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EDUCATION IS NOT ENOUGH.

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1975

EDUCATION IS NOT ENOUGH

by

ROBERT S. PEPPER

A dissertation submitted to the
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This manuscript has been read and accepted for the Graduate Faculty in Sociology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy

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Abstract

EDUCATION IS NOT ENOUGH

by

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Education is Not Enough is a study of the effects of education on income. There seem to be many Americans who believe that high educational attainment and economic success are closely related. We use new data to examine this mythical relationship. We find that the belief in the power of education is not supported by the facts. There seems to be only a modest correlation between education and income for the young men in our sample. And educational attainment does not seem to reduce inequality substantially. We argue that even when men of different social origins have equal amounts of schooling, important differences between them remain. It is argued that social background related differences in social contacts, attitudes toward work and achievement and personal style have a significant effect on success. Given the modest relationship between education and income, and given serious limitations of our data, we suggest a number of strategies for success that may help some young men to maximize their return on investments in education.

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CHAPTER I

INTRODUCTION

EDUCATION IS NOT ENOUGH

Americans, as a nation, value education. Berg has noted that in the last thirty years we have fostered and protected the individual's right to higher education through federal law. The post-war GI Bill and the draft exempt status of college students through the 1960's are two examples of such legislation (Berg, 1970, p. 5-7). We value education because we believe that schooling has an important effect on the intellectual, emotional and spiritual development of our young people. Americans also believe that education has a significant impact on earning power. One aspect of the American belief is that high educational attainment leads directly to high income.

As Jencks notes, "everyone" knows that staying in school is important for "getting ahead", and most people assume that "getting ahead" includes "making money" (Jencks, 1972, p. 221). Each day we are bombarded with tv, radio and newspaper advertisements which urge all young Americans to complete their education in order to secure good jobs and high salaries. Minority groups have

a particular interest in education. The famous Civil Rights slogan of the 1960's -- "learn, baby, learn" -- epitomized the belief that education was an institution that could help to reduce inequality in this nation. This belief appeared to be shared by our nation's leaders:

The basic strategy of the war on poverty during the 1960's was to try to give everyone entering the job market or any competitive arena comparable skills. This meant placing great emphasis on education. Many people imagined that if schools could equalize people's cognitive skills this would equalize their bargaining power as adults. In such a system nobody would end up very poor -- or, presumably, very rich.
(Jencks, 1972, p. 7)

The strong belief in the effect of education on income influenced government policy in the 1960's, e.g., Titles I-IV, SEEK, Upward Bound, Open Admissions, Model Cities and NDEA institutes.

It is our belief, however, that America's faith in the institution of education is somewhat naive. The underlying speculation of this study is that our nation has placed too much of its trust in education. Our goal is to place the potential beneficial effects of education on income into perspective. We believe that education has limited curative power on the social, political and economic ills of this nation. This is not necessarily

good or bad. It forces us to look at the relationship between education and income within a wide social context however. In subsequent chapters we examine how social forces such as race, class and ethnicity indirectly affect income, often independently of education. Our study deals exclusively with the dynamics of this process for young men in this country. We wish to state here that our investigation was undertaken in the spirit of Jencks, Milner, Blau and Duncan and Miller who studied the effects of education on income. These investigators have worked to de-mystify that relationship; we hope to add to their significant accomplishments. To achieve our goal we have organized the data into three distinct tasks.

Re-Examination of Issues Raised by Others

First, we re-examine issues raised by Jencks, Milner, Miller, Blau and Duncan and others that seem to contradict each other, or contradict government policy and public opinion. For example, most investigators agree that the relationship between education and income is positive but modest (see p. 48). However there is disagreement as to whether the fourth year of schooling, at each level, adds significantly more to income than any of the three preceding years. Jencks does not believe that the fourth year is significantly different than

the others; Miller does believe it is different (see pp. 48-51). This is an important issue to resolve because it relates directly to the question of the economic value of certification. Much of the publicity about education stresses the need to graduate, to obtain the credentials, in order to succeed. If Jencks is correct, then the salience of certification in determining income would be somewhat less than Miller, and many other Americans, had supposed. This could influence people's career decisions and educational plans.

A second contradiction we examine deals with social inequality. As mentioned earlier, many Americans believe that educational attainment can help to reduce racial inequality. The assumption underlying much government policy is that education can help to redistribute the wealth of this nation more evenly among the population. However, recent studies by Jencks (1972) and Milner (1972 and 1973) tend to contradict this assumption. It seems that while high educational attainment improves individual mobility among blacks, i.e., a black man with a college degree might be better off than a black man without a degree, education seems to do little to combat racial inequality since the distribution of income between whites and blacks who have high educations favors whites. In order for education to reduce inequality, minority groups

must benefit as much, or more, from high educational attainment as the traditionally "privileged" groups. Existing data do not indicate that this is a likely occurrence. We feel that it is necessary, therefore, to resolve this inconsistency between government policy and the findings of others. Our investigation uses new data to determine the extent to which educational attainment reduces inequality. In addition to examining these contradictions, we explore several findings of Jencks, Milner and others that appear to need additional empirical support.

Milner states, for example, that as more people receive a B.A. the value of the degree declines (see p. 21). He argues that in order to secure high wages it becomes necessary to acquire specialized skills. We attempt to verify this statement by examining the income of men with vocational training and the income of men without vocational training. If Milner is correct, then college graduates with vocational training should earn more than college graduates without it.

Another finding that needs additional support deals with the relationship between education, income and social background. Jencks observed that middle-class men earn more money than lower-class men when education is controlled. He notes, however, that the data are not totally trustworthy. It is impossible, therefore, to

draw firm conclusions (Jencks, 1972, p. 223). We believe that this is a significant finding, and must be studied further. If Jencks' data are supported by our data, it would seem that the role of education in reducing social class inequality would be seriously questioned.

Test Speculations as to the Relationship Between Education and Income

A second goal of this investigation is to use our data to test my speculations as to the relationship between education and income within the general population and within racial and social class sub-groups. These speculations are rather unique. They help to clarify the role played by educational attainment in determining income, and they attempt to specify the conditions under which success is most likely to occur. These speculations seem to be unique because at the present time, there does not appear to be a clear understanding of this social process. Most interpretations, as shown in Chapter II, often over-simplify the relationship between education and income and appear quite naive.

Provide Alternatives for Future Social Policy

Our data are used to suggest directions for developing social policy. We believe that part of the responsibility of this investigation should be to plan new educational strategies. De-mystifying the relationship between education and income is a significant goal of this study; however, we feel that it is not enough. Although we may show that education cannot guarantee everyone high income, there are conditions under which educational attainment may increase earning power. Part of the contribution of this study is, therefore, to suggest constructive programs of reform. Hopefully, these reforms can help some Americans to maximize their return on investments in education. In order to accomplish this goal, we explore the question of why do blacks and lower-class people receive less education than whites and middle-class people? It is important that we understand the dynamics of this problem before policy, designed to help minorities use their educations effectively, is implemented.

Background on the Data

Our data come from the 1967 wave of a U.S. Department of Labor longitudinal study of young men who

were between the ages of 14-24 in 1966, the year of the first wave.¹ In 1967, in other words, the age range of our respondents was between 15-25. Of a total sample of approximately 5,000 we selected only those men who were out of school and employed full-time in 1967. Our sample size was 1984. 71% of these men were white, 28% were black and 1% were classified as other. Since the "other" category was so small, it was decided to combine this group with the blacks. It should be noted that the decision to use only the 1967 wave was due to technical difficulties with the data from other years. Such problems included the lack of relevant data on income, social background and educational attainment, or some combination thereof, in other waves. There were also problems of miscoding in several of the waves making the utilization of the panel nature of the data impossible. For example, in 1966 the coding of income was such that it was impossible to obtain a pure measure of respondent's income. If a man were married, his income was combined with his spouse's income, and if he were single his income was tabulated as part of his family's total income.

Respondents were asked to supply information on a variety of subjects. The data that we use pertain to:

¹I wish to thank Dr. David Caplovitz of the Graduate School of the City University of New York for arranging access to the data.

income, educational attainment and educational goals, race, father's occupation, respondent's occupation and length of employment. All the data in this study come from the 1967 wave, except Table 4.1 where we present information on vocational training in 1969. This was necessary because relevant data on this subject were not complete for 1967.

At this point we should like to discuss our reason for selecting income as the primary dependent variable in our analysis. Our primary objective in this study is to determine the economic worth of education for the general population, and its economic worth within and between various sub-groups of the population. Income was chosen because many Americans apparently recognize its importance in life, and believe that it is related to education. Income also seems to be a most direct and concrete measure of education's value. While the variable of occupation is used in our analysis, its role is that of an intervening variable. That is, it is studied as a mediating force between education and income. It is not examined as a separate dependent variable. This was done to simplify the analysis, and to remove the possibility that subjective assessments of an occupation's attractiveness to middle-class eyes did not cloud the investigation. Since our intention is to measure the economic significance of education, it is important

that we separate the social value of a job from its dollar value, at each level of the skills hierarchy.

Presentation of the Data

In order to present income with the minimum amount of distortion due to inflation between 1967 and the present, it was decided to compute income as a percentage of the total sample average in 1967 which was \$4,024. In other words, income averages above this figure were expressed as a percentage over 100%.

Our major focus in this study is the effects of high school and college education on income; it was decided therefore to exclude those men with less than high school education from the analysis. The cell frequencies for post-graduates were too small to allow for consistent analyses throughout the study.

In presenting data on the effects of length of employment on income, we divided that variable into two categories: those working two years or less and those working three years or more. This division was dictated by the data. Any further refinement of categories would have produced a situation in which cell frequencies were too small for accurate analysis.

Chapter Outline

Chapter II is devoted to a discussion of the literature on the degree of relationship between education and income, and the significance of the fourth year of schooling at each level. There are discussions of the literature on the effects of race and social class on income when education is controlled. Chapter II also includes our speculations as to how race and class influence income. This discussion, as noted, is rather unique in the field since no one, to my knowledge, has fully explored the dynamics of social and race discrimination. Existing data that support our speculations are presented in the last section of this chapter.

Chapter III is a presentation of our data on the relationship between educational attainment and income for the general sample. Data are provided from sample year 1967 on three separate but related aspects of this relationship: (1) the size of the correlation between education and income; (2) an examination of the significance of certification;² (3) education and income

²In Chapter III one major goal is to determine the significance of the difference between the fourth year of schooling and other years, at each level of education attainment. In order to do this, we must compute the average income of each year of high school and college separately. Table 3.1, therefore, presents income by each year of schooling, i.e., 9th year, 10th year and so on.

controlled by number of years of employment. The men in our sample are at the beginning of their careers; all are under the age of 25. It would be important to know how the significance of certification varies in the early stages of men's careers. We, therefore, compare the effects of certification for men who have been working two years or less and those who have been working three years or more. In other words, we study the relatively unexamined phenomenon of the cumulative effects of education in the early stages of a career.

Chapter IV examines the impact of vocational training on income. We have already noted that specialized training may effect earnings. There are some investigators who have shown that vocational training has a positive effect on income (see p. 62). It has been indicated that those considering dropping out of high school might be given the advice: "if you must drop out, at least get some job training first. It might prove to be a useful commodity in the job market." In Chapter IV our investigation explores whether the data support this statement.

Chapter V examines the effects of race on the relationship between education and income in our data.³

³In Chapters IV-VI the variable of education is coded in the following manner: high school dropouts, high school graduates, some college experience and college graduates. This was done because we felt that

We want to know whether, for example, previously found racial inequality exist when education and occupation are controlled. That is, do whites earn more than blacks when they have the same education and work at the same occupation? And, does education make a difference within the black community? In other words, do blacks with high education earn more than blacks with little education? This helps to understand the dynamics of discrimination and provides the basis for suggesting strategies for blacks who want to succeed in the system, despite the fact that the odds may be against them.

Chapter VI presents our data on the relationship between social background, education and income. This chapter is divided into three parts: (1) data on the relationship and a comparison of the effects of education between social classes and within social classes. In

the use of these common sense categories would not distort our analysis of inequality. In fact, it seemed that coding the variable in this manner allowed us to measure income differences between sub-groups simply and directly without loss of accuracy. At the end of Chapters V and VI, however, we examine the effects of the fourth year of schooling on income within each sub-group. In these sections, our computations were carried out for each year separately, as in Chapter III. This change in conceptualization of educational attainment was necessitated by the change in the nature of the problem under investigation. When studying income differences between groups, it is appropriate to code educational attainment by level, as long as the definition of each level remains consistent, i.e., a man with three years of high school or less is classified as a high school dropout regardless of race or class. When studying the dollar value of the fourth year of schooling, each year must be examined separately.

addition, we present data on social background and income when occupation is controlled. (2) A speculation as to why differences between classes exist. (3) An examination of the implications of our findings for the future of social inequality.

Chapter VII presents data on the relationship between race and social background, as independent variables, and educational attainment as a dependent variable. We ask the question, why are there differences between races and social classes in regard to their average levels of education? In the final section of this chapter, we summarize the data of the preceding chapters to set the stage for the conclusion of this study.

In Chapter VIII we examine the implications of the data and offer our conclusions in three parts: (1) Strategies for success, suggested by the data, are presented; (2) suggestions as to the implementation of these strategies are made; and (3) the implications of our data for future research are offered.

Appendix A provides the reader with all pertinent data that are not presented in the body of this work. And, Appendix B describes some of the problems encountered in doing secondary analysis.

CHAPTER II

REVIEW OF THE LITERATURE

The Significance of the Fourth Year of Schooling at Each Level

There is much evidence that the relationship between education and income is positive. Berg observes that there have been numerous studies by economists in the late 1950's and the early 1960's that document this positive relationship (Berg, 1970, p. 8-9). In 1964, Miller reported that "every study of the relationship between earnings and education shows that the more highly educated the man, the greater the earnings" (Miller, 1964, p. 139). Jencks quotes the correlation between education and income to be .387 for a study of veterans carried out in 1964 by NORC, and Jencks also reports that the correlation coefficient for his data was .353 (Jencks, 1972, pp. 160 and 241). There is very little question that education and income are positively related, although the relationship is rather modest.

There is disagreement, however, as to whether the variable of education is continuous; that is, whether each year of schooling, at each level, is worth as much as any other year. Jencks argues that the last year of

schooling is no more valuable than the three preceding years. He states:

. . . we will assume, in other words, that the value of an individual's credentials is proportional to the highest grade of school he has completed . . . it treats each extra year of school or college as if it were as valuable as the next. This is clearly an oversimplification Nonetheless, the differences are modest. Assuming that one year of school or college is just like the next reduces our ability to explain adult economic success by only 3 to 5 percent, and it greatly simplifies our analysis. (Jencks, 1972, p. 136).

Miller has argued that the fourth year is more important than any other year of schooling, at each level. Miller states that "although income generally tends to increase with education, the completion of a given level of schooling (e.g., the fourth year in high school) yields a greater return than any of the years up to graduation" (Miller, 1964, p. 142). Clearly, these two positions contradict each other; they cannot both be right. It may be possible to reconcile this discrepancy if we consider that neither Miller's nor Jencks' conclusions are completely warranted by their data. In Jencks' case, he concludes that the last year of schooling is not more valuable than any other because the relationship between education and income is linear. That is, the difference between the part of the variance

that does not assume linearity is not greater than the part of the variance that does assume linearity. However, it is possible that, while the overall relationship between education and income is linear, there can be significant differences in income between the third and fourth year of schooling and the other years, at each level. In other words, the linearity of the relationship between education and income does not necessarily guarantee that the fourth year is no more important than any other year. In order to determine the relative importance of the fourth year, we must determine whether the difference between years three and four is significantly larger than the difference in income between the first and second years, and the second and third year. In order to determine the relative importance of the last year over the others, we must compare the average income of men with four years of schooling with the incomes of men with less than four years and observe whether the difference in income is significant.

Miller does compare the average income of graduates with non-graduates at each level of schooling. He observes that graduates have higher incomes than non-graduates and concludes that the last year of schooling is the most important. However, in his comparison of average incomes Miller combines all men with one to

three years of schooling into one category -- non-graduates. Combining non-graduates into one group tends to increase the size of the difference between graduates and non-graduates because the effect of the third year is pulled downward by the lower average incomes of men with only one or two years of schooling at a given level. It is impossible, in other words, to determine precisely how important the last year is if the first three years are not kept separate in the analysis. Presumably, the significance of the last year would have diminished somewhat if Miller had compared the average incomes of each year separately.

Both Miller and Jencks make a further error in their analyses, an error that hopelessly confounds their conclusions. Miller and Jencks are interested in determining whether certification, i.e., the acquisition of a degree or diploma, makes a significant difference in determining income. Though Jencks and Miller use different techniques to arrive at their answer, both compare the last year with the other years of schooling to determine the significance of certification. This is a mistake. It is a mistake because it implicitly equates the acquisition of a degree with having attended four years of school. We suggest that having attended school for four years is not necessarily the same as having obtained the degree. To treat them as the same

makes it impossible to determine how much of the income added by the fourth year of schooling is due to the acquisition of the degree and how much is due to the effects of the extra year of schooling itself. In other words, it is necessary to separate those who have attended school for four years and who have not graduated from those who have graduated in order to determine accurately the significance of certification.

The data we use in this work suffer from this latter difficulty. However, we are able to refine the data analysis so that a more accurate approximation to the solution of this problem can be given than has been offered in the past. We compare the difference in income between the fourth and the third year with the difference between the first and second, and the second and third year. This is the first time, to my knowledge, that anyone has studied the relationship in this manner. While imperfect, it yields the closest answer yet to the question of the significance of certification. Until researchers become aware of this conceptual problem and make the appropriate changes in the collection and analysis of the data, no final answer can be provided.

Nonetheless, there are experts who believe that certification does make a difference in determining income. Among those who agree that a degree is important, there is some disagreement as to why this is so.

Miller suggests that the acquisition of a degree shows, in part, the greater ability of graduates as compared to non-graduates. He feels that this is especially true at the college level. Miller states that, "the income differential between men with 1 to 3 years of college, and those who have graduated, reflects, in part, differences in 'ability'" (Miller, 1968, p. 144).

Berg notes that the employers whom he interviewed in his study believed that graduates were more capable than non-graduates. These employers felt that a college degree indicated a "stick-to-it-iveness" of graduates. It showed that college graduates were more stable than non-graduates. Employers felt that a college degree was an important requirement for employment (Berg, 1970, p. 75). Berg, however, does not believe that a college degree necessarily indicates that a graduate is more capable and stable than a non-graduate. His data do not suggest that the better educated employees are the most productive workers. In fact, there is often little difference in productivity between the best educated workers and others (Berg, 1970, p. 77-104). Berg believes that credentials are important because the supply of people with degrees has increased substantially in recent years. As more people receive college degrees, Berg argues, the more selective employers can be in their hiring. In effect, degrees are used as a first level

screening device to narrow the field of prospective employees (Berg, 1970, p. 78). It is not that the nature of the work has changed due to developments in technology, thereby creating a need for educated workers, but rather organizations have been able to absorb the highly educated by raising the requirements for employment (Berg, 1970, p. 65).

There are others who share Berg's interpretation of the phenomenon. Huff notes that "when the supply of workers is great and positions are limited, credential requirements are high" (Huff, 1974, p. 259, see also Collins, 1971).

A serious consequence of this pattern, however, is that in the long run the value of a college degree declines as more people acquire it, and compete for the same jobs. This leads to a situation that Milner has labelled as "status inflation" (Milner, 1970, p. 7). I would assume that the devaluation of a college degree forces people to obtain specialized training along with a B.A. in order to secure high incomes. The growing trend toward vocational training amongst college students seems to reflect this reality (see p. 63). Without such specialized training one may experience considerable difficulty in finding challenging and well paying employment. In effect the value of a degree diminishes to the point that "today's

B.A. has the same cultural meaning as a 1920's high school diploma" (Jencks and Riesman, 1968, p. 81).

Despite the fact that the dollar value of education may be declining in this country, it seems that education's economic value is greater for some groups than for others. Social scientists have known for some time that the value of education is not the same between races and classes, in this country. Blacks and lower-class men tend to earn less than whites and middle-class men even when education is controlled. In a later part of this chapter, we offer our explanation as to why these differences exist. Let us first present the existing data on racial inequality and class inequality.

Education and Income: Race

Research on the effects of education on racial inequality has shown that blacks do not earn as much as whites when education is controlled. This is true at all levels of education including college graduates. The pattern is clear.

Siegel presented a rather persuasive account of the situation. He observed that blacks have a low income range, as compared to whites, despite wide variations in educational attainment and occupation within their own

racial group (Siegel, 1965). Blau and Duncan made a similar observation and conclude:

In sum, Negroes are handicapped by having poor parents, less education, and inferior early career experiences than whites. Yet even if these handicaps are statistically controlled by asking, in effect, what the achievement of non-whites would be if they had the same origins, the same education, and the same first jobs as whites, their occupational chances are still consistently inferior to those of whites. (Blau and Duncan, 1967, p. 209)

The most recent data confirm that the situation has changed relatively little. Jencks found that blacks with the same education as whites earn only 63% of their income (Jencks, 1972, p. 218). And Milner reports that between the end of WW II and the middle 1960's "the average non-white income was slightly over 50 percent of the average white income despite the fact that the difference in educational attainment decreased considerably over that time period" (Milner, 1972, pp. 76-8).

The difference in income between whites and blacks, when education is controlled, is attributed mostly to racial discrimination. Milner states that while increased educational attainment among blacks has had the effect of decreasing occupational differences between races, racial discrimination is still a significant factor in the job market (Milner, 1973, p. 280). Duncan found

that discrimination against blacks has thwarted their ability to convert education into high occupational status, and occupational status into income, throughout our nation's history (Duncan, 1968, pp. 96-7). It may be, however, that the discrepancy in black-white income, when education is controlled, is related to racial differences in the quality of education. The economic value of a high school diploma, for example, may be less for a black man than for a white because the quality of academic training for blacks is inferior to the training for whites. In this study, we raise, but cannot answer, the important question of whether a black high school graduate is as well educated as a white high school graduate. The same question, of course, could be raised for college graduates. In general, we would want to know what effect does the quality of education have on income inequality? It should be noted that it is not possible to control for the quality of education with our data.

Whether or not there is a difference in the quality of education between whites and blacks, there are data that suggest that education has a positive effect on income within the black community. It seems that a black with a degree is better off than a black without one. Paul Siegel reports that "in both 1950 and 1960 there was a tendency for dissimilarity (in occupation between

blacks and whites) to increase with level of education and taper off at the highest levels: in both 1950 and 1960 the highest indices of dissimilarity occur at the high school and some college levels" (Siegel, 1965, p. 45). Siegel argues that this dissimilarity in occupation, when education is controlled, is a consequence of racial discrimination on the part of employers. He feels that discrimination is strongest against those blacks who have some college experience but who do not hold a degree. As Siegel notes, "persons with so much education are qualified for supervisory, craft, sales and managerial duties. These are, however, the very occupations denied to Negroes by social mores governing race relations" (Siegel, 1965, p. 45).

Milner has observed a similar pattern in his data. He has proposed the "middle-class respectability hypothesis" to explain the phenomenon. This hypothesis suggests that those in positions to hire and fire, who are mostly middle-class whites, choose people who fit the image of middle-class respectability, i.e., white and college educated. The non-white with a college degree is more "respectable" than a non-white with only some college experience. It is easier, therefore, for a white employer to hire him (Milner, 1973, p. 294, see also Blau and Duncan, 1967, pp. 238-9 for further confirmation of this pattern).

There is at least one investigator, however, who believes that black college graduates are more discriminated against than non-graduates. According to Miller, the gap between black and white incomes widens as education increases. The lifetime earnings of black elementary school graduates is 64% of that received by whites, while for black college graduates the ratio drops to only 50% (Miller, 1964, p. 155). This discrepancy between Miller's findings and the findings of others is difficult to reconcile. Since Miller's data are comparatively old, it might be possible to explain the difference in terms of the fact that the situation has changed for blacks since 1959. This would be a reasonable explanation if it were not that Siegel's data also come from the 1950's. There is another explanation of the difference that is more plausible. The observed drop from 64% to 50% of the ratio of black-white income may be misleading. While average income most likely increases as education increases, for both whites and blacks, it is possible that the income ratio between the groups declines, at the same time, if the rate of increase of income to education is greater for whites than for blacks.

Miller does agree with other researchers, however, that racial discrimination is the crucial determinant of differences in income between whites and blacks when

education is controlled. "These findings support the belief that much of the gap between the earnings of whites and blacks is due to factors other than differences in training or ability" (Miller, 1964, p. 155). In a later section of this chapter we present our speculations on how the discrimination process operates in the labor market.

Education and Income: Social Background

There has been surprisingly little written about the effects of social background on success after schooling has been completed. The work that has been done seems to suggest that social background does make a difference, and that in general middle-class men have the advantage. Even before the data were available, social scientists assumed that middle-class men would have the advantage as the following quote suggests:

It is my guess that social class does make a big difference among high school graduates. The higher the social class level of the graduates' family, the more likely it is that he obtain a high-level job . . . if we could parcel out family status in viewing the relation of graduation to occupation, we would find that graduation does not make a great difference for the boys from working classes; it is the linkage of graduation with prior middle class status that makes the difference in the overall results of the relation of high school diplomas and occupations. (Miller, 1965, p. 17)

Current data appear to confirm this proposition. Milner and Jencks provide evidence which support the notion that when education is controlled, social background affects income. Milner observes that if members of all social classes had equal amounts of education middle-class people would still earn more money: "even total and complete equality of opportunity at all levels of the educational system -- a very unlikely prospect -- will not eliminate the advantages (or disadvantages) of different socio-economic backgrounds" (Milner, 1972, p. 56). Jencks notes that "an extra year of schooling also seems to do about twice as much for a student from a middle-class background as for a student from a working-class background" (Jencks, 1972, p. 223). Jencks has difficulty in explaining this pattern:

Why should educational credentials be more valuable to white middle-class students than to others? One plausible theory is that middle-class students attend high prestige colleges whose diplomas impress employers more than the diplomas acquired by working class students. But middle-class men appear to benefit more from a high school diploma. This is hard to explain. . . . We have considered a variety of alternative explanations, but none seems entirely convincing. Since the evidence for a difference comes from a single, imperfectly representative sample, we think it wiser to make sure the pattern is real before inventing elaborate explanations. (Jencks, 1972, p. 223)

There is some evidence which suggests this pattern is more complicated than Jencks has hypothesized in at least two ways: (1) in addition to social class, ethnicity may affect income when education and occupation are controlled, and (2) in certain circumstances, men of lower-class origins may have an advantage over others when education and occupation are controlled. Let us examine some of this data.

Rogers' study of the New York City Board of Education suggests that:

Particular ethnic groups have been the gatekeepers of the system at different historical periods, reflecting an ethnic politics that existed throughout New York City government. . . . The New York City school system in the 1950's and sixties has been largely a Jewish school system, in the sense that Jews hold power in the professional associations and the Board of Examiners. They have tended to protect themselves against outsiders much as the Catholics tried to protect themselves against the Jews in previous generations. (Rogers, 1968, pp. 289-95)

Though the power has changed hands from one ethnic group to another over time, it seems that ethnicity remains a significant force in directly determining mobility and income in the school system.

A second illustration of the importance of ethnic background in determining income deals with the relationship between being Jewish, educational attainment and

financial success. This illustration is derived from a synthesis of data from two different sources. My interpretation, therefore, does not necessarily represent the views of the investigators whose data I have borrowed.

Bruce Eckland studied college dropouts and found that ethnic background had affected dropout rates and the likelihood of return to school after dropping out. One finding that appears relevant to this discussion was that while Jews had an extremely low dropout rate, the percentage of Jewish dropouts who did not return to school was extremely high. Jews comprised 22.6% of all dropouts: 70% of those Jews who did dropout did not return to school, however (Eckland, 1964). Although Eckland does not attempt to draw conclusions from this, it is possible to suggest that the reason why so many Jews did not return to school may have been that they were able to find decent employment after dropping out, employment that did not require academic training for success. This hypothesis seems at least plausible in light of Miller's observation that while 22% of Jews graduate from college, 44% had high income jobs (Miller, 1964, pp. 123-4). The relatively large percentage of Jews with high incomes as compared to Jews with high educations suggests that there may be a systematic social process that enables many Jews to do quite well financially without the benefit of a college degree.

Business, retailing and finance are occupations in which high educational attainment is not necessarily a requisite for success. Since many Jews are employed in these types of occupations (Miller, 1964, p. 123-4), it may be possible for a young Jew to find a job through his personal social network. These contacts may not be as accessible to men of other backgrounds, on the assumption that Jewish employers "take care of their own first." I would conclude, therefore, that having the personal connections to obtain high paying jobs that do not necessarily require college degrees has the effect of keeping many Jewish dropouts from returning to school. The need to complete college, in other words, may not be as essential for Jews as for others.

There are also data that seem to suggest that within certain occupations, ethnicity and social class may interact to produce a situation in which lower-class men have an advantage over others. Studies of the socio-political system of New Haven in the 1930's indicate that lower-class Irishmen were able to move up the social ladder through political connections related to ethnic group (Dahl, 1961, p. 41, see also Lenski, 1966, p. 400). It would appear, therefore, that the findings of Jencks and others are too broad, and do not accurately reflect the reality of the social structure. It is my belief that ethnicity, in addition to social class, is an

important determinant of economic success. Further, I would speculate that middle-class men do not always have the advantage over others, contrary to what Jencks suggests. The structure of the job market is complex and in the next section we speculate as to how this system operates.

Why Social Background and Race Affect Income When Education Is Controlled

Experts seem to agree that discrimination is at the heart of the unequal distribution of income between races (see pp. 23-27); perhaps it is also at the heart of the unequal income distribution between social classes and ethnic groups as well. No one, to my knowledge, has ever studied the dynamics of discrimination in detail. We would like to begin here. Unfortunately, limitations in our data restrict our ability to complete the task in two crucial ways: (1) we have no information on respondents' nationalities, and (2) we lack qualitative and quantitative data on the process by which men select, and are selected for employment. Our data only allow us to provide the reader with the outline of the interaction system of the labor market. The details must await future research (see Appendix B for further discussion of the problem of secondary analysis). It is hoped that the following discussion serves as a useful guide toward

a solution of the important question: what is there about being black, or lower-class for which no amount of education can compensate?

In the case of blacks, the immediately obvious answer is racial prejudice. Blacks are discriminated against as a consequence of whites' fear and hatred of blacks. While the sheer physical fact of skin color plays a significant role in the determination of economic success, it cannot be the sole factor. After all, there are numerous successful blacks. I would imagine that the blacks who have succeeded do not differ from blacks who have not because their skin color is lighter. (This is not intended as a facetious comment.) I am suggesting that discrimination against blacks must entail more than color alone. In the case of social class discrimination, the lack of physical distinctiveness between social classes suggests that class inequality probably rests on social, and not biological differences. I would speculate that class, and racial discrimination are affected, in part, by the fact that men of different origins differ along at least three sets of important social attributes: (1) social contacts, or as the saying goes "it's who you know and not what you know that counts," (2) attitudes

toward work and achievement,⁴ and (3) traits of personal style such as speech patterns, dress, grooming, self-assurance and even charm. These three background related differences, I suspect, in turn affect economic success when education and occupation are controlled.

I would speculate that social contacts, which develop through family and friendship interactions, influence job placement and income. All college graduates, for example, do not have an equal chance of securing the best paying jobs within an occupation because finding the best job often entails having the right connections. Job opportunities, in other words, differ according to which college was attended and personal contacts (see Havemann and West, 1952). Access to the best jobs is not randomly distributed in this country, and accessibility to these jobs is related to social origin. It is my speculation that class related contacts may influence job success in different types of occupations, middle-class men being more successful than lower-class men in

⁴While there is little documentation of the effect of social origin and attitudes toward work on income, there are data on the general relationship between origin and attitudes toward achievement. See Kohn 1959a and b, Rosen, 1956 and 1961, Green, 1946, Katz, 1967, Hyman, 1954, Sewell and Shah, 1967, Mostellar and Moynihan, 1972, Jencks, 1972, Milner, 1972, Turner, 1960, Sewell, Haller and Portes, 1969, Haller and Portes, 1973, Sewell, Haller and Strauss, 1957, Duvall, 1946, Aberle and Naegele, 1952, Sewell, Haller and Ohlendorf, 1970 and Coleman, 1966.

professional and white collar jobs and working-class men being more successful in craft occupations. Having come from the "proper" background, in each case, may help to provide the right personal connections. This might mean knowing where the best jobs are and knowing someone with an "in".

In addition to social contacts, personal styles also seem to be important determinants of success. Employers and clients probably respond to the unspoken characteristics of a worker as much as they respond to the verbal communications. Qualities of personal style, which I believe are related to social origin, are most likely unconsciously perceived, but are nonetheless influential in shaping the reaction of employers and clients to the man. They form that "certain something" that is undefinable but which may attract or repel the observer.

Once in a job, background related attitudes may continue to influence economic success. Men of lower class origins, for example, who have college degrees and who are working in white collar and professional jobs may not be as productive as middle-class men in similar positions because the meaning of the job may be different for them. For a man of lower-class background, a white collar or professional job is a gain in status,

as compared to his father's status. It is possible, for the lower-class man, that this gain in status is experienced as enough of an accomplishment in one lifetime, so that achievement within the career is not important. The middle-class man, however, because of his background, might see the job as a starting point for achievement and not as an end in itself. Once in the job, perhaps the middle-class man must prove himself by producing.

Of course, what a man brings to a job is only half the picture. Discrimination does not occur in a social vacuum. The prospective employee's personal style and attitudes are responded to by men in the position to hire and fire, whose personal histories also determine their styles and attitudes. I would imagine that the employers' attitudes and personal qualities affect their perceptions of the job applicant, and that employers are predisposed, consciously or not, to view men whose values and personal characteristics most resemble their own as the most acceptable applicants. In describing a similar phenomenon in politics, Lenski notes that this is "one of the most natural human reactions: the expression of support for those most like oneself" (Lenski, 1966). This is not the same argument as Milner's "middle-class respectability hypothesis" that was discussed earlier. I do not believe that a black man with a college degree

is more acceptable to a white employer than a black man without a degree. Employers are probably more sensitive to basic differences in style and attitude that distinguish men of different origins than they are to educational credentials. This might lead to a situation in white collar and professional occupations, where most employers are white and middle-class, in which young, white, middle-class men are likely to be the "favorite sons." In craft jobs the reverse might be true. That is, given that those who hire are often union men of working class origins, in such situations as hiring halls and "shape-ups," it may be that sons of blue collar workers and craftsmens' sons are the favored ones. In either case, however, blacks would not be represented amongst the "powers that be." This could explain the research that has shown that young blacks do not earn as much as whites when education is controlled.

Why Social Background and Race Affect Educational Attainment

In addition to explaining differences in income, social origin may also help to explain discrepancies in educational attainment. Research has shown that lower-class men and blacks do not receive as much education as white middle-class men, though the gaps in educational attainment have narrowed in recent years (see p.103).

It is my conjecture that social origin may account, in part, for the discrepancies in educational attainment. While blacks and lower-class men may value education as much as whites and middle-class people, I believe that education has a different meaning for them. To a black or a lower-class man, education is a status gaining mechanism, as we noted earlier. The decision not to attend college may be related to the weighing of the pros and cons of a college education. While high educational attainment seems to assure the lower-class men and the black higher social status than he could expect without it, the data presented so far seem to suggest that high income is not assured. If a good income is a higher priority than high social status, it may be wise to forego the time, money and energy required of four years of college. This is especially true in the case of the blacks, since data already cited seem to suggest that blacks with high educations do not make overwhelmingly more money than blacks with less education.

In sum, it appears that a man is never immune from the effects of his social background. Racial and class discrimination seem to be, in part, the end products of a social process that constantly sorts men of different backgrounds in at least four stages of their careers:

(1) in deciding about attending college, (2) in looking for a job, (3) in being hired, and (4) after working at

a job for some time. At each stage their class related contacts, attitudes and personal styles play a significant role in interactions with employers, and in the man's attachment to his work. These factors affect success even when education is controlled. Discrimination is produced, therefore, as a consequence of this sifting and sorting, independently of education. The implication of this is that high educational attainment alone can not guarantee the elimination of racial and class inequality. This conjecture concerning discrimination as a social process does not exist in a vacuum. There are data that support the contribution of social contacts, attitudes toward work and personal style to the production of discrimination. We present some of these data here.

The Effect of Social Contacts and Personal Styles On Success

Research has shown that personal connections are often important determinants of success in the professions. Smigel in his study of Wall Street lawyers had observed that networks of interpersonal relations, that are class related, affect income with the law profession. He notes that there are wide variations in types of law firms; these different types of practices pay vastly different amounts of money to their employees and differ in the types of cases and clientele that are serviced. The firms

also seem to differ in the social origins of their staffs. Jewish graduates are more likely to be employed in small firms that handle individual or small business clients while Wall Street firms are dominated by White Anglo-Saxon Protestants from Ivy League schools. These firms are considerably more prestigious than most other firms; they represent large corporations and their employees usually earn relatively high salaries. Smigel further documents the social process by which decisions about hiring are made in these large Wall Street firms. The "proper" type of personality, family background and appropriate credentials are all important factors in sorting out acceptable law school graduates from the mass (Smigel, 1964). Clearly, graduates of Brooklyn Law School are not the same as graduates of Yale or Harvard Law Schools. They usually differ significantly in terms of social background, and this, in turn, affects their chances of economic success in that profession. Further, it appears that for members of some ethnic groups, attendance at an Ivy League school does not improve the chances for acceptance into the "elite" law firms. "The probability of a lawyer's entry into a large (elite) firm is greatly affected not only by status of his law school and his own class standing . . . , but also by religion. Lawyers who attended both a top-quality college and an Ivy League law school are less likely to

be members of large firms if they are Jews than if they are not" (Carlin, 1966, p. 31, see also Gerstl and Perucci, 1966).

Oswald Hall (1949) studied the relationship between social background and success in the medical profession. Hall described the practices of a Irish Catholic doctor, a Jewish doctor and a Yankee doctor. Each one had a characteristic style of practice that Hall labelled "friendly, individualistic and colleague," respectively. The first and third types emphasized the importance of social contacts for a successful practice. The "friendly" style of the Irish Catholic doctor, however, stressed close personal relations with clients while the "colleague" style of the Yankee doctor emphasized close ties with peers. The Jewish doctor was competitive with other doctors for patients and viewed medical practice as a commercial venture. These different styles of practice remained stable over time because each doctor tended to sponsor young doctors who were most like themselves in social background and in attitude toward medical practice. The implication of this is that young doctors, much the same as young lawyers, are sorted out early in their careers. This sorting process seems to follow along social background lines. "The major hospitals are organized along religious lines with which class and ethnic differentiations are discernible. Thus, in the

community studied the upper-class Yankee generally goes to an undergraduate school where fees are high, proceeds to Harvard Medical school, interns at the dominant Yankee hospital and enters the competitive practice of medicine from that vantage point" (Hall, 1948, p. 330).

Social contacts seem to be important in academia as well. Crane (1969) found that the success of new Ph.D's. was attributable to the prestige of the institution at which they were employed. Productivity was a secondary factor. Further, accessibility to the best places was related to undergraduate and graduate training which are, in turn, related to social background (Crane, 1969, see also Goldblatt, 1967). This phenomenon has been labelled "inbreeding" and seems to be widespread in the many prestigious institutions of higher learning (Hargens, 1969, Hargens and Hagstrom, 1967, Berelson, 1960 and Caplow and McGee, 1965). Havemann and West, in their study of the relationship between education and financial success, observed that family background affected the choice of college that was attended, and subsequent income (Havemann and West, 1952).

The impact of social ties on economic success seems too apparent in craft industries as well. In-breeding may occur within craft occupations much the same as it does in academia. Lipset, Coleman and Trow describe the intricate substitute system among printers (Lipset,

Coleman and Trow, 1956). This substitute system is based, in part, on personal relations. Often printers' jobs are handed down through family and friendship lines. Personal contact with a printer seems to be an important prerequisite for finding a job in that field. Blauner in his study of blue collar workers noted that family ties, friendships and neighborhood loyalties played an important role in hiring within textile mills in the South (Blauner, 1964).

Personal style also appears to have some effect on economic success. Berg describes the hiring policy of one company that he studied. He says that:

Its college recruiters select candidates from among those who have worked in men's haberdasheries . . . in the belief that these young fellows combine a highly desirable set of appetites, skills and styles. Recruiters from this company also look for vacant seats on airplanes next to well-appointed young men whose college background can be inferred from the rings they wear. (Berg, 1970, p. 75)

Rogers reveals, in his study of the New York City Public School System, that applicants for teaching positions have often been rejected because of their speech. To quote, "many Negro applicants reportedly used to be ruled out on oral examinations because of so-called 'Southernisms' in their speech" (Rogers, 1968, p. 288). Rogers reported that civil rights leaders claimed that

racial discrimination and not speech patterns determined who was hired, since applicants with local speech patterns, e.g., "Brooklynese" were not rejected (Rogers, 1966, p. 288).

The Effect of Social Background Related Attitudes Toward Work on Economic Success

In her study of academic success, Crane (1969) suggests that part of the discrepancy of success between middle-class and lower-class people must be related to differences in attitudes between classes. She argues that lower-class people do not succeed in academia because they lack "the cultural equipment" to compete with middle-class people. Crane says that "lower-class students are less able to form close ties with their teachers due to differences in cultural background and this in turn affects the amount of help and encouragement which they receive, regardless of ability" (Crane, 1969, p. 11).

West suggests that the attitudes of people from lower-class backgrounds who enter academia may work against them. West notes that class origins of students affect faculty decisions to offer them help. If a professor can identify with the student, according to West, he may be more willing to work closely with that student. However, a person who is upwardly mobile may

be too defensive and self-conscious in the presence of middle-class faculty members, thus creating a tension between student and teacher that interferes with the full development of an effective working relationship with sponsors. West observes that a lower-class person's attitude toward learning is often inappropriate to a professional setting, such as a graduate school. Knowledge is seen in a short-term perspective, for its usefulness in the immediate situation, for example its utility in an upcoming exam or paper. This often leads to a situation where the faculty see the lower-class student as uncouth or unworthy of grooming for professional status. And failure to develop proper working relations with sponsors may lead to problems in securing the better paying jobs in the profession (West, 1961).

Attitudes toward work may also be related to the differences in the success of groups in craft occupations. In a study of the social structure of a gypsum factory, Alvin Gouldner (Gouldner, 1954) describes two different patterns of supervisor-worker relations that appear to have significant effects on worker productivity and morale. Gouldner presents the consequences, which are basically negative, of a change-over in supervision from an informal, personal and lax style to an impersonal, bureaucratic and achievement oriented style of leadership

(Gouldner, 1954, pp. 59-70). The two supervisors differed in attitude, style and orientation toward work, although they came from similar social origins. The newcomer, however, was committed to values usually associated with middle-class notions of competition and achievement. These values were not conducive to high productivity in the factory. In fact, they had a detrimental effect. Perhaps, similar values are also destructive in other blue collar and craft settings. Studies of social systems in work settings have shown that high competitiveness and high achievement of individual workers can have serious consequences on the quantity of output and the quality of interpersonal relations among workers (see Blau, 1955, and Roethlisberger and Dickson, 1939). If middle-class workers could be shown to be more committed to these goals than workers from other backgrounds, it may be possible to explain their comparatively low incomes in some craft jobs as a consequence of the negative effects of these attitudes.

In Chapters V through VIII we explore the effects of the three social attributes: social contacts, attitudes toward work and achievement and personal style on economic success. In these chapters, we present data from our sample that are relevant to this discussion. Given the limits of our data, it is hoped that our analysis will provide the reader with a road map, as it were, to a

clearer understanding of the general structure that racial and class discrimination takes in the labor market. In addition to providing the reader with a sense of what information needs to be gathered in future research, such discussions will ultimately serve to test the conjecture presented here.

CHAPTER III

THE RELATIONSHIP BETWEEN INCOME AND EDUCATION

This chapter is devoted to a study of the degree and form of the relationship between education and income for our sample. This task is divided into three separate but related sections: (1) an examination of the correlation between education and income, (2) a study of the significance of certification, and (3) the effects of certification controlled by number of years of employment. We begin with issue one (1).

The Correlation Between Income and Education

First, our data support the findings of others that the correlation between income and education is positive. The correlation of income and education was .283 in 1967. This is somewhat lower than Jencks' reported correlation of .387 in 1964 (Jencks, 1972, p. 160). This discrepancy between correlations may be due to at least two factors. First, the difference may be due to a decline in the dollar value of education between 1964 and 1967. In order to determine if this is a correct interpretation of

the data, however, we must await future research that will provide data on the relationship between income and education in the 1970's. These data may show whether this decline is a minor variation in an otherwise stable relationship, or indicates a significant shift in the relationship between education and income. Another possible explanation of the difference may be that age range of Jencks' respondents is larger than ours. Jencks' age range was wider, including all males above the age of 25. It is possible, therefore, that the range of incomes is broader for his sample than in ours. This wider income range could produce an increase in the size of the correlation coefficient. It should be noted, at this early stage in the presentation, that the youthfulness of our sample will be a problem throughout this study. The reader should keep in mind that our data deal only with the relationship between income and education for men in the early stages of their careers. This is a serious limitation because we cannot be certain to what extent our findings are representative of the larger population. The relationship between education and income may not be the same for men in the middle and later stages of their careers as it is for those starting out. In any case, our data do confirm the fact that there is a positive, if modest, relationship between education and income for the young men in our sample. A correlation

of .283 suggests that only 8% of the variance in income can be explained by differences in education. However, other variables that have been used to account for variation in income do not seem to fare much better.

Jencks states that:

Neither family background, cognitive skill, educational attainment, nor occupational status explains much of the variation in men's incomes. Indeed, when we compare men who are identical in all these respects, we find only 12 to 15 percent less inequality than among random individuals. (Jencks, 1972, p. 226)

Our data and Jencks' data, therefore, would seem to qualify any statement to the effect that educational attainment is a guarantee of high income. Education alone does not appear to be enough. Given that the total amount of explained variance in income is quite small, however, Jencks noted that within that context education ranked second only to family background as the source of the variation (Jencks, 1972, p. 216).

An important question that we can raise, but cannot answer here is, why are education and income related? It is my belief that, in part, the modest relationship between education and income exists because employers, like much of the general public, believe that educated people are more competent than others and thereby should earn higher incomes. As a result, the better educated

workers are often employed in prestigious jobs earning somewhat higher incomes than less educated workers.

(For alternative explanations as to why these variables are related see pp. 19-22.) The income difference is not always large; in fact, Jencks observed that within many occupations better educated people do not earn more than others (Jencks, 1972, p. 182). It would seem, therefore, that another important question to ask here is: why do Americans believe that education and income are strongly related? I would speculate that the myth survives in this nation because it serves an important function. It provides a possible panacea to make us more comfortable with what we know is still the case. Social inequality is inherent in America. As long as we believe that inequality is an unfortunate side-effect of our way of life, we can also believe that individual achievement, i.e., high educational attainment, has an effect on reducing inequality. It is more difficult for Americans to accept the fact that there may be social forces beyond the will or control of individuals that influence success. It is easier to think that minority groups, for example, are poorer than other groups because they have little education. At present the situation remains stable because, as Jencks has noted, "many adolescents dislike school. The fact that high-status occupations are believed to require a lot of

education deters many young people from trying to enter these occupations. As a result, the distribution of occupational aspirations among high school students is surprisingly congruent with the distribution of actual opportunities. Were this not the case, the whole fabric of American society might begin to unravel" (Jencks, 1972, p. 183). A latent function of education may be, in other words, to serve as a deterrent from oversupplying the job market with workers seeking high-status jobs but whose social background preclude economic success. Schooling, as Jencks observed, seems to legitimize inequality rather than to create it (Jencks, 1972, p. 135). Although our data do not allow us to test these speculations, we may be able to arrive at a partial solution to the problem in the following discussions.

Our data support Jencks' findings that the relationship of education and income is linear.¹ Caution should be applied in interpreting this finding; for while it appears that all years seem to add roughly equal increments onto income, it would not be entirely

¹Linearity is measured by an analysis of variance test that determines whether the size of the difference between that part of the variance that can be explained by assuming linearity, correlation-squared, and that part that does not assume linearity, eta-squared, is greater than chance. If the difference is larger than would be expected by chance the relationship is assumed to be non-linear. Our computations were carried out at the .05 level of significance.

appropriate to conclude that the fourth year of schooling is equal in importance to all other years.

The Impact of Certification on Income

TABLE 3.1

Average Income By Each Year of High
School and College in 1967
(as a percentage of the total sample average)

<u>HS 1</u>	<u>HS 2</u>	<u>HS 3</u>	<u>HS 4</u>	<u>Col 1</u>	<u>Col 2</u>	<u>Col 3</u>	<u>Col 4</u>
72%	93%	102%	108%	121%	114%	112%	146%
(143)	(174)	(174)	(830)	(110)	(77)	(30)	(90)

Table 3.1 presents our data on the average income for each year of high school and college separately. In Chapter II it was said that, in order to determine accurately whether the fourth year adds more to income than the preceding three years, we have to compare the income difference between the fourth and third years with the differences between the first and second years, and the second and third years. Let us begin with an examination of the high school years.

There is no reason to compute a test of significance between the difference in income of years three and four and the other years because the difference between three

and four is actually considerably less than the difference in income between the first and second, and the second and third year of high school. In fact, it seems that dropping out of high school after the freshman year has more of a detrimental effect on income than does dropping out after the third year of high school. Looking at the data from this perspective would seem to indicate that the fourth year of high school may not be as important as had been previously thought. Perhaps this can be explained if we consider the fact that in many places the first year of high school, which is the ninth grade, is actually the last year of junior high school. It may be that people who have not spent any time in high school are treated differently by employers than are those who have had some high school experience but who have dropped out before graduating. Employers might assume that a person with three years of high school is about as qualified for a job as a person who has graduated. Someone with a ninth grade education, however, may be thought by employers to be too deficient in the necessary skills, and perhaps even too unstable to be considered. It may be that employers feel that ninth grade dropouts are people who do not relate well to their superiors "and since employers dislike 'troublemakers' such people are also likely to end up in low status occupations" (Jencks, 1972, p. 132, see also Boocock, 1972, p. 291). There may be, in other words, a

quantum jump in acceptability for employment between the ninth grade and the junior year of high school. Viewing the data from this perspective seems to suggest that the fourth year of high school is not more important in its effect on earnings than other years. However, there is one feature of the data that may indicate that the economic value of a high school diploma is indeed significant.

It may be that the large difference in income between the fourth year of high school and the first year of college reflects the importance of a high school degree. As noted, our data do not distinguish those with four years of high school who have graduated from those who have not. We can be sure, however, that those men in their first year of college are high school graduates. It is possible that these men have not attended college long enough to reap the full benefits of a post-secondary school education. The difference in income between those with four years of high school and those with one year of college, therefore, may be an indicator of the value of a high school degree. Of course, the increase between the fourth year of high school and the first year of college may indicate the potential of even a small amount of college to affect earnings. The latter interpretation seems more likely. I would assume that of the total number of men with four years of high school, the percentage of those who graduated would be larger than the

percentage who had not. The income of those with four years of high school, in other words, more likely reflects the earnings of high school graduates than of seniors who dropped out. Until data are collected that separate these two groups, however, no final conclusions can be drawn. Let us now examine the data for men who attended college.

There is no need to compare the difference in income of the fourth year with the third year, or with the other years, because there is a rather large drop in income after the first year college that continues until the last year. The only difference we need to test is the difference between the first year and the last year. If this is significant, then obviously the fourth year of college does add more to income than the other years. Our computations show that the difference is significant.² The reason for the drop in income between the first and second year, and the second and third year, and the large gain in the fourth year might be that men with one year of college compete for the same jobs as those with high school diplomas. This may give them an edge in that competition and explain, in part, their comparatively high salaries. Men with two and three years of college, however, may try to compete with those men who have

²The test of significance was carried out at the .001 level.

attended college for four years and who presumably have degrees. Employers recruiting for jobs that require college educations may insist upon a B.A. since so many people these days have one. In other words, employers may use the college degree as a screening device as Berg has suggested (see p. 20). Those men without a degree are clearly at a disadvantage. Further, the data seem to indicate that it is the B.A. and not the high school diploma that is the most valuable type of certification. Before we draw any final conclusions as to the significance of the fourth year of schooling, at each level, it is important that the effect of the number of years of employment be taken into consideration.

Income and Education Controlled by Years of Employment

It was our speculation that the effect of the fourth year might disappear once years of employment was controlled. We assumed that after a man enters an occupation, credentials play less of a role in determining income than such factors as on-the-job competence and skill. We agree with Jencks when he says, "a man trying to get his first job has nothing to offer but educational credentials. Once an individual has entered a field, his prior performance can be evaluated. If performance is only marginally related to schooling, the correlation between

schooling and income will be negligible" (Jencks, 1972, p. 182). We argue that those with four years of college might have an initial advantage because they enter higher status jobs than others. The advantage may disappear after several years of work, however. There are some occupations where high income can be earned without the benefit of a college degree, i.e., business and retailing. Table 3.2 presents our data on income and education when

TABLE 3.2

The Impact of Certification on Income
Controlled by Years of Employment

Men Working Full-Time Two (2) Years or Less							
<u>HS 1</u>	<u>HS 2</u>	<u>HS 3</u>	<u>HS 4</u>	<u>Col 1</u>	<u>Col 2</u>	<u>Col 3</u>	<u>Col 4</u>
62%	66%	77%	70%	75%	94%	99%	115%
(23)	(27)	(25)	(130)	(24)	(12)	(7)	(23)
Men Working Full-Time Three (3) Years or More							
<u>HS 1</u>	<u>HS 2</u>	<u>HS 3</u>	<u>HS 4</u>	<u>Col 1</u>	<u>Col 2</u>	<u>Col 3</u>	<u>Col 4</u>
90%	82%	130%	134%	151%	182%	69%	178%
(68)	(90)	(90)	(414)	(32)	(21)	(7)	(25)

years of employment is controlled. Our speculations seem to be confirmed. There are several important features of these data. First, in every case except one (men with three years of college where the cell frequency for those

working more than three years is only 7), those men working three years or more earned more than those working two years or less. This seems to indicate that the longer a man works, the more money he earns. Second, income for the fourth year of high school is not significantly larger than the income for other high school years. In fact, the pattern in Table 3.2 is quite similar to the pattern observed in Table 3.1. The difference in income between years three and four, for both those working three years or more and those working two years or less, is actually smaller than the differences between other high school years.

Data in Table 3.2 seem to indicate that the dollar value of a college degree diminishes over time. For men working two years or less, the men with four years of college had the highest incomes of all college men. The difference in income between those with four years and those with three years of college, however, is smaller than the difference between men with two years and those with one year of college. For men working three years or more, the men with four years of college did not even earn the highest income of all men. It would seem, therefore, that the economic value of the fourth year declined over time. The initial advantage of a college degree disappeared when years of employment were controlled.

Our data tend to support Jencks' contention that the senior year of high school, and college, do not add significantly more to income than any other year, at least when the effects of employment are accounted for. The data seem to suggest that the dollar value of education is based on the amount of time spent in school rather than the acquisition of the degree. This apparently contradicts the arguments of Miller, Milner, Huff and others that were presented in the discussion of credentialism in Chapter II. These writers assumed that credentials made a difference; they were concerned about explaining why the difference existed. It appears that their assumption is not supported by the data. However, our findings may only be representative of men in the early stages of their careers. The pattern of the relationship between education and income, for these men, may not be characteristic of the pattern for all men. It may be that the full benefits of a college degree do not appear until a man is well into a career. For those men just out of school, graduates may hold the initial advantage. This advantage seems to disappear through the early stages of young mens' careers. In fact, it seems that the income of non-graduates may even exceed the income of graduates in the earlier stages. However, the income of non-graduates may peak earlier and lower than the income of graduates. As time passes, the slow

starting college graduates' income may catch and then surpass the income of the non-graduate. We are suggesting a complex pattern of initially strong impact of education on income, then a decline and finally an increase. The implication of this is that caution should be applied in interpreting our findings. Since our data are gathered for only young men, our conclusions are limited in their generality. It may be that the pattern of the relationship between education and income is different in the later stages of mens' careers than it is in the earlier stages.

CHAPTER IV

VOCATIONAL TRAINING AND INCOME

In this chapter we study the effects of vocational training on income at various levels of educational attainment. The question that is asked here is: given the general relationship between educational attainment and income, does vocational training enhance the dollar value of education at each level of attainment?

In the last decade considerable attention has been paid to the beneficial effects of vocational training on income. Jacob J. Kaufman and his associates at the Institute for Research on Human Resources at the Pennsylvania State University have found that vocational training does pay off, at least at the high school level.

Given that earnings and employment are appropriate indices of the benefit of education, the analysis indicates that, for the study sample, vocational-technical graduates earned significantly more and were employed significantly longer than the graduates of the other four curricula over the six-year post-graduation period. (Kaufman, 1969, p. 233)

Additional studies by Kaufman and others confirm this finding (Kaufman and Lewis, 1968, Kaufman, Schaefer, Lewis, Stevens and House, 1967, and Eninger, 1967). Trends toward vocationalism have been observed lately in the nation's colleges. The New York Times reported on December 30, 1973 that their survey had noted a marked rise in the percentage of undergraduates majoring in applied subjects. "College students, in what appears to be a reversion to the pre-1960's, are swinging away from theoretical studies and toward a 'new vocationalism'" (New York Times, December 30, 1973, Section IV, p. 12). Enrollments were up in such areas as: pre-med, pre-law, nursing and business, and down in the social sciences and the humanities. The report noted that one reason for this shift was the students' concern for financial security. A B.A. alone did not seem to be a guarantee for high wages. Students felt that a field of specialization was needed to secure a well paying job (see also Queens College's Phoenix, November 6, 1974. Department heads noted that registration decreased in disciplines that were not vocationally oriented).

Kaufman's findings and the behavior of many college students as noted above reflect a growing awareness among numerous Americans as to the potential importance of vocational training. If education has a large effect on income, then it may be vocational training that makes a

difference. Let us examine our data on this matter. Unfortunately, they do not allow a refined investigation of vocational training. In this analysis we are forced to combine such diverse forms of vocational training as: professional, managerial, clerical, skilled, business and company training. The meaning of vocational training, in other words, must remain quite broad. Be that as it may, it is possible to make some general statements about the relationship between vocational training and income for men in our sample. Table 4.1 presents the data on the relationship between income and education controlled by vocational training. The data for this table were obtained from Table 3.1 and a similar table for 1969, in a two step process. First, the original table was collapsed so that broad levels, rather than individual years of education were obtained. And second, those men with vocational training were separated from those who had no such training.

There are at least four important findings in these data. First, within each educational category those with vocational training earn more than those without it (except high school dropouts in 1967). And, as a corollary to this, the value of a degree, at the high school level in 1967 and at the college level in 1969, is greatly enhanced when combined with vocational training. For example, in 1967, the average income of

TABLE 4.1

Income for Men
With and Without Vocational Training¹
Controlled By Years of Academic Education in 1967 and 1969

	1967		1969	
	Training	No Training	Training	No Training
HS Dropouts	97% (41)	100% (453)	113% (34)	91% (547)
HS Graduates	144% (112)	109% (718)	119% (187)	99% (793)
Some College	144% (27)	119% (190)	132% (66)	117% (208)
College Grads	0	154 (92)	162% (59)	125% (91)
	N = 192	N = 1,780	N = 391	N = 1,857
	Total Sample Average = 100%		Total Sample Average = 100%	
	Sample Average = \$4,024		Sample Average = \$5,420	

those who graduated from high school without any training was 109%; the average income of high school graduates with vocational training was 144%. In other words, there was a difference of 35 percentage points.

¹Since there were no data on the effects of vocational training for college graduates in 1967, we present data from 1969 in this table. This is the only table in this study in which data are used from another year.

Secondly, vocational training alone was not enough to raise income substantially. At the level of high school, it seemed that, in order to reap the full benefits of vocational training, a man needed a diploma. There was a difference of 47 percentage points between those men with vocational training who graduated high school and high school dropouts with training.

What was true of the 1967 data at the high school level seems to be true at the college level in 1969. Vocational training alone is not enough to assure a high income. There is a 30 percentage point difference between the incomes of men with vocational training with only some college experience. Thus, it would seem that in order to reap the fullest benefits of vocational training it would be advisable for young people to obtain the degree before they begin working. As a general statement of the relationship between vocational training and income in 1967 and 1969, it appears that it is more profitable to acquire vocational training along with a college degree than it is to obtain either the degree alone or vocational training without a degree.

There is a third feature of the data that seems to run counter to this rather optimistic statement about the effects of vocational training. Between 1967 and 1969 there is a downward drift in the differences in income between those with training and those without it

in all educational categories except for high school dropouts. In other words, while those men with vocational training earned more than those without it in 1969 as in 1967, the differences were smaller in the later year. At the level of high school graduate, the percentage of average income for those with training is 144% in 1967; in 1969 it is 119%. This is a 15 point drop in the difference between the two groups over the two year period. Similarly, at the level of some college experience, the percent of average income for those men with training falls from 144% in 1967 to 132% in 1969. This represents a drop in the difference in average incomes between those with training and those without it, at the same college level, from 25 percentage points in 1967 to 15 percentage points in 1969. The decline in average income for those men with vocational training may indicate that the initial advantage held by these men disappears over time. Vocational training may provide a young man with a higher starting salary, on his first job, than he could expect without training. After a few years of work, however, on-the-job skill and experience may have a greater impact on earnings than prior vocational training. This pattern seems to be true at least through the level of some college experience. While we cannot compare average incomes of college graduates between 1967 and 1969 since there were no data

in our 1967 sample for men who were college graduates and who had vocational training, there is something important that can be said about vocational training at the college graduate level. This is the fourth characteristic of the data that warrants our attention.

The average income of college graduates with vocational training was the highest of any category in either year. It would seem that this finding is the strongest positive evidence that can be offered in support of vocational training. It appears that vocational training coupled with high educational attainment has an important effect on income. This provides an excellent illustration of Milner's concept of "status inflation." As more people attend college and graduate with a B.A., the less the degree is worth. In order to secure a better paying job, it is important to receive special training along with a B.A. However, this rather optimistic conclusion must be accepted with caution. Without data on income for college graduates with training at two points in time, it is impossible to determine accurately the significance of vocational training. College graduates in 1969 who had vocational training in our sample were relative newcomers to the labor market. Since no one from our sample was in this category in 1967 college graduates with vocational training in 1969 could have been working for only two years or less. It is

impossible to determine, in other words, the effects of length of employment for these men. We do not know to what extent the income difference between college graduates with vocational training and those without it changes through the early stages of the men's careers. It could be that the initial advantage in earnings of college graduates with vocational training diminishes over time, as the data indicated was the case for lower levels of educational attainment. This would be consistent with the finding of Chapter III which suggested that the value of a degree declined through the early stage of the careers of the men in our sample (see p. 59). Final conclusions as to the significance of vocational training, however, must await research that examines its impact over the span of a lifetime.

CHAPTER V

RACE, EDUCATION AND INCOME

In this chapter we begin the discussion of the data on the relationship between education and income by race for the men in our sample. Our concern here is to examine the extent to which education can help to reduce racial inequality and to study the effects of education on individual mobility within racial sub-groups.

The late 1960's and the early 1970's were times of optimism for many in this country who felt that education could serve to redistribute income more equally between races. The civil rights adage of "learn, baby, learn" had begun to be translated into reality in the form of such programs as Open Admissions, Black Studies Programs, Seek and Upward Bound. The hope was that as racial discrimination abated in this country, black college graduates would be able to realize considerable economic gains from an investment in education. Young blacks and other minorities were urged to complete their schooling to reap the benefits of a changing society.¹

¹The potential effect of these programs in raising income through increased educational attainment may be thwarted by the present state of the economy. In the New York Times, November 10, 1974, Marylin Bender writes

Most social scientists who have collected data on the relationship between race, education, occupation and income suggest that increased educational attainment for blacks may not be the final solution to the problem of inequality even under ideal economic conditions. As noted in Chapter II, these investigators have found that income differences between races remain even when education is accounted for. The discrepancy was said to be due to the persistence of discrimination in this country.

Our more recent data support the pessimistic findings of earlier research. It seems that in 1967, the cost of being black was as substantial as it was in the 1950's when Siegel collected his data (see Siegel, 1965). The data of Table 5.1 reveal the magnitude of the problem. In 1967 there was only a 1 percentage point difference in the average income of white high school dropouts and black college graduates. (There were only 9 black college graduates, however.)

While the number of black college graduates in our sample is small, the data are similar to findings of another study:

that whatever progress may have been made toward greater equality in the last several years may be washed away in the current depression. Minorities who were hired last are the first to be fired under existing seniority systems.

TABLE 5.1

The Relationship Between
Race, Education and Income in 1967

	Whites	Blacks
HS Dropouts	113% (305)	67% (189)
HS Grads	123% (630)	84% (200)
Some College	123% (190)	111% (27)
College Grads	136% (38)	114% (9)
Sample Average = 100%		
Sample Average in Dollars = \$4,024		
Sample N =	1403	579

The fact is that in 1959, the average non-white with four years of college could expect to earn less over a lifetime than the white who did not go beyond the eighth grade. (Miller, 1964, p. 155)

Education alone, it would appear, cannot completely eliminate racial inequality in this country. While investigators tend to agree on this point, they do not agree as to which level of educational attainment accounts for the highest level of discrimination against blacks. For example, Blau and Duncan argue that "the better educated Negroes fare even worse relative to whites than uneducated Negroes . . . with the partial exception of

the minority who complete a college education" (Blau and Duncan, 1967, p. 239). Milner presents a similar argument. As noted earlier (see p. 25), he suggests that a black with a college degree is more acceptable to a white employer than a black with only some college experience. Milner calls this the "middle-class respectability hypothesis." Miller, on the other hand, argues that blacks who graduate from college are more discriminated against than less well educated blacks. The lifetime earnings of black high school graduates are 60% of those received by whites, and the ratio drops to 50% among college graduates (Miller, 1964, p. 155). Miller would agree with Blau and Duncan that the income gap between whites and blacks widens as education increases; he does not seem to agree that black college graduates are an exception to this pattern. Our data, however, suggest a somewhat different relationship between education and racial inequality. It seems that inequality decreases with education -- but only to a point. The income gap between races is smallest at the level of some college. Beyond that the gap increases by 10 percentage points at the level of college graduate. This seems to indicate that racial discrimination may be stronger at the extremes of the continuum of educational attainment than in the middle.

Data in Table 5.2 suggest that, independent of race, as education increases occupational status also increases. It can be inferred from the data in this table, as well from Table 5.1, that the relatively large gap in income between black and white college graduates is not a consequence of black college graduates being denied access to high status jobs, but is a result of unequal opportunities for success within high prestige occupations.

TABLE 5.2

The Relationship Between
Race, Education and Occupation

(Expressed as the percentage of men who are either white collar workers or professionals, at each level of educational attainment.)

	HS Dropout	HS Grad	Some College	College Grad
Whites	14% (283)	29% (566)	50% (179)	97% (80)
Blacks	7% (172)	17% (195)	40% (25)	100% (8)

Perhaps these data can be explained, in part, by the conjecture presented in Chapter II. We stated that, at the heart of discrimination is a process whereby employers sort potential employees along race related differences in attitudes and personal styles. Employers selecting men, not only by ability or skill, but also according to these subjective criteria, are predisposed to hire men most like

themselves. Data in Table 5.3 suggest that this phenomenon may be more likely to occur at the extremes of the skills hierarchy. At these extreme ends of the continuum many workers may have relatively equal skills and abilities; that is, at the lower end of the skills range they have no skill, and at the upper end may have considerable skill.

TABLE 5.3

The Relationship Between
Race, Occupation and Income

	<u>Differences</u>		
	<u>Whites</u>		<u>Blacks</u>
Professions	148% (205)	+69	79% (17)
White Collar	110% (169)	+60	50% (45)
Craftsmen	128% (238)	+40	88% (50)
Blue Collar	117% (493)	+67	50% (287)

In these instances employers may have to rely on their "intuition" as to who would make the best candidate for a position, since skill is not a factor. This situation would, I imagine, consistently favor whites over blacks. In the middle-range of education, blacks

may be less discriminated against. They are judged on their merits rather than their race. Men with some college experience are probably most qualified for low-level supervisory positions. It may be that the responsibilities of these jobs are not so great as to arouse the white employers' anxiety about having a black in a high level position. With fears minimized, competition based on objective differences in skills may be possible between men of different races. Blacks would then stand a better chance of being hired to work alongside whites than is the case at the extremes of the skills continuum.

Our data seem to contradict the findings of some investigators who have found that black college graduates are less discriminated against than other blacks (see P. 73). It may be possible to reconcile this contradiction if we consider several limitations of our data. First, the youthfulness of our sample may restrict the generality of the findings. Our findings may only be representative of the relationship between education and income in the early stages of the men's careers. (This point was made earlier, see p. 49.) Black college graduates in our sample may have been too young for an accurate determination of the dollar value of their degrees. As the black college graduate develops on-the-job skill and social contacts within an occupation, he may be able to overcome

some of the initial effects of discrimination. Black college graduates do not seem to earn as much as white college graduates at any stage in their careers; however, inequality may be greatest in the earlier stages. This could help to explain, at least in part, the discrepancy between our findings and the findings of others. Our findings are also limited in their generality because of the broadness of the data on occupations. In order to determine the extent to which our speculations are correct, we would need to have detailed information on skills required of specific jobs; this would permit a more detailed examination of black-white differences in income. We would also need data for different types of occupations within each category. It is possible that the observed difference in income between black-white professionals may be due to the fact that men of different races work at different types of professional occupations, e.g., a black teacher as compared with a white physician.

The discrepancy in income between races in the professions may also be explained, in part, by the difference in the social meaning of these occupations for blacks and whites. As stated in the speculations of Chapter II, the black who has a college degree and enters a professional occupation, has travelled a considerable distance up the social ladder. He may feel that the

journey itself is the goal; the need to achieve within the profession is not as great as it is for the white who sees high educational attainment as a status maintaining mechanism. To the white men in a profession, the job is a starting point and not an end in itself. Blau and Duncan make a similar point when they say:

Given the lower level of rewards for Negroes, less increment in rewards is needed for Negroes than for whites to produce the same marginal utility and hence the same incentive power to acquire more advanced education. In other words, the argument would be that the higher occupational returns whites obtain for the same educational investments compared to Negroes are necessary to produce the same marginal utility and incentive value, precisely because the level of rewards is higher for whites than for Negroes. (Blau and Duncan, 1967, p. 239)

In sum, the data show that young black men earn less than young white men at all levels of educational attainment, and that college graduation does not seem to help reduce racial inequality. Given this situation, we can ask: within each race, how important is education in determining income, and does the fourth year of schooling, at each level, add more to income than the preceding three years? While it is possible that education may never reduce inequality between blacks and whites, it is possible that, within the black group, having a good education is better than having no education at all. In

the final section of this chapter we examine the relationship between education and income within each racial group separately. We wish to determine the extent to which education affects income, for blacks, to the same degree that it affects income for whites.

The Relationship Between Education and Income: Blacks

The correlation between education and income was .282 for blacks. This would indicate a positive, but modest relationship between the variables. Of all the variation in income within the black group only 8% can be explained by differences in educational attainment. Actually, the figure should be somewhat smaller than this, if the pattern shown in Table 5.1 is representative of the larger population of black young men. In Table 5.1 it can be seen that the majority of our respondents had high school educations or less. The observed correlation is derived mostly from the relationship between education and income for these men. Our data suggest that the relationship between education and income tapers off at the highest level of educational attainment since there is only a difference of 3 percentage points between black college graduates and blacks with some college experience. The comparatively small number in these two

groups, however, may have had a negligible effect on the overall correlation. Thus, the correlation between education and income may be somewhat less than .282 for black young men. Nonetheless, our data do indicate that within the black community it does pay to continue one's education through college.

As mentioned in previous chapters, in order to determine whether the fourth year of schooling adds more to income than any other we must compare the incomes separately by each year. Our data show that when this breakdown is made, the last year of college and the last year of high school do not add significantly more to income than any other year. In fact, for blacks in our sample, those with two years of college actually have slightly higher average incomes than black college graduates, the incomes were 115% and 112% respectively.² Our data suggest, therefore, that a college degree may not be as important for young blacks as had been thought in the past. A black with a college degree does not appear to be more attractive to white employers than a black with only some college experience. The data tend to confirm our conjecture that, to employers, being middle-class means more than having a B.A. It appears that employers are more sensitive to racial differences

²These data are presented in Appendix A.

in attitude and personal style than they are to educational certification, as was noted earlier in this chapter in another context (see pp. 71-75). It should be reiterated that this relationship might change over time so that the beneficial effects of a B.A. appear later in the career of these men.

Lastly, although it appears that vocational training does not help to reduce income inequality between races, it seems to be a worthwhile investment among blacks. In Table 5.4 it can be seen that blacks with vocational training, who are mostly men with high school educations, earn more than black high school graduates and less than those with some college. It would appear, therefore, that

TABLE 5.4

The Relationship Between Race,
Vocational Training and Income in 1967³

Whites		Blacks	
Training	No Training	Training	No Training
139% (157)	124% (1246)	93% (35)	78% (544)

³Most of these men have not gone beyond high school. 85% of all men with vocational training in our sample were high school graduates and under. See Chapter IV for details.

a black man who doesn't want to go to college but who wants to earn more than he would with a high school diploma alone should consider receiving vocational training before looking for a job. It seems to make a difference.

The Relationship Between Education and Income: Whites

The correlation between education and income for whites was .193. This again suggests a positive but very modest relationship between education and income. From Table 5.1 it appears that unless a young white man completes a college education, there is no difference between what he would earn with some college experience and without any at all. However, an examination of the incomes of each year separately reveals that the fourth year of college does not add significantly more to income than any of the preceding years.⁴ The increase over the first three years is hidden when they are combined. The increase is large enough, in other words, so that the increment added by the last year is not statistically greater than what would have been expected by chance.

⁴This was also true for the last year of high school, see Appendix A.

One final characteristic of the relationship between education and income for whites should be noted. Data in Table 5.4 show that the average income of young whites with vocational training is slightly higher than the average income of college graduates! Given that most men with vocational training have not gone beyond high school, this finding is particularly important. It suggests that, for young whites, a high school education providing a skill may be as profitable as having a B.A. This phenomenon can be explained, at least in part, if we assume that as more men receive B.A.'s. the dollar value of a degree tends to decline because the supply of educated workers exceeds the number of available jobs requiring a B.A. for employment. As the market for college educated men becomes flooded, therefore, a shortage of skilled craftsmen is created. It may be that the combined effects of strong labor union power, and the limited supply of skilled workers in such fields as plumbing, printing, metalwork among others, have pushed the wage scales of these men to their present heights. Before we reach any final conclusions about the potentially beneficial effects of vocational training for whites, however, we must await the data presented in the next chapter. For it seems that the effects of vocational training not only vary by race, but by social class as well.

In sum, it seems that the pattern of the relationship between education and income is similar for young blacks and whites, although the actual incomes of these groups differ substantially. First, the relationship between these variables is positive, yet modest. Second, the fourth year of schooling does not appear to add significantly more to income for either whites or blacks. And finally, vocational training does appear to enhance the dollar value of education for each racial group.

CHAPTER VI

SOCIAL BACKGROUND, EDUCATION AND INCOME

In Chapter II it was stated that, while there is little written about the relationship between income, education and social background, existing data seem to suggest that middle-class men earn more money than lower-class men at each level of educational attainment. To quote Jencks, "the biggest single source of income differences seems to be the fact that men from high-status families have higher incomes than men from low-status families, even when they enter the same occupation, have the same amount of education, and have the same test scores" (Jencks, 1972, p. 216). No one as yet clearly understands how social background affects income when education is controlled. Two goals of this chapter are, therefore, to provide new data on this relationship, and to try to explain why the differences in income exist between men of various social backgrounds. In the final section of this chapter, we discuss the implications of our data and their interpretation for the future of class inequality in this country.

Table 6.1 and 6.2 indicate that the relationship between social background, education and income is rather

complex. Unlike Jencks' and Milner's data, our data do not show that middle-class men earn more than lower-class men at all levels of educational attainment.¹ It seems that middle-class young men earn more money than lower-class young men at the highest levels of educational attainment, but the pattern is reversed at the lower levels, as indicated in Table 6.2.² The data, however, are not entirely consistent. There seem to be at least four patterns in the data that suggest that middle-class men do not always have the advantage when education is controlled: (1) It appears that the effects of social background on income are not the same for the two traditional categories of middle-class background, the sons of professionals and the sons of white collar workers. For example, while the sons of professionals had the highest incomes at the high school graduate and college graduate level the sons of white collar workers did not have the second highest income at these levels (though the cell frequency for white collar sons at the level of college graduate is quite small). In fact, the sons of white collar workers had the lowest average

¹We define social class by father's occupations, i.e., the sons of professionals and white collar workers are middle-class and the sons of craftsmen and blue collar workers are lower-class.

²Most men with vocational training had high school educations (see p. 65).

TABLE 6.1

Income and Social Background at Each
Level of Educational Attainment in 1967

<u>Father's Occupation</u>	<u>Son's Education</u>			
	<u>HS Dropout</u>	<u>HS Grad</u>	<u>Some College</u>	<u>College Grad</u>
<u>Professional</u>	89% (28)	130% (85)	130% (59)	180% (21)
<u>White Collar</u>	122% (17)	102% (40)	123% (13)	167% (7)
<u>Craftsmen</u>	113% (65)	126% (136)	133% (20)	180% (11)
<u>Blue Collar</u>	83% (178)	112% (182)	121% (35)	117% (15)

TABLE 6.2

Income, Social Background and Vocational Training

<u>Father's Occupation</u>	<u>Training</u>	<u>No Training</u>
Professional	122% (23)	120% (187)
White Collar	123% (12)	114% (72)
Craftsmen	142% (33)	118% (234)
Blue Collar	136% (39)	92% (375)

income of all groups at the high school graduate level. (2) In some ways, the sons of craftsmen and the sons of professionals are very much alike. These two groups earn roughly the same incomes at three levels of educational attainment. (3) However, the incomes of sons of craftsmen and the sons of professionals are most divergent for those who have had vocational training. In this case, the sons of craftsmen had the highest income of all groups, and the sons of blue collar workers had the second highest incomes. It appears, therefore, that lower-class men with vocational training earn higher incomes than middle-class men with vocational training. This would indicate that under certain conditions middle-class men do not have an advantage over others. (4) Generally, however, the opposite was true for the sons of blue collar workers. They usually had the lowest income of any group, even at the highest levels of educational attainment.

Data in Table 6.3 reveal that, independent of social background, the higher the level of educational attainment the more likely it is that the man is in either a white collar or professional occupation. This suggests that the differences in income, at each level of educational attainment, were due to income variations within occupations for men of different social backgrounds. Indeed, the data of Table 6.4 parallel the

TABLE 6.3

The Relationship Between Occupation
and Education by Father's Occupation

(Expressed as a percentage of men who are employed at
middle-class type jobs.)

<u>Father's Occupation</u>	<u>HS Dropout</u>		<u>HS Grad</u>		<u>Some College</u>		<u>College Grad</u>	
	<u>Professional</u>	14%	(28)	35%	(78)	62%	(58)	95%
<u>White Collar</u>	25%	(16)	35%	(40)	58%	(12)	100%	(7)
<u>Craftsmen</u>	13%	(63)	23%	(132)	50%	(26)	99%	(12)
<u>Blue Collar</u>	9%	(110)	23%	(185)	36%	(34)	93%	(14)

TABLE 6.4

Income and Occupation
Controlled by Father's Occupation in 1967

<u>Son's Occupation</u>	<u>Father's Occupation</u>							
	<u>Professional</u>	<u>White Collar</u>	<u>Craftsmen</u>	<u>Blue Collar</u>				
<u>Professional</u>	139%	(55)	154%	(19)	139%	(44)	124%	(46)
<u>White Collar</u>	144%	(36)	129%	(19)	129%	(30)	105%	(37)
<u>Craftsmen</u>	123%	(42)	84%	(12)	125%	(58)	121%	(65)
<u>Blue Collar</u>	117%	(65)	98%	(32)	116%	(126)	92%	(244)

data in Table 6.1 and 6.2 to a considerable extent. There is much inconsistency in the table, as was the case of Table 6.1. However, it seems that sons of professionals and sons of white collar workers have quite different incomes within occupational categories. It should be noted, though, that the broadness of the categories may be one source of variation. Nonetheless, in Table 6.4 as in Table 6.1 it appears that the sons of white collar workers had the lowest income in one category -- in Table 6.4 it was in craft occupations. A similarity in the data from these tables is that the sons of craftsmen and the sons of professionals have incomes that are very much alike in most categories. Third, the sons of craftsmen had the highest income of any group in the craft occupations; the sons of blue collar workers did comparatively well in the crafts also. However, in most other occupational categories, the sons of blue collar workers had the lowest incomes. It is possible to provide a tentative explanation of this phenomenon using the conjecture presented in Chapter II. We speculated, at that time, that the observed variation in income could be accounted for, in part, by class related differences in social contacts, attitude and personal style. Before we amplify on this, however, let us recapitulate the pattern of the data.

It seems that young men of middle-class backgrounds earn more than lower-class young men at the higher levels of educational attainment, and within professional and white collar jobs. Conversely, men of lower-class origins often earn more than middle-class men at the lower levels of educational attainment, especially at jobs where vocational training has been received. It must be noted again, however, that there is considerable inconsistency in this pattern. Nonetheless, we can attempt to explain the four important findings of our data. First, let us discuss the relatively low income of the sons of white collar workers who are high school graduates, working in craft jobs.

Interpretation of Four
Important Patterns of the Data: (1) The
Relatively Low Income of White Collar Sons in Craft Jobs

We speculate that the relatively low income of the sons of white collar workers may be accounted for, in part, by their lack of "good" social connections in craft occupations. The channels for advancement into the better jobs within this field may be restricted for some middle-class men because interpersonal social networks may control the accessibility to jobs. With the proper contacts, sons of white collar workers may be limited in their choice of craft jobs. There is some evidence from

other sources that family ties and friendship networks play an important part in the hiring policies of craft and blue collar industries. In the textile industry, "a good part of the employment interview . . . may be devoted to establishing just 'who' the applicant is in terms of his kinfolk and in terms of people who he and the interviewer know in common" (from Gilman in Blauner, 1964, p. 77).

Another possible explanation of the relatively low wages of white collar sons in this occupation might be that since these men are downwardly mobile, they may not be achievement oriented, thereby earning less than others. Their jobs neither maintain the style of living characteristic of their parental home, nor do the jobs improve their social position. The low income may be an indication of their feeling that the movement down the social ladder is irreversible. These men may have given up on themselves.

However, neither of these interpretations can fully explain the data since the sons of white collar workers who are high school dropouts have the highest incomes of all men at that level of educational attainment, and most work at the same type of jobs as high school graduates. Our conjecture, or any single interpretation for that matter, may not provide a complete explanation of the phenomenon. It may be, as Jencks has stated,

that luck plays a large part in the determination of economic success:

Income also depends on luck: chance acquaintances who steer you to one line of work rather than another, the range of jobs that happen to be available in a particular community when you are job hunting . . . in general, we think luck has far more influence on income than successful people admit. (Jencks, 1972, p. 227)

It may be that the white collar workers' sons who were high school dropouts, shown in Table 6.1, had high incomes as a consequence of their good fortune rather than anything else.

(2) The Similarity in Income Between Sons of Professionals and the Sons of Craftsmen

The similarity in income between the sons of professionals and the sons of craftsmen is rather surprising. We might have expected that these men would have had quite different incomes at each level of education because of their divergent social origins. It may be that the attitudes toward achievement of the sons of craftsmen are not the same as the attitudes of others from working class backgrounds. Thus, these men may be more achievement oriented than others of lower-class origins. This might account for the pattern that has been observed; however, it is at variance with much of

the data available on the relationship between social class and achievement (see p.34) for a list of sources). There are studies, though, that suggest that attitudes toward achievement are not necessarily uniform among men of lower-class background. Some of these may be more achievement oriented than others. Whyte, in his study of lower-class Italians in Boston, noted that there were at least two distinct types of lower-class men: the corner boys and the college boys. These two types of men differed in their attitudes toward friendship and family ties and they differed in their attitudes toward work and achievement. The college boys were much more upwardly mobile in their attitudes toward work and achievement than were the corner boys (Whyte, 1943). It may be that sons of craftsmen, like Whyte's college boys, have different attitudes in this regard as compared to other men of similar origins. This might account, in other words, for their comparatively high incomes in all occupational and educational categories.

(3) The Relatively High Income of Lower-Class Men in Craft Jobs

Explaining the relatively high incomes of lower-class men in craft jobs is actually the opposite side of the argument explaining the low wages of middle-class men holding such jobs. In some types of union jobs, for

example, the hiring is controlled by union members, e.g., hiring halls and "shape-ups". It may be that lower-class men, who have personal contact with job recruiters, have a distinct advantage over middle-class men. Having the proper connections, in other words, may provide lower-class men with access to better paying jobs in the craft industry. In Chapter II, it was said that printers' jobs are often passed down along friendship and family lines. It was impossible to obtain a job without knowing the right people (see p. 42).

(4) The Relatively Low Income of Blue Collar Sons in Professional and White Collar Jobs

While social background may have helped the sons of blue collar workers to obtain craft jobs, the effects of their background may have negative consequences for them in professional and white collar occupations. In Chapter II it was stated that studies have shown that the attitudes of men from lower-class backgrounds who were working in the professions were often inappropriate and ultimately self-defeating. Lower-class men were often unable to develop good working relations with superiors as a result of their attitudes toward work and achievement. This seemed to have serious effects on the individual's chances for academic and financial success. In part, the problem lies with the individual, in his background

related attitudes. However, it also seems likely that superiors may not like certain of the individual's attitudes that do not correspond to "appropriate" academic ideals and values. The attitudes of teachers and supervisors, in other words, may contribute to the process whereby young lower-class professionals earn less than young middle-class professionals. It was also shown in Chapter II that social background affected one's opportunities within a profession. Depending upon which college was attended and one's connections, the accessibility of jobs varied. Further, choice of college and connections were shown to be related to social background. Men from lower-class backgrounds were at a great disadvantage (see pp. 39-44). We would speculate that the low incomes of blue collar men within the professions may be related to this subtle but nonetheless compelling form of class discrimination. In a recent study by Granovetter (1974), the data seem to indicate that family ties are particularly important for success among young professionals. Granovetter explains the importance of family contacts for young professionals. He states that, "younger workers, whose careers are still taking shape, have not yet acquired as large a number of professional colleagues who can be of assistance as have those who have been working fifteen or thirty years" (Granovetter, 1974, p. 43). This would suggest that the discrepancy in

income between young lower-class professionals and young middle-class professionals may diminish over time. As lower-class professionals develop social contacts within the profession, they may be able to overcome their initial handicap.

In our discussion of the relationship between background and success in Chapter II, we stated another reason why lower-class men might earn less than middle-class men in the professional and white collar occupations. Income is not the only criterion for judging success. Lower-class men working in professional and white collar jobs may measure their personal success by their movement up the social ladder. This mobility may help to compensate for the relatively low income. For example, it may be more socially valuable for the son of a blue collar worker to become a teacher rather than a cop or sanitation worker, even though the starting salary is less for teachers. In fact, the low income of blue collar workers, compared to middle-class men, in the professions may be caused, in part, by the effects of social mobility. If "having made it" means, to a lower-class man, working at a socially prestigious job, then this may reduce the need to achieve within the job itself.

In sum, it seems that high educational attainment cannot guarantee all young Americans high incomes.

Education alone has relatively little direct effect on reducing class discrimination in this country since inequality exists when education and occupation are controlled. We have speculated that the heart of class discrimination rests with the class related differences in social contacts, attitude and personal style. In order to reduce inequality, a change in the effect of these variables on success must occur. While this may be rather difficult to accomplish, we feel it is not impossible. At the end of Chapter VIII we shall present our strategies on how lower-class men and blacks could use the data presented here to their own advantage in the struggle to succeed within the present system. In the last section of this chapter we examine another question: given the fact that lower-class young men do not earn as much as middle-class young men at the higher levels of educational attainment, does education make a difference within each class sub-group? That is, are lower-class men with high levels of educational attainment more likely to have higher incomes than lower-class men with less education? Answers to this question will help us develop the most efficient and effective strategies for the success of lower-class men.

The Relationship Between
Education and Income Within Social Class

Though the correlations between income and education vary somewhat from class to class, the data show that in all cases the relationship between these variables is positive but modest. The correlations are .282 for the sons of professionals, .130 for sons of white collar workers, .219 for the sons of craftsmen and .215 for the sons of blue collar workers.³ It seems, therefore, that within each class high educational attainment is somewhat related to high income. However, these correlations hide an important aspect of the relationship between education and income which affects lower-class and middle-class men differently. Referring back to Tables 6.1 and 6.2, we see that among sons of craftsmen and the sons of blue collar workers, the highest incomes were achieved by those with vocational training. The majority of men with vocational training did not go beyond high school (see p. 85). This means that, despite the fact that high educational attainment is related to high income for men of lower-class origins, the highest income they could

³All correlations were significant at the .05 level except in the case of the sons of white collar workers. The comparatively small size of this correlation, and its lack of significance seem to be due to the fact that the distribution of educational attainment for this group is heavily weighed toward the higher levels. Over 75% of these men have at least a high school diploma.

attain did not require a college education. The value of vocational training is most evident for men whose fathers were blue collar workers. There was a 44 percentage point difference in average incomes between blue collar workers' sons who had vocational training and blue collar workers' sons who did not. This was the case for men of middle-class backgrounds whose highest incomes were achieved by the college graduates from that social class. Indeed, the correlation of education and income was highest for the sons of professionals. Not only was the correlation highest, but our computations revealed another significant facet of the relationship between education and income for the sons of professionals. When the average incomes by class were computed for each year of schooling separately, the difference between the third and fourth years of schooling, at either the high school or college level, was significant in one instance.⁴ This was between the third and fourth years of college for the sons of professionals. In other words, the last year of college added proportionately more to the incomes of the sons of professionals than did the last year of college within any other group. The dollar value of a college degree was greatest for sons of professionals.

⁴See Appendix A for the data. This difference was barely significant at the .05 level.

The implication of this seems to be that the road to financial success may vary depending upon social background.

It seems to pay for middle-class men to obtain a higher education, and receive the B.A. This appears to be particularly true of the sons of professionals. At the same time it seems that lower-class men may earn more money in jobs requiring a high school diploma and vocational training than they do in jobs requiring a B.A. As Jencks notes, "for working class whites, blacks and women, dropping out seems in many cases to be the most economically rational decision. Efforts to get everyone to finish high school and attend college must, therefore, be justified primarily on non-economic grounds. Otherwise, they probably cannot be justified at all" (Jencks, 1972, p. 224). We conclude, therefore, that if economic equality is a high priority in this country, then perhaps public policy should be designed to help some lower-class men to develop awareness of their high income opportunities in occupations that require skilled training, but do not require a college education. This would replace the current policy of urging lower-class men to pursue higher education in the hope that increased educational attainment will raise their incomes to the level attained by middle-class men. Our data seem to indicate that this assumption is not entirely accurate. The implications

of our data for reform are discussed at greater length
in Chapter VIII.

CHAPTER VII

RACE, SOCIAL BACKGROUND AND EDUCATIONAL ATTAINMENT

The data of the last two chapters seem to indicate that educational attainment does not substantially reduce class or racial inequality. Contrary to the public belief, education alone cannot guarantee high income for black and lower-class young men. However, it appears that education does contribute modestly to income. In fact, Jencks noted that next to social background, education explained more variation in income than any other variable (Jencks, 1972, p. 216). Since education has some effect on income, it is important that we understand the determinants of educational attainment for men of different races and social class.

Investigators studying the relationship between these variables find that significant differences exist between groups. Middle-class men receive more education than lower-class men; whites receive more education than blacks, although the differences have been getting smaller in the last fifty years (Sewell, 1957, Sewell, 1971, Hauser, 1971, Gasson, Haller and Sewell, 1972, Jencks, 1972, Milner, 1972 and Mosteller and Moynihan, 1972).

In this chapter, we ask the question: why do these differences in educational attainment exist? Here we compare attitudes of men of various social origins with their educational attainment.¹ We speculate here that, in part, the relatively low attainment rates of blacks and lower-class men may be related to the feeling, among these men, that education does not pay them as much as it does whites and middle-class men. Blacks and lower-class men may decide that the investment of time, money and effort of a college education is not worth it. This attitude could exist independently of whether blacks and lower-class men value learning and appreciate the importance of a "good education" for intellectual, emotional and spiritual development. Most investigators who have studied the determinants of educational attainment explain the phenomenon differently, however. Oversimplifying the diversity of explanations somewhat, it

¹Since our data come from only one year, 1967, it is impossible to compare the college plans of men with their actual attainment. We would need a panel study for this. In order to provide data on this matter, however, we can compare the college plans of men still in high school in 1967 (N = 211 by race and 152 by social class) with the actual educational attainment of men from similar social origins who were out of school and employed in 1967 (N = 1982 by race and social class). In other words, we compare men of similar background who are at two different stages in their careers in 1967. This is done under the assumption that since all respondents in 1967 are under 25 years of age, the attitudes and opportunities for men of similar backgrounds are comparable so that men still in school do not differ significantly in terms of their chances for success than their older counterparts.

can be said that there are at least two general types of sociological interpretations: (1) that differences between groups are the consequence of difference in family life and associated differences in the values attached to education (see Jencks, 1972, Coleman, 1966, Armor, 1972, Smith, 1972, Sewell, Haller and Portes, 1969, Sewell, Haller and Ohlendorf, 1970, Hyman, 1954). (2) That the differences in attainment are related to the imbalances in social structure in this country which effect equality of opportunity to attain higher education (see for example Liebow, 1967, E. Franklin Frazier, 1939, Gunnar Myrdal, 1944, Richard Cloward and Lloyd Ohlin, 1960). Each of these positions has merit, but taken separately they lack the theoretical power to explain the phenomenon completely.

Jencks, for example, has argued that the differences in educational attainment between social classes is accounted for by the differential attitudes of these classes toward educational attainment. Middle-class people, according to him, want more education than others. To quote, "if we want to equalize the educational attainment of children from different economic backgrounds, we will probably have to change not only their test scores and financial resources, but also their attitudes and values" (Jencks, 1972, p. 141). The implication is, of course, that people of different classes are essentially

different in terms of their evaluation of education. Those who now receive less education than others must learn to value the need for education.

Armour, in his re-examination of the Coleman data found that the differences in achievement between whites and blacks were due to differences in family factors rather than to school factors. "Those results are strongly suggestive of the conclusion that the determinants of student achievement variation are more likely to be found in the home than in school" (Armour, 1972, p. 224). Coleman himself has said that "equality of educational opportunity through the schools must imply a strong effect of schools that is independent of the child's immediate social environment . . . that strong independent effect is not present in American schools" (Coleman, 1966, p. 135).

Some writers have suggested that the interaction patterns within families can account for the difference in achievement for children of different racial and social backgrounds. Katz writes that the social structure of the lower-class black family actually precludes the possibility of high motivation and achievement in children. The punitive and often inconsistent attitudes of lower-class black fathers, Katz argues, cause their children to become self-critical and mistrustful of their own abilities and capacities. A situation develops in which

low achievement and failure are the only ways for the child to reduce the anxiety associated with failure and punishment (Katz, 1967). On the opposite side of the coin, Green describes the over-achievement of white middle-class males as a response to an equally hostile environment in the family. He suggests that the need to achieve is actually a way for the child to control his mother's love. The middle-class parent uses the threat of withdrawal of love as a means of regulating the behavior of their children. Achievement is the child's attempt to alleviate the anxiety of being rejected. Green concludes, "not the need for love, but the constant threat of its withdrawal after the child has been conditioned to the need, lies at the root of most characteristic modern neurosis" (Green, 1946, p. 39). Over-achievement is seen as a symptom of one type of neurosis (for other attempts to explain achievement within the context of family relations see also Rosen, 1956 and 1961).

Others have argued that the essential difference between groups in our society is not a matter of values, or family, but one of opportunity. Liebow argues that blacks want as much education, among other things, as whites, but they cannot attain these goals because of the lack of opportunity that characterizes the black man's existence in this country.

It does not seem profitable, according to Liebow:

. . . especially for those who would see it changed -- to look at it (the black social structure) as a self-supporting, on-going social system with its own distinctive "design for life," principles of organization and system of values . . . of much greater importance for the possibilities of change, however, is the fact that many similarities between the lower-class Negro father and son (or mother and daughter) do not result from "cultural transmission" but from the fact that the son goes out and independently experiences the same failures, in the same areas, and for much the same reasons as his father. What appears as a dynamic, self-sustaining cultural process is, in part at least, a relatively simple piece of social machinery which turns out, in rather mechanical fashion, independently produced look-alikes. The problem is how to change the conditions which, by guaranteeing failure, cause the son to be made in the image of the father (Liebow, 1967, p. 219 and 223, also see Perrucci, 1967, Miller, 1964 and Parker and Kleiner, 1964 for similar arguments).

The implication of Liebow's remarks is that the situation of the black man, not his value system, must change if we are to improve the black's position in our country. The values of the white middle-class are present in the lower-class black man's life; the opportunity to achieve such values must be provided.

Both types of explanation seem to have considerable merit. However, data in Table 7.1 suggest that while blacks and lower-class men want as much education as whites and middle-class men, they do not receive it.

TABLE 7.1

College Plans and Actual
Attainment by Race and Social Background in 1967

<u>Race</u>	<u>White</u>	<u>Black</u>		
Percent in high school planning to go to college	48.5% (65)	71.4% (55)		
Percent of those out of school and employed who actually attended college ²	22.1% (311)	6.6% (38)		
<u>Social Background</u>				
	<u>Prof.</u>	<u>Wh. Col.</u>	<u>Crftmn.</u>	<u>Bl. Col.</u>
Percent in high school planning to go to college	58% (15)	73% (8)	61% (22)	60% (33)
Those who were out of school and employed who actually went to college	41% (83)	30% (15)	17% (44)	13% (53)

The difference for whites between those who plan to go to college and those who actually attend is considerably less than the difference for blacks. The same is true of the difference for blacks. The same is true of the difference for middle-class men as compared to lower-class men. It would appear, therefore, that the observed differences in

²Any one who entered college was included here, regardless of how many years of college they attended.

educational attainment cannot be attributed to differences in the valuation of education. Opportunity differences can account for some of the observed differences, but this alone cannot completely explain the complex reality, as the following discussion seems to suggest.

Why Differences in Educational Attainment Exist

It seems that the differences in attitude and social structural factors may account for some of the observed discrepancy between the plans and the actual educational attainment of men from different backgrounds and races. In Chapter II I presented my conjecture as to how attitudinal differences might explain some of the variation between education and income. At that time it was also said that attitudinal differences might help to explain variation in educational attainment. I speculated that differences in attainment may be accounted for by differences in the meaning of education from group to group. It seems relevant to explore the implications of that statement here, and to speculate further as to how social structural variables are related to the phenomenon.

Depending upon one's family origin, education may have either a status gaining or status maintaining function. Education may be status maintaining for middle-

class men, an opportunity to insure that the style of life that was characteristic of one's parental home will be continued in one's own family. The fact that in our sample, the sons of professionals had the lowest percentage of those planning to attend college, and the highest percentage of those who actually attended may be explained in this way. Independent of whether they want to go to college, some sons of professionals may feel that they must attend so as not to lose the social position that they have inherited from their fathers. Jencks and Riesman note that "downward mobility holds far greater terrors than the mere frustration of upward mobility" (Jencks and Riesman, 1967, p. 133).

Education may have a status gaining function for lower-class and black men, on the other hand. To understand why these men plan to attend college, but do not do so to the same degree as whites and middle-class men we must know how important the status gaining function of education is to them. To lower-class men and blacks who attend college the status gaining effect of education may be most important; this seems especially true since they do not earn as much as whites and middle-class men do at the higher levels of educational attainment, as the data from the last two chapters appear to indicate. This is not to say that high income is not a high priority among blacks and lower-class people. It would

seem, however, that moving up the social ladder may be enough of an accomplishment to compensate for relatively low income. High educational attainment, in other words, may be a goal that is shared by men of different backgrounds, a goal that is shared for different reasons, however.³

While the goals of "success" and "education" are equally shared throughout the class hierarchy, there are different meanings attached to these goals (Mizurchi, 1964). The classes differ in terms of the symbolic indicators of success valued, and in terms of their view of education as having intrinsic value or as an instrument means of advancement" (Perrucci, 1967, p. 131).

While the status gaining function of education is probably most important for many lower-class and black men, it is also probably true that for many other such individuals, factors in addition to status affect their decisions about education and occupation, since many more blacks and lower-class men say that they would like to go to college than actually attend. Jencks and Riesman note that:

³The notion that the same value may have different means for middle-class and lower-class people is not uncommon. Kohn uses it in his analysis of child-rearing practices (see Kohn, 1959 a and b).

For the lower-class or working class,⁴ going to college is a step up in the world . . . it may be desirable but is hardly indispensable . . . substantial numbers of lower strata families seem to be relatively content for their children to occupy a similar position . . . even those whose parents want them to go to college often sense that if they fail to live up to this hope their parents may be disappointed but rarely heartbroken (Jencks and Riesman, 1968, p. 133).

We suggest that the decision not to go to college may come about, in part, because of over-riding financial pressures of college, and perhaps to some extent it may be based upon a relatively objective assessment of the long-range economic payoff of an investment in higher education. Several researchers (see below) have taken this position. They argue that many lower-class and black men may be aware from their own experience, or the experiences of others, that high educational attainment does not pay them as well as it does whites and middle-class men. This may affect their decision to continue their education, even if they want to attend college to increase their knowledge or to improve their social status. Perrucci describes a study done by Stephenson that seems to make precisely this point. Stephenson found a "markedly greater" discrepancy between the aspirations (what the young men in his study would like

⁴I would imagine this applies for blacks as well.

to do if they could do anything they really wanted) and the plans (their actual intentions) of lower-class men as compared to middle-class men. The same seemed to be true for blacks (Perrucci, 1967, p. 125). The conclusion was:

Under the assumption that plans, as compared to aspirations, represent an adjustment to the constraints of the real world, these data indicate "that while there is a relatively consistent pattern of high occupational aspirations among these youths, their plans tend to conform to their position in the stratification system" (Stephenson, 1956, p. 207 in Perrucci, 1967, p. 125).

Others seem to reach similar conclusions:

There is some justification for the feeling by Puerto Rican, Negroes and other minority groups that education does not do as much for them, financially, as it does for others. James Baldwin writes in Nobody Knows My Name: "It is not to be wondered at that a boy, one day, decides that if . . . studying is going to prepare him only to be a porter or an elevator boy -- or his teacher-well, then, the hell with it" (Miller, 1964, p. 140).

And Blau and Duncan make a similar point in their discussion of the reasons why blacks do not continue their education past high school to the same degree as whites:

Since Negroes receive less return in the form of superior occupational prestige and income for their educational investments than whites, they have less incentive to make such investments, that is, to make the sacrifices that staying in school to acquire more education entails . . . although it is the uneducated Negro who is the main object of prejudiced stereotypes, the educated one being often explicitly exempt from it, it is the better educated Negro who in practice suffers most from discrimination. (Blau and Duncan, 1967, p. 239-40) (For another statement of this position see Jencks and Riesman, 1968, p. 87.)

These quotes suggest that the decision of many blacks and lower-class men not to attend college may be a consequence of their negative, but objective, perception of the conditions of the labor market. After weighing the pros and cons of a college education, these men may decide not to pursue a college career. The data from the last two chapters support the contention that for many black and lower-class men, the investment in time, money and effort of college may not be worth it. Here we recapitulate the findings of Chapters V and VI.

In Chapter V it was said that blacks earn less than whites at all levels of education. Within the black community itself, however, there was a positive relationship between education and income, although college graduation did not improve the earnings of blacks over

what they could earn with only some college experience. Further, blacks with vocational training had higher incomes than blacks with only high school diplomas. The data in Chapter VI showed that while lower-class men usually earned less than middle-class men at the higher levels of educational attainment, they often earned more at the lower levels of education. This was especially true when the man had vocational training. In fact, lower-class men with vocational training often earned more than lower-class men with college degrees. We speculated that class related differences in social contacts, attitudes and personal styles may account for this pattern. The particular set of contacts, attitudes and personal styles that characterized lower-class men were to their advantage in craft jobs, but did not operate in this way in white collar and professional jobs. Blacks had the double burden of color and class, and were disadvantaged in all occupational categories.

CHAPTER VIII

CONCLUSIONS, STRATEGIES AND IMPLICATIONS FOR THE FUTURE

We conclude that the differences in educational attainment between races and social classes are not due to different evaluations of education. Blacks and lower-class people may value education as much as whites and middle-class men, but they may do so for different reasons. An implication of this is that blacks and lower-class Americans do not have to be taught to appreciate learning. The desire for education exists. In fact, given the relatively low economic return these men receive from higher education, those blacks and lower-class men who pursue a college career may value education even more than white and middle-class students (see Blau and Duncan, 1967, p. 239 for a similar argument).

Our data do not support the argument that the value system of the lower-classes precludes the possibility of social mobility. There does not appear to be empirical confirmation of Walter Miller's speculation that the lower-class environment:

. . . brings them into the world, and it furnishes them the values, the aspirations, and the psychic make-up that low-skill jobs require (e.g., high toleration of recurrent unemployment; high boredom tolerance; high flexibility with respect to work, residence, relational patterns; capacity to find life gratification outside the world of work). (In Liebow, 1967, pp. 227-8)

At the same time, however, it does not seem that the solution to the problem of inequality lies entirely in the opening of social structures that have been previously closed to blacks and lower-class men. The structures must be opened, of course, but if these men do not believe that education can make a significant difference in increasing their incomes, they may not avail themselves of the opportunities that are presented. There may, in fact, be a serious discrepancy between the government's assumptions as to the relationship between education and inequality and the assumptions of some minority group members.

Our data seem to indicate that there is neither a very strong nor very weak relationship between education and income. It appears that government leaders, and many other Americans, have been overly optimistic in their faith in the power of education to affect income. At the same time, perhaps some blacks and lower-class men may have been too pessimistic. Education alone

cannot guarantee everyone high income. However, our data suggest that there is at least a modest relationship between education and income. Educational attainment, therefore, may be of value to some minority group members under certain conditions. In the pages to follow we wish to describe the conditions under which high educational attainment can help to reduce inequality. Our data suggest a number of strategies of success for lower-class and black men -- strategies that we believe may increase the dollar value of education for these men. We further believe that these strategies help to place the potential power of educational attainment into perspective, and thereby de-mystify the relationship between education and income. Limitations of the data restrict the generality of the strategies. It is important, therefore, that we repeat these limitations.

Since our data deal exclusively with young men, it is impossible to determine the extent to which the patterns observed are representative of the experiences of men throughout their careers. We must be cautious in our interpretation of the data since it is possible that the significance of educational attainment changes over a lifetime. A further limitation of our data are the inconsistencies in the observed patterns. These inconsistencies make it difficult to generalize from the relationship between education and income for young men

in our sample to young men in this country. We cannot accept the findings of our data with complete certainty, in other words. As a consequence, we must offer our strategies with the proviso that they may not work for everyone. Our strategies cannot be applied generally, but should be considered on an individual basis. With these limitations in mind, let us present the strategies.

The data suggest at least three different strategies. Since the experiences of young blacks and young lower-class men are somewhat different, we must consider separately the extra handicap of blacks in our discussion. We do this by treating the strategies for blacks as a special case within the larger context of lower-class strategies for success.

First, if high income has greater priority, than high status for a lower-class person, then it pays to receive vocational training. It would seem that an effective way of obtaining the most from this training is to use the interpersonal social network system available to many lower-class men, to seek someone with an "in" into the union that has control over hiring in that craft. The situation is different for a black who wants to learn a trade. First, the vocationally trained individual is not in the highest paying educational category among blacks; black college graduates earn more. However, blacks with vocational training earn more than blacks with only

high school educations. Thus, it pays to receive vocational training, if college is not a realistic alternative. Second, since blacks cannot count on social contacts, at least to the same extent as white lower-class men, to provide the leads to good jobs in the craft industry, they must find the best employment track even before they have learned a skill. To assure a good job in a craft, it would seem important for a young black to find a training program that has a good record of placing their black graduates. The experiences of friends and relatives would be helpful in identifying such training programs. One could also check to see if a training program is affiliated with a local organization of Equal Opportunity Employers. In any case, the point is that blacks are probably better off if they do not leave their search for a job until after they have received vocational training. To protect themselves from racial discrimination and their lack of personal contacts within industry, it is a good idea to receive training at a place that has a reputation of "taking care of its own."

If high status is an important priority, then a college education is a good investment for both blacks and lower-class men. Our data showed that high educational attainment was related to high social status, independent of race and social class. But high educational attainment did not guarantee blacks equal income with whites, nor

did it guarantee lower-class men equal income with middle-class men . However, the income of blacks with college educations is not in the same position vis-a-vis less educated blacks, as the income of college educated lower-class men vis-a-vis the less educated within their social group. That is, blacks with college educations have the highest incomes of all blacks. College seems to assure not only high status to blacks, but the most money they can earn as well. If a black man wants to earn as much as he can, in other words, he has no other choice but to go to college. The lower-class man, on the other hand, has a choice. While college assures him high social status, it does not assure him of the highest possible income for a person of his background. Vocational training and employment in a craft seems to offer the highest earnings. Under the present conditions, therefore, a college education seems to be most appropriate to a man from lower-class origins whose major goal is to raise his social status.

However, there may be blacks who would want to earn as much with a college education as whites do. And many lower-class men might want to make a college education as financially profitable as possible. In these cases, the men must be aware of the ways to circumvent discrimination within professional and white collar

occupations. Several suggestions can be offered that may help to equalize incomes between races, and between classes, for men who want to increase the odds for their success at the highest level of educational attainment. One possibility would be to consciously cultivate positive working relations with teachers, counsellors and other superiors throughout one's college career. This should not be taken to mean a cynical and manipulative attempt to buy friendships with influential people. However, one of the facts of professional life seems to be that social contacts make a difference. They, therefore, must be actively developed as part of the process of receiving an education. For example, it is important for students to participate in class discussions, in a spirit of intellectual curiosity and professional camaraderie with teachers and peers. It is my belief that teachers more easily identify with those students who willing engage in the day to day interactional process of a class than those who do not. Further, it seems only natural that teachers are probably more eager to help the students with whom they can identify. Thus, in order to develop the proper relations, within academia or any profession for that matter, a young person must consciously acknowledge the attitudes and values of the system to which he aspires. This is not necessarily a matter of conforming, nor of losing one's

identity in a group, but it is important to appreciate the power of the group's values over the individual. It is important to be sensitive to these values and to be aware of their impact on success within a chosen field. To attempt to place the individual's interests above the interests of the group displays an attitude that is not only inappropriate, but also self-defeating. As Crane (1969) notes, for example, the lower-class student who insists upon viewing knowledge from a short-term perspective of immediate gratification shows a disregard for the values of his colleagues, and threatens his own chances for advancement in the system (see p. 44). It is in the best interests of the lower-class and black man to be conscious of the potential for conflict between his attitudes and the attitudes of the larger group. A reconciliation of these differences is possible as long as the individual is aware of the limits of the larger system, and is also aware of the consequences of overstepping those limits. This is not an easy task to accomplish but it can be done.

These strategies suggest two areas for future work: (1) research, and (2) implementation.

Additional research is needed to support our interpretations. We need to know more about the variation in the meaning of high educational attainment for men of different social origins, i.e., as either a status

gaining or status maintaining mechanism. This information might explain, in part, variations in income between men of different social origins within high status occupations. In the last chapter we said that there may be differences in attitude toward work and achievement within sub-groups of the lower-class. These differences could account for the fact that some black and lower-class men are more successful than others. In other words, it would be most helpful if we knew about deviant cases. What is there about successful blacks and lower-class men with college educations that distinguishes them from other men of their backgrounds with similar educational credentials? I think that an answer to this question will help us to understand better the dynamics of discrimination and to suggest detailed strategies to counteract its effects.

We also need to know why the percentage of black and lower-class men who attend college is lower than the percentage of white middle-class men. We have argued that black and lower-class men probably value education as much as anyone but decide that an investment in time, money and energy in college is not worth it. Their decision may be based, in part, on an objective assessment of the potential of educational attainment to increase their earnings. Our conclusions, however, contradict some of the findings of other investigators.

According to Jencks, for example, attitude toward education accounts for differences in attainment. Lower-class men receive less education than middle-class men because they do not value educational attainment to the same degree (see p. 105). Additional research on the process by which black and lower-class men decide about college attendance, might help to resolve this contradiction. The low aspirations of the lower-class men, in Jencks' study, may be related to their realization that education does not pay them as well as it does middle-class men. Data are needed to answer the question: to what extent are young blacks and lower-class men aware of the objective conditions of the labor market, and how does their knowledge (or lack of it) affect their decisions about college? In general we must know the conditions under which the decision not to attend college is made, since so many black and lower-class men say that they want to attend college, but never do.

The task of implementing these strategies must be approached cautiously. As noted, the limitations of the data restrict the generality of our strategies. It would be inappropriate, for example, for us to discourage a young lower-class man from attending college because the data indicate that he can possibly earn more money working at a trade. Though the short-term effects of education on income for young lower-class men are not

great, there may be a reversal of this pattern in later stages of their careers. As Granovetter noted, the significance of family ties for young professionals is greater than it is for those with thirty years of experience (see p. 96). If this is true, then perhaps it would pay for a young lower-class person to enter the profession of his choice with the hope that over the long-run his earnings will improve as his on-the-job contacts develop. Though limited, our strategies are important because they help young blacks and lower-class men to know what their options are. With the guidance of teachers, counsellors and community leaders some students might be able to use these strategies to plan their futures. The priorities of the individual, however, will determine to what extent any of these strategies are appropriate to their needs. Hopefully, these strategies add to an understanding of how discrimination operates within an occupation. With this knowledge, it may be possible to lessen the feeling of impotence in the face of overwhelming odds, or bitter resignation to a future that is less than what was hoped for -- a feeling that apparently is shared by many minority group members (see p. 113).

Our strategies alone, however, will not change the situation a great deal. One significant conclusion of this study seems to be that any program that attempts to increase the earnings of minorities, through education,

can have only limited success. Since there is only a modest relationship between education and income, at least for the young men in our study, we cannot expect to achieve equality through schooling alone. While the impact of education on inequality appears to be more modest than government leaders would have us believe, it may be stronger than many lower-class and black men think. Our goal in this study has been to show that the strength of the relationship between education and income varies with occupation and social origin. The impact of education on income is different under various social conditions. Knowing this, perhaps educational programs can be designed that do not assume more of education than is possible, but that can provide some minority group members with strategies that may help to increase their chances for financial success.

APPENDIX A

ADDITIONAL TABLES

TABLE A.1

Income and Race*

<u>Income</u>	<u>Whites</u>	<u>Blacks</u>
\$0-499	5% (72)	10% (60)
\$500-999	4% (62)	13% (76)
\$1,000-2,499	16% (225)	28% (159)
\$2,500-4,999	27% (375)	33% (193)
\$5,000-7,499	33% (461)	13% (76)
\$7,500-9,999	11% (152)	2% (11)
\$10,000-16,000	4%	.7% (4)

*Chi-square significant at .001 level.

TABLE A.2
Occupation and Race*

Occupation	Whites	Blacks
Professional	19% (244)	4% (19)
White Collar	14% (177)	10% (50)
Craftsmen	21% (268)	12% (63)
Blue Collar	46% (595)	75% (386)

TABLE A.3
Occupation and Father's Occupation **

Son's Occupation	Father's Occupation			
	Professional	White Collar	Craftsmen	Blue Collar
<u>Professional</u>	27% (56)	23% (19)	17% (54)	11% (46)
<u>White Collar</u>	18% (36)	23% (19)	12% (30)	9% (38)
<u>Craftsmen</u>	21% (42)	14% (12)	22% (58)	16% (64)
<u>Blue Collar</u>	32% (65)	38% (32)	48% (126)	60% (244)

*Chi-square significant at .001 level.

**Chi-square for uncollapsed table with 81 degrees of freedom significant at .001 level.

TABLE A.4
Income and Father's Occupation*

<u>Income</u>	Professional	White Collar	Craftsmen	Blue Collar
<u>\$0-499</u>	3% (7)	4% (3)	5% (11)	5% (23)
<u>\$500-999</u>	5% (10)	5% (4)	8% (19)	9% (39)
<u>\$1,000-2,499</u>	16% (34)	19% (16)	20% (45)	21% (88)
<u>\$2,500-4,999</u>	24% (51)	29% (24)	26% (60)	29% (121)
<u>\$5,000-7,499</u>	32% (67)	32% (27)	31% (72)	25% (105)
<u>\$7,500-9,999</u>	13% (27)	8% (7)	7% (16)	7% (28)
<u>\$10,000-16,000</u>	6% (14)	4% (3)	4% (8)	2% (10)

*Chi-square for uncollapsed table with 54 degrees of freedom significant at .001 level.

TABLE A.5
The Impact of Certification On
Income Controlled by Years of Employment

	<u>1 Yr or Less</u>		<u>2 Years</u>		<u>3 Years</u>		<u>4 Years</u>		<u>5 Years</u>	
HS 1	65%	(15)	58%	(8)	58%	(15)	85%	(12)	55%	(5)
HS 2	35%	(13)	57%	(14)	87%	(21)	72%	(7)	115%	(11)
HS 3	51%	(10)	94%	(15)	89%	(17)	119%	(13)	146%	(12)
HS 4	16%	(62)	95%	(68)	103%	(73)	134%	(70)	132%	(68)
Col 1	58%	(11)	88%	(13)	105%	(6)	115%	(4)	185%	(9)
Col 2	50%	(5)	125%	(7)	193%	(6)	183%	(4)	190%	(5)
Col 3	65%	(2)	113%	(5)	145%	(3)	188%	(1)	153%	(1)
Col 4	72%	(10)	148%	(13)	150%	(11)	222%	(7)	140%	(5)

	<u>6 Years</u>		<u>7 Years</u>		<u>8 Years</u>		<u>9 Years</u>	
HS 1	113%	(7)	113%	(3)	105%	(12)	110%	(14)
HS 2	105%	(12)	123%	(8)	141%	(9)	138%	(22)
HS 3	135%	(12)	116%	(13)	156%	(7)	168%	(16)
HS 4	136%	(63)	144%	(63)	157%	(53)	166%	(24)
Col 1	158%	(7)	158%	(3)	100%	(1)	200%	(2)
Col 2	154%	(4)	130%	(1)	246%	(1)	0	
Col 3	0		0		0		28%	(1)
Col 4	250%	(2)	0		0		0	

*This is the only instance in which the fourth year added more to income than any other year (N>5). The increase was not significant at the .05 level, however,

TABLE A.6
The Impact of Certification
On Income Controlled by Race

	Whites	Blacks
HS 1	88% (84)	50% (59)
HS 2	110% (102)	70% (75)
HS 3	120% (119)	63% (55)
HS 4	118% (630)	78% (200)
Col 1	*125% (97)	98% (13)
Col 2	115% (65)	115% (12)
Col 3	118% (28)	40% (2)
Col 4	150% (83)	112% (9)

*This difference is not significant at .05 level.

TABLE A.7
The Impact of Certification On
Income Controlled By Social Background

	Professional	White Collar	Craftsmen	Blue Collar
HS 1	75% (5)	42% (2)	78% (14)	70% (35)
HS 2	93% (10)	128% (4)	120% (25)	80% (47)
HS 3	88% (13)*	123% (11)	110% (26)	93% (36)
HS 4	123% (85)	98% (40)	123% (136)	103% (182)
Col 1	125% (25)	127% (5)***	135% (17)**	130% (21)
Col 2	125% (17)	110% (6)	132% (11)**	85% (10)
Col 3	128% (17)**	128% (2)	113% (1)	108% (4)
Col 4	173% (21)	158% (7)	168% (12)	115% (15)

* Not significant at .05 level.

** Significant at .05 level.

*** Not significant at .05 level.

**** Not significant at .05 level.

APPENDIX B

Some Problems of Secondary Analysis

For me secondary analysis has been simultaneously a productive and a frustrating experience. On the one hand, using the Department of Labor study has been an invaluable saving in time, money and energy in the collection, coding and computerizing of the data. It has provided the opportunity to test my speculations as to the process of discrimination on a relatively large cross-section of young men in this country. Further, in the process of analyzing these data problems with the conceptualization of phenomenon in earlier research became clear and alternative procedures for the future emerged.

However, secondary analysis has had considerable drawbacks also. Because I have been restricted to secondary analysis I have raised more questions than I have answered. Large gaps in data and interpretation remain, and there is the feeling that the unexplained portion of the problem of inequality is still greater than the part explained. It is as if we have begun a complicated jig-saw puzzle and pieced the border together, but the middle of the picture is missing.

We have a general outline of the discrimination process and the effects of class and race related differences in social contacts, attitudes toward work and personal style. But that is all. There is no depth or detail to the picture of reality because so much is unknown. Here we describe what is missing in these data, and some of the problems encountered using data that, while relevant to our study, were collected by others for different purposes. We begin with a discussion of missing data.

There were no data on the experiences of men in the labor market. Since discrimination is a social process we need qualitative and quantitative data on interactions between employees and employers. Case history accounts of mens' careers, including information on occupational choice, how jobs were obtained and respondents' perceptions of opportunities for advancement within occupations, attitudes toward work and descriptions of personal style would be crucial for a full understanding of the discrimination process. We also know little of what employers bring to the job market in regard to attitudes toward work, attitudes toward men of various races and social classes, and how employers determine which applicants are best suited for particular jobs. In other words, there are no data on how the qualities that employees and employers bring to the job market interact to produce discrimination.

In addition, there were no detailed data on types of occupations. We could only use broad categories of occupation. This forced our discussions of income differences within occupations to be vague. It would have been most helpful had we been able to distinguish, for example, various occupations within the professional category. In this way, it would have been possible to ascertain the extent to which income differences between white and black professionals were due to occupational dissimilarities, e.g., black teacher compared with a white physician.

Data on ethnic background are missing, and there was no information on women in this sample. These are serious omissions because race and social class are too broad in scope to reflect accurately important differences in social contacts, attitudes toward work and personal style in the population. Within social classes, for example, there is probably considerable variation in these factors, related in part to sex and ethnicity. We have to gloss over these differences, and thereby lose richness and depth in our analysis of discrimination.

Another serious problem of these data center around the conceptualization, collection and coding of educational attainment. These data, along with all studies to date of which I am aware, equate the fourth year of schooling, at each level, with the acquisition

of a degree. This confounds the data, making it impossible to determine accurately the impact of certification on income. That is, the fourth year of schooling and the acquisition of a degree are not necessarily the same. It is possible, for example, for an individual to have attended school, at either the high school or college level, for four years without having graduated. Therefore at present, any statement on the effects of certification on income cannot be totally accurate. Hopefully our use of the data bring us closer to a correct determination, but they are still approximations. Had we collected the data ourselves, there would have been a clear separation between graduates and non-graduates with four years of schooling at each level.

There were also difficulties with missing data on vocational training. We know little about the different types of vocational training that men in our sample have received. Had we collected the data ourselves we would have distinguished various classifications of vocational training more carefully than was the case. For example, we would have collected specification information on the nature of training received and the type of job to which the training has been applied.

In addition to problems with missing data, there were also problems with using data collected by others

for different purposes. The most significant difficulty was that the U.S. Department of Labor sampled its population by age. Their sample was approximately 5,000 men between the ages of 15-25. Our interest, however, was to study men who were out of school and employed. In other words, we used only a percentage of the men in the government study, 40% of the total. Had we collected the data, the men would have been sampled by schooling and labor market status. This would have allowed for a larger base. Our sample size, 1982, though relatively large, was too small for refined analysis. Cell frequencies declined rapidly as the number of variables taken into account in a table increased. This led to the type of situation mentioned earlier. In Chapter IV we found it necessary to use data from 1969 because there were no men in the 1967 sample who had both a college degree and vocational training. Nor was it possible to study the income of post-graduates, since there were too few of them in either 1967 or 1969. The problem with sample size also precluded the simultaneous analysis of the effects of race and social background on income or educational attainment. There would have been too many empty cells had we attempted to examine their combined impact on these dependent variables.

The analysis was further frustrated by our inability to take advantage of the longitudinal design of the U.S.

Department of Labor study. ID numbers of respondents differed from year to year; as a result, we could not trace the changes in individual behavior and attitude over time. Each wave, in other words, had to be studied as a separate unit of analysis. In itself, this would not have been a serious problem; however, the data were collected and computerized so that most background data were located on the tapes of the earlier waves and most attitudinal data appeared in the later waves. There was little overlap in data on background and attitudes from year to year. Our analysis was stymied. We could not incorporate important attitudinal data that appeared in the later years of the study because background data for respondents were missing in those years. Nor could we retrieve data across years because ID numbers did not match. As a consequence we lost valuable information about respondents. For example, in 1968 respondents were asked their feelings about the effects of luck on their financial success. We could not determine social class differences along this variable because no social background data were recorded in the 1968 wave, and there was no way to identify those individuals who were interviewed in 1968 and in 1967. If these men could have been identified, it would have been possible to determine the relationship between social background and attitude toward

luck, since 1967 was a year in which data on social background were recorded.

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