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SOCIAL MOBILITY AMONG YOUNG BLACK AND WHITE MEN

A Longitudinal Study of Occupational Prestige and Income

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The National Longitudinal Surveys of young males provides the data for the construction of causal models of occupational mobility for both black and white workers. These NLS data allow several methodological variations from previous occupational mobility research, including longitudinal design, less reliance on retrospective techniques, and a more precise time frame. The annual models indicate that beyond years of education, very few variables available to most surveys have a statistically significant effect on variation in occupational prestige and income. Also, these longitudinal surveys show a growing racial gap in occupational rewards. Much of this increase in the black-white reward differences is found to be related to labor market racial discrimination in advancement rather than to different levels of family background and labor market entry. Policy implications are drawn based on the importance of education and the racial discrimination in occupational mobility.

Since the pioneering analysis of Blau and Duncan (1967), a large number of researchers have focused on factors influencing variations in occupational prestige and income. The most widely cited studies have been either an extension of the Occupational Change in a Generation (OCG) data employed by Blau and

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Duncan and its recent update, OCG II (e.g., Featherman and Hauser, 1976), or similar analysis of the Wisconsin data gathered under Sewell and his associates (e.g., Sewell et al., 1969). For much of this research, the primary goal was to construct a model that included all relevant determinants of occupational status. The basic models have typically included only four or five major predictors which combined to account for approximately 1/5 to 1/2 of the total variation in occupational prestige and income. And while these studies have contributed substantially to our understanding of how occupational rewards are distributed, the data available for these studies require methodologies that restrict the utility of their findings.

This study, using the National Longitudinal Surveys (NLS) data set, focuses on young men in the initial stages of their careers and follows them through five years of labor market experience. This NLS analysis of occupational rewards differs from most previous research in three ways that address some of the design problems usually found in the methodologies of labor market mobility studies:

(1) There is an explicit focus on *young* male workers in their early years of labor market experience rather than a study of *all* male workers in a particular year as is the focus in OCG I and II. This avoids the problems inherent in comparing workers within cohorts whose time of entry into the labor market varies by as much as 20 years.[1] In addition, previous research has shown the importance of initial positions in the labor market on later rewards (e.g., Blau and Duncan, 1967; Ornstein, 1976; Bielby et al., 1977) and the early years of labor market experience would seem more amenable to policy changes.

(2) The National Longitudinal Surveys are based on a *panel* method of longitudinal analysis for young workers rather than a *cross-sectional* study of workers with varying levels of work experience such as OCG I and II. This should reduce the problem of unreliability in background data recently documented by Bielby et al. For example, if faulty memories contribute to inconsistent reporting for the early years of labor market experience (Duncan, Featherman and Duncan: 210), then the much shorter time span between the questioning and the recollected events (e.g., father's occupation or education) and the absence of recollection

at all for the primary dependent variables (early occupational prestige and income) in the NLS design should produce more reliable results than are typically found with usual retrospective techniques.

(3) This study provides a test for a dual labor market of occupational prestige and income along racial and class lines. The issue is addressed by matching each black respondent in the NLS sample with a randomly selected white respondent at the same level of occupational prestige. This test cannot be made for the racially homogeneous Wisconsin sample or the OCG II sample with its lack of income data.

Thus, this analysis will allow comparison of the NLS data with earlier research findings and at the same time produce findings that are not as susceptible to some of the problems associated with other studies of occupational mobility. And while all research techniques possess distinct strengths and weaknesses,[2] this study rests on four methodological strengths: first, it moves beyond the retrospective technique of assigning early levels of occupational prestige and income; second, it focuses on the early years of labor market experience, facilitating a more precise cohort comparison; third, the analysis is truly longitudinal; and finally, the NLS data permit a comparison of black and white workers with identical occupational levels.

THE NLS DATA FOR LABOR MARKET MOBILITY

The National Longitudinal Surveys of Labor Market Experience were conducted by the Center for Human Resource Research of the Ohio State University for the Department of Labor. Four groups of the U.S. population were periodically surveyed between the years 1966 and 1971, including the group analyzed in this paper: young men ages 14 to 24 in 1966. The number of young men sampled was large (n = 5,255), representative (multistage probability sampling design), with a high respondent completion rate (77%) over the five years, and a total number of measured variables in excess of 3,000. It is from these surveys that our models explaining the attainment of occupational

prestige and income are structured. Although considerable research has been done with the NLS data, we believe this represents the first longitudinal study of labor market mobility.

The initial step toward construction of these social mobility models required selecting all the young men in the NLS sample who possessed a full-time job in 1966. This produced a total of 1,283 workers: 955 whites and 382 blacks.[3] A racial comparison of these two groups in Table 1 shows expected relationships. The white workers come from a higher-class family background, remain in school longer, and are more highly rewarded in both pay and prestige for their labors.

There is, however, one trend in Table 1 which may be unexpected: the difference between white and black occupational rewards is growing at a considerable rate. This is especially true for income, which shows a consistent annual increase. However, for prestige there is an initial growth in the racial gap and then relative stability into 1970. While this is largely in keeping with the longitudinal study reported by Ornstein (1976), it is counter to Featherman and Hauser's (1976) discovery of a narrowing racial gap between 1962 (OCI I) and 1973 (OCG II). This seeming contradiction may be resolved by specifying the findings by methodology. The longitudinal NLS data show that as black and white workers progress through the labor market, the income gap increases with each year of work experience. The cross-sectional OCG design indicates that there has been an overall reduction in the racial gap for occupational prestige between the two survey times.[4] These findings are not necessarily mutually exclusive and could both represent the dynamics of the American labor market. For example, it is possible that there is a growing racial equality in prestige while income is becoming more unequal. The NLS data as well as other surveys which have included both income and prestige show that the relationship between the two types of occupational rewards is not a concomitant one. Another possibility is that while black workers are becoming more equal to white workers when compared to similar cohorts at earlier time periods, a black worker within a particular cohort can still expect to fall further behind his white counterpart with each passing year. Thus, there may be an aggregate trend

TABLE 1

Social Characteristics of Young Black and White Workers in 1966, 1967, 1968, 1969, and 1970

Characteristic	1966 (N=1283)		1967 (N=1113)		1968 (N=1028)		1969 (N=1015)		1970 (N=960)	
	Black $\bar{X}$ (n=328)	White $\bar{X}$ (n=955)	Black $\bar{X}$ (n=293)	White $\bar{X}$ (n=820)	Black $\bar{X}$ (n=271)	White $\bar{X}$ (n=757)	Black $\bar{X}$ (n=263)	White $\bar{X}$ (n=752)	Black $\bar{X}$ (n=249)	White $\bar{X}$ (n=711)
Head's Education*	7.54	9.71	7.23	9.64	7.28	9.60	7.38	9.68	7.37	9.74
Head's Occupation*	14.67	31.72	13.99	30.93	14.03	30.84	13.72	30.89	13.82	31.99
Siblings*	4.70	2.89	4.95	2.84	4.99	2.85	5.19	2.90	5.20	2.87
Age	20.22	20.82	21.20	21.96	22.37	23.10	23.36	24.01	24.39	25.29
Years of Education*	10.31	11.65	10.11	11.61	10.07	11.66	10.07	11.67	10.11	11.79
Years of Work Experience	4.91	4.17	6.09	5.35	7.30	6.44	8.29	7.34	9.28	8.30
Occupational Prestige	18.78	30.09	18.89	33.83	19.52	35.23	19.62	34.70	21.02	36.70
Racial Gap	11.31		14.94		15.71		15.08		15.68	
Hourly Income	1.73	2.29	1.93	2.63	2.16	3.03	2.41	3.41	2.62	3.75
Racial Gap**	.56		.68		.83		.90		.95	

*Given a longitudinal research design and the nature of these variables, there should be no temporal variation among these means during the sampling periods. The small differences that do exist can be accounted for by the annual reduction in sample size (respondents dropping out of job market or not located by surveyors). The apparently random nature of these variations indicate little or no bias is being introduced by sample size reduction.

**Income gap standardized to 1966 levels for increases in consumer price index (all items) due to inflation rates reported by the Department of Labor, Bureau of Labor Statistics.

toward racial equality at the societal level and a growing inequality at the individual level. In any event, these NLS data clearly show a widening reward gap between individual black and white workers. Reasons for the increase in the racial gaps can be determined after the causal models of labor market mobility are developed.

MODELS OF LABOR MARKET MOBILITY

Once the full-time workers are drawn from the NLS respondents, longitudinal models are created by a series of stepwise regression equations comparing every possible combination of predictors to account for variation in each year of occupational prestige and pay. Over 20 variables (listed and defined in the Appendix) are available from the NLS data that were employed in previous models or that logically can be assumed to have a causal association with income and prestige, but most prove to have no demonstrable effect (i.e., make a significant contribution to the explained variance).[5] Head's education and occupation and the number of siblings are included in the models illustrated in Table 2 because they are typically found in other models and because they do help account for variation in education and, occasionally, for pay and prestige. However, the only consistently significant predictors of occupational prestige and rate of pay throughout the five-year period are years of education and work experience.[6]

Table 2 also shows that, just as with previous research (e.g., Blau and Duncan, 1967; Ornstein, 1976), the explained variance is higher for prestige than income, and is also higher for whites than blacks. This suggests that occupational prestige is more stratified and predictable than income; that is, more related to family background and achievement. Likewise, the occupational rewards of whites are more stratified and predictable than those of blacks. The rules governing prestige and income for white workers appear more clearly defined in that knowledge of a young white's family background and education will provide

TABLE 2

Regression Coefficients for Predictors of Occupational Prestige and Income

		Prestige						Income						
Predictors		HeadEd	HeadOc	Siblings	Ed	Exp		HeadEd	HeadOc	Siblings	Ed	Exp	Prestige	
1966	White	.39*	.10*	-.48*	4.89*	1.89*	R^2=.28	.94	.23	- .28	18.17*	11.97*	.20	R^2=.18
	Black	.25	.17*	.04	2.52*	.88*	R^2=.18	4.49*	.64*	-1.94	9.34*	3.27*	.64	R^2=.18
1967	White	.48*	.13*	-.49	4.43*	1.03*	R^2=.26	.93	.27	- .34	20.79*	10.42*	.24	R^2=.19
	Black	.94*	.08	-.07	2.06*	.60*	R^2=.21	3.16*	.54	-1.18	14.86*	6.33*	.82*	R^2=.25
1968	White	.52*	.09*	-.29	4.59*	.78*	R^2=.26	.53	.40*	- .32	20.02*	9.68*	.51	R^2=.19
	Black	.56*	.14	.03	2.54*	.15	R^2=.25	3.83*	.51	-2.28	12.27*	4.79*	1.33*	R^2=.28
1969	White	.26	.10*	-.71*	4.74*	.99*	R^2=.27	- .71	.45*	1.45	21.68*	11.54*	1.11	R^2=.19
	Black	.44	.01	-.05	2.72*	.38	R^2=.23	3.36*	1.26*	-2.14*	13.73*	4.36*	1.20	R^2=.30
1970	White	.07	.16*	-.80*	4.47*	.73*	R^2=.27	2.66	.29	-1.90	24.39*	11.80*	1.25*	R^2=.21
	Black	.51*	.06	-.07	3.08*	.40	R^2=.27	2.75	- .98	-2.19	12.67*	3.35*	1.46*	R^2=.23

*Regression coefficient significant at .01 level. (The statistical significance is calculated with the assumption of simple random sampling, although the NLS sample involved cluster sampling at some stages. To compensate for design effects, a somewhat more conservative—.01—than usual interpretation for significance is used.)

more accurate estimates of occupational rewards than will similar knowledge about black workers.

Although the explained variance for white workers is higher than that of black workers, there are no major racial differences in the selection of explanatory variables for the models. The variables which are not important for predicting white rewards are also of no aid in explaining black rewards. NLS measures of individual variables such as IQ, locus of control, work ethic, method of finding a job, and age at labor market entry failed to add significantly to the explained variance in occupational prestige and pay. Measures of family background, such as the absence of the father in the home, or cultural background indicators, such as the presence of newspapers and magazines or library use, do not aid the explanation of occupational prestige and pay. Similarly, community variables, such as local unemployment rate and quality of school (including expenditure per pupil), cannot add as much as one percent to the variance explained by education and experience. The implications of the possible lack of relevance on the part of so many potentially important variables are complex and have been extensively debated ever since Coleman (1966) and especially Jencks et al. (1972) found similar results.[7] Methodologically, however, this produces extremely economical models. Although over 20 potential variables are available, models consisting of only seven variables can account for about the same variation as larger, more complex models. Of course, as can be seen by the regression equations and decomposition of effects in Table 3, the interpretation becomes more complex when the causal sequences between these variables are considered between races over a five-year period.

The standardized coefficients in Table 3 show the overwhelming superiority of education over the other causal variables. For prestige, the direct effect of education is several times more powerful than the other variables for both races in each time period. Either the education of the head of the household or the amount of work experience is usually the second most important variable. When the total effects are considered, the family background measures of head's education and occupation close the gap somewhat, but years of formal education remains the most

TABLE 3

Standardized Coefficients for Predictors of Occupational Prestige and Income

		White/Black										
		Prestige					Income					
Predictors		HeadEd	HeadOc	Siblings	Ed	Exp	HeadFd	HeadOc	Siblings	Ed	Exp	Prestige
	Effects*											
1966	Direct	.06/.06	.10/.12	-.05/ .01	.53/.45	.26/.21	.03/.19	.05/ .01	-.01/-.07	.44/.29	.37/.14	.04/.11
	Total	.22/.20	.17/.12	-.13/-.05	.38/.36	.26/.21	.13/.22	.09/ .03	-.02/-.14	.25/.24	.38/.16	.04/.11
1967	Direct	.07/.22	.13/.05	-.05/-.02	.46/.36	.13/.14	.03/.12	.06/ .05	-.01/-.04	.46/.42	.29/.24	.05/.13
	Total	.22/.35	.21/.06	-.12/ .07	.38/.27	.13/.14	.15/.30	.12/ .07	-.07/-.14	.32/.31	.30/.26	.05/.13
1968	Direct	.08/.12	.08/.08	-.03/ .01	.48/.43	.10/.03	.02/.14	.08/ .05	-.01/-.08	.42/.34	.25/.18	.10/.05
	Total	.25/.30	.16/.09	-.12/-.07	.42/.41	.10/.03	.15/.32	.14/ .27	-.08/-.14	.32/.32	.26/.19	.10/.05
1969	Direct	.04/.10	.10/.00	-.08/-.01	.49/.48	.13/.09	-.02/.12	.08/ .11	.03/-.07	.38/.38	.25/.16	.19/.19
	Total	.22/.28	.19/.03	-.15/-.09	.42/.41	.13/.09	.11/.30	.15/ .14	-.04/-.14	.31/.36	.28/.17	.19/.19
1970	Direct	.01/.11	.15/.03	-.08/-.01	.46/.50	.09/.08	.06/.09	.04/-.08	-.03/-.06	.37/.32	.22/.11	.18/.23
	Total	.18/.33	.22/.03	-.15/-.02	.41/.45	.09/.08	.19/.29	.12/-.07	-.10/-.07	.32/.42	.23/.13	.18/.23

*The direct effect is the standardized or beta coefficient. The total effect includes both direct effects and indirect effects transmitted through other causal variables (Alwin and Hauser, 1975).

important determinant of occupational prestige for black and white workers. Likewise, for black and white income levels, the most important predictor is again education. And this time for whites, years of work experience is more powerful than family background measures, even when the total effects are considered. For black workers, however, the head of the family's education is more important than the amount of work experience.[8] So, although temporal and racial differences do appear, an analysis of the betas suggests a job market in which the rewards are most closely tied to education for both races and at every time period. And for young white workers (and to a lesser degree for black workers) the amount of accumulated work experience is also of some importance. The explanatory power of education and experience is not unexpected. Several previous studies (e.g., Blau and Duncan, 1967; Sewell et al., 1969; Coleman et al., 1972; Link and Ratledge, 1975; Featherman and Hauser, 1976; Ornstein, 1976) have shown either one or both of these variables to be among the most important in accounting for variation in occupational rewards.

RACIAL DIFFERENCES IN OCCUPATIONAL REWARDS

In order to examine the role of education and experience more closely, and to allow interracial comparisons (Schoenberg, 1972; Specht and Warren, 1976), the unstandardized effects of one year of education and one year of experience are shown in Table 4. Differential rewards along two dimensions are clearly illustrated. First, there is strong superiority of education over experience in terms of both income and prestige. While both are valuable resources for acquiring rewards from the labor market, one year of education is worth approximately twice as much as a year of experience in terms of pay; and for prestige, education has at least four times the effect of experience. And surprisingly, education becomes an even more valuable economic resource as workers progress in their field. Second, there is a strong bias in favor of white workers in the NLS sample.

A white's economic reward for each year of education or experience is at least double the black level. This unequal reward system also holds for prestige, with the white worker receiving usually within two to five times the black level of returns on equal investments of education and experience.

In fact, it is possible to extend this type of analysis of racial discrimination for all the variables in the occupational mobility model. If the black means in the multiple regression equations in Table 2 are raised to white levels, it is possible to compute a measure of the percentage of the racial gap attributable to racial discrimination in the job market.[9] An illustration of these relationships in Table 5 shows that while the income and prestige gap steadily increase over the five-year period, the discrimination effect is not so consistent. For income, the effect of discrimination holds constant at about 30% until 1970, when a sudden upturn increases discrimination levels to 73%. In other words, between 1966 and 1969, about one-third of the racial gap in income can be accounted for by a reward system in which black workers are penalized not for deficiencies in family background, education, or work experience, but rather for being black.[10] And in 1970, almost three-fourths of the differences between black and white pay levels is attributable to labor market discrimination. Most of this increase in discrimination for income in 1970 can be accounted for by a devaluing of the two most important contributors to black income. Table 4 shows 1970 as the only year in which the value of black education and experience values were both decreasing. At the same time, the values of white education and experience were increasing. Thus, the amount of the gap due to labor market discrimination shows a substantial increase in 1970. For prestige levels, there are varying but substantial discrimination rates accounting for between 46% and 66% of the black-white gap.[11] In fact, these NLS data indicate that for most years the difference between types of jobs held by blacks and whites is more affected by labor market discrimination than the income difference; perhaps because occupational prestige is less easily measured and thereby more difficult for advocates of racial equality to compare and enforce. In any

TABLE 4
Racial Comparisons of Education and Experience

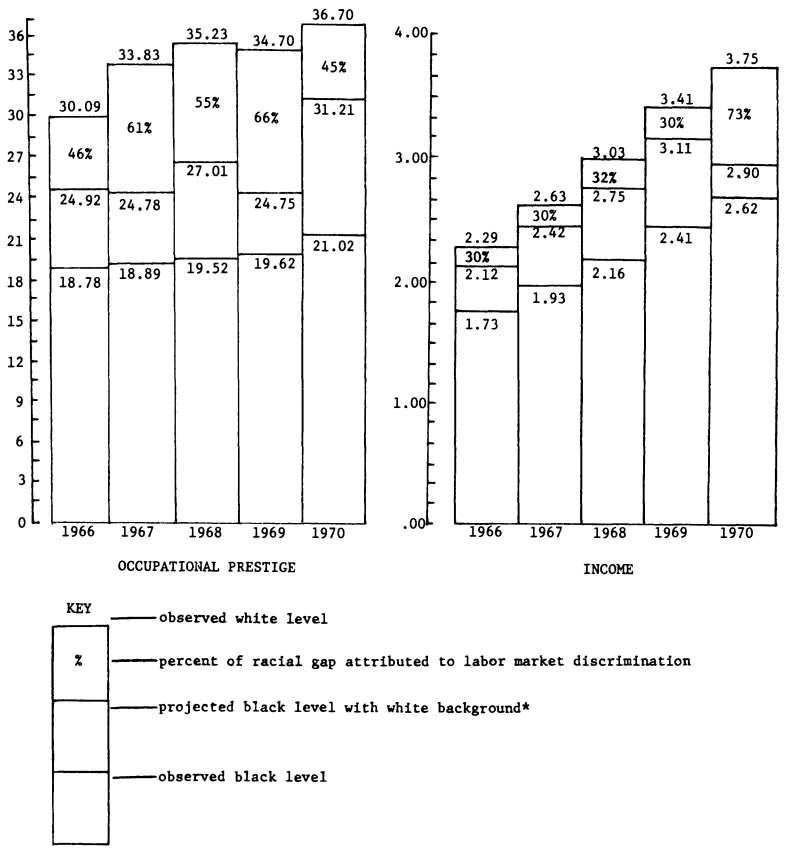
		1966	1967	1968	1969	1970
Effect* of one additional year of schooling on hourly pay**	White	.18	.20	.19	.21	.23
	Black	.09	.15	.12	.13	.12
Effect* of one additional year of work experience on hourly pay**	White	.12	.10	.10	.11	.12
	Black	.03	.06	.05	.04	.03
Effect* of one additional year of schooling on Duncan prestige scale	White	4.90	4.40	4.60	4.70	4.50
	Black	2.50	2.10	2.50	2.70	3.10
Effect* of one additional year of work experience on Duncan prestige scale	White	1.90	1.00	.70	1.00	.70
	Black	.90	.60	.10	.40	.40

*Unstandardized regression based on coefficients from Table 2.
**Effects on pay adjusted to 1966 levels for increases in Consumer Price Index (all items) due to inflation rates reported by the Department of Labor, Bureau of Labor Statistics.

event, these continuing and increasing (at least for income) measures of discrimination indicate that even black workers who possess the same level of valued resources (family background, education, experience) as their white counterparts can expect to receive significantly lower levels of income and prestige. Thus, within the methodological limits of this technique, it can be concluded that beyond the racial discrimination which produced the lower levels of family background and education shown in Table 1, substantial amounts of the black-white gaps in pay and occupational prestige are directly attributable to racial discrimination in the labor market itself.

When these results are compared with cross-sectional NLS studies of young male workers (Link and Ratledge, 1975; Jud and Walker, 1977; Abell and Lyon, 1977), it appears that racial discrimination is relatively low when these workers first enter the job market; but as they continue their careers, occupational

TABLE 5
Longitudinal Representation of Labor Market Progressions and Discrimination



*Predicted black means are obtained by substituting white means into the black regression equations for prestige and income.

advancement and pay increases quickly become more dependent on race. This suggests two reasons for the widening of the gaps between black and white levels of occupational rewards: (1) education becomes more valuable over time and whites typically have approximately one and a half more years of education; and (2) racial discrimination against blacks increases as workers

progress through the labor market, because whites are rewarded more highly for their education and experience and the effects of this discrimination are magnified as the value of education and years of experience increase.

There is an alternative explanation that could also account for the growing racial gap in pay and prestige. It is possible that a variation of dual labor market theory (Cain, 1976) can explain the increasing inequality between blacks and whties. Specifically, if lower levels of family background and education coupled with racial discrimination in hiring move blacks into the labor market at lower levels than whites, then blacks could fall further behind over time because they are more likely to be employed at jobs which offer lower rates of advancement. Thus, what appears to be racial discrimination in the labor market mobility may be a more general occupational discrimination facing all low-level workers, black and white alike. In order to test this explanation, a new subsample of 328 white workers was selected with identical occupational levels to blacks by matching randomly selected white workers with the same 1966 occupational prestige scores as blacks. This produces a white subsample with the same size and prestige characteristics as the original black sample.

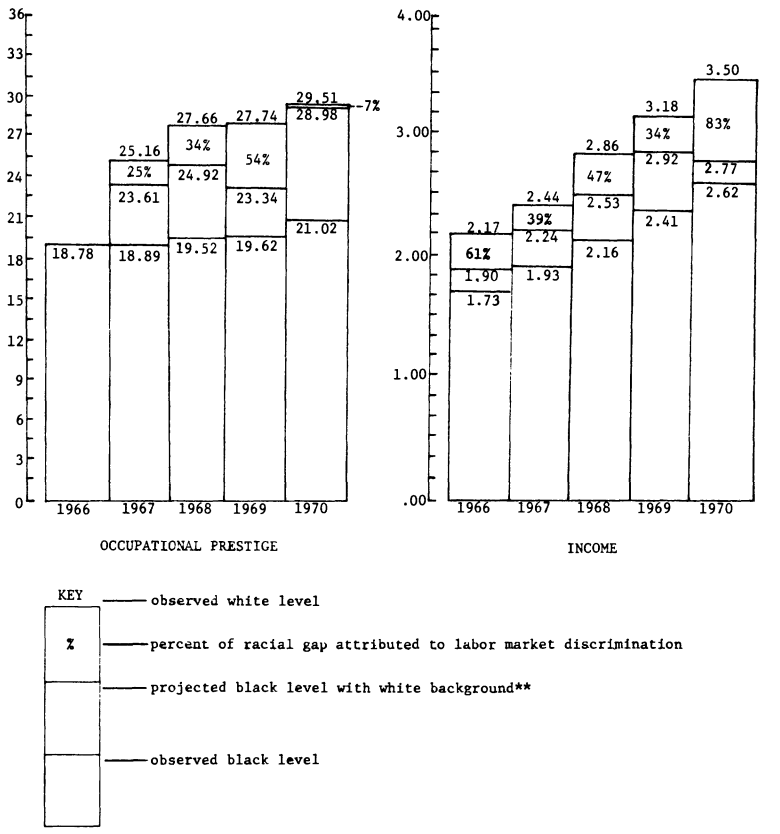
Now it is possible to compare black and white workers with identical prestige levels in 1966. A longitudinal comparison of these two groups in Table 6 shows substantially the same trends as in Table 5. The racial gap in income increases consistently throughout the five-year period; and for prestige, white workers move dramatically ahead the first year and slowly increase their advantage through 1970. Again, these gaps are due in no small part to racial discrimination.[12] Thus, we find little evidence for the growing inequality between black and white workers being based on the lower aggregate level at which black males are employed. Instead, it appears that labor market discrimination coupled with low levels of family background and education creates an early gap in occupational prestige and income; and the same factors (background, education, and discrimination) account for the increase in the gaps as young males gain work experience.

SUMMARY, CONCLUSIONS, AND POLICY-RELATED SPECULATIONS

This analysis of the NLS data allows several conclusions to be drawn about how young male workers achieve income and prestige in the labor market. First, just as with the review of stratification research by Jencks, very few variables available to most surveys have a statistically significant effect on variation in occupational rewards. Whether this is due to poor measurement or a real lack of causal association is difficult to determine. Also, these longitudinal surveys show both a growing racial gap in occupational rewards and substantial amounts of these gaps being caused by labor market discrimination. When compared with cross-sectional NLS studies of this same cohort, the following pattern emerges for young male workers: whites enter the labor market at a much higher level than blacks, largely because whites have higher levels of family background. The effect of measurable racial discrimination at entry appears minimal. However, as these young males gain work experience, the racial gaps in occupational rewards grow larger; not because of the low level at which blacks enter the job market, but because whites possess more valuable resources such as education and also because they are rewarded more highly for these resources (i.e., racial discrimination in the labor market).

This explanation of labor market mobility suggests two distinct policy approaches to lessening the racial gaps in occupational pay and prestige. First, the strong positive impact of schooling for both blacks and whites indicates that programs which encourage students to remain in school will pay large dividends once they enter the labor market.[13] Thus, one method for reducing the racial gap in occupational prestige and pay would be to encourage black students to remain in school. While it is true that white workers are rewarded more highly for their education than blacks, education remains the most powerful determinant of black occupational rewards; and this study and others (e.g., Featherman and Hauser, 1976) suggest its impact is growing.

TABLE 6
Longitudinal Representation of Labor Market Progression and Discrimination: Matched Samples*



*White workers were selected to exactly match the occupational prestige levels of black workers in 1966.
**Predicted black means are obtained by substituting white means into the black regression equations for prestige and income.

However, the racial bias in rewards for education and experience suggests a second policy implication. Although earlier studies (Ornstein, 1976; Abell and Lyon, 1977) found relatively low levels of racial discrimination present at the entry point into the labor market, the high levels of racial discrimination estimated here for the early years of labor market experience

indicate that emphasis needs to be placed on insuring racial equality not only in hiring, but in the early stages of advancement as well. The young black workers in these surveys are at a distinct competitive disadvantage in the labor market. In spite of previous reports of little racial discrimination at entry, the opportunity for upward mobility is biased against blacks. White workers are rewarded at a much higher level for equal amounts of two of the most important contributors to occupational rewards—schooling and work experience. Regulations concerning advancement in the labor market are more difficult to develop and enact than those concerning the more open and simple process of hiring, but these NLS data clearly show their need.

NOTES

1. Variation of this magnitude is present within the cohorts of OCG I and II and also the labor market entry study of Ornstein (1976). The standard deviation in age and work experience for both races and at all time periods is less than three years for the young male workers responding to the NLS questionnaires.

2. For example, a longitudinal design such as this one suffers from two major drawbacks: (1) a short time span of only five years, and (2) attrition of respondents during that time. However, these five years are during the initial stages of labor market experience and therefore may possess more than usual theoretical and practical relevance. Also, the retention rate shown in Table 1 is 75%, with little indication of systematic bias.

3. Blacks were sampled at approximately twice their usual level for the young male NLS cohort.

4. Featherman and Hauser (1976) did not choose to follow particular cohorts over time with OCG I and OCG II; however, a comparison of the 25-34 cohort in 1962 with the 35-44 cohort in 1973 shows a narrowing of the racial gap, but to a much smaller degree than that shown by comparing the young cohorts at both survey times.

5. Since the addition of predictors can "artificially" increase explained variance, R^2s were adjusted for degrees of freedom. While increments in explained variance is not the only way to evaluate explanatory variables (Cain and Watts, 1970), they are used here as a first step in model construction. The unstandardized regression coefficients are employed later to estimate racial discrimination and evaluate policy implications.

6. One variable which has often been found to have a significant impact on prestige and income is "veteran status." While it is measured for this NLS cohort, the young age of the respondents does not allow a sufficient number of military veterans to be in the labor market.

7. As an example, see the review essays in the *American Journal of Sociology*, 78 (May, 1973): 1523-1544.

8. This close association between the present status of black workers and the status of their fathers is in keeping with the OCG trend reported by Featherman and Hauser (1976: 639).

9. There are several variations of this statistical technique to estimate discrimination. For example, Bielby et al. (1977: 1276) suggest an opposite approach (black means with white equations) to the one used here due to the unreliability of black equations. However, the present study argues that the NLS design is less susceptible than OCG to unreliability. Further, the logical interpretations seem more straightforward with the white mean-black equation variation. Also, a case can be made for estimating the percentage increase in black rewards that would come with the absence of labor market discrimination (e.g., Weiss, 1970). This technique is most effective when the size of the racial gap varies substantially, which it does not in this study. In any event, four separate estimates were computed (but are not shown) for labor market discrimination for each year in this study; and the general conclusions about the magnitude and effects of labor market discrimination did not vary by procedure. Finally, it must be noted that these techniques are at best only proximate estimates of racial discrimination in the labor market. Thus, they are properly interpreted more as rough indicators of prejudice rather than precise measures.

10. It should be noted that this technique measures racial discrimination only *in the labor market.* Certainly, there is considerable racial discrimination contributing to the lower black means for family background and education variables as well.

11. The racial gap shown in Table 5 for occupational prestige (ranging from 11.3 to 15.7) compares closely with the gap (13.6) reported by Featherman and Hauser for the young cohort of OCG II respondents.

12. A recent Marxist approach to this issue (Wright, 1978) reaches somewhat similar conclusions after separating workers by class and race, but exact comparisons are difficult since the research is cross-sectional and based on different class divisions.

13. It has been persuasively argued that compulsory attendance in school is self-defeating (e.g., Jencks et al., 1972; Bachman, 1972), but that is a questionable proposition. NLS measures of what a young male knows (IQ and work knowledge) cannot explain variation in occupation or income, but how long he remains in school has considerable explanatory power. It appears that, in spite of the recent concern over uneducated high school and college graduates, employers are not only concerned with the formal function of education—instruction—but they also see years of schooling as certification of the internalization of values such as obedience, punctuality, and neatness. Of course, as shown in this study, schooling is more profitable for whites, but is still the single most important determinant of black rewards as well.

APPENDIX

Operational Definitions of NLS Variables

Education	—years of education completed by respondent on entry into job market
Entry Age	—age of respondent when entering job market

Expenditure per Pupil	—district-wide annual expenditure (adjusted for area price levels) per pupil-in average-daily-attendance
Father's Education	—highest grade completed by respondent's father by 1966
Father's Encouragement	—amount of encouragement by respondent's father (if present) to remain in school (1) much, (2) some, (3) none
Father Present	—dummy variable indicating presence (1) or absence (0) of father in household at age 14 of respondent
Head's Education	—highest grade completed by respondent's father (mother, if father absent) in 1966
Head's Occupation	—occupational prestige (Duncan's Index) of head of household (father, unless absent) when respondent was age 14
Income	—hourly income (adjusted if paid by week or month) reported by respondent
IQ	—respondent's standardized percentile score of mental ability based on an array of different national "intelligence" tests (e.g., Otis Quick Scoring Mental Ability Test, California Test of Mental Maturity, Lorge-Thorndike Intelligence Test, and the Henmon-Nelson Test of Mental Maturity) taken during respondent's tenure in secondary school; for a more complete explanation, see Kohen (1973)
Job Selection Method	—dummy variable indicating whether respondent found job through individual (1) or organizational (0) means
Mother's Education	—highest grade completed by respondent's mother by 1966
Mother's Encouragement	—amount of encouragement by respondent's mother (if present) to remain in school (1) much, (2) some, (3) none

Number of Siblings	—total number of siblings of respondent in 1966
Occupational Prestige	—prestige (Duncan's Index) of respondent's current full-time job; higher scores = greater occupational prestige
Parental SES	—index of socioeconomic level of respondent's family based on father and mother's educational attainment, occupational status of head of household, educational attainment of respondent's oldest sibling, and availability of reading material in the home; higher scores = higher socioeconomic level
Reading Index	—index based on availability of magazines, newspapers, and library card in respondent's home at age 14 (0) none available, (1) one available, (2) two available, (3) all available
Rotter's Locus of Control	—11-statement attitude scale to measure internal (lower scores) versus external (higher scores) control over self
School Quality Index	—index based on per-pupil availability of library facilities; pupils per full-time teacher; full-time-equivalent counselors per 100 students; and annual salary of a beginning teacher with bachelor's degree and no experience, adjusted for geographic differences in price levels; higher scores = higher school quality
Unemployment Level	—rate of local unemployment for year of respondent's entry into job market
Work Ethic	—variable based on response to following question: If, by some chance, you were to get enough money to live comfortably without working, do you think that you would work anyway? (1) yes, (2) undecided, (3) no

Work Knowledge —composite measure of respondent's knowledge concerning education required, tasks performed, and income received from 23 selected occupations (e.g., hospital orderly, stationary engineer, fork lift operator); higher scores = greater knowledge

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