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ABSTRACT

This analysis examined the major differences in patterns of occupational achievement of blacks and whites during the first decade of labor force experience after last leaving full-time schooling. In large part, the analysis was designed to examine differences in the processes underlying the attainment of two dimensions of achievement, status, and income. The analysis showed directly what the earlier separate analyses of status and income had implied: for whites, status is the dimension of occupational achievement to which background resources are more fully directed, while for blacks, income is the dimension toward which these resources are utilized. The difference between blacks and whites holds both for the initial job and for the job held 10 years later. The strategy of whites--using background resources to obtain jobs in which status is higher relative to income--has long-range implications not just for status but for income, to a much greater extent than is true for blacks. This difference between blacks and whites in the utility of background resources is especially evident in the case of educational attainment. A related study is available as VT 015 025. (Author/BH)

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REPORT NO. 123

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WHITE AND BLACK CAREERS DURING THE FIRST TEN YEARS OF WORK EXPERIENCE: A SIMULTANEOUS CONSIDERATION OF OCCUPATIONAL STATUS AND INCOME CHANGES

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INTRODUCTORY STATEMENT

The Center for Social Organization of Schools has two primary objectives: to develop a scientific knowledge of how schools affect their students, and to use this knowledge to develop better school practices and organization.

The Center works through five programs to achieve its objectives. The Academic Games program has developed simulation games for use in the classroom. It is evaluating the effects of games on student learning and studying how games can improve interpersonal relations in the schools. The Social Accounts program is examining how a student's education affects his actual occupational attainment, and how education results in different vocational outcomes for blacks and whites. The Talents and Competencies program is studying the effects of educational experience on a wide range of human talents, competencies, and personal dispositions in order to formulate--and research--important educational goals other than traditional academic achievement. The School Organization program is currently concerned with the effects of student participation in social and educational decision-making, the structure of competition and cooperation, formal reward systems, effects of school quality, and the development of information systems for secondary schools. The Careers and Curricula program bases its work upon a theory of career development. It has developed a self-administered vocational guidance device to promote vocational development and to foster satisfying curricular decisions for high school, college, and adult populations.

This report, prepared by the Social Accounts program, is part of the program's continuing exploration of the differences in the labor market experience of black and white men.

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This paper is part of a research program in Social Accounting initiated by Peter H. Rossi and James S. Coleman. We would like to express our appreciation to Page Clark for her assistance in data processing.

Abstract

This analysis examined the major differences in patterns of occupational achievement of blacks and whites during the first decade of labor force experience after last leaving full-time schooling. In large part, the analysis was designed to further examine differences between blacks and whites observed in earlier work; i.e., that the processes underlying the attainment of two dimensions of achievement, status and income, may be different for the two groups.

The results of canonical analysis showed directly what the earlier separate analyses of status and income had implied: for whites, status is the dimension of occupational achievement to which background resources are more fully directed, while for blacks, income is the dimension toward which these resources are utilized. The difference between blacks and whites holds both for the initial job and for the job held ten years later.

A second canonical correlation showed that the strategy of whites -- using background resources to obtain jobs in which status is higher relative to income -- has long-range implications. These resources are

valuable at the later time not just for status but for income, to a much greater extent than is true for blacks. This difference between blacks and whites in the utility of background resources is especially evident in the case of educational attainment.

Introduction

In two recent analyses, we have focused on the occupational achievement of black and white men during the first ten years of occupational experience after last leaving full-time education (Coleman, Blum, and Sørensen, 1970; Blum, 1971). The first analysis used the status of the first and last full-time jobs during that period as a measure of occupational achievement. The second analysis used the income of the jobs held at the beginning and end of the first decade of work. The analyses highlighted differences in both the levels of resources which whites and blacks bring to the labor market (such as background characteristics and educational attainment), and the efficacy of those resources in bringing either status or income to the individual. In both previous papers, black-white differences were found in the relation between background characteristics and the measures of occupational achievement. Most important, comparing the two analyses suggested that the processes underlying the attainment of the two aspects of achievement, status and income, may be different for blacks and whites. This paper explores further these differences in the labor market experience of black and white men. First, however, we need to describe the data and methods of analysis as well as to summarize the previous work.

The Data

The data on which this and previous papers are based are retrospective life histories collected from one age cohort in the population: men who reached the ages of 30 to 39 in 1968. Information was collected, from the respondent's age 14 to the time of interview, on events and experiences in several main aspects of life: education, occupational history, family and residential history. In addition, information was collected about the individual's parental education and father's occupation when the respondent was 14. This information is longitudinal in character, although collected retrospectively. Data processing techniques developed for this study give us access to information in any life area at designated time points, e.g. a specific age or date or in relation to a given event. In addition, it is also possible to obtain information about the duration of a specific event or experience as well as the number of occurrences. For example, the present analysis is centered about two specific jobs: the first civilian full-time job after last leaving full-time education and the job held ten years later. The data include information about the status of the job, its income, the location in which the respondent lived while holding that job, and other attributes. In addition, the dates of

certain events, such as military service and marriage, and frequency of occurrence of events and activities, such as part-time education, were recorded.[1]

The universe for the two samples in this study is the total population of black and white males 30-39 years of age, in 1968, residing in households in the United States. Individuals were selected by standard multi-stage area probability methods. The basic data consist of information about 738 blacks and 851 whites.[2] In this paper, the prestige scores from the 1964 National Opinion Research Center studies are used as a measure of occupational status (Siegel, 1971). Adjusted yearly income, in 1959 dollars, is the measure of income (Blum, 1971).

Summary of Previous Analyses

The first paper (Coleman, Blum, and Sørensen, 1970) examined the factors affecting initial occupational status and growth in occupational status over 10 years. It was found, as shown in Table 1, that the initial status of blacks is about 5.6 points below that of whites. The later status of blacks is about 11.00 points below that of whites, representing

Table 1 About Here

an average gain of 9.2 points or 30.8% for whites and only 3.9 points, or 15.9% for blacks. Consequently, attention was focused on two questions:

1. For whites and blacks separately, what factors are the most important determinants of occupational status?

2. What are the major sources of the observed difference in initial occupational status and growth in occupational status for whites and blacks?

The results of regression analyses, summarized in Table 2, help answer the questions raised above. The dependent variables in these

Table 2 About Here

regressions are the occupational status of the initial job and the occupational status of the later job. When these are regressed on those background characteristics found to be important in preliminary work, we find that the pattern of the determinants of initial and later occupational status is similar for both whites and blacks, with the most important determinant being educational level. The major differences between whites and blacks are (a) the continued impact of father's occupational status for whites (but not for blacks) at the time of the later job, and (b) the greater importance of education for the initial job status of whites than

for blacks. In addition, the amount of variance (R^2) explained by these variables is greater for whites at both time points; the difference, however, is more pronounced at the later time.

Using the results in Table 2, the observed difference between whites and blacks in average occupational status, at both the initial job and the later job, was partitioned into three components.[3] The first component is the portion of the total difference in status due to differences in the average levels of the independent variables, e.g. differences in mean education between the two groups. The second component is the portion of the total difference due to the differential effects of these variables, e.g. the differential "worth" of a unit of education in obtaining occupational status for whites when compared to blacks. The third component is a remaining difference in status which is unexplained, i.e., due to unmeasured variables. The results of the decomposition are summarized in Table 3.

Table 3 About Here

The results show that at the first time point differences between whites and blacks in the levels of various background resources account

for 3.26 status points of the total difference in status of the first job. Ten years later, the resource differences account for 4.46 status points of the total difference. However, since the actual gap in status points has increased, differences in levels were a larger percentage of the initial status difference (58.3% vs. 40.7%). The differential efficacy of these resources, in actual status points, increases somewhat over the ten year period; but explains a lower percentage of the difference over time. The differential efficacy of the independent variables accounts for 1.87 points of the total difference in status of the first job (33.5%) and 1.97 points of the total difference in status of the job held ten years later (18.0%). Further analysis indicates that it is the stronger impact on later job status of first job status that creates the difference.

The major portion of the observed difference at the later time, 4.51 status points, remains unexplained. (Further analysis in Coleman, Blum, and Sørensen [1970] identified various events and experiences during the ten year period which explained some of the differences in status. Those details, however, will not be reported here.)

The differences between blacks and whites in occupational status appeared rather straightforward. In a second paper, a second dimension

of occupational achievement was explored, income of the occupation (Blum, 1971). This analysis was designed to examine questions analogous to those stated above for occupational status but using the yearly income of the first job and the yearly income of the job ten years later as dependent variables. This analysis showed a different pattern of black-white contrasts than that for status.

Table 4 shows the mean income for both groups at both points in time and is comparable to Table 1. As in Table 1, whites show a greater change than blacks over the ten-year period. The first differences between the two groups in the determinants of the two dimensions of occupational achievement, status and income, appear in Table 5. This

Table 4 About Here

table shows the standardized regression coefficients from regression equations analogous to those for occupational status, reported in Table 2. The only differences in the variables included in these equations are two income adjustment variables, residence at the time a job was held (North vs. South) and the number of months in which the respondent received remuneration-in-kind during the earning year.

Table 5 About Here

In contrast to coefficients shown in Table 2, the first two columns of Table 5 show that education has a weaker relationship to initial income for whites than for blacks. Also, the total amount of variance explained by these background variables is less for whites than for blacks, again in contrast to Table 2. However, ten years later, education shows a stronger relation to income for whites than for blacks, and the difference in the amount of variance explained by these variables has decreased between blacks and whites.

The comparison between results for income and those for status can be extended by examining for income, as we did for status, results from a decomposition of the observed difference between blacks and whites. Table 6, analogous to Table 3, shows the portion of the total difference due to differences in levels of background resources, the portion due to differences in efficacy, and the portion due to unmeasured variables. For the income of the first job, the decomposition suggests that the black

Table 6 About Here

resources are more efficacious than those of whites (as shown by the -$183), and it is only the greater average resource levels of whites that counteract this to create an initial income difference in favor of whites. When the income of the later job is examined, the picture is quite different. Apart from the increasing gap between the two groups, the efficacy of white resources is now greater. That is, whereas black resources were more efficacious at the first time point, white resources are more effective at the later time.

If we compare the first two columns of Tables 3 and 6, we see that the background resources are more effective in securing initial income for blacks, and are more effective in securing initial status for whites. This suggests that income is the more important dimension of occupational achievement for blacks, toward which their education and other background resources are utilized, while occupational status is the more important dimension for whites. The background variables measured here account for more variance in income than in status for blacks (36.3% vs. 21.5%), while they account for more variance in status than in income for whites (28.1% vs. 24.8%).

This contrast led, in an earlier paper (Blum, 1971), to the conjecture that whites are applying their background resources toward status rather

than income in obtaining their first job after the end of full-time schooling, and blacks are applying their background resources toward income rather than status. The patterns in the right-hand side of Tables 2 and 5 (coefficients for the later job) suggest that the strategy of whites, if it is a strategy, is more successful than that of blacks. The variance accounted for by these resources, both in income and in status, rises more for whites; the principal background resource, education, shows a higher relation for whites to later income than it did to initial income. In addition, the coefficient for education, in both the equations for later income and later status, is higher for whites than it is for blacks. Also, as Tables 1 and 4 show, the percentage increase in status and income over the ten years is much higher for whites than for blacks.

In the income paper it was suggested that whites are in fact interested in income as well as status, but are using a long-range strategy of emphasizing the status of their early job, with the expectation that the job status will bring high income in the long run. This conjecture was tested by examining the degree to which initial status was a determinant of later income for whites. This test showed that initial status does have a relatively strong effect on later income, but that initial

income is not important for later status. The same test for blacks showed that initial status is much less important for later income than is true for whites, and that initial income is not important for later status.

The previous analyses then, leave us with a partially-tested hypothesis that whites and blacks may be emphasizing different dimensions of occupational achievement when they use their background resources to obtain an initial job. Furthermore, if there are such strategies, the strategy of whites has a greater long-term payoff in both job status and income. These analyses, however, investigated the problem only from the perspective of blacks and whites, without consideration of processes in the labor market itself. In addition, previous analyses considered the two dimensions of occupational achievement, status and income, separately. The purpose of this paper is to explore further the conversion of individual resources by simultaneously considering status and income, and by describing labor market processes more systematically.

Simultaneous Consideration of Income and Status

In the previous work, the emphasis was on the resources the individual brings to the job market. Implicit in the work was the assumption that

individuals attempt to maximize their resources in obtaining jobs, and that they can do so without severe constraints. This formulation, however, did not take into account the fact that employers, in trying to fill job vacancies, attempt to maximize their resources to obtain employees. What is being suggested here, then, is a more symmetric description of the labor market process: the individual brings certain resources to the labor market, which he attempts to use to obtain the "best" job he can. Similarly, jobs have certain desirable attributes, such as status and income, which an employer uses to obtain the "best" employee he can get. What is seen as the best job may differ from man to man, and what are seen as the best resources of individuals may differ for different groups of jobs. Our problem is to see, empirically, just how the matching between attributes of individuals and attributes of jobs operates.

The most appropriate analytical technique with which to approach the problem is canonical analysis. This method of analysis, developed by Hotelling (1935), can be thought of as a generalization of regression analysis in that it allows for more than one dependent variable in an analysis, forming the best linear combination of the two or more variables to be considered jointly as dependent. "Best linear combination" means that linear combination which has the highest multiple correlation with

the best linear combination of the independent or predictor variables. There is, in fact, no distinction between "dependent" and "independent" variables in the analysis. Instead, there are variables on the left side of the equation, and variables on the right. Henceforth, we will treat the job's attributes as the left variables, and the individual's attributes as the right variables. The two properties of jobs are status and income. The individual's attributes, on the right, are the background resources of the individual utilized previously in the separate analyses.[4]

In applying canonical analysis to this problem, the important question becomes just what linear combination of job attributes and what linear combination of individual attributes maximizes the correlation. The weights in the linear combination for the left attributes can be seen as the relative importance that the two attributes of the job have in attracting men, while the weights in the linear combination for the right attributes can be seen as the relative importance that different attributes of prospective employees have in obtaining jobs.

The conceptualization suggested above for the labor market process, i.e. a matching between jobs and individuals, is subject to all the caveats usually associated with multivariate statistical procedures, due

principally to the correlation of measured variables with unmeasured variables that play a part in the real situation.

Results of the Canonical Analysis

A canonical analysis was carried out for initial job and job ten years later, using as attributes of the individual the independent variables listed in Tables 2 and 5, and as attributes of the job its status and income. Quite clearly, some desirable attributes have been omitted on both sides of the equation; this point should be kept in mind when interpreting the results.

The set of canonical weights associated with the job attributes for whites and blacks at the initial and later times are given in Table 7.

Table 7 About Here

For the initial job, these weights confirm the inferences made earlier: for whites, the weight for status is higher than that for income; for blacks, the weight for income is nearly twice that for status.[5] In terms of the interpretation of the labor market proposed earlier, the status attribute of the job attracts whites with higher resources, and the income attribute of the job attracts blacks with higher resources.

For the second job, the same pattern of differences between the two groups remains; i.e. for whites the weight for status is higher than that for income, while for blacks the reverse is true. The weights for the relative attractiveness of job attributes of the later job do not support the earlier conjecture about the importance of income at the later job for whites. Our hypotheses would be better confirmed if income had a higher weight for whites, in comparison to the weight for prestige, for later job. That is, if in fact whites are interested in maximizing later income rather than status, then income growth (which is measured by including later income on the left when initial income is on the right) should have a higher weight than later status, a weight in part due to the initial job status, which is on the right (i.e., at the later time, is a resource of the individual). The major point, however, is confirmed. Status aspects of a job attract more qualified whites and the income aspects of a job attract more qualified blacks.

We can now ask the complementary question: what is the relative importance of various resources and experiences of individuals in the matching process between men and jobs, and what are the differences between whites and blacks? Table 8 shows the first canonical weights for the individual variables in the analysis, on the right side of the canonical equation.

Table 8 About Here

The most important individual attribute is educational attainment. The weight is higher for whites than for blacks, and higher for initial occupational attainment than for later attainment. For both groups, the next highest weight is for military service prior to the initial job. In this case, the weight is higher for blacks. Next in importance is marriage prior to the initial job for whites and residence in the North for blacks.[6]

The importance of educational attainment in the weights for the later job was noted above. In addition, several of the other individual attributes have high weights. Most important are the weights for the status and income of the first job. For whites, first job status is more important than initial income; for blacks, it is the reverse. These weights imply that for income and status growth of the occupation of whites, initial job status is a more important resource than is initial income, while for income and status growth for blacks, initial income is the more important resource. In this equation, the status and income of the first job represent the individual's initial occupational achievement which can

be utilized to obtain subsequent jobs. The weights suggest that after ten years of labor force experience, initial status is less important for blacks than for whites in bringing them the later jobs they desire.

At the time of the later job, living in the North is still important for blacks but inconsequential for whites. Marriage before the first job has not lost its importance for whites and is considerably more important for blacks at the later time. An individual attribute which was important when first entering the civilian labor force, military service, is now almost zero for whites. For blacks, this attribute is still important, although the weight is about a third of its value at the time of the first job.

This examination has, for the most part, confirmed earlier inferences about the different relative importance of status and income for whites and blacks as dimensions of achievement for first job, and has also shown that the same relative importance holds ten years later. The analysis has not been able to clarify the apparent greater success of whites in the initial job which the previous papers showed. In addition, the analysis has not distinguished between those attributes of individuals which are more important in maximizing income and those which are important in maximizing status. Put another way, there are jobs which have high status but

low income and those which have high income and low status. In the next section, we will see if background resources can be isolated which are most highly related to jobs with high status relative to income or which are more highly related to jobs with high income relative to status.

Differential Importance of Background Resources for Income and Status

The method of canonical analysis used in the preceding section generates as many orthogonal combinations of variables as there are dependent variables. In the present case, there are two orthogonal combinations. The first one is a weighted sum of income and prestige which was used to analyze the way in which a matching between job and individual takes place. The second combination, based on a set of residuals from the first, shows which background attributes are most highly related to jobs with high status relative to income, and which are highly related to jobs with high income relative to status.

The weights in the canonical correlation of these residuals (the second canonical correlation) for both sets of variables are given in Table 9. (One set, as before, consists of the job attributes; the other, of individual attributes.) If we first look at the weights for income and status, we find that they are polarized, with income having a

negative sign and status a positive sign. The background attributes have positive signs if their contribution is to jobs with high status and low income or negative signs if their contribution is to jobs with low status and high income.

Table 9 About Here

For the first job, education is the background resource most strongly associated with high-status, low-income jobs. The size of the coefficient for whites (.616) in comparison to blacks (.318) shows that the use of education to obtain high-status low-income jobs is more pronounced for whites than for blacks. Or, we can say that high-status low-income jobs recruit whites whose educational attainment is high to a greater extent than similar jobs attract blacks with a high educational attainment. This difference in the utilization of education by whites and blacks is precisely what has been indirectly suggested in our earlier work.

By the time of the job held ten years later, the relative importance of education has changed drastically. For blacks, a high education still means a job whose status is high relative to its income. In fact, the

weight for education is higher at the time of the later job than at the time of the initial job. For whites, however, this tendency has reduced very sharply. Education is still associated with a job whose status is higher relative to its income; however, the size of the coefficient is considerably smaller (even lower than the coefficient for blacks at the time of the first job).

The pattern observed for education suggests that whites with high education obtain an initial job that has high status and low income. However, their income grows over the first decade of work. Blacks with a high education less often get jobs in which status is high relative to income; when they do get such jobs, income growth does not follow as it does for whites.

An indirect way to see if the inferences above are plausible is to look at changes in status and income for whites and blacks of different educational levels. Figure 1 shows the mean yearly income by educational attainment for both groups.[7] The graph shows that the change in income is much greater for whites than for blacks, and that this differential growth is especially evident for the two groups with the highest education (some college and college graduate or more). Figure 2 shows the mean occupational status by educational attainment groups and age. In this

figure, there is no great black-white difference in status growth for different educational groups (the major difference, of course, being the lower status levels of blacks).[8] If the figures were superimposed on each other, they would show in a more complicated form the differences

Figures 1 and 2 About Here

in the labor market experience of blacks and whites which are suggested by the four coefficients for educational attainment in Table 9. That is, education is much more related to a high-status low-income initial job for whites than for blacks (.616 to .318), but less highly related to a high-status low-income job at a later time (.231 to .521).

Several of the other coefficients in Table 9 require comment. Residence in the North is strongly associated with high income relative to status, as is implied by the existence of higher wages in the North for similar jobs. The importance of northern residence dimishes for whites over time, but not for blacks. It may be that discriminatory patterns are such that while it is better (in terms of income) for both groups to start their careers in the North, blacks have to remain there

for career advancement while whites can afford to be less geographically bound. As would be expected, initial income and initial status are associated respectively with later jobs that have income relatively higher than status and later jobs that have status relatively higher than income. For blacks, the size of these coefficients is about equal; for whites, the coefficient for income is higher than that for status. It may be that whites whose initial income is high relative to status are more likely to remain in such jobs than men whose initial status is high relative to the income of that job.

Father's occupational status, in all cases except later job for blacks, is associated with high status relative to income. The pattern for father's education is exactly the reverse, but this may be a statistical artifact created by the high correlation between father's job status and education.[9]

Summary and Conclusions

This analysis examined the major differences in patterns of occupational achievement of blacks and whites during the first decade of labor force experience after last leaving full-time schooling. In large part, the analysis was designed to further examine differences between blacks

and whites observed in some of our earlier work; i.e., that the processes underlying the attainment of two dimensions of achievement, status and income, may be different for the two groups.

The results presented in this paper are based on canonical analysis, an analytic technique which allows for the simultaneous consideration of two or more variables on one side of the equation and another set of variables on the other side. Here, two attributes of a job, status and income, were taken as one set and various resources and attributes of the individual, such as education, were taken as the second set of variables. We suggested that the weights of the first canonical correlation for the job attributes could be interpreted as the relative importance that the different attributes of a job have in attracting men with the best backgrounds, and that the weights of the first canonical correlation for the individual attributes indicate the relative importance of the resources of individuals in obtaining good jobs. The results showed directly what the separate analyses of status and income had implied: for whites, status is the dimension of occupational achievement to which background resources are more fully directed, while for blacks, income is the dimension toward which these resources are utilized. The difference between blacks and whites holds both for the initial job and for the job held ten years later.

In addition, it is clear from the second canonical correlation that the strategy of whites -- using background resources to obtain jobs in which status is higher relative to income -- has long-range implications. These resources are valuable at the later time not just for status but for income, to a much greater extent than is true for blacks. This difference between blacks and whites in the utility of background resources is especially evident in the case of educational attainment. At the time of the first job, education is more related to high-status low-income jobs for whites than for blacks, but at the later time is less related to this type of a job for whites than for blacks. Graphs showing the relation of education to income and to status at different ages illustrate this phenomenon in terms of actual levels of income and status for men with different educational backgrounds.

Footnotes

[1]For a more detailed description of the study and methods of analysis, see Blum, Karweit and Sørensen (1969).

[2]This paper is based only on those 592 blacks and 662 whites for whom ten years of occupational experience is available from the start of the first full-time job after last leaving full-time education. For a complete description of this universe and a comparison of it with the total sample, see Coleman, Blum and Sørensen (1970).

[3]This technique is described in Coleman and Blum (1971) and in the appendices of Coleman, Blum and Sørensen (1970) and Blum (1971).

[4]Strictly speaking, it is incorrect to consider one set of variables as "dependent" and the other as "independent" in all applications of this technique. The canonical correlation model is designed to help in the analysis of two sets of variables measured on a set of subjects. The sets can be named by the investigator depending on the research problem; in our case, the job attributes are seen as the dependent variables and the

individual resources or attributes as the independent variables. (See Cooley and Lohnes, 1971).

[5]In this analysis, both of the income adjustment variables (geographical area of residence and months of remuneration-in-kind) are included as independent, i.e. individual attributes. When these are excluded from the analysis, the resulting weights for status and income are quite similar:

Job Attribute	Initial Job		Later Job	
	Whites	Blacks	Whites	Blacks
Income	.510	.732	.492	.623
Status	.716	.470	.714	.567

It could also be argued that remuneration-in-kind is an attribute of a job, albeit generally considered negative. When this variable is included on the same side as income and status, the weights for these two attributes are not significantly affected; as would be expected, its weight is negative, i.e. jobs which have this type of return are not attractive:

Job Attribute	Initial Job		Later Job	
	Whites	Blacks	Whites	Blacks
Income	.537	.756	.483	.719
Status	.695	.409	.713	.451
Remuneration-in-kind	.004	-.081	-.054	-.051

[6]The duration of remuneration-in-kind will not be interpreted here. As noted above (footnote 5) it could be considered an attribute of the job and included jointly with income and status.

[7]This graph is taken from Blum and Coleman (1970) where it is discussed in some detail. It should be noted that this graph is a compound of different persons entering the labor force at different ages, and thus does not exactly represent (as does the data utilized in the canonical analysis) growth in the same persons' incomes. This does not constitute a major defect here, since most of the differential growth in income occurs after most persons have attained their highest educational level and are in the labor force.

[8]Taken from Blum and Coleman (1970); see footnote 7.

[9]The negative sign for father's occupational status for later job for blacks is probably due to the high positive relation of first job status, with which it is highly correlated, to high-status low-income later jobs (.630). This tendency of highly-correlated independent variables to be unstable, one turning negative when the other is positive, has been evident in other analyses. [See Hald (1952) for an example.] A similar statistical artifact is probably causing the pattern seen here for father's education. The high intercorrelations between background resources, here father's occupational status and father's education, when combined with measurement error, tend to make one negative when the other is positive.

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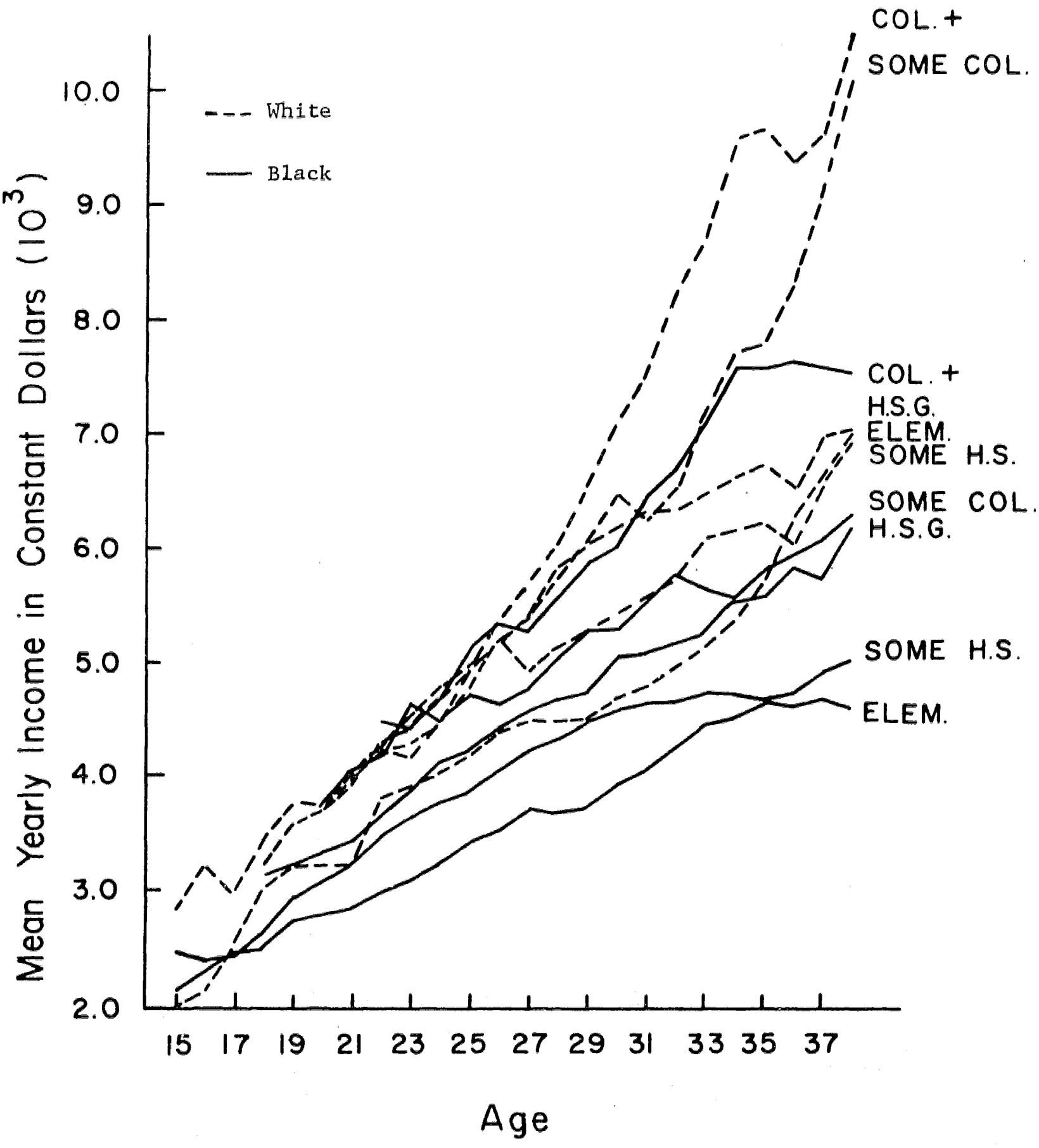

Figure 1. Mean Yearly Income in Constant Dollars, by Educational Attainment at Various Ages, for Black and White Men.

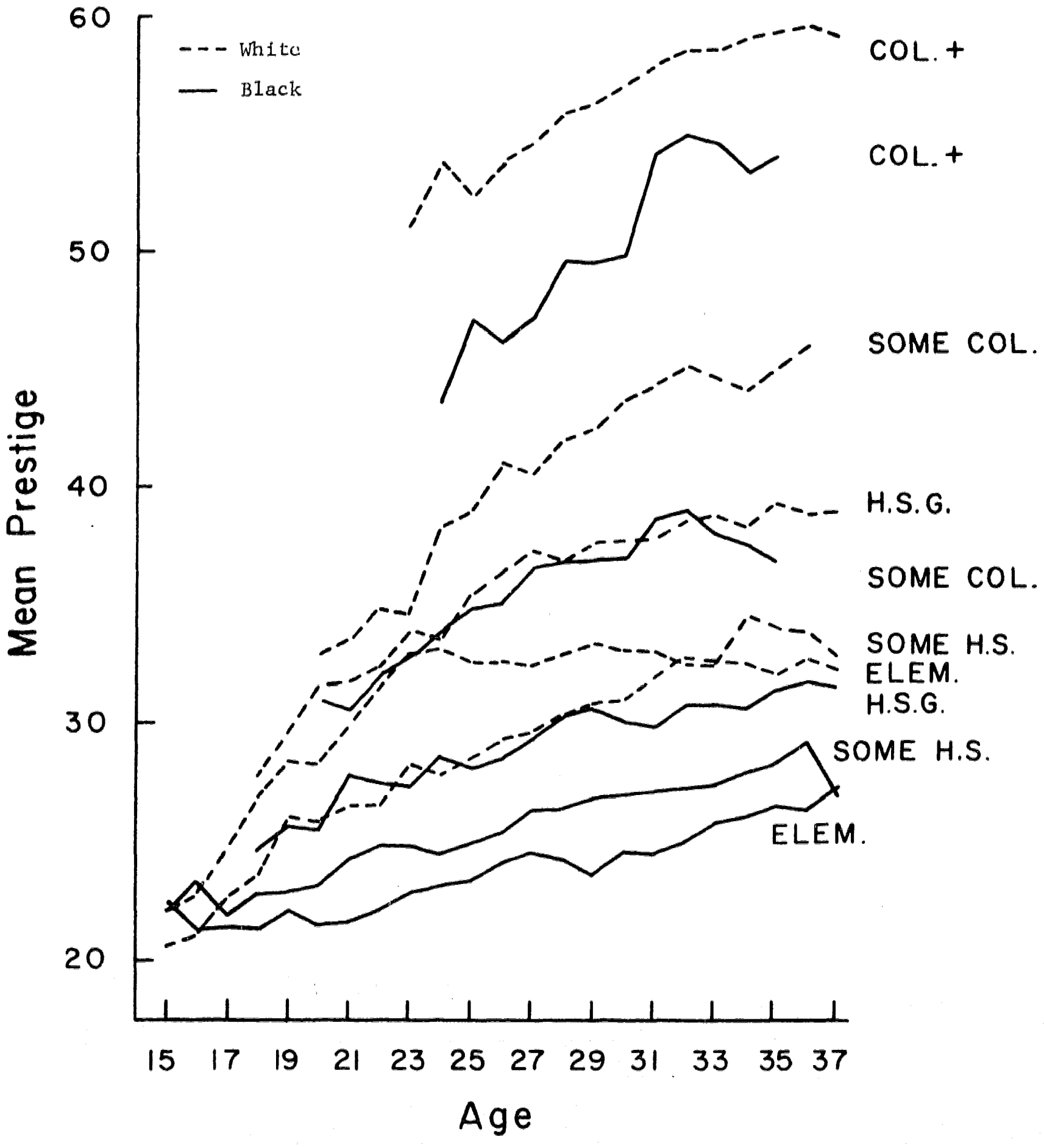

Fig. 2 Mean Occupational Prestige by Educational Attainment at Various Ages for Black and White Men.

Table 1

Mean Occupational Status of First Job After Last Full-Time Education and of Job Held Ten Years Later, for White and Black Men

	White	Black	Difference
Status of First Job			
Mean	29.89	24.30	5.59
Std. Dev.	13.03	9.24	
Status of Later Job			
Mean	39.10	28.15	10.95
Std. Dev.	13.54	10.99	
Change in Mean Status	+ 9.21	+ 3.85	5.36
Percentage Change	+ 30.81%	+ 15.85%	

Table 2

Summary of Regressions of Initial Job Status and Status of Job Held Ten Years Later on Background Characteristics, for White and Black Men

Independent Variables	Initial Status		Later Status	
	White	Black	White	Black
	Standardized Regression Coefficients			
Father's Occupational Status	.081*	.129*	.127*	.047
Father's Educational Attainment	-.013	.065	.035	.033
Educational Attainment	.453*	.309*	.365*	.353*
Military Service Before First Job	.071*	.173*	.036	.028
Marriage Before First Job	.087*	.014	.067	.091*
Initial Job Status	--	--	.274*	.237*
R^2=	.281	.215	.397	.290

*t-values of regression coefficients 2.0 or greater.

Table 3

Results from Decomposition of Status Differences Between White and Black Men Analyzing Status of First Full-Time Job and Status of Job Held Ten Years Later

Difference Due to:	First Full-Time Job		Job Held Ten-Years Later		Differential Gain in Status Whites-Blacks
	Status Points	Percent of Difference	Status Points	Percent of Difference	
Levels of Resources	3.26	58.3	4.46	40.8	1.20
Efficacy of Resources	1.87	33.5	1.97	18.0	0.10
Unexplained	0.46	8.2	4.51	41.2	4.05
Total	5.59	100.0	10.94	100.0	5.35

Table 4

Mean Yearly Income of First Job After Last Leaving Full-Time Education and of Job Held Ten Years Later, for White and Black Men

	White	Black	Difference
Income of First Job			
Mean	$ 3134	$ 2661	$ 473
Std. Dev.	1553	1474	
Income of Later Job			
Mean	6699	4810	1889
Std. Dev.	3813	2272	
Change in Mean Income	3565	2149	1416
Percentage Change	114%	81%	

Table 5

Summary of Regressions of Initial Job Income and Income of Job Held Ten Years Later on Background Characteristics, for White and Black Men

Independent Variables	Initial Income		Later Income	
	White	Black	White	Black
	Standardized Regression Coefficients			
Father's Occupational Status	.042	-.081*	-.007	-.001
Father's Educational Attainment	.046	.151*	-.021	.021
Educational Attainment	.273*	.311*	.290*	.226*
Military Service Before First Job	.159*	.213*	-.040	.081*
Marriage Before First Job	.100	.014	.140*	.088*
Initial Job Income	--	--	.332*	.310*
Residence in North at Time of Job	.139*	.198*	.032	.235*
Remuneration-in-kind, Months	-.166*	-.133*	-.084*	-.035
R^2 =	.248	.363	.347	.403

*t-value of regression coefficients 2.0 or greater.

Table 6

Results from Decomposition of Status Differences Between White and Black Men Analyzing Income of First Full-Time Job and Income of Job Held Ten Years Later

Difference Due to:	First Full-Time Job		Job Held Ten Years Later		Differential Gain in Income Whites-Blacks
	Income	Percent of Difference	Income	Percent of Difference	
Levels of Resources	$ 573	121.1	$ 942	49.9	$ 369
Efficacy of Resources	-183	-38.7	225	11.9	408
Unexplained	83	17.5	722	38.2	639
Total	$ 473	99.9	$ 1889	100.0	$1416

Table 7

Canonical Weights from the First Canonical Correlation for Occupational Status and Income When Fitted Against Background Resources for Initial and Later Jobs of White and Black Men

Job Attribute	Initial Job		Later Job	
	Whites	Blacks	Whites	Blacks
Income	.570	.788	.549	.768
Status	.663	.398	.664	.399

Table 8

Canonical Weights from the First Canonical Correlation for Individual Attributes When Fitted Against Occupational Status and Income for Initial and Later Jobs and for Whites and Blacks

Individual Attribute	Initial Job		Later Job	
	Whites	Blacks	Whites	Blacks
Father's Occupational Status	.123	-.018	.111	-.033
Father's Educational Attainment	.030	.221	-.047	.044
Educational Attainment	.728	.568	.551	.464
Military Service Before First Job	.218	.369	.003	.107
Marriage Before First Job	.186	.024	.164	.155
Residence at Time of Job (North/South)	.131	.245	.003	.266
Remuneration-in-Kind	-.211	-.191	-.058	-.050
Income of First Job	--	--	.235	.351
Status of First Job	--	--	.325	.169
Canonical Correlation	.621	.642	.706	.667

Table 9

Canonical Weights from the Second Canonical Correlation for Job Attributes and Individual Attributes for Initial and Later Job, for Whites and Blacks

	Initial Job		Later Job	
	Whites	Blacks	Whites	Blacks
Weights for Job Attributes				
Income	-.884	-.721	-.917	-.783
Status	.816	.992	.838	1.022
Weights for Individual Attributes				
Father's Occupational Status	.138	.828	..345	-.124
Father's Educational Attainment	-.252	-.222	-.027	.052
Educational Attainment	.616	.318	.231	.521
Military Service Before First Job	-.430	.082	.213	-.085
Marriage Before First Job	-.083	.009	-.198	.067
Residence at Time of Job (North/South)	-.605	-.609	-.147	-.525
Remuneration-in-Kind	.507	.222	.241	.039
Income of First Job	--	--	-.904	-.672
Status of First Job	--	--	.447	.630
Canonical Correlation	.199	.230	.346	.358