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RACE, ETHNICITY AND EMPLOYMENT, 1970-1985

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ABOUT THE AUTHORS...

Gary D. Sandefur was born and grew up in rural southeastern Oklahoma. A member of the Chickasaw Nation, he received his B.A. from the University of Oklahoma in 1974 and his Ph.D. in Sociology from Stanford University in 1978. From 1978 to 1984, he was an Assistant Professor of Sociology at the University of Oklahoma. Since 1984, he has been an Associate Professor of Sociology at the University of Wisconsin, Madison, and he is currently the Associate Director of the Institute for Research on Poverty. Professor Sandefur has published a number of articles on the socioeconomic status of American Indians, Whites, and Blacks. His current research focuses on racial differences in the effects of household structure on the education activities and family formation of young people.

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Published government statistics and social science research have documented employment trends for the 1960-1980 period. During the 1960s, the

percentage of Black, White, and other men who worked full-year (48 or more weeks per year) increased, and the gap between Blacks and Whites, and Whites and others narrowed (Smith and Welch 1986; Sandefur and Pahari 1987). This improvement did not continue in the 1970s, however, and the percentage of Black, White and other men who worked full-year declined while the percentage who worked none at all increased. Further, the gap in the employment of Whites and Blacks increased.

Most observers attribute the gains of the 1960s to economic growth and to improvements in the average level of education of minority group members (Smith and Welch 1986). The 1970s, on the other hand, was a period of inflation, recessions, and little growth in jobs. In addition, the ranks of those seeking employment increased with the coming of age of the baby boom generation and the increase in job-seeking among women. This made finding employment much more difficult than it had been during the 1960s. The evidence also suggests that Blacks, because of their over-representation in marginal jobs, were hurt more by the problems of the 1970s than were Whites (Wilson 1987).

Most of the research on these trends in employment has concentrated on Blacks and Whites, because these are the two largest racial groups in American society and because data on these groups is more readily available. The limited amount of research on other groups such as Asians, Hispanics, and Native Americans indicates that their experiences diverge from those of both Blacks and Whites (see, for example, Hirschman 1988; Sandefur and Pahari 1987). The purpose of this paper is to examine racial differences in trends in employment more carefully. We address two major questions: (1) Have the racial/ethnic differences in employment increased or declined since 1970? and, (2) Have differences in employment across educational groups increased or declined since 1970?

SOCIOLOGICAL MODELS OF DECLINING RACIAL DIFFERENCES

The predictions that race/ethnicity would decline in significance and education would increase in importance as American society developed are firmly rooted in several sociological traditions. In Weber's (1947) analysis of Western civilization and the development of capitalism he observed that traditional criteria for the distribution of positions and rewards were being replaced with rational/legal criteria, and predicted that the rationalization of society would proceed into the future. Although lineage, family, skin color and ethnicity might have been widely used criteria in the past, Weber argued that they would gradually diminish in importance to be replaced by an emphasis on performance-related criteria. In Parson's (1954) analysis of stratification systems, he characterized American society as one which valued performance. This led to an emphasis on universalistic as opposed to particularistic criteria in the distribution of rewards. Parsons characterized race/ethnicity as particularistic criteria and performance-related criteria, such as education and ability, as universalistic criteria.

Park (1924) argued that the spread of Western-style economies and civilizations had led to contact between racial and ethnic groups. He argued that over time (perhaps several centuries) groups would go through a cycle of contact, competition and conflict, accommodation and assimilation. Assimilation would be facilitated by the increasing irrelevance of racial/ethnic criteria in modern industrial economies, and by the changing attitudes, values and behavior patterns of both the majority group and minority groups. minority groups would accept, while also modifying, major societal institutions and values, while the majority group would gradually accept minority group members as full participants in society. Class would

replace race as the fundamental basis for political and economic conflict in society.

Many of Park's predictions seem to be coming true. Research on trends in racial prejudice show that the general level of prejudice directed at Blacks and other minority groups has declined considerably over the past half century (Schuman, Steeh and Bobo 1985). The federal government, state governments and the judicial system have developed and enforced legislation that prohibits discrimination on the basis of racial and ethnic criteria. Further, the major political action groups representing the interests of minorities (e.g., the NAACP, the Urban League, and National Congress of American Indians) have emphasized working within the American political system; these groups and most members of minority groups seem to define success in the sense that it is defined by members of the majority group. In sum, there has been a convergence in the attitudes, values and behavior patterns of majority and minority groups, and an increasing acceptance of all groups as members of one society.

A number of empirical researchers have applied these ideas directly in analyses of stratification in general, and to the analysis of racial/ethnic differences in attainment. Featherman and Hauser (1978, p. 12), drawing on the work of Bell (1973), Feldman and Moore (1962), Goldthorpe (1964), and Levy (1966), pose what they term the thesis of industrialism:

...as societies modernize they tend toward common institutional forms and styles. Among these commonalities is the transition from a regime of mobility based on particularistic standards such as kinship, race, and ethnicity to one based on universalistic, meritocratic practices and institutions.

In the view of Featherman and Hauser, the growth of the service sector of the economy (e.g., education, government, and medicine) created a large number of new White-collar jobs. These jobs required personnel with advanced technical and scientific training. They argue that this transition to a service economy led to an increased use of merit and universalism as opposed to particularistic criteria in the process of stratification. Their evidence provided some support for this view. Between 1962 and 1973 the process of stratification seemed to move to a more racially homogeneous pattern; the effect of socioeconomic background lessened while the effect of education became more important, and both effects became more similar for Blacks and Whites. On the other hand, they found that racial differentials in returns to education remained, and that "racial stratification and inequality persist, even in the post-industrial United States" (Featherman and Hauser 1978, p. 382).

Other research has also uncovered what appears to be a fairly consistent pattern of declining racial differences in socioeconomic outcomes. The title of the report by Smith and Welch (1986), *Closing the Gap: Forty Years of Economic Progress for Blacks*, reflects their judgement that Blacks made significant gains relative to Whites during the 1940 through 1980 period. Hirschman and Wong (1984) found that the effects of race and ethnicity on earnings had declined for Black, Hispanic, and Asian men (with the exception of Chinese men) between 1960 and 1976. Tienda, Smith, and Ortiz (1987) examined some of the factors involved in the improved labor market performance of different groups of minority women, and concluded that in 1979, Hispanic women earned as much as White women with similar characteristics, but Black women averaged slightly higher earnings than their White equivalents. Consequently, there is a body of evidence which suggests that the importance of race and ethnicity as determinants of socioeconomic outcomes has declined over time.

The Challenge of the 1970s

Although the past half century can appropriately be characterized as one in which the effects of race and ethnicity on most aspects of well-being declined, the 1970s were anomalous in at least two respects. First, as we pointed out above, the poor general economic situation in the United States resulted in increasing rates of joblessness among men in all racial and ethnic groups. Second, some evidence suggests that young educated Blacks continued to make gains in the 1970s, and that the detrimental effects of the poor economy were concentrated among a subset of Black Americans. This point has been most fully developed by William Julius Wilson (1987). Wilson argues that changes in the U.S. economy, the geographical relocation of major employers from cities in the Northeast and Midwest to the South and West, and the increasing reliance on educational credentials have left certain minority group members, specifically uneducated central city Blacks, behind. "Advantaged" minority group members, e.g., those from middle income families or those who have college degrees, are able to take advantage of the opening of American society to people of color. Poor and uneducated minority group members, on the other hand, are not able to take advantage of these new opportunities since they do not have the requisite skills and training, and they are often physically and/or socially isolated from these opportunities (Wilson 1986).

There is accumulating evidence that industrial restructuring is leaving some minority group members behind. Butler and Heckman (1977) suggested that some of the relative improvement in the earnings of Blacks reflected an exodus of low-wage Blacks from the labor force.[1] Mare and Winship (1984), in an effort to explain the "paradox" of decreasing inequality in education and earnings among Black and White youth accompanied by increasing inequality in employment rates suggested that educational opportunities for Black youth have grown. This has led to increased school enrollment and educational attainment among Blacks, but "disadvantaged" Black youth who are unable (or unwilling) to take advantage of these opportunities continue to face a great deal of difficulty finding jobs. Freeman and Holzer (1985) argue that there are jobs available for inner city Black youth, but they are jobs that pay less than those available to White youth. They suggest that "Black youth clearly want to work, but only at jobs and with wages that are comparable to those received by their White counterparts" (Freeman and Holzer 1985, p. 30).

Explicit in some of these analyses and implicit in others are two hypotheses. First, the assimilation model and the arguments of Wilson suggest that race and ethnicity are becoming less important in determining access to employment opportunities in American society. The weight of the evidence suggests that this is the case, but the hypothesis has rarely been tested with groups other than Blacks and in different time periods. Second, Wilson's arguments suggest that growing minority unemployment is at least partially due to persisting racial differences in education and other job-related skills. Further, the assimilation model, the thesis of industrialism, and Wilson's arguments suggest that the importance of education in determining access to jobs is increasing over time. We test each of these hypotheses below.

DATA AND METHODS

Data

The data were drawn from the 1970 and 1980 Public Use Microdata Samples

(PUMS), and the March 1985 Current Population Survey (CPS). We use data on White, Black, American Indian, and Hispanic men aged 25-54 in the civilian population. This age group is often referred to as the prime aged labor force.[2] The PUMS and CPS data make it possible to distinguish among Mexicans, Puerto Ricans, and Other Hispanics.[3] The CPS does not contain sufficient numbers of American Indians to permit separate analyses of this group, so we only have data on American Indians for 1970 and 1980.[4] Sample counts differ greatly by year, but the descriptive tables show each group and each year separately so weighting was not necessary. We also did not use weights during the multivariate analysis. Instead, the marginal totals are controlled during parameter estimation so that yearly differences should not seriously bias the estimates of other parameters.

Dependent and Independent Variables

The dependent variable considered here is weeks worked in the previous year (i.e., 1969, 1979, and 1984). This variable is categorized as: zero weeks worked (no employment), from 1 to 47 weeks worked (part-year employment) and 48 or more weeks worked (full-year employment). We decided to measure employment categorically since we feel there are important substantive distinctions between not working, working only part of the year, and working full year that are not captured if weeks worked is treated as a continuous variable.

We examine a small set of independent variables: race, age, year, and education. There are, of course, a number of other variables that affect employment, such as marital status and region, which are measured in the PUMS and CPS. Many of these other variables are endogenous in the employment process, however, whereas race, age, year, and education can be viewed as exogenous. For example, whether one is married or not in 1980 is probably in part dependent on whether one is employed in 1979, whereas years of education among those aged 25-54 is probably unaffected by employment in the previous year. Even region, which is often treated as exogenous, may be a function of decisions involved in the search for employment. Consequently, it is appropriate to view our model of employment as a reduced form model.

The independent variables are measured as follows:

YEAR: 1970, 1980, 1985

AGE: Classified as 25-34, 35-44, 45-54.

RACE: Individuals have classified themselves as non-Hispanic White, non-Hispanic Black, Mexican, Puerto Rican, Other Hispanic, and American Indian.

EDUCATION: Classified as 0-11 years of schooling, 12 years completed (no post-secondary schooling), and Postsecondary schooling.

Method

Since we are interested in the effect of exogenous variables on an ordered three-way outcome, we fit a multinomial logit model to the cross-classified data using maximum likelihood estimation (Agresti 1981; Fienberg 1981). We consider the odds or log-odds of three possible events: (1) The (log) odds of working from 1 to 47 weeks vs. working zero weeks in the previous year, i.e. the odds of working part-year vs. not working. (2) The (log) odds of working 48 or more weeks vs. working zero weeks in the previous year, i.e. the odds of working full-year vs. not working. (3) The (log) odds of working 48 or more weeks vs. working from 1 to 47 weeks or the odds of full vs. part-year work in the previous year.

RESULTS

Economic Growth, Education, and Employment

Before discussing our multivariate analyses, we briefly examine descriptive evidence on changes in employment over the 1970-1985 period. To place the discussion in context, we also examine evidence on economic growth and changes in educational characteristics since these are widely considered to be two of the most important factors in explaining declines in racial inequality.

The figures in Table 1 indicate that the Gross National Product (GNP) grew from 2,416 in 1970 to 3,585 in 1985. However, the GNP declined between 1969-1970, 1974-1975, and 1979-80 as reflected in the second row of numbers. The other major difficult time was 1981-1982 when the GNP declined by 2.5%. In sum, there were a number of sluggish economic periods during the larger 1970-1985 period. While the economy was experiencing difficulties, the size of the potential labor force was increasing dramatically. During the 1970-1985 period, the size of the male population 16+ grew from 64.3 million to 84.5 million, an increase of over 30%. Employment, however, grew faster than the male population: the number of employed individuals grew from 78.7 million to 107.2 million, an increase of 36%. In spite of this, the ratio of employed men to total men declined from 76.2% in 1970 to 70.9% in 1985. One reason for this was the movement of women into the labor force (see Table 1).

Table 2 contains the distribution of each racial/ethnic group in educational categories. Changes in these distributions over time are largely due to the aging of less educated cohorts out of the prime-aged labor force and the aging of more educated cohorts into the prime-aged labor force. The evidence indicates steady improvement in the educational credentials of Whites from 1970-1985. The percentage of Whites with less than 12 years of education declined from 32.4 in 1970 to 11.4 in 1985, while by 1985, over one-half of Whites had at least some college. The educational credentials of racial/ethnic minority men also improved on average over this period, and in some ways their gains surpassed those of Whites. For example, the likelihood of having some post-secondary education was 1.6 times higher for Whites in 1985 than in 1970, whereas it was 2.5 times higher for Blacks and 1.9 times higher for Mexicans. However, significant differences in educational credentials persisted in 1984. For example, in 1985 the gap between Blacks and Whites in terms of the percentage who had attended college was 17.5 percentage points while in 1970 it was 19 percentage points, hardly a dramatic difference (see Table 2).

Table 3 contains information on the employment of each racial/ethnic group over the 1969-1984 period. Consistent with other research, these figures show that the percentage of full-year workers in each racial/ethnic group declined between 1969 and 1979, with the exception of American Indians. Still, American Indians were the least likely to be employed full-year in both 1969 and 1979. The percentage of men who worked none at all increased between 1969 and 1979. The experiences of the groups during the 1979-1984 period are less similar than during the 1969-1979 period. There has been very little change in the distribution of White workers over this period, with a slightly higher percentage in the 0 weeks category. Among Blacks and Mexicans, there has been an increase in the percentage who work full-year, and among Mexicans, there has been a decrease in the percentage who work none at all. The percentage of Puerto Ricans who worked none at all increased from 18.8% in 1979 to 22.4% in 1984 (see Table 3).

Tests of the Effects of Race and Education

To test for the declining significance of race and the increasing significance of education over the 15 year period we fit a number of alternative models to the data. Test statistics for six of these models are shown in Table 4. The first model is a baseline model for purposes of comparison. Since the G-squared statistics are often poor indicators of fit under departures from simple random sampling, we have used alternative indices of fit such as the index of dissimilarity (of observed vs expected frequencies) and simple proportions or percentages of the variance in the baseline model explained by the fuller model. Thus we minimize the risk of overfitting the model from relying only on G-squared as a fit statistic. We also considered the BIC index, a Bayesian alternative suggested by Raftery (1986).[5] In using BIC, one chooses the model with the lowest negative number (see Table 4).

Model 1 is the baseline model which fits the interactions among the independent variables (Y.R.E.A.) and the main effects for the employment variable (W). Each of the subsequent models also fits the interactions among the independent variables. Model 2 includes only the effect of year on weeks worked and explains about 1 quarter of the variation in the baseline model. Model 3 includes the additional effects of age and education and explains about 69 percent of the variation in the baseline model and offers an improvement of about 44 percent (69-25) over the previous model. Model 4 includes the effect of race and explains about 92 percent of the variation in the baseline model and explains about 23 percent more variance than the previous model.

Models 1-4 do not provide any information regarding our two hypotheses. Our first hypothesis suggests that the effects of race are declining over time. This implies an interaction between race and year. Model 5 includes this interaction (W.Y.R.). A comparison of the G-squared statistics indicates that this model is a significant improvement over Model 4. The BIC statistic, on the other hand, indicates that Model 4 is preferable to Model 5. Further, the indices of dissimilarity indicate little difference between Model 4 and Model 5, and Model 5 only explains one percent more of the baseline G-Squared than Model 4. This suggests that the effects of race on employment may be changing over time but not very much. Also, it does not tell us whether these effects are increasing or declining.[6]

Our second hypothesis suggests that the effects of education are increasing over time. Model 6 includes an interaction between year and education (W.Y.E.) as well as an interaction between year and race. The test statistics indicate that the effects of education on employment did change over the 1969-1984 period, but again, it does not tell us whether these effects are increasing or decreasing.

The G-Squared statistic indicates that Model 6 does not fit the data very well. Other statistics suggest a somewhat different view. The index of dissimilarity between the observed and predicted cell frequencies indicates that only 1.8% of the predicted cell occupants would have to be reclassified in order to achieve the observed distribution, and the model explains 95% of the baseline G-Squared. We estimated a number of other more complicated models which we do not report in Table 4. Although fitting other three way effects (e.g., W.E.R.) resulted in significant reductions in G-Squared, none of these models had a lower BIC statistic than Model 6 in the table. Consequently, we feel comfortable in using Model 6 to assess the magnitude of changes in the effects of race and education on employment.

Changes in the Effects of Race and Ethnicity on Employment

Table 5 contains the ratio of the odds of White employment to those for each of the racial and ethnic minority groups. These odds ratios have a fairly straightforward interpretation. The 1.71 for the White:Black comparison in the first panel indicates that Whites were 1.71 times more likely than Blacks to be working part-year rather than not working in 1969. The difference between Blacks and Whites increased between 1969 and 1979, but declined somewhat between 1979 and 1984. The same pattern of change for Blacks and Whites is shown in panel 2 (the odds of working full-year rather than not working), whereas panel 3 shows that the Black/White ratio of the odds of working full vs. part year decreased consistently, but only slightly over the 1969-1984 period (see Table 5).

The results for the White/Mexican and White/Other Hispanic comparisons in the first two panels indicate that differences between Whites and Mexicans, and Whites and other Hispanics declined consistently over the 1969-1984 period. On the other hand, the differences between Whites and Puerto Ricans increased over the 1969-1984 period. The difference between Whites and Indians did not decline over the 1969-1979 period.

The most notable result in the final panel is that the effects of race on the odds of working full-year vs. part-year changed little over the 1969-1984 period. What change occurred was in the direction of convergence with the odds for Whites.

In sum, the odds ratios do not indicate that the significance of race and ethnicity has declined for all groups over the 1969-1984 period. Employment patterns for Mexicans and Other Hispanics are converging with those of Whites. Black patterns diverged during the 1970s, but may be converging now, and those for Puerto Ricans were diverging from those for Whites throughout the period

Changes in the Effects of Education on Employment

Table 6 provides odds ratios for different educational groups. These ratios can be interpreted in the same way as those in Table 7. The 1.38 in the first column in the first panel, for example, indicates that the odds of working part year vs. not working at all were 1.38 times higher for those with 12 completed years of education than those with less than 12 years of education. The pattern in the first two panels indicates that, if anything, educational differentials in working vs. not working have declined over the 1969-1984 period (see Table 6).

Increases in educational differentials have occurred, however, in the odds of working full-year vs. part-year. This is shown in the third panel. This is especially true when we compare individuals with at least some post-secondary education to those with no post-secondary education. Individuals with post-secondary education were 1.6 times more likely as those with less than 12 years of education to work full-year vs. part-year in 1969, and 2.6 times more likely to do so in 1984. In 1969, individuals with exactly 12 years of education were actually more likely to work full-year vs. part-year than those with post-secondary educations, but by 1984, this situation had reversed itself substantially. This change may be due to the kinds of jobs that were created during the 1969-1984 period, i.e., there was little growth in the types of "good" jobs for those with no post-secondary education (e.g., in manufacturing), but substantial growth in professional jobs in the service sector.[7]

SUMMARY AND CONCLUSIONS

As is often the case in social science research the findings in this paper do not unambiguously support or refute the hypotheses of declining racial differences and increasing educational differences in employment. The employment patterns of Mexicans and Other Hispanics appear to be converging with those of Whites; this is not true for Blacks, Puerto Ricans, and American Indians. Also, it is important to remember that the jobs occupied by minority group members pay less and have fewer fringe benefits than those which White men have. Educational differences in full- vs. part-year work appear to increase.

When these results are viewed in the context of the general improvement in minority group conditions during the 1940-1970 period, the long-term trend seems to be one of slowly decreasing racial differences in employment. Economic growth, such as that experienced during the 1960s, seems to provide a setting in which substantial reductions in employment differentials occur. On the other hand, relatively little improvement has occurred since 1970, and the situation for some groups, especially Puerto Ricans, has worsened.

These findings and previous research suggest there are two things that we can do to promote further reductions in racial inequality in employment. First, access to good jobs is becoming more and more dependent on having at least some post-secondary education. We can improve racial equality in employment prospects through insuring that minority group members finish high school, and then attend and complete college. Unfortunately, recent evidence suggests that Blacks (and probably other minority group members) are increasingly less likely to attend college after finishing high school (Hauser 1987). Hauser argues that this disturbing trend may be due to reductions in financial aid.

Second, we must do something to create good jobs, i.e., full-year jobs with healthy wages and fringe benefits, for individuals who do not have post-secondary educations. This problem was solved for us during the 1940-1970 period because of healthy growth in the economy. In addition, the late 1960s through the mid-1970s witnessed the creation of public service employment and training programs that increased the employment prospects of the most disadvantaged members of the labor force (Bassi and Ashenfelter 1986). Although we can all hope for healthy economic growth during the rest of the century, there is no guarantee that this will happen. Consequently, we need new public service employment and training programs to provide jobs to those who cannot currently find them. Education and the creation of good jobs for the uneducated emerge as the key factors in future reductions in racial inequality.

1. Butler and Heckman argue that one of the major factors in the withdrawal of low-skilled workers from the labor force may be generous social programs such as the Social Security Disability program. Their position can be placed in the context of a wider debate between those who believe that generous social programs have induced individuals do withdraw from the labor force and those who believe that industrial restructuring has forced individuals to leave the labor force.

2. There are other specifications of the age range for the prime age labor force. We chose 25 as the low point because by this age most individuals have completed their education. We chose 54 as the top age because most individuals do not voluntarily retire prior to this age.

3. One must be cautious in analyzing trends among Hispanics over the 1970-1985 period since each Hispanic group includes both immigrants and natives.

Although it is possible to distinguish between immigrants and natives in the Public Use Microdata Samples, it is not possible to do so in the Current Population Surveys.

4. One must also be cautious in examining trends in the employment of American Indians over this period since a number of individuals changed their self-identification from non-Indian to Indian between 1970 and 1980 (Passel 1976; Passel and Berman 1985).

5. The rationale for using BIC goes as follows. The Likelihood Ratio Test using G-Squared is designed to detect any departures from fit from the saturated model. As the sample size gets large, the Likelihood Ratio Test will find discrepancies and reject more and more models. This is the same as finding significant differences occurring with a large sample size or finding that low correlations are more significant as sample size increases. Raftery suggests that we should be comparing models and not simply looking for minor discrepancies between one model and the data.

6. We also estimated a model that included only the significant interactions between race and year. This model had a G-squared statistic of 1136.1 with 272 degrees of freedom. The BIC index for this model was -2207, which suggests that it is a better model than the model with no year X race interactions (Model 4).

7. Jobs in the manufacturing sector grew at an average annual rate of .5% between 1970 and 1980, but decreased by an average annual rate of -1.1% between 1980 and 1984. Jobs in the service sector grew at an average annual rate of 4.1% during the 1970-1980 period and 3.2% during the 1980-1984 period (Statistical Abstract of the United States 1987, Table 661).

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White	32%	35	33	19	37	44	11	36	52
Black	55	31	14	37	35	29	26	39	35
Mexican	68	20	12	55	23	22	49	28	23
Puerto Rican	72	22	7	54	27	19	45	32	23
Other Hisp.	46	29	25	34	29	37	27	36	38
American Indian	60	27	13	34	34	32	--	--	--

Source: Tabulations using the 1970 and 1980 Public Use Microdata Samples and the 1985 Current Population Survey.

TABLE 3

Percentage of Men Aged 25-54 Working None at All, Working Part-Year, and Working Full-Year, 1970-1985

Group	Year								
	1970			1980			1985		
	None	1-47	48+	None	1-47	48+	None	1-47	48+
White	4%	13	84	5	17	78	6	15	79
Black	11	19	70	16	22	62	17	20	64
Mexican	8	18	74	9	24	67	7	24	69
Puerto Rican	13	16	72	19	19	62	22	16	62
Other Hisp.	7	15	77	9	20	71	7	18	75
American Indian	11	34	55	13	30	57	--	--	--

Source: Calculations using the 1970 and 1980 Public Use Microdata Samples and the 1985 Current Population Survey.

TABLE 4

Models of the Effects of Race/Ethnicity and Education on Employment, 1970-1985

Model	G-Squared	DF	Index of Dissimilarity	Diff. From Prev. Model	DF	BIC	Percentage of Baseline
1. Baseline	16476	304	.092	--	--	--	--

(W)								
2. (WY)	12295	300	.078	4181	4	8607	25%	
3. (WY)(WA)								
(WE)	5071.0	292	.047	7224	8	1482	69%	
4. (WY)(WA)								
(WE)(WR)	1267.2	282	.022	3803.8	10	-2199	92%	
5. (WA)(WE)								
(WRY)	1124.4	264	.021	142.8	18	-2121	93%	
6. (WA)								
(WRY)(WYE)	856.1	256	.018	268.3	8	-2291	95%	

Source: Computations with the 1970 and 1980 Public Use Microdata Samples and the 1985 Current Population Survey.

Note: All models include (AERY); W=work or employment, A=age, Y=year, R=race/ethnicity, and E=education.

TABLE 5

The Ratio of the Odds for Whites to Those for
Each of the Racial/Ethnic Minority Groups
(From Model 6 in Table 4)

Comparison	Year		
	1969	1979	1984
Part-Year vs. None			
White:Black	1.71	2.28	2.00
White:Mexican	1.32	1.08	.69
White:Puerto Rican	2.45	2.80	3.25
White:Other Hispanic	1.57	1.36	.87
White:American Indian	1.06	1.39	--
Full-Year vs. None			
White:Black	2.75	3.48	2.76
White:Mexican	1.71	1.48	.87
White:Puerto Rican	2.78	3.30	3.29
White:Other Hispanic	1.86	1.72	.96
White:American Indian	3.72	3.13	--
Full-Year vs. Part-Year			
White:Black	1.61	1.54	1.37
White:Mexican	1.29	1.37	1.25
White:Puerto Rican	2.11	1.18	1.01
White:Other Hispanic	1.19	1.27	1.1
White:American Indian	3.52	2.26	--

TABLE 6

The Ratio of the Odds for Those with 12 Years
of Education and Those With Post-Secondary Education
to Those with Less Than 12 Years of Education
(Based on Model 6 in Table 4)

Comparison	Year		
	1969	1979	1985
Part-Year vs. No Work			
12:LT12	1.38	1.49	1.34
GT12:LT12	1.99	1.79	1.07
Full-Year vs. No Work			
12:LT12	2.65	2.27	2.14
GT12:LT12	3.18	3.01	2.87
Full-Year vs. Part-Year			
12:LT12	1.93	1.52	1.60
GT12:LT12	1.60	1.73	2.60

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