Race, Class, and Labor Markets: The White Working Class and Racial Composition of U.S. Metropolitan Areas

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Because divisions caused by racism are presumed to weaken the working class and because racism is more apparent in local areas with relatively large Black populations, labor market proportion Black is expected to be positively associated with class inequality among Whites. However, Black population size has also been systematically linked to White privilege across a wide array of indicators. In this article, I test the effects of labor market proportion Black on Black–White and class inequality for men and women using hierarchical linear models with 1990 data from U.S. metropolitan areas. The analysis demonstrates that labor markets with larger Black populations have greater class inequality among White men (not women), but also greater relative White-over-Black advantages across class levels, male and female—and these race effects are substantially larger than the class effects. The results are thus consistent with a contradictory position for the White working class with regard to racism. © 2001 Academic Press

Many scholars have argued that the divisions caused by racism weaken the position of the working class overall (e.g., Perlo, 1975; Reich, 1981; Roscigno and Tomaskovic-Devey, 1994). If that were the case, one would expect employers to have a greater opportunity to sow such divisions in labor markets with more Black workers. And if racism is generally more apparent in areas with relatively larger Black populations (Fossett and Kiecolt, 1989; Quillian, 1996; Taylor, 1998), then one would expect working-class solidarity to be weaker in these areas, undermining the bargaining power of the entire working class and therefore increasing class inequality, including among Whites (Szymanski, 1976; Tienda and Lii, 1987; Tomaskovic-Devey and Roscigno, 1996).

On the other hand, Black population size has been linked to systematic White privilege across a wide array of indicators, including joblessness (Cohen, 1998a; D’Amico and Maxwell, 1995; Farley, 1987; McCreary, England, and Farkas,

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1989; Tigges and Tootle, 1993), occupational attainment (Beggs, Villemez, and Arnold, 1997; Burr, Galle, and Fossett, 1991; Fossett and Seibert, 1997; Semyonov, Hoyt, and Scott, 1984), and income or earnings (Blalock, 1956; Cassirer, 1996; Cohen, 1996b; Fossett, 1988; Frisbie and Neidert, 1977; Grant and Parcel, 1990; Tienda and Lii, 1987). Given the breadth of these findings, it would be surprising if the relative benefits of Black population size did not extend to the White working class.

However, these two possibilities are not mutually exclusive. This article tests the hypothesis that Black population size is associated with (a) greater White class inequality and (b) greater inequality between Black and White workers.\(^1\) That is, increased local competition with Black workers may increase the class disadvantage of the White working class, even as it increases their racial advantage. The White working class would thus be in a contradictory position with regard to racism, wherein their exclusionary or racist practices may be protective against Black competition while simultaneously undermining their long-term position relative to higher paid class groups—and hindering the development of oppositional class consciousness.

**RACE AND THE WHITE WORKING CLASS**

Most U.S. scholars in the Marxist tradition have held that because racism divides the working class, it undermines the interests of the White working class by diverting the formation of class consciousness and weakening class struggle. For example, Willhelm (1980, p. 107) quotes the *Guardian* newspaper on the necessity to educate “the white workers to the basic truth that racism is not in their interest and that the precious goal of Black–white unity can be achieved only when the white workers take up and make as their own the just demands of the Black workers.” Reich (1972, p. 318) argues that employers use the fear invoked by the local presence of Black workers to undermine White workers’ wage demands, while racial antagonism undermines labor’s solidarity.

For Reich (1981) and Perlo (1975)—arguing against Becker’s (1971) theory of taste for discrimination—discrimination in pay occurs at the instigation of employers, who stand to benefit most from its practice through reduced wages. If the White working class exhibits racism, in this view, it is the result of discrimination, not its cause. The racism of most Whites is “implanted” by the social system, which “has been and remains controlled overwhelmingly by the capitalist class” (Perlo, 1975, p. 127). Roscigno and Tomaskovic-Devey (1994, p. 587) similarly argue that the landed upper class in the South “played a central role in promoting and instigating racial antagonism and fear, thereby recreating the racial inequality upon which its economic position has depended.”

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\(^1\) Cohen (1998b) has previously demonstrated that full-time working White women benefit in line with White men from larger local relative Black population size. The focus here is therefore on class differences, although men and women are considered independently and differences noted where they occur.
Whites with lower levels of education do express more racist attitudes than those with a college education (Bobo and Kluegel, 1997) and (in Detroit) show more negative stereotyping of Black intelligence, dependence, and disposition while expressing less willingness to live near Black neighbors (Farley et al., 1994). These attitudes may be related to direct economic competition, as White ethnic groups clustered with Black workers in the secondary labor market have expressed more racial intolerance (Cummings, 1980). But is the racism of Whites from less affluent backgrounds a collective mistake that undermines the possibilities for necessary political alliances, or is it a purposive reaction in defense of a privileged status?

The idea of such racism representing ruling class ideas “implanted” in the working class consciousness does not sit well with more complex conceptions of culture (Hall, 1980). Shulman (1990, p. 17) argues that “the history of white workers’ efforts to exclude and subordinate blacks is far more extensive than their sporadic attempts to unite with them. The divide-and-conquer model can only explain this phenomenon in terms of false consciousness.” In Willhelm’s view, “Virtually all Marxists fail to perceive the possibility of divergent material interests separating black and white workers that inhibit unity across race lines” (1980, p. 107).

Williams (1987) faults Reich for precluding the possibility of the White working class garnering short-term gains from racial inequality. In particular, she argues that White workers have been able to generate pressure for exclusionary practices that limit the job entry and advancement of Black workers. In the process of creating divisions within the working class, racism may also play a unifying role for White workers, who can apply pressure to protect job boundaries. Therefore, even if racism retards the development of unions, contributes to stagnated overall wages, or fuels public policy that favors capital over labor, there may be a simultaneous tendency to widen the gap between Black and White workers (Shulman, 1990). Beck and Tolnay (1990) suggest that historically both White workers and White elites may have benefited from racial violence: White workers from bettering their competitive position relative to Black workers, and elites from dividing working class groups from each other.

But if the White working class favors racial discrimination, do they have the clout to impose their will on employers—and do they have more clout in labor markets with higher proportion Black populations? There are several avenues by which White workers might contribute to Black–White inequality in local labor markets. In Bonacich’s (1976) account, as capital used lower priced Black workers to undermine higher priced White labor, the White working class responded with anti-Black practices to protect their privilege, primarily through their unions. Higher local levels of unionization have been associated with lower employment for Black men in blue-collar manufacturing jobs (Stearns and Coleman, 1990), and unionism in the post-War period was positively associated with Black–White income inequality (Beck, 1980a). With the decline of union-
ization, however, other ways of shaping labor market outcomes may have become more important for less powerful Whites.

Consumer pressure may be one such source of influence. The decline of unions has coincided with an increase in service employment, which means that a greater portion of working class jobs involve face-to-face contact with customers. Whites could use their majority status and greater disposable income to influence employment practices, doing business with establishments that locate workers according to their local preferences. Such a mechanism is hard to measure, but there is some relevant evidence. Whites are more likely than Black workers to be hired for jobs that involve talking to customers (Holzer, 1996). Further, firms with mostly White customers are more likely to hire White workers, and this difference is greater for face-to-face jobs (Holzer and Ihlanfeldt, 1998). Holzer and Ihlanfeldt suggest that such discrimination results in Black workers being crowded into firms that serve Black customers, where pay scales are lower. These tendencies could reflect employers’ response to White client demand, real or perceived.

Outside of employment, DeSena (1994) documents White working class grassroots racism to enforce residential segregation, which she describes as an arena in which relatively poor Whites can and do have influence on the racial structure of their communities. Once segregation is higher, White workers’ contributions to White advantage by taking advantage of employers’ reliance on employee referrals, which have been shown to increase White concentration in already segregated firms (Mouw, 2000). Where White workers view the Black population as competitive, they may also influence state policy and institutions, such as the justice system (Myers, 1990). And less-skilled White workers historically responded to Black competition with lynching and urban violence (Olzak, 1990).

These White working class contributions to racial inequality do not suggest a mechanism by which White workers have more clout in markets with larger Black populations. But if racist sentiments generally respond to Black population size, White motivation in furtherance of racist goals would be enhanced, as might the capacity for cross-class unity among Whites. It is thus possible that, even as larger Black representation in the population increases the capacity of employers to undermine labor’s interests, it also increases unified White mobilization in ways that further depress Black workers’ wages. If that is the case, we would expect Black population size to be associated with increased class inequality among Whites and a greater cushion between the White working class and the bottom of the labor force. To explore this theoretical complexity empirically requires deliberate specification.

Massey and Fischer (1999) document the high levels of racial residential segregation from all Whites that persists for Black households of different incomes in 1990; Farley et al. (1994) report that Black–White segregation differs little by income or education level in Detroit.
Several studies have sought to determine whether the White working class benefits from Black–White inequality by examining correlations between measures of Black–White inequality and economic inequality among Whites across local areas. Reich (1972, 1981) and Szymanski (1976) found that greater Black–White inequality is associated with greater income or earnings inequality among Whites. Black–White inequality may not be a suitable independent variable, however, because it partly measures the underlying class inequality itself (Williams, 1987). Thus the direction of causality is not clear. Because it is more exogenous and because it is associated with both expressed racism and observed Black–White inequality, relative Black population size is a more appropriate indicator for a test of racism’s effects on class inequality.

Several studies have examined the relationship between Black population size and White inequality. Using 1970 census data, Szymanski (1976) found that relative minority population size is positively correlated with the White male earnings Gini index. On the other hand, Villemot (1978) found that more Whites had higher earnings and fewer had lower earnings in metropolitan areas with larger Black populations. With 1980 census data, Tienda and Lii (1987) found that, among men, White workers with the most education gained most from higher minority concentrations, which suggests that minority concentration is associated with increased White class inequality. Tomaskovic-Devey and Roscigno (1996) found that population proportion Black benefits to the White working class in North Carolina (in 1980) depend on the form of the elite class structure. At higher levels of elite landowner concentration the White working class did not benefit from increased local proportion Black, but when the elites were less concentrated the White working class did gain. Finally, Tigges and Tootle (1993), who examine proportion Black effects on several employment status outcomes, found a pattern most consistent with generalized gains for White men at different levels of market vulnerability, but with some evidence that the gains are less pronounced for more vulnerable workers.

The bulk of research on this question used data from 1980 or earlier. However, in addition to the lack of consensus achieved in previous work, there are good reasons to return to the question with more recent data and improved methods. First, overall income inequality increased substantially during the 1980s (Levy,

\footnote{Villemot (1978) disagrees with Reich’s (1972) and Szymanski’s (1976) use of Black–White income or earnings ratios as independent variables and fails to replicate their results using instead the Index of Net Difference. Black population size seems preferable to either measure. Using both income ratios and an index of dissimilarity as independent variables, Beck (1980b) fails to replicate the cross-sectional findings by Szymanski (1976) and Reich (1972) with time-series analysis of national data from the late 1940s to 1975. There was also an extensive debate over which measures of central tendency are best suited for dependent variables, but this was mostly premised on the need to compare aggregate measures, which is no longer necessary. Ironically, in this debate over a neo-Marxist interpretation of class and race, none of the studies used an occupation-based indicator of class, but rather used income or earnings levels, or the Gini coefficient.}
1995), while earnings gaps between White men and other groups—especially White and Black women—narrowed (Cotter, Hermsen, and Vanneman, 1999). Second, labor markets themselves changed during that decade, with considerable restructuring of industries and jobs (Kasarda, 1995), an uneven pattern of declining racial residential segregation (Farley and Frey, 1994), and a deepening urban crisis (Nelson, Schwirian, and Schwirian, 1998). Third, the magnitude, effectiveness, and nature of organized labor efforts continued to change after 1980, with unions emerging in a more defensive posture (Wallace, Leicht, and Raffalovich, 1999), which could affect racial dynamics within the working class (Beck, 1980a).

In addition to changing conditions, recent research on other labor market outcomes suggests the presence of class interactions in racial composition effects. In particular, effects on employment status itself might differ across class groups. Cohen (1998a) has shown that proportion Black is associated with greater Black–White inequality in long-term joblessness, which suggests greater effects on employment for working class Blacks, who are at higher risk of long-term joblessness (Jencks, 1991; Kasarda and Ting, 1996). Although beyond the scope of this article, an examination of change over time and the effects of new methods may be motivated by these results.

**DATA AND METHODS**

*Class Definition*

Because an occupation-based class identification is most appropriate for examining the working-class questions previously identified, I test proportion Black effects on earnings across class by breaking White men, White women, Black men, and Black women into working-class and non-working-class subgroups by occupation.\(^4\) I use Szymanski’s (1983) definition of working class, based on relations of production and taking into account structures of authority, so that teachers, blue-collar supervisors, and police, for example, are not included as working class.\(^5\) For our purposes this is more appropriate than a more expansive definition, such as Perlo’s (1975), which includes everyone who works for a

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\(^4\) Horton et al. (2000) use a class definition based on the average income of broad occupational categories. While this strategy may be adequate for measuring the size of the working class over time, it has the weakness of not taking into account the role of specific occupations in the economy. The working class I identify is considerably smaller than the combined “working” and “bottom” classes they propose.

\(^5\) These are not arbitrary examples. Teachers, supervisors, and police, while sometimes considered working class and often members of unions, all have power that can affect labor market outcomes by race directly (e.g., supervisors and promotion) or indirectly [e.g., teachers and poor grades (Ainsworth-Darnell and Downey, 1998) and police and arrests (Reiman, 1998)], for those over which they have authority.
wage or salary, or a more restrictive one that includes only blue-collar occupations.\(^6\)

In 1990 census categories, this definition of working class includes sales workers (except finance and business services and nonretail commodities); all technical, sales, and administrative support occupations (except supervisors); all service occupations (except protective service); and all nonsupervisory agriculture and blue-collar workers. In the sample, 45% of White men are working class compared to 50% of White women, 63% of Black women, and 67% of Black men. I describe the remainder as “non-working class,” while acknowledging that it includes members who are part of various other classes. The non-working class, as the reference category, is conceptualized as the occupational group with which members of the working class might compare their own earnings and well-being.\(^7\)

**Data**

Data for individuals are from the 1990 Decennial Census 5% Public-Use Microdata Samples (PUMS). Variables identify the metropolitan area in which each adult works as well as a set of demographic indicators commonly used to predict labor market outcomes. To study processes of inequality in labor markets, I restrict the sample to non-Latino Black and White individuals ages 25–54 not in military occupations, school, or institutions in 1990 who usually worked 35 h or more per week in 1989.\(^8\) The dependent variable is the natural log of average weekly wage, where average weekly wage is annual earnings divided by weeks worked in 1989. Labor markets have been defined as metropolitan areas (MAs) by the U.S. Census Bureau, based on 1990 population and commuting patterns; I use consolidated metropolitan areas (e.g., Washington–Baltimore) and New

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\(^6\) Concise definitions of “working class” are scarce in the Marxist-oriented literature. Braverman (1974), for example, discusses “new,” “old,” and “unmistakably” working class positions, but offers no overarching specification. The definition employed here is closest to his “unmistakably working-class population” (378). In a recent formulation, Wright (1997, p. 24) defines not classes per se but “locations within class relations.” The category here roughly parallels the skilled and unskilled workers in Wright’s typology (that is, all employees less experts, supervisors, and managers).

\(^7\) In a separate test I used returns to education for each group as a dependent variable, which is more consistent with Tienda and Lii (1987), although I used continuous years instead of credential-year dummy variables. If local proportion Black is associated with increased returns to education, that reflects increased class inequality for that group. The results of that analysis (available from the author) were consistent with those reported here.

\(^8\) People in the ages 25–54 are of prime working age. Differences in their earnings are not likely to be due to current retirement or school-related statuses. Those in military occupations are excluded because their earnings may not be a function of local conditions or decisions. Part-time workers are excluded because variation in their earnings in part reflects independent decisions regarding labor force participation, whereas full-time workers may more reasonably be assumed to want the highest paid jobs they can find.
England County Metropolitan Areas were applicable. The final data set includes 261 labor market MAs.  

The decision to restrict the analysis to Black and White workers, while consistent with most prior research on this question, is underscored by the significant complications required to adequately consider Latinos. In addition to requiring changes to the individual-level model, analysis of Latinos across geographic areas is confounded by the correlation of location and national origin (Cotter, Hermsen, and Vanneman, 1999). We cannot analyze observed differences between Latinos in Miami and Los Angeles as the result of labor market variables, for example, without distinguishing between people of Cuban versus Mexican origin (as well as examining nativity). So the analysis of Latino populations would also need to take into account national origin, further suggesting that this project should be postponed (and Latinos should be removed from the White and Black samples).

**Labor Market Variables**

The primary MA-level independent variable is proportion Black. The use of proportion Black is consistent with including only Blacks and Whites in the models. However, because the presence of other minority groups affects White gains from discrimination as well as employment queues (Cohen, 1998b; Fossett and Seibert, 1997; Tienda and Lii, 1987), I include proportion Hispanic and proportion Asian as independent variables at the MA level. Despite the above-mentioned problems with modeling effects for Latinos, the effect of Latino population size on other groups is less problematic. A similar case can be made for the analysis of diverse Asian groups. Thus, rather than either omit indicators for the presence of other groups or fully model the effects of diverse minority groups, I impose the assumption that the presence of heterogeneous Latino or Asian populations has the same effect on Black and White workers and control for their proportions in the local population.

A set of variables control for economic structure and conditions. Considering the argument that achieved characteristics rather than ascription are more likely to predominate in larger urban areas with more rational and competitive industries, greater bureaucracies, and higher levels of education (Fossett and Kiecolt, 1989), I also control for the log of MA population size. Burr, Galle, and Fossett (1991) found that a strong economy is associated with higher levels of occupa-

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9 The MAs and MA-level data are as used by Cotter et al. (1997), who made their data available for this study. Other researchers (e.g., Beggs, Villezmez, and Arnold, 1997) prefer labor market areas as defined by Killian and Tolbert (1993), which include rural areas. For my models—in which Los Angeles has much more effect on the results than, say, Enid, Oklahoma—the difference is probably slight, since the vast majority of workers live in the metropolitan areas I use. However, it is possible that the dynamics under consideration differ substantially in rural areas.

10 An additional complication is that the effect of the presence of Latinos may depend on the proportion of immigrants in the population, which I do not control. On immigration effects on Black labor market outcomes, see Bean and Bell-Rose (1999).
tional inequality. On the other hand, others have reported a negative effect of a strong local economy on Black–White inequality in employment (Moore, 1992; Freeman, 1991). I therefore include net in-migration—the net change in population as a result of domestic migration in the previous 5 years—as an indicator of long-term local economic conditions (Alperovich, Bergsman, and Ehemann, 1977; Manson and Groop, 1999). I also control for the unemployment rate in 1989 to control for short-term economic conditions.

To control for relative labor demand, I constructed variables for the industrial demand for Black men’s, White women’s, and Black women’s labor based on the national representation of each demographic group in each industry and the industrial composition of each MA’s labor force. This variable is intended to capture aspects of employment preference or discrimination that are specific to industries rather than to local areas (Beggs, 1995; Stearns and Coleman, 1990). This differs from the occupational demand measure used by Cotter et al. (1998) to examine gender effects, but is more consistent with the approach of Beggs, Villemez, and Arnold (1997). Following previous research (e.g., Blalock, 1956; Burr, Galle, and Fossett, 1991; Cohen, 1998b; Cassirer, 1996; Fossett, 1988), I also include a control for percentage manufacturing in the labor force to capture that unique aspect of industrial structure.

These variables, while not measuring change over time, are presumed to capture some of the effects of restructuring at the aggregate level. Region is also controlled, using the four-category Census definition. Labor market variables are summarized in Appendix Table A.

**Individual Variables**

The hierarchical linear model (see below) allows for a full metro-area-level model to predict the slopes of individual-level independent variables. The individual-level coefficients of interest are for dummy variables identifying each of seven class \( \times \) race \( \times \) gender groups, with non-working-class White men

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11 The industrial demand for Black men, White women, and Black women was constructed by calculating their national representation in each of 17 industry groups (from the 1990 5% PUMS file) and multiplying those national weights by the proportion of jobs in each industry for each metropolitan area (from the STF3C file). The industrial demand for White women’s labor, for example, is calculated according to the following equation:

\[
WWDEM_j = \sum (IPROP_{ij} \times WWREP_i),
\]

where \( WWDEM_j \) is the industrial demand for White women’s labor in metropolitan area \( j \), \( IPROP \) is the proportion of the labor force in industry \( i \) for metropolitan area \( j \), and \( WWREP \) is the national representation of White women in industry \( i \).

12 As one reviewer pointed out, this variable controls for the historical differences in the levels of inequality across regions, but assumes that racial composition effects do not vary by region. To the extent that regional variation represents differences in historical development (see, e.g., Tomaskovic-Devey and Roscigno, 1996; Walters, James, and McCammon, 1997; Wilson, 1978), this assumption may not hold and should be further explored.
(NWCWM) as the excluded category. These coefficients, measuring the earnings difference from non-working-class White men, net of any individual controls, are simultaneously modeled in the MA-level equations.

The individual-level model comprises control variables that interact with White men (WM), White women (WW), Black men (BM), and Black women (BW), allowing them to have different effects on each group. They include years of education, potential experience (calculated by subtracting education-plus-6 from age) and its square, and a dummy variable for individuals who report a work-limiting disability. Family context variables include married and formerly married (separated, divorced, and widowed); never-married is the excluded category. Number of own children under 18 in the household and presence of own children under 5 are also controlled. A series of family interaction variables allow the effects of the children variables to vary by marital status (and each of these interacts with White men, White women, Black men, and Black women). Summary statistics for individual-level variables appear in Appendix Table B.\(^{13}\)

**Analytic Strategy**

Hierarchical linear models allow for simultaneous estimation of a full macro-level model to predict the slopes of individual-level independent variables (Bryk and Raudenbush, 1992). These models identify the relative role of individual and contextual effects in accounting for earnings inequality.\(^{14}\) In the case of labor market racial composition, which has both historical and contemporary effects, this approach identifies the premarket effects of contextual variables, or the mediation of labor market effects by individual characteristics. Broad measures of racial inequality should be taken without individual controls (Bonilla-Silva, 1997; Reich, 1972; Szymanski, 1983), and most of the debate over White working-class benefits from Black–White inequality concerns effects that do not control for individual differences.\(^{15}\) Therefore, I first examine the role of racial composition without controlling for individual characteristics and then add individual variables in a separate model.

Coefficients for the seven dummy variables (with non-working-class White men as reference category) are dependent variables at the MA level. These individual-level coefficients measure the gap between the earnings of each group and non-working-class White men (net of individual controls if any). This strategy treats each class × race × gender group as distinct in comparison to

\(^{13}\) All analyses are conducted using the PUMS 5% person weight divided by 20.

\(^{14}\) Unlike a two-stage regression model, these models account for variance in the standard errors of individual-level coefficients, which differ across contextual units for groups in the sample. Hierarchical linear models are also better than the two-stage approach at estimating individual-level effects because they pool individuals to produce fixed effects. Without this ability, models of individual-level effects are not reliable (or, sometimes, possible) across macro-level units, some of which have small sample sizes.

\(^{15}\) Darity and Myers (1998) stress the importance of considering premarket effects, which they integrate into Black–White income inequality models.
non-working-class White men, rather than measuring class or race effects within genders, gender effects within classes, and so on. These comparisons are most appropriate for understanding the dynamics of a system with multiple intersecting mechanisms of inequality (Cotter, Hermsen, and Vanneman, 1999). For each group, the dummy-variable coefficient represents inequality compared to the universal reference category.

The full individual-level equation takes the following form:

\[ Y_{ij} = \beta_{0j} + \beta_{1j}(WCWM_{ij}) + \beta_{2j}(NWCWW_{ij}) + \beta_{3j}(WCWW_{ij}) + \beta_{4j}(NWCBM_{ij}) + \beta_{5j}(WCBM_{ij}) + \beta_{6j}(NWCBW_{ij}) + \beta_{7j}(WCBW_{ij}) + \sum \beta_{aj}(WM_{ij})(X_{kij} - \bar{X}_k \cdot \cdot) + \sum \beta_{bj}(BM_{ij})(X_{kij} - \bar{X}_k \cdot \cdot) + \sum \beta_{cj}(WW_{ij})(X_{kij} - \bar{X}_k \cdot \cdot) + \sum \beta_{dj}(BW_{ij})(X_{kij} - \bar{X}_k \cdot \cdot) + r_{ij}, \]  

where \( Y_{ij} \) is the natural log of the weekly wage for individual \( i \) in MA \( j \); \( \beta_{0j} \) is the individual-level intercept (non-working-class White men); \( \beta_{1j} \cdots \beta_{7j} \) are coefficients for the gap between each of the seven class–race–gender subgroups and non-working-class White men in MA \( j \); \( \beta_{aj} \cdots \beta_{dj} \) are the vectors of coefficients for the interaction of White men, Black men, White women, and Black women with control variables \( X_{kij} \) in MA \( j \); \( \bar{X}_k \cdot \cdot \) is a vector of \( k \) grand means of the control variables; and \( r_{ij} \) is an error term for individual \( i \) in MA \( j \).

Two control variables are not centered: disabled and presence of children under age 5. The centering of the rest of the control variables means that the intercept \( (\beta_0) \) equals the predicted wages for non-disabled non-working-class White men with average characteristics on all the control variables and no children less than 5 years old, and the coefficients for inequality represent predicted differences for the other groups at the same levels of the control variables. When they are included, all individual-level control variables are constrained to have fixed effects across metropolitan areas.\(^{16}\)

Individual-level coefficients are the dependent variables at the MA level of the model, represented by Eq. (2) as follows:

\[
\begin{align*}
\beta_{0j} &= \gamma_{00} + \gamma_{01}(PB_j) + \sum \gamma_{m0}(Z_{mj} - \bar{Z}_m \cdot) + u_{0j} \\
\beta_{1j} &= \gamma_{10} + \gamma_{11}(PB_j) + \sum \gamma_{m1}(Z_{mj} - \bar{Z}_m \cdot) + u_{1j} \\
\beta_{2j} &= \gamma_{20} + \gamma_{21}(PB_j) + \sum \gamma_{m2}(Z_{mj} - \bar{Z}_m \cdot) + u_{2j} \\
\beta_{3j} &= \gamma_{30} + \gamma_{31}(PB_j) + \sum \gamma_{m3}(Z_{mj} - \bar{Z}_m \cdot) + u_{3j} \\
\beta_{4j} &= \gamma_{40} + \gamma_{41}(PB_j) + \sum \gamma_{m4}(Z_{mj} - \bar{Z}_m \cdot) + u_{4j} \\
\beta_{5j} &= \gamma_{50} + \gamma_{51}(PB_j) + \sum \gamma_{m5}(Z_{mj} - \bar{Z}_m \cdot) + u_{5j}
\end{align*}
\]

\(^{16}\) I agree with Sun (1999) that the variation across communities in individual-level effects may be a fruitful avenue for further research. Such analyses should proceed from specific research questions, however, rather than take the form of a general search for variation in individual-level effects.
where $\gamma_{00}$ is the intercept for the MA-level model of non-working-class White men’s predicted wage ($\beta_{0j}$) and $\gamma_{01}$ is the effect of proportion Black on $\beta_{0j}$; $\gamma_{10}$ is the intercept for the MA-level model of $\beta_{1j}$ (the wage difference between working- and non-working-class White men) and $\gamma_{11}$ is the effect of PB on $\beta_{1j}$ and so on for the other groups; $\gamma_{m0} \cdots \gamma_{m7}$ are the vectors of $m$ MA-level coefficients for the effects of $Z_{mj}$ on the individual-level coefficients; $\bar{Z}_m$ is a vector of $m$ grand means of the MA-level variables; $\bar{u}_{0j} \cdots \bar{u}_{7j}$ are the error terms for MA-level random effects; and $\bar{\beta}_{a} \cdots \bar{\beta}_{dj}$ are constant coefficients across all MAs. Metro-area-level control variables are also centered so that the intercept represents predicted wages for non-working-class White men at average levels of the individual controls in labor markets with average values on the MA controls and zero PB.

A positive proportion Black coefficient for the intercept ($\gamma_{01}$) indicates that non-working-class White men earn more in labor markets with more Black residents. Proportion Black coefficients for the subgroup dummy variables test whether Black population size is associated with changing wage differences between each group and non-working-class White men. The model thus tests the absolute change for non-working-class White men and the relative changes for other groups associated with Black population size.

RESULTS

Table 1 includes summary results from the first set of models. Model A is a baseline, which includes no MA-level variables or individual-level control variables. The coefficient for non-working-class White men (the reference group) shows their predicted logged weekly wage ($640). The coefficients for the other groups represent the predicted difference between each group and the reference group. The baseline establishes the earnings inequality between each group and non-working-class White men (controlling only for the variation across labor markets) and the amount of variation in these coefficients (lower panel).

In Model B, proportion Black is introduced as the only determinant of the differences between each group and non-working-class White men. With no individual- or MA-level controls in the model, this shows the overall association of proportion Black with absolute earnings for non-working-class White men and change in relative earnings for the other class \times race \times gender groups. Model C tests whether there is a proportion Black effect net of the other metro-area characteristics. Models B and C permit the individual-level dummy variables for each group to reflect the indirect effects of proportion Black, which may have historical or premarket effects on education levels and returns to education, family size and structure, and so on.

The proportion Black coefficients show the predicted change in each group’s
dummy-variable coefficient as proportion Black rises from 0 to 1. Remember that
the significance tests for proportion Black ask whether each slope is different
from the slope for White men, not whether proportion Black has a positive or

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>Metro Area-Level Models: Weekly Earnings for White Non-Working-Class Men and Differences in Earnings by Race, Gender, and Class Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline (A)</td>
</tr>
<tr>
<td>Non-working-class</td>
<td></td>
</tr>
<tr>
<td>White men ((γ_00))</td>
<td>6.461***</td>
</tr>
<tr>
<td>Proportion Black ((γ_{01}))</td>
<td>.046</td>
</tr>
<tr>
<td>White women ((γ_{10}))</td>
<td>−0.398***</td>
</tr>
<tr>
<td>Proportion Black ((γ_{11}))</td>
<td>−.062*</td>
</tr>
<tr>
<td>Black men ((γ_{20}))</td>
<td>−0.277***</td>
</tr>
<tr>
<td>Proportion Black ((γ_{21}))</td>
<td>−.528***</td>
</tr>
<tr>
<td>Black Women ((γ_{30}))</td>
<td>−0.471***</td>
</tr>
<tr>
<td>Proportion Black ((γ_{31}))</td>
<td>−.269***</td>
</tr>
<tr>
<td>Working class</td>
<td></td>
</tr>
<tr>
<td>White men ((γ_{40}))</td>
<td>−0.379***</td>
</tr>
<tr>
<td>Proportion Black ((γ_{41}))</td>
<td>−.118**</td>
</tr>
<tr>
<td>White women ((γ_{50}))</td>
<td>−0.824***</td>
</tr>
<tr>
<td>Proportion Black ((γ_{51}))</td>
<td>−.038</td>
</tr>
<tr>
<td>Black men ((γ_{60}))</td>
<td>−0.585***</td>
</tr>
<tr>
<td>Proportion Black ((γ_{61}))</td>
<td>−.481***</td>
</tr>
<tr>
<td>Black women ((γ_{70}))</td>
<td>−0.861***</td>
</tr>
<tr>
<td>Proportion Black ((γ_{71}))</td>
<td>−.571***</td>
</tr>
</tbody>
</table>

Variance components of coefficients (Percentage of between-MA variation explained)

| Non-working-class | | | |
| White men \((u_0)\) | .01174 | .01171 (0) | .00420 (64) |
| White women \((u_1)\) | .00194 | .00191 (2) | .00099 (48) |
| Black men \((u_2)\) | .00873 | .00498 (43) | .00261 (70) |
| Black women \((u_3)\) | .00463 | .00412 (11) | .00239 (48) |

| Working class | | | |
| White men \((u_4)\) | .00457 | .00442 (3) | .00174 (61) |
| White women \((u_5)\) | .00211 | .00210 (0) | .00143 (32) |
| Black men \((u_6)\) | .01219 | .01010 (17) | .00488 (60) |
| Black women \((u_7)\) | .00926 | .00553 (40) | .00335 (64) |

Note. See Table 2 for complete MA-level coefficients.

* \(p < .10\).
* * \(p < .05\).
* * * \(p < .01\).
* * * * \(p < .001\) (two-tailed tests).
negative absolute effect on each group. For example, in Model C, non-working-class White women have a negative PB coefficient of .083. However, since non-working-class White men’s coefficient is a positive .266, the net effect of PB on non-working-class White women is \( .266 - .083 = .183 \). So the absolute effect on these women is positive, but their gain is significantly less than that of the reference group.

Model B shows the observable relationship between proportion Black and earnings inequality. There is greater inequality between each group (except working-class White women) and non-working-class White men in labor markets with higher proportion Black. However, the association for Black workers of both class groups is much stronger. This shows that White working-class men earn less relative to their non-working-class counterparts in labor markets with more Black workers, consistent with the claim that racism increases White class inequality. However, the result also is consistent with the argument that White workers gain relative to Black workers in markets with more Black workers. For both men and women, the proportion Black effect is significantly more negative for members of the Black working class than for those in the White working class.\(^{17}\)

Because individual control variables capture important premarket inequalities, the primary model for identifying proportion Black effects at the MA level is Model C, which controls for MA-level variables but not individual-level variables. For illustration, predicted weekly earnings from Model C are presented in Figs. 1 and 2 for men and women respectively. In this model proportion Black has a significant positive effect on non-working-class White men, the reference group. However, the positive coefficient for the intercept in Model C moves the baseline so that there is an absolute gain for all White workers (e.g., \(.266 - .091 = .175\) for White working-class men) and losses for all Black workers (e.g., \(.266 - .586 = -.320\) for Black working-class men). The increased Black–White inequality is statistically significant for both men and women in both working-class and non-working-class groups. This again supports the argument that PB’s effect is to increase inequalities among Whites as well as inequality between Black and White workers.

The slopes in Figs. 1 and 2 are upward for all White groups and downward for all Black groups. In dollar terms, the predicted positive effect is strongest for White men outside the working class, who are predicted to earn $91 more per week as proportion Black increases from 0 to 0.5. The increased class inequality among White men and the increased gender inequality for Whites outside the working class both need to be seen in the context of positive net effects for all Whites.

The rest of the metro-area results from Model C are presented in Table 2. Of particular interest here are the effects of relative Latino population size. Non-
working-class White men are predicted to earn more as proportion Hispanic increases (.194), while working-class White men fall further behind (−.227). As with proportion Black (but not proportion Asian), proportion Hispanic is associated with increased earnings for the reference group, increased class inequality among White men, and increased inequality between Black and White men at both class levels. Proportion Hispanic effects for women are in the same direction, but weaker and in most cases not significant.

One additional observation from Table 2 is that in only a few cases do MA-level variables have opposite effects on inequality for different groups. Exceptions include proportion Asian, which has negative effects for Black women and positive effects for White women; the unemployment rate, which reduces inequality only for men and Black women outside the working class; net domestic in-migration, which reduces inequality for women but increases inequality for working-class White men; and manufacturing, which has negative effects on White women but a positive effect for working-class Black women.

To summarize the main result, population proportion Black is associated with increased Black–White inequality for men and women, working class or not. At
the same time, proportion Black is associated with increased class inequality among White men but not White women. This confirms the initial hypothesis with regard to men but not women. White working-class men are indeed in a middle position wherein they are negatively affected by larger Black (and Latino) population size relative to non-working-class White men, while at the same time their White privilege relative to Black men in the working class increases. However, as the figures show, the race effects are substantially larger than the class effects, so that at higher levels of proportion Black racial inequality is of greater relative importance compared to class inequality. In fact, by 35% Black White working-class men are predicted to earn more than Black non-working-class men (Fig. 1).

Black–White inequality has substantial prelabor market effects (Darity and Myers, 1998), perhaps most importantly with regard to educational outcomes (Roscigno, 1995, 1999). Table 3 includes Model C from Table 1 and compares it to a model with the individual control variables added. This last model approximates a labor market discrimination model. The difference between these two models shows the extent to which labor market characteristics are embedded.
The third column of the table shows the percentage change in each coefficient when the individual controls are added. Consistent with previous research (e.g., Tomaskovic-Devey, 1993), the individual controls used in personal history. The third column of the table shows the percentage change in each coefficient when the individual controls are added. Consistent with previous research (e.g., Tomaskovic-Devey, 1993), the individual controls used
here account for a substantial portion of the observed earnings inequalities (from 13 to 56%), with class and race inequalities for men most substantially reduced. In the final model of Table 3, the proportion Black effect on class inequality for White men is no longer significant. That effect thus apparently results from the distribution of individual characteristics in higher proportion Black areas. White working-class men in higher proportion Black areas are less likely to have human capital and family structure characteristics conducive to higher wages. The proportion Black effects on Black workers are reduced in this model (about one-quarter for men; less for women), although all remain statistically significant and of substantial magnitude, implying net negative earnings effects for Black workers. We may conclude from Table 3 that proportion Black effects are mediated to a limited extent through the distribution of individual characteristics; Black men especially appear to suffer premarket consequences of higher relative Black population size. But proportion Black is also positively associated with contemporary discrimination against Black workers, holding individual characteristics constant.

### Table 3

Weekly Earnings Models with MA-Level and Individual-Level Controls

<table>
<thead>
<tr>
<th></th>
<th>With MA-level controls*</th>
<th>With MA &amp; individual controls</th>
<th>Percentage change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-working class</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White men ($\gamma_{00}$)</td>
<td>6.431***</td>
<td>6.340***</td>
<td>−1†</td>
</tr>
<tr>
<td>Proportion Black ($\gamma_{01}$)</td>
<td>.266***</td>
<td>.249***</td>
<td>−6</td>
</tr>
<tr>
<td>White women ($\gamma_{10}$)</td>
<td>−.388***</td>
<td>−.338***</td>
<td>−13†</td>
</tr>
<tr>
<td>Proportion Black ($\gamma_{11}$)</td>
<td>−.083*</td>
<td>−.092**</td>
<td>11</td>
</tr>
<tr>
<td>Black men ($\gamma_{20}$)</td>
<td>−.183***</td>
<td>−.111***</td>
<td>−39†</td>
</tr>
<tr>
<td>Proportion Black ($\gamma_{21}$)</td>
<td>−.655***</td>
<td>−.513***</td>
<td>−22</td>
</tr>
<tr>
<td>Black women ($\gamma_{30}$)</td>
<td>−.436***</td>
<td>−.352***</td>
<td>−19†</td>
</tr>
<tr>
<td>Proportion Black ($\gamma_{31}$)</td>
<td>−.383***</td>
<td>−.356***</td>
<td>−7</td>
</tr>
<tr>
<td><strong>Working class</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White men ($\gamma_{40}$)</td>
<td>−.367***</td>
<td>−.162***</td>
<td>−56†</td>
</tr>
<tr>
<td>Proportion Black ($\gamma_{41}$)</td>
<td>−.091*</td>
<td>−.048</td>
<td>−47</td>
</tr>
<tr>
<td>White women ($\gamma_{50}$)</td>
<td>−.825***</td>
<td>−.621***</td>
<td>−25†</td>
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<tr>
<td>Proportion Black ($\gamma_{51}$)</td>
<td>.016</td>
<td>.008</td>
<td>−50</td>
</tr>
<tr>
<td>Black men ($\gamma_{60}$)</td>
<td>−.516***</td>
<td>−.293***</td>
<td>−43†</td>
</tr>
<tr>
<td>Proportion Black ($\gamma_{61}$)</td>
<td>−.586***</td>
<td>−.433***</td>
<td>−26</td>
</tr>
<tr>
<td>Black women ($\gamma_{70}$)</td>
<td>−.797***</td>
<td>−.566***</td>
<td>−29†</td>
</tr>
<tr>
<td>Proportion Black ($\gamma_{71}$)</td>
<td>−.465***</td>
<td>−.382***</td>
<td>−18</td>
</tr>
</tbody>
</table>

* Model C from Table 1.
* * $p < .05$.
* ** $p < .01$.
* *** $p < .001$.
* † Difference significant at $p < .05$ (two-tailed tests).
CONCLUSIONS

White men in the non-working-class group reap the greatest rewards from larger local Black population size. As a result, relative Black population size is positively associated with class inequality among White men and gender inequality among higher class Whites. However, for men and women—in the working class or not—relative Black population size is also positively associated with inequality between Black and White workers. These findings contradict Tienda and Lii’s (1987, p. 162) conclusion that “only college-educated [male] whites gained from the presence of minorities, while whites with less education did not.” Tienda and Lii also found that Black men with less education had the greatest negative percentage minority effect, which is not supported by these results.¹⁹

The conclusion is equivocal for what is sometimes called the “radical” view of racism (Beck, 1980b; Tigges and Tootle, 1993), which predicts that the presence of Black workers increases the capacity for management to drive a wedge into the working class, resulting in lower earnings for both Black and White workers. On the one hand, working-class White men (but not women) do fall further behind their non-working-class counterparts as a function of population proportion Black. On the other hand, the relative advantage of all White workers over Black workers is heightened as proportion Black increases. All groups of Whites benefit from larger relative Black population size, but White men outside the working class benefit most. Although the mechanisms remain opaque, at the most general level the “racial structure of society,” which represents the aggregate of the “social relations and practices based on racial distinctions [that] develop at all social levels” (Bonilla-Silva, 1997, p. 474), is apparently conditioned by the relative size of the Black population.

The fact that White men and women at both class levels gain relative to Black workers lends credence to those who have questioned the “false consciousness” aspect of White motivations for fostering racial divisions. These results do not prove that the White working class has the desire or ability to increase Black–White inequality in the labor market. Employers may simply take advantage of increased racial animosity in higher proportion Black labor markets in order to further divide White and Black workers, against the will of both.²⁰ But if that is the case, these results suggest that the wages of White workers come out higher, not lower, as a result (at least in the short run). Paying White workers more and Black workers less may be a means of dividing workers, but it is not done at an equal cost to Black and White workers. These results are thus consistent with a contradictory position for the White working class. The White working class may be able to improve its class position by uniting with Black workers, but those who would promote such efforts should recognize that in so doing they threaten their racial advantage.

¹⁹ Tienda and Lii (1987) used percentage minority (rather than just Black) as well as data from 1980 and different statistical models, making direct comparisons with the results difficult.
²⁰ I owe this formulation to an anonymous reviewer.
# APPENDIX

## Table A

**Metropolitan-Area Variable Summary Statistics**

<table>
<thead>
<tr>
<th>Variable</th>
<th>White Mean</th>
<th>SD</th>
<th>Black Mean</th>
<th>SD</th>
<th>Min.</th>
<th>Max.</th>
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</thead>
<tbody>
<tr>
<td>Proportion Black</td>
<td>.121</td>
<td>.082</td>
<td>.181</td>
<td>.087</td>
<td>.0003</td>
<td>.455</td>
</tr>
<tr>
<td>Proportion Asian</td>
<td>.029</td>
<td>.038</td>
<td>.028</td>
<td>.032</td>
<td>.001</td>
<td>.600</td>
</tr>
<tr>
<td>Proportion Hispanic</td>
<td>.082</td>
<td>.100</td>
<td>.083</td>
<td>.095</td>
<td>.002</td>
<td>.939</td>
</tr>
<tr>
<td>Population (ln)</td>
<td>14.43</td>
<td>1.46</td>
<td>14.75</td>
<td>1.43</td>
<td>10.95</td>
<td>16.78</td>
</tr>
<tr>
<td>West</td>
<td>.202</td>
<td>.401</td>
<td>.105</td>
<td>.307</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>South</td>
<td>.303</td>
<td>.460</td>
<td>.467</td>
<td>.499</td>
<td>0</td>
<td>1</td>
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<tr>
<td>North Central</td>
<td>.248</td>
<td>.432</td>
<td>.217</td>
<td>.412</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>East</td>
<td>.247</td>
<td>.431</td>
<td>.211</td>
<td>.408</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>.172</td>
<td>.056</td>
<td>.165</td>
<td>.053</td>
<td>.036</td>
<td>.463</td>
</tr>
<tr>
<td>Unemployment</td>
<td>.061</td>
<td>.013</td>
<td>.063</td>
<td>.014</td>
<td>.028</td>
<td>.143</td>
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<tr>
<td>Net in-migration</td>
<td>.001</td>
<td>.041</td>
<td>−.002</td>
<td>.038</td>
<td>−.154</td>
<td>.261</td>
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<tr>
<td>White women demand</td>
<td>38.2</td>
<td>1.16</td>
<td>38.3</td>
<td>1.07</td>
<td>33.3</td>
<td>44.6</td>
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<tr>
<td>Black men demand</td>
<td>4.61</td>
<td>.10</td>
<td>4.63</td>
<td>.09</td>
<td>4.08</td>
<td>4.99</td>
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<tr>
<td>Black women demand</td>
<td>5.32</td>
<td>.23</td>
<td>5.36</td>
<td>.23</td>
<td>4.46</td>
<td>6.37</td>
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</tbody>
</table>

_Sources_: Census STF3C, Cotter et al. (1997), and subsequent calculations (see text).

## Table B

**Individual-Level Summary Statistics**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean White men</th>
<th>SD</th>
<th>Mean White women</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working class (=1)</td>
<td>.451</td>
<td>.498</td>
<td>.496</td>
<td>.500</td>
</tr>
<tr>
<td>Weekly wage (ln)</td>
<td>6.414</td>
<td>.665</td>
<td>5.979</td>
<td>.613</td>
</tr>
<tr>
<td>Working class wage (ln)</td>
<td>6.174</td>
<td>.578</td>
<td>5.756</td>
<td>.555</td>
</tr>
<tr>
<td>Non-working class wage (ln)</td>
<td>6.609</td>
<td>.682</td>
<td>6.215</td>
<td>.590</td>
</tr>
<tr>
<td>Education</td>
<td>13.97</td>
<td>2.66</td>
<td>13.88</td>
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<tr>
<td>Hours worked (ln)</td>
<td>3.810</td>
<td>.175</td>
<td>3.775</td>
<td>.137</td>
</tr>
<tr>
<td>Potential experience</td>
<td>19.33</td>
<td>8.40</td>
<td>19.18</td>
<td>8.71</td>
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<tr>
<td>Potential experience squared</td>
<td>406.4</td>
<td>338.4</td>
<td>406.4</td>
<td>342.8</td>
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<tr>
<td>Married</td>
<td>.745</td>
<td>.436</td>
<td>.631</td>
<td>.483</td>
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<tr>
<td>Was married</td>
<td>.108</td>
<td>.310</td>
<td>.212</td>
<td>.409</td>
</tr>
<tr>
<td>Own children in HH</td>
<td>.998</td>
<td>1.143</td>
<td>.744</td>
<td>.986</td>
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<tr>
<td>Married/Children</td>
<td>.944</td>
<td>1.143</td>
<td>.583</td>
<td>.939</td>
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<tr>
<td>Was married/Children</td>
<td>.037</td>
<td>.267</td>
<td>.140</td>
<td>.498</td>
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<tr>
<td>Married/Children LT5</td>
<td>.648</td>
<td>.478</td>
<td>.538</td>
<td>.499</td>
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<tr>
<td>Was married/Children LT5</td>
<td>.088</td>
<td>.283</td>
<td>.174</td>
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<tr>
<td>Never married/Children LT5</td>
<td>.116</td>
<td>.320</td>
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<tr>
<td>Disabled</td>
<td>.035</td>
<td>.183</td>
<td>.025</td>
<td>.155</td>
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_N_ = 1,255,742

N = 789,042
REFERENCES


