant at the .001 level ($X^2 = 18.7$), these data support the findings of previous researchers who concluded that students in working class black schools are more likely to aspire to attend college than are students in working class white schools.

Before accepting this conclusion, however, it is necessary to consider two possible considerations which might indicate that the tendency for black students to have higher college aspirations than white students is spurious. First, it is possible that the black students in our sample of working class schools have a higher social class background than the white students; since college aspirations tend to correlate with social status, a differential of this sort could account for the differences shown in Table 11. As shown in Table 12, however, the differences in SES distribution between students in the black and white schools are relatively small and do not seem large enough to account for the differences in college aspiration. (SES patterns with respect to college aspirations and attendance are discussed below.) Second, it is possible that there were large differences in dropout rates between the black and white schools and that relatively larger percentages of students who were not motivated to attend college had dropped out of the black schools than the white schools. For this reason we obtained data on the dropout rates in the black schools and in the central city white schools in our sample. (Similar data were not available for the two fringe schools.) As shown in Table 13, however, the dropout rates in the black schools in our sample did not appear to be higher than for the white schools; if anything, the white schools had the higher dropout rates. Although the dropout data shown in Table 13 share the notorious shortcomings generally encountered in working with this type of information and although they apply only from the sophomore to the senior year, neither do they suggest that the pattern shown in Table 11 is due to racial differentials in dropout rate. Thus we conclude that on the basis of the data available in the present study, students in black working class high schools are more likely to aspire to attend college than are students in white working class high schools.

An additional difference apparent in the data shown in Table 11 is that there is a larger gap in aspirations to attend college between white males and females than between black males and females. For each race the percentage planning to attend college is higher for males than for females, but for black respondents the difference is only four percentage points, whereas for whites the comparable difference is 15 percentage points. Sex differences in college patterns within the racial groups will be further explored in later sections of this chapter.

Differences between college aspiration rates in the two types of schools also emerged when comparisons were made by SES and sex. As shown in Table 14, there is a trend for college aspiration rates to decrease among white students, both male and female, as SES level declines. College aspirations for black students, however, do not show a consistent pattern by social class. College aspiration rates for black students fluctuate around 50 percent, so that even for SES I and II black males only 52 percent planned to attend college, compared to 78 percent of the white males in SES I and II. Differences between SES patterns within the white and black schools will be further examined and discussed in later sections of this chapter.

College Enrollment Data

Procedures

The follow-up study, conducted in 1969-70, two years following high school graduation, obtained information about 663 of the 732 students who had planned to attend college. To obtain data, post cards were mailed to each student requesting information on a return form. Since only a small percentage of responses were received, most of the data were obtained through telephone calls, made most successfully in the evening or on weekends, to the home of the student. Sometimes the high schools were asked for help in tracing students, but they had no formal follow-up system and were not able to supply much information. One of the most frustrating aspects of the follow-up was the number of phones which had been disconnected or converted to silent numbers.

Information requested was kept very simple. The basic questions were: Did the student attend college? If so, where? If not, why not? Is he still enrolled? Did he transfer? These data were transferred to IBM cards for computer processing and analysis.

College Enrollment Rates by Race

The major finding in the data on college aspirations described above was that seniors in black working class schools were more likely to say they planned to enroll in college than were seniors in the white working class schools. The second major question with which we were concerned was whether seniors in the black working class schools averaspired to attend college in comparison to seniors in the white schools--that is, whether they were proportionately as able to fulfill their relatively high aspirations. Due to the possible effects of overcompliance among black respondents on items dealing with future educational aspirations and the possibility that black students might be relatively more limited in resources to finance a college education, we anticipated that attrition between high school graduation and college graduation very well might be considerably greater for seniors from the black working class schools than seniors from the white working class schools.

As shown in Table 15, however, the difference in college enrollment rates between seniors in the two types of schools who had said they planned to attend college was very slight. Although the proportion of white seniors who enrolled in college (83) was five percentage points higher than the equivalent percentage (78%) for black students, this difference was not statistically significant at the .05 level ($X^2 = 2.04$; $p < .10$), despite the relatively large number of respondents included in the comparison. Thus our major finding in this section is that students in black working class high schools cannot be said to have unrealistic college aspirations when their social background and the type of school they attend are taken into account.[11]

---

[11]It should be emphasized that the findings reported in this chapter are for students in working class high schools only. It is possible that black students in higher status schools in our sample do overaspire in comparison with whites, but the number of black students in non-working class schools in our sample was too small to test this hypothesis.

Whether this finding is unique to the Kansas City metropolitan area remains to be determined, of course, by research elsewhere, but we have no reason to believe that black working class students in the Kansas City area have relatively better or poorer opportunities to fulfill college aspirations in comparison with white working class students than is true in other large urban centers. One reason why our results disagree with findings reported in several previous studies may be that recent federal, state, and local efforts to increase black enrollment in higher education are having a noticeable impact in terms of making it possible for black students to satisfy their relatively high aspirations for a college education. Adequate longitudinal data to test this hypothesis, however, are not available.

One factor that might make our major conclusion spurious is the possibility that the black seniors in our sample might represent a more select group than did the white seniors. That is, it is possible that relatively more students drop out of black working class high schools than white working class high schools, thus leaving a more highly college-motivated sample to graduate in the former schools than in the latter. As mentioned above, however, data on the dropout rates in the central city working class high schools did not indicate that there was a higher dropout rate in the black than the white schools; therefore we have no reason to believe that our finding is an artifact caused by differential dropout rates by race in the working class schools included in our sample.

Sex Differences in College Attendance Within Racial Groups

With the finding that among the working class high schools in the study both black and white students were attending college at very nearly the same rate, the analysis of the data turned to variations in college attendance associated with factors other than race.

As indicated above, black females tended to have college aspiration rates nearly as high as black males, but white males' college aspirations clearly were higher than those of white females (Table 11). Table 15 shows that the enrollment rate for black females was nine percentage points greater than that for black males, whereas white males had an enrollment rate eleven percentage points greater than did white females. That black males are lower in college attainment than black females and white females are lower than white males is further indicated in Table 16, which shows that five percent more of the black males than black females and seven percent more of the white females than white males dropped out of college in the first two years. These data suggest that black males and white females may experience special problems which limit their educational attainment in comparison with black females and white males, respectively. For a variety of reasons which are not particularly pertinent to this study and therefore will not be reviewed here, it is often thought that low status black males and low status white females constitute particularly disadvantaged (some would say oppressed) groups in modern urban society. Our data tend to support this point of view insofar as it can be expected to be exemplified in differential college expectation and enrollment patterns among seniors in working class high schools in a large metropolitan area.

SES Patterns in College Attendance Within Racial Groups

Table 17 shows the college enrollment rates and the proportions of seniors entering college who were still in their initial college two years later for the differing SES groups within our sample of white and black working class high schools. In general, the data indicate that SES may be slightly associated with college entrance for white males but otherwise is not strongly associated with college entrance and retention of seniors in working class schools. With respect to college enrollment, the proportions of white seniors enrolling in college were 91 percent in SES I and II, 85 percent in SES III, and 78 percent in SES IV and V; for black seniors the comparable proportions were 72 percent, 82 percent, and 77 percent, respectively. (SES and sex groups had to be combined in order to obtain sufficient numbers to make these comparisons.) With respect to college retention, the proportions of white seniors who enrolled in college and were still enrolled in the initial college two years later were 68 percent in SES I and II, 54 in SES III, and 63 percent in SES IV and V, respectively. Comparable proportions for students from the black working class high schools were 64 percent for SES I and II, 60 percent for SES III, and 59 percent for SES IV and V, respectively.

Data in Table 14 had indicated that SES was more clearly associated with college attendance plans for students in white working class schools than for students in black working class schools. One possible explanation of this pattern is that socioeconomic classification may not be as meaningful for black students as for white students. That is, when disadvantages attributable to race (or caste) are added to disadvantages associated with economic or occupational status (class), black students may suffer multiple social handicaps which obscure relationships between SES and other variables. Another way of stating this hypothesis is that the opportunities available to relatively high SES students living in an economic and racial ghetto may be more limited than are the opportunities available to relatively high SES students in an economic ghetto. An alternative hypothesis is that differences in mobility and aspiration between high SES black students who attend predominantly black schools and black students of similar SES whose families have moved to racially integrated areas may be greater than are the differences between high SES white students who live inside and outside working class neighborhoods.

Whatever the explanation, the data in Table 17 indicate that SES differences in college aspiration between white and black students in working class schools generally are not maintained after graduation from high school. Except for the large difference in college entrance rate between SES I and II white and black students (SES I and II white = 91 percent; SES I and II black = 72 percent; $X^2 = 4.76$, $p < .05$), college enrollment and retention rates by SES are not greatly different for the two racial groups and show no consistent pattern which differentiates between the races. The relatively low enrollment rate for SES I and II black students does provide a further indication, however, that SES ratings of black students in working class high schools may be less meaningful or more open to misclassification than is true with respect to white students in working class high schools.

Implications

The relatively high college aspirations coupled with the relatively high college enrollment rates found among black students in working class high schools in this study suggests that there may be a trend for black students to be increasingly utilizing opportunities for higher education. Recent developments in financial aid to black students and current competition between white campuses to enroll black students may be contributing substantially to a changing pattern of aspiration and fulfillment of educational goals for the black student.

However, at the same time caution should be exercised against overstating what appears to be an improving picture of educational realization for black students. This finding must be kept within the context of the total picture for working class students: secondary school dropout rates, relatively low percentage planning to attend college, and relatively high proportion dropping out of college, as compared with higher status students. The trends indicated by the results of this study point to a more positive picture of utilization of opportunities for higher education by black students then might have been expected; but if the college aspiration and attendance rates of both black and white students from working class high schools are contrasted with those of students from comprehensive or middle class schools, the limited expectations of the working class student remain obvious.

The results of this study of students in working class schools, even without a comparison with other school types, have implications for educators in metropolitan high schools in which racial composition is currently shifting. Black and white students appear to be equally serious about their college ambitions and are specially in need of help in realizing their educational goals. Problems which require particularly vigorous attention from counselors in working class high schools include those of encouraging the black male to attend college and increasing the level of educational aspiration and attendance of white females. In each racial group, but particularly the black, students from the working class high school need more encouragement and assistance than they have been receiving after arriving in college. When college dropout percentages are translated into personal disillusionment and lost human potential, special efforts to help the working class student succeed after he arrives in college become even more important.

The suggestions found in this study that socio-economic status may have less relation to the college attendance plans and subsequent enrollment of black students than of white students emphasizes the importance of careful consideration of the meaning of measures of social class typically applied to black students. Social class definitions may not be completely adequate as indices for comparing black and white student groups. Education, occupation and income may satisfactorily categorize social status for white families and provide good explanations for differences in aspiration, but the additional effects of the color-caste system in our society may have more influence than social class variables on the educational plans and careers of black families. Additional factors may particularly differentiate between black and white students in high SES I and II categories. Even with the same educational level and similar occupations, the income level of the black family of relatively high status may not compare favorably with that of a white family of equivalent SES rating. It

is very difficult, even with income figures, to assess the ability of a family to provide for the expenses of a child in college. Presumably these families had relatively high status and good incomes, but the real income of the black parent might be considerably less than that of the white worker in the same field of work in spite of efforts to reduce this kind of discrimination. Income in the high status black family may be particularly depleted by high interest rates and higher prices for commodities paid by residents of the ghetto. Thus even with a theoretically high income, black families in SES I and II might find it particularly difficult to provide the financial support necessary to send a child to college.

A social class hierarchy based on educational and occupational data does not apply equally well to black and white students in this study. The high status black males appear to have lower educational aspirations than the high status white males in our sample of working class high schools, while on the other extreme low SES black students, both male and female, had higher college aspirations than did low SES white students. This may be a reflection of several factors which need further investigation, including the possibility that high status black males in working class schools are more alienated toward the school as a means to success than are high status white males in similar schools and the possibility that lower status white students feel less need than low status black students to have more education as a prerequisite for work.

There are definite indications that both black and white working class students are expressing goals which, to an equal degree, they intend to achieve. For the black student, this may represent a new trend in that ambitions are being expressed which are not mere reflections of acceptable white goals, but are aspirations with which the black student can personally identify. Longitudinal studies are needed to determine if this is happening, or is beginning to happen, in other schools in other areas. But since there is no apparent reason to believe that Kansas City is unique in this respect, our findings may be perceived as evidence that efforts to enable black students to continue their education beyond high school are beginning to show results.

TABLE 11

SENIORS IN WHITE AND BLACK WORKING CLASS HIGH SCHOOLS AND PERCENT PLANNING TO ATTEND COLLEGE, BY SCHOOL AND SEX

Kansas City Metropolitan Area, Spring 1967*

	Number in Class			Planning to Attend College					
	M	F	T	M		F		T	
				N	%	N	%	N	%
White Schools:									
Rosehill	110	97	207	50	45	33	34	83	40
Sleepy Waters	68	65	133	28	41	24	37	52	39
Pioneer	50	56	106	36	72	19	34	55	52
Naples	133	162	295	68	51	56	35	124	42
Total White	361	380	741	182	50	132	35	314	42
Black Schools:									
Midtown	178	227	405	103	58	116	51	219	54
Carver	57	87	144	28	49	41	47	69	48
Roosevelt	105	126	231	59	56	71	56	130	56
Total Black	340	440	780	190	56	228	52	418	54
Grand Totals	701	820	1521	372	53	360	44	732	48

*This table includes a small change to correct for the misclassification of four students at the time tables were prepared for Chapter I.

TABLE 12

SES DISTRIBUTION OF STUDENTS IN WHITE AND BLACK WORKING CLASS HIGH SCHOOLS, KANSAS CITY METROPOLITAN AREA, SPRING 1967

SES	White		Black	
	%	N	%	N
I	03	(19)	04	(34)
II	11	(78)	11	(87)
III	27	(201)	28	(221)
IV	47	(347)	42	(330)
V	13	(96)	14	(108)
	101*	(741)	99*	(780)

*Percentages do not sum to 100 due to rounding.

TABLE 13

DROPOUT PERCENTAGES BETWEEN SOPHOMORE ENROLLMENT AND GRADUATION FOR BLACK AND WHITE CENTRAL CITY WORKING CLASS HIGH SCHOOLS

	Sophomore Enrollment	Graduating Seniors	Dropped or Did not graduate	Percent of Dropouts
White	1009	607	402	40
Black	1289	864	425	33

TABLE 15

NUMBER AND PERCENT ENROLLING IN COLLEGE BY SEX AMONG SENIORS WHO PLANNED TO ENROLL IN COLLEGE, WHITE AND BLACK WORKING CLASS HIGH SCHOOLS, KANSAS CITY METROPOLITAN AREA, FALL 1967

School	Male			Female			Total		
	Planned to Attend	Enrolled	Percent Enrolling	Planned to Attend	Enrolled	Percent Enrolling	Planned to Attend	Enrolled	Percent Enrolling
White	159	139	87	122	93	76	281	232	83
Black	173	126	73	209	171	82	382	297	78

TABLE 16

PERCENT OF SENIORS ENROLLING IN COLLEGE WHO DROPPED OUT OF COLLEGE WITHIN FIRST TWO YEARS BY SEX, WHITE AND BLACK WORKING CLASS HIGH SCHOOLS, KANSAS CITY METROPOLITAN AREA, 1967-1969

School	Male		Female	
	%	(N)	%	(N)
White	27	(37)	34	(32)
Black	38	(48)	33	(57)

TABLE 17

PERCENT OF SENIORS ENROLLING IN COLLEGE AND REMAINING IN INITIAL COLLEGE AFTER TWO YEARS, WHITE AND BLACK WORKING CLASS HIGH SCHOOLS, KANSAS CITY METROPOLITAN AREA, 1967-1969

Enrolling in College (% of N Who Planned to Attend)

	White		Black	
	%	(N)	%	(N)
SES I and II	91	(41)	72	(47)
SES III	85	(87)	82	(91)
SES IV and V	78	(104)	77	(159)

Remaining in Initial College After Two Years (% of N Who Enrolled)

	White		Black	
	%	(N)	%	(N)
SES I and II	68	(28)	64	(30)
SES III	64	(56)	60	(55)
SES IV and V	63	(65)	58	(92)

SELECTED REFERENCES AND BIBLIOGRAPHIC SOURCES

Adams, Bert N. and Meidam, Miles T. (1968). "Economics, Family Structure, and College Attendance," American Journal of Sociology, 74, 230-239.

Astin, A. W. (1965). Who Goes to College, Science Research Associates, Inc., Chicago.

Atkinson, Carolyn, Etzioni, Amatai, and Tinker, Irene. (1969). Post-Secondary Education and the Disadvantaged: A Policy Study, New York: Center for Policy Research.

Baird, Leonard. (February, 1967). Family Income and the Characteristics of the College Bound Student, American College Testing Research Report, #17.

Baird, Leonard L. and Holland, John L. (1969). "The Flow of High School Students to Schools, Colleges, and Jobs: A Re-examination of Some Old Questions by the Use of Multiple Indices of Talent," Journal of Human Resources, 4, 22-37.

Bayer, Alan E. and Boruch, Robert F. (1969). "The Black Student in American Colleges," American Council on Education Research Reports, 4, No. 2.

Bennett, William S. and Gist, Noel P. (December, 1964). "Class and Family Influences on Student Aspirations," Social Forces, 43, #2, 167-173.

Bennett, William S., Jr. and Gist, Noel P. (October, 1963). "Aspirations of Negro and White Students," Social Forces, 42, 40-48.

Berdie, Ralph F. and Hood, Albert B. (1963). "Trends in Post High School Plans Over an 11-Year Period," Cooperative Research Project #951, U.S. Office of Education, Minneapolis, Minnesota, University of Minnesota.

Blau, Peter and Buncan, Otis Dudley. (1968). The American Occupational Structure, New York, Wiley & Sons, Inc.

Bowles, Samuel and Levin, Henry M. (1968). "The Determinants of Scholastic Achievement--An Appraisal of Some Recent Evidence," Journal of Human Resources, 3, 3-24.

Boyle, Richard P. (May, 1966). "The Effect of the High School on Student's Aspirations," American Journal of Sociology, 71, 628-639.

Bredemeier, Harry C. (1968). "Schools and Student Growth," The Urban Review, 2, No. 2, 21-28.

Brodie, Donald Z. and Suchman, Edward A. (1968). "Socioeconomic Status, Students' Evaluations and Educational Desires," Social Science Quarterly, 49, 253-260.

Chandler, Christopher. (1967). "Motivation A Crucial Factor in Success of Ghetto Pupils," Chicago Sun-Times, December 11, 1967, pp. 5, 26.

Coleman, James S. (1969). "Commentary on Evaluation Problems," The Urban Review, 3, No. 4, 6-8.

Coleman, James S., et. al. (1966). Equality of Educational Opportunity, Washington, D.C., U. S. Government Printing Office.

"Commentary and Debate." "On Adams and Meidam's 'Economics, Family Structure, and College Attendance'" and "The Authors' Reply," (1968) American Journal of Sociology, 74, 274-278.

Douvan, Elizabeth and Kaye, Carol. (1962). "Motivational Factors in College Entrance," The American College, Nevitt Sanford, ed., New York. Wiley & Sons, 199-223.

Egerton, John. (1968). Higher Education for "High Risk" Students, Atlanta: Southern Education Reporting Service.

Farquhar, Robin F. (1965). "Home Influences on Achievement and Intelligence: An Essay Review," Administrator's Notebook, 13, No. 5.

Haller, Emil J. and Anderson, Barry D. (1969). "Contextual Effects on Educational Aspirations: Some Canadian Evidence," Administrator's Notebook, 17, No. 7.

Harrison, Forest I. (n.d.). Opportunity as It is Related to Home Background and School Performance. Claremont, California: Claremont Graduate School.

Hauser, Robert J. (1969). "Schools and the Stratification Process," American Journal of Sociology, 74, 587-611.

Havighurst, Robert J. (1964). The Public Schools of Chicago: A Survey Report, Chicago: Board of Education.

Herriott, Robert E. (1963). "Some Social Determinants of Educational Aspiration," Harvard Educational Review, 33, 157-177.

Holloway, Robert G. and Berreman, Joel V. (1959). "The Educational and Occupational Aspirations and Plans of Negro and White Male Elementary School Students," Pacific Sociological Review, 2, 56-60.

Hood, Albert and Swanson, Edward. (1965). "What Type of College for What Type of Student?", Cooperative Research Project #2182 (0#-4-10-014), Student Counseling Bureau, University of Minnesota.

Institute for Community Studies. (1969). Evaluation of the Community Action Program of Kansas City, Missouri, Kansas City, Missouri, Institute for Community Studies.

Jencks, Christopher. (Spring, 1968). "Social Stratification and Higher Education," Harvard Educational Review, 38, 277-316.

Kahl, Joseph, (Summer, 1953). "Educational and Occupational Aspirations of 'Common Man Boys'," Harvard Educational Review, Vol. 23, 186-203.

Kemper, Theodore H. (1968). "Reference Groups, Socialization, and Achievement," American Sociological Review, 33, 31-45.

Kendrick, S. A. and Thomas, Charles L. (1970). "Transition from School to College," Review of Educational Research, 40, 151-179.

Kiesling, Herbert J. (1968). "Empirical Evidence Concerning the Relative Educational Performance of Children from Disadvantaged Backgrounds," Federal Programs for the Development of Human Resources Vol. 1 of a Compendium of Papers Submitted to the Joint Economic Committee, Congress of the United States, Washington, D.C.: U. S. Government Printing Office, 250-262.

Lyle, Jerolyn R. (1968). Research on Achievement Determinants in Education Systems: A Survey. Washington, D.C., National Center for Educational Statistics, Technical Note No. 56, Ed. 018 858.

McDill, Edward L., Rigsby, Leo C., and Meyers, Edmund D., Jr. (1969). "Educational Climates of High Schools: Their Effects and Sources." American Journal of Sociology, 74, 567-586.

McDill, Edward L. and Rigsby, Leo C. (1966). Sources of Educational Climates in High Schools. Baltimore: Department of Social Relations, The Johns Hopkins University, Project No. 1999, OE-3-10-080.

McDill, Edward L. and Coleman, James. (Winter, 1965). "Family and Peer Influences in College Plans of High Schools Students," Sociology of Education, 38, 112-127.

McDill, Edward L., and Coleman, James S. (1963). "High School Status, College Plans, and Interest in Academic Achievement," American Sociological Review, 28, 905-918.

McDill, Mary Sexton, Stinchcombe, Arthur L. and Walker, Dollie. (1968). "Segregation and Educational Disadvantage: Estimates of the Influence of Different Segregating Factors," Sociology of Education, 41, 239-246.

Michael, John A. (Winter, 1961). "High School Climates and Plans for Entering College," Public Opinion Quarterly, 24, 585-595.

Mitchell, James V. (1968). "Dimensionality and Differences in the Environmental Press of High Schools," American Educational Research Journal, 5, 513-530.

Morgan, James M., et. al. (1962). Income and Welfare in the United States, New York: McGraw-Hill.

Office of Education Bureau of Research. (1968). "Patterns of College Attendance," (Ed-022-067), Eric Document Reproduction Service.

Ramsey, Natalie Rogoff. (1962). Social Structure and College Recruitment, Bureau of Applied Social Research, Columbia University.

Rehberg, Richard A., and Westby, David L. (1967). "Parental Encouragement, Occupation, Education and Family Size: Artificial or Independent Determinants of Adolescent Educational Expectations?," Social Force, 45, 362-374.

Reiss, A. (1961). Occupation and Social Status, Glencoe, Illinois: Free Press.

Richards, James M., Jr., and Holland, John L. (October, 1965). A Factor Analysis of Student "Explanations" of Their Choice of a College, (Ed 016 994), Report No. ACT-RR-8, Iowa City, Iowa: American Testing Program.

Richards, James M. (February, 1968). Who Goes Where to College? A Cross Validation, Center for the Study of the Evaluation of Instructional Programs; University of California, Los Angeles.

Schoenfeldt, Lyle F. (1968). "Education After High School," Sociology of Education, 41, 350-369.

Sewell, William H., Archibald, O., and Porter, Alejandro (1969). "The Educational and Early Occupational Attainment Process," American Sociological Review, 34, 83-92.

Sewell, William H., and Armer, J. Michael (April, 1966). "Neighborhood Context and College Plans," American Sociological Review, 31, 159-168.

Sewell, William H., and Shal, Vimal P. (August, 1967). "Social Class, Parental Encouragement and Educational Aspiration," American Journal of Sociology, (paper presented at 62nd meeting of American Sociological Association).

Sewell, William H. (February, 1964). "Community of Residence and College Plans," American Sociological Review, 29, 24-38.

Shaycroft, Marion F. (1967). The High School Years: Growth in Cognitive Skills, American Institute for Research and School of Education, Project Talent Interim Report 3, Project No. 3051, OE 6-10-65.

The Chronicle of Higher Education (April 24, 1968). 11, No. 16.

Thompson, Wilbur R. (1964). A Preface to Urban Economics, Baltimore: Johns Hopkins Press.

Todd, Edward S. (1969). "High School Curricula: Some Economic Implications," Administrator's Notebook, 18, No. 2.

U. S. Department of Commerce (July 11, 1969). "Factors Related to High School Graduation and College Attendance," Population Reports Series 9-20, No. 185.

Veroff, Joseph and Peele, Stanton (1969). "Initial Effects of Desegregation on the Achievement Motivation of Negro Elementary School Children," Journal of Social Issues, 25, No. 3, 71-91.

Wolfe, Dael (1961). "Educational Opportunity, Measured Intelligence, and Social Background," in Education, Economy and Society, edited by A. H. Halsey, Jean Floud, and C. Arnold Anderson, New York: Free Press, 1961, pp. 216-240.