Racial Segregation Among Places of Employment*

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ABSTRACT

Indices of racial segregation in employment are presented for black and non-Hispanic white workers in the same occupational category. Controlling on the availability of blacks in each category, the most racially segregated groups are laborers and service workers. At each occupational level, women are more racially segregated from one another than are men, although differential employment in high- and low-segregation industries accounts for some of these differences. The racial composition of an establishment's work-force in one occupation is strongly related to its racial composition in other occupations, particularly though, within the blue collar and white collar subgroups. The black proportions of sales workers and clerical workers are higher the more the total establishment's employment is concentrated in that occupation. Further research directions are suggested.

Since 1965, studies have documented the extent of racial segregation in schooling and housing in the U.S. Thus, we have reasonably reliable statistics about the extent to which neighborhoods in a city vary in their racial composition (e.g., Sorensen et al.) and the extent to which different schools in the same school system have different racial composition (see Coleman et al.).

Along with neighborhoods and schools, employment is one of the most significant realms of social life. However, until now we have lacked comparable descriptive data on the extent of racial segregation in employment. Of course, there is a large literature in sociology and in economics on racial discrimination in the labor market and its consequences for the disproportionate concentration of minority workers in certain occupational categories (see Pascal). However, there has been little systematic descrip-

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tion or analysis of the *segregation* of white and black workers in the *same occupation* across *different places of employment.*

Each year, however, the Equal Employment Opportunities Commission (EEOC) collects data from over 35,000 employers on the race and sex composition of their work force, for each of nine broadly defined occupational groupings from managers to service workers. By aggregating these data, we can examine racial segregation among broadly conceived occupational peers. For instance, we can determine whether white and black skilled craftsmen are more segregated from one another (more likely to work at different places of business) than are black and white unskilled laborers. Using the EEOC data, we can also see, for example, whether men or women are more racially segregated or which industries are the most racially segregated, and we can ask which factors are most associated with the racial composition of workers employed in a particular occupational category.

In this paper, we examine the segregation of the *non-Hispanic* white employed population and the black working population.[1] First, we look at the general level of employment segregation between these two ethnic categories and then we disaggregate by occupational category, by sex, by industry, and by several other factors. Our description of segregation is based on two types of measures: (1) the *absolute level* of cross-racial experience (e.g., for the average white professional, the proportion of blacks among the professional-level employees at his place of work), and (2) a *standardized* measure of segregation—a measure of how much the average racial environments of black and white workers in the same category *differ* from one another and from the racial environment that would exist under the condition of complete integration of that category of workers.

Source of Data

The EEOC survey, conducted annually, is a mail census of most private employers in the country. Nearly all private employers with 100 or more employees are included in this survey.[2] For firms with more than one place of business (e.g., retail chains), a separate data record is created for each place of business with 25 or more employees. However, because not every employer complies with the EEOC regulations (Ashenfelter and Heckman, n. 5) and because many employers are excluded from the survey's coverage (small employers, tax-exempt groups), the employment data exist for only about half of all private non-agricultural workers (and only about 5 percent of workers employed in agriculture).[3] The analysis in this paper comes from a one-in-twenty sample ($N = 7,483$ places of employment) from the 1975 EEOC survey.

It is difficult to evaluate the quality of the employer self-report data

used here. Employers were given instructions to record racial/ethnic data based on a visual survey, personnel records, or, where necessary, direct inquiry. They were given a paragraph-length description of each of the nine occupational categories including discussion of skill and educational requisites and examples of the kinds of jobs included in the category. However, the reports, while audited by EEOC for annual changes in establishment racial composition, are not systematically validated, and we have no evidence as to how attentive the survey respondents were to these instructions and definitions.

On the other hand, our estimates of segregation would be most likely to be in error if *non-respondents* were particularly clustered among establishments with very few black workers, or if firms with a small number of black workers tended to overreport their presence. Such biases would also distort the overall racial composition of the sample. Consequently, it is reassuring to report that the sample's racial composition approximates quite closely the racial composition of the labor force of the non-agricultural, private sector as reported by the Bureau of Labor Statistics (B.L.S.). In its survey of the population with work experience in 1975, B.L.S. estimated a private, non-agricultural work-force that is 11.5 percent "black and other races." Our EEOC sample is 11.9 percent black and other races (10.7 percent black, 1.2 percent other) in addition to 4.2 percent "Spanish-surnamed" which is a minority group within the white racial category.

Thus, while there may be some slight underreporting by homogeneously white establishments and some overclaiming of black and other minority employees, there is no evidence to suggest major impediments to our use of the data to analyze patterns of racial segregation in employment.

Employment Segregation: Descriptive Statistics and Measurement of the Segregation Index

A picture of the differential racial environments of black and white workers in the EEOC labor force is given in the following statistics: half of all white workers included in the enumeration work at a place of business whose work force is less than 5 percent black. Yet only 1 out of 12 black workers find him- or herself in this small a minority. On the other hand, the median black worker is employed at an establishment that is about 21 percent black, whereas only 1 white worker in 9 works in such a racially heterogeneous situation. In sum, the median black worker's work environment consists of more than four times the proportion of black workers as does the environment of the median white worker.

It is theoretically possible for the racial distributions of co-workers to be identical for each ethnic group. This would be the case, however, only

when the percent black at all establishments was identical. The more that establishments vary in their racial composition, the more the typical racial environments of white and black workers vary from one another. In the extreme case, each ethnic group works at an establishment that only employs members of that group and the variance in racial composition among the establishments is at its maximum.

An index measuring points along the continuum from complete integration (no variation in racial composition) to complete segregation (variation at its maximum) is called a "segregation index." A variety of such segregation indices exists, but an analysis of the subject (Becker) suggests the choice of the index, described below, which we call *S*. *S* has been recently used to examine school segregation by race (Coleman et al.) and residential segregation by social class (Farley) and by race (Schnare).[4]

As applied to employment segregation, the *S* index compares the average existing cross-racial experience of individual workers with the cross-racial experience that would exist under a condition of complete integration.

The actual experience with black co-workers by white workers, for example, can be expressed as the mean percent black at the same place of employment for all white workers, or

$$P_{b|w} = (\sum_{i=1}^{n} n_{w_i} \cdot P_{b_i})/(\sum_{i=1}^{n} n_{w_i})$$

Where P_{b_i} = percent black among total employment in i'th establishment
n_{w_i} = number of whites in i'th establishment
N = total number of establishments

This is sometimes called the "percent black for the average white," although it is not the same as the median white worker's experience but, more properly, "the average percentage of black workers for all white workers."

Under complete integration, "percent black for the average white" is merely the overall percentage of black workers in the universe under study, or P_b. Thus, since blacks constitute 10.7 percent of all workers covered in the EEOC data set, under complete integration the average white worker would work with 10.7 blacks for every 100 co-workers (including himself). However, in fact, the mean percent black for all white workers is 8.7 percent. Thus, white workers are segregated from black workers by the proportion:

$$S^*_{b|w} = (P_b - P_{b|w})/P_b = (10.7 - 8.7)/10.7 = 2.0/10.7 = .19$$

(In this paper, we drop the decimal point, using $S_{b|w} = 19$ $(= 100 \times S^*_{b|w})$ as our measure of segregation.)

The segregation index thus indicates the proportion of underrepresentation of one racial group in the work environment of another group. It is 0 under complete integration and 100 under complete segregation. It can be shown that where X and Y are mutually exclusive and exhaustive population subgroups, $S_{x|y}$ equals the difference between the mean proportion X for all X's and the mean proportion X for all Y's—that is, the difference between the racial environments of the two groups (Becker). In addition, it follows that $S_{x|y} = S_{y|x}$ under these conditions. Where X and Y are not exhaustive, $S_{x|y} \neq S_{y|x}$. However, where they are nearly exhaustive, as in the case of non-Hispanic whites and blacks, the figures are generally very close. In our case, for the employment segregation of all non-Hispanic white and black workers, both $S_{b|w}$ and $S_{w|b} = 19$.

Disaggregation by Occupation

The national segregation statistic for employment ($S = 19$) is significantly lower than that reported for elementary and secondary students ($S = 56$, 1972; Coleman et al.) and that recently calculated for four-year colleges ($S = 42$, 1974; McPartland). The overall index is also much lower than a similar calculation for residential segregation by race within metropolitan areas ($S = 56$, 1970; Schnare).

However, the relatively modest level of employment segregation (in comparison to school and residential segregation) conceals some highly interesting occupation-specific and sex-specific differences in employment segregation, along with additional complications related to the overall proportion black in the firm, its industrial classification, the size of the company's work-force, and the number and proportion of that work-force who are employed in the black person's occupational category. It is with these factors that we will now deal.

Table 1 gives the employment segregation indices and related cross-racial environments for each of the nine major occupational categories. Data for a given occupation refer only to the racial composition and the experiences of employees in *that* occupational category at the same place of employment. Thus, in row one of the table, for the average black official or manager, 81.6 percent of his or her *co-workers who are officials or managers* are whites, whereas whites as a whole make up 94.2 percent of *all officials and managers* covered in the EEOC survey.

Table 1 indicates that although laborers and service occupations have a significantly higher proportion of black workers than the other occupational categories, at the same time they are by far the most racially *segregated* of the nine occupational categories, across different places of work. This is shown by the segregation indices which standardize for the availability of black and white workers at a particular occupational level.

Table 1. RACIAL SEGREGATION IN EMPLOYMENT BY OCCUPATIONAL CATEGORY, U.S. 1975

	Percent Non-Hispanic White* in This Occupational Category		Percent Black in This Occupational Category		
	For Blacks (weighted avg.)	For Everyone (simple avg.)	For Whites (weighted avg.)	For Everyone (simple avg.)	Segregation Index†
Managers and officials	81.6%	94.2%	2.7%	3.1%	15
Professionals	78.9	92.1	2.5	3.0	14
Technical workers	70.7	83.3	5.2	6.5	20
Sales workers	72.0	91.0	4.4	5.6	21
Office and clerical workers	68.9	85.6	7.8	9.7	20
Craft workers	74.8	88.9	6.0	7.1	16
Operatives	60.9	79.1	11.0	14.3	23
Laborers	41.5	69.3	12.6	21.0	40
Service workers	42.5	68.5	14.0	22.5	38
All jobs	67.8	83.7	8.7	10.7	19
Racial segregation into different occupational categories and different places of work‡					30.1
Segregation between occupational categories					4.7
Segregation between places of work within occupational categories					25.4

*The denominator includes other racial-ethnic categories as well as blacks and non-Hispanic whites.

†Segregation Index is average of $S_{w/b}$ and $S_{b/w}$, which were within 1.0 from one another for all but one occupation. (Segregation of managers: non-Hispanic whites from blacks, $S_{b/w} = 16$; blacks from non-Hispanic whites, $S_{w/b} = 13$).

‡The denominator includes only blacks and non-Hispanic whites.

Source: EEOC 1975 Survey of Private Employers, 1/20 sample.

It is true that the average white laborer and service worker is a member of a work group that has *more* blacks than do those of the average white employed in the other occupations. The percentage of black laborers for the average white laborer, for example, is 12.6 percent, which is five times the proportion of blacks for the average white professional. However, if laborers had the same degree of between-establishment segregation as professional workers have, the average white laborer would be working in a group that was nearly 20 percent black, a full 50 percent increase over the present proportion of black laborers in his environment.

Among the other occupational categories, managers, professionals, and craft workers have somewhat less employment segregation by race than the rest, and machine operatives have a bit more than the others. But the similarities in the segregation indices for these seven categories set them apart rather strikingly from the laborer and service worker categories.

Most of the top panel of Table 1 deals with workers in specific occupational categories, one category at a time. Each segregation index is based on upwards of 7,483 work groups, the number of establishments in the sample. In the bottom panel, we calculate a measure of the segregation of white and black workers into *both* different occupational categories and

different places of work. This is accomplished by gathering all (7,483 × 9) work groups (establishment × occupational category) into one analysis.

The result of this procedure is the somewhat surprising conclusion that most of the segregation of black and white workers into different places of work and into different occupational categories is segregation by place of work rather than stratification into different occupational categories.

As shown in Table 1, the segregation of black and white workers into both different categories and different places of work produces a segregation index of 30. Taking advantage of a characteristic of the *S* index—namely that it can be decomposed hierarchically into "between-category" and "within-category" segregation (for details, see Becker)—we can disaggregate this figure into segregation between occupational categories and segregation between establishments within the same occupational category. Of the total between-category/between-establishment racial segregation, only about 15 percent is segregation between occupational categories; the rest is segregation of black and white workers of the same occupational category into different places of work.

One of the major contributors to the segregation of blacks and whites is the large proportion of whites who work with *no* blacks at all at the same occupational level as themselves. Nearly half of all white managers have no black managers in their establishment, more than one-third of all white professionals, technical workers and sales workers have no black worker peers, and even among the remaining occupational categories nearly one-quarter of all white workers do not see black workers doing the same kind of work that they do (Table 2).

Black workers (and those of other minorities), who constitute a much smaller fraction of the total employment than do majority whites, are not nearly as likely to be isolated from members of different racial/ethnic groups. Nearly all blacks work with at least some whites in their occupational category and more than 90 percent work with at least one other black in the same category. Thus, although racial segregation is often considered a problem of integrating the black and minority cultures into the dominant Anglo-white culture, from a statistical perspective, it is the majority population, as it nearly always is, that is the isolated one under conditions of segregation (P. Blau).

Sex Differences

Since employment segregation by sex is such a major part of the occupational structure, a clearer picture of *racial* segregation in employment is probably given by separately examining the employment segregation of white women from black women and white men from black men. Table 3

Table 2. RACIAL COMPOSITION OF CO-WORKERS*, SAME OCCUPATION, SAME ESTABLISHMENT: FOR NON-HISPANIC WHITES AND BLACKS

	Proportion with This Co-Worker* Racial Composition				
	No (Other) Blacks	Less Than 5% Black	At Least 20% Black	Less Than 20% White†	No (Other) Whites†
White† managers/ officials	48%	81%	1%	0%‡	0%‡
Black managers/ officials	15	40	14	3	1
White professionals	33	86	1	0	0
Black professionals	8	49	14	6	1
White technical workers	38	67	7	0	0
Black technical workers	7	19	44	4	1
White sales workers	39	69	4	0	0
Black sales workers	6	20	38	7	3
White office/ clerical	24	51	10	0	0
Black office/ clerical	3	11	46	4	0
White craftworkers	25	58	5	0	0
Black craftworkers	4	14	31	4	1
White operatives	18	47	18	0	0
Black operatives	1	5	66	7	1
White laborers	26	50	23	1	0
Black laborers	2	4	83	19	4
White service workers	23	42	25	1	0
Black service workers	2	4	78	26	4

*Co-worker racial composition excludes each person himself from his environment; i.e., is racial composition of others besides himself.

†Refers to non-Hispanic whites only.

‡0% refers to less than 0.5%.

shows the experience with black co-workers of the same sex and in the same occupational category for non-Hispanic white men and women. At all nine occupational levels, white and black *women* are *more segregated* from one another than are white and black men. This is true both in occupational categories where black women are found in greater proportions than black men (white collar occupations and skilled blue collar work) and where the reverse is true (remaining blue collar categories and service workers).

Examining work-site segregation across all occupations, the segregation of women is nearly 40 percent higher than the racial segregation

Table 3. RACIAL SEGREGATION IN EMPLOYMENT WITHIN OCCUPATIONAL CATEGORIES, WITHIN SEX (BLACKS AND NON-HISPANIC WHITES)

	Segregation Index	
Occupational Level	Men	Women
Managers	12	25
Professionals	10	26
Technical workers	15	26
Sales workers	20	25
Clerical workers	21	22
Craft workers	16	26
Operatives	23	28
Laborers	38	52
Service workers	36	44
All jobs	18	25

among men. For the job categories of highest pay and prestige, women are more than twice as segregated as are men. Only among clerical workers does the segregation index for men approximate that for women. For both sexes it is again the laborer and the service worker categories that exhibit the greatest degree of segregation between blacks and whites.

Part of the reason why women are more racially segregated than men has to do with the industries that tend to employ them. Female employment is heavily concentrated in the industry group with the highest between-establishment segregation (services) while the greatest number of male workers is employed in durable manufacturing, the industry with one of the lowest between-site segregation indices (data not shown here). Thus, while the overall segregation index is 7 points higher for females, the average male–female difference for the industry-specific indices is only 3 points.

Accounting for Employment Segregation

The above example of using the industry variable to help account for sex differences in racial segregation suggests that further understanding of the structure of racial segregation in employment may be possible by taking into consideration other factors that are also related to the racial composi-

tion of the labor force at places of employment. Like our use of "industry" to account for sex differences in racial segregation, we can use these factors to account for differences between the major occupational categories in the amount of segregation they exhibit. We can also see whether controlling on various elements in the employment situation can account for the overall level of segregation that occurs—for example, whether establishments that are in the same industry are more similar in racial composition (i.e., have lower levels of segregation among themselves) than are establishments in all industries combined.

Our data permit us to examine several other variables, besides industry, that are related to the proportion of blacks working at the establishment. For example, the size of the establishment is another important factor in the differential employment of blacks. Black workers are employed in larger *proportions* at places of business that employ more people. In our sample, those establishments with fewer than 50 workers have, on the average, a 7 percent black labor force. Those with 500 or more employees, on the other hand, have a labor force that is 12.4 percent black. Thus, a certain amount of segregation between whites and blacks is related to employment in differentially sized establishments.

Second, the establishment's overall propensity to hire black workers plays an extraordinarily large part in determining the proportion black among employees in any one occupation. The correlation between any single occupational category's percent black and the establishment's percent black among employees in the other eight categories goes no lower than $r = .38$ (sales workers) and goes as high as $r = .60$ (laborers) (see Table 4). On the other hand, hiring of blacks in white collar positions is not strongly associated with the proportion of blacks hired for blue collar positions at the same establishment. (The r's vary from .19 to .35.) Within these broad occupational divisions, the associations are much higher, averaging .46 for correlations among the five white collar categories and .47 among the four blue collar ones.

Finally, for certain occupational categories there is an association between the *number* of employees holding those types of jobs and the *proportion* of them who are black. The clerical and sales categories are particularly noteworthy in this regard. For example, where there are fewer than 5 clerical workers at a place of business, only 3.3 percent of these are black. But when the establishment employs over 100 clerical workers, the average black proportion among clerical workers climbs to 12.2 percent. Among sales workers, the differential is almost as dramatic. Among the establishments employing the fewest sales workers, blacks constitute only 1.4 percent of sales workers; among those employing over 100 such workers, blacks make up 6.9 percent of the sales force.[5]

Other occupational categories have different relationships between these two variables. The proportion of professionals who are black is at a

Table 4. CORRELATIONS BETWEEN PERCENT BLACK IN EACH OCCUPATIONAL CATEGORY ACROSS PLACES OF WORK*

	Managers	Profes-sionals	Technical Workers	Sales Workers	Clerical Workers	Craft Workers	Operatives	Laborers	Service Workers
All other occupations	.50	.44	.41	.38	.39	.52	.58	.60	.46
Managers	1.00	.54	.42	.51	.48	.28	.32	.29	.25
Professionals		1.00	.46	.60	.46	.19	.25	.21	.23
Technical workers			1.00	.22	.39	.25	.26	.27	.29
Sales workers				1.00	.51	.22	.19	.22	.23
Clerical workers					1.00	.26	.28	.27	.35
Craft workers						1.00	.49	.45	.30
Operatives							1.00	.62	.46
Laborers								1.00	.49
Service workers									1.00

*For places of work with at least one person in each occupation of the pair. The minimum N is about 1,500 establishments (sales workers x technical workers).

maximum at places employing from 25 to 99 professional workers. Blacks among technical workers also tend to be found in greater proportions in the establishments employing a moderate-to-large number of such workers. Service workers, on the other hand, include a *lower* proportion of blacks at these intermediate sized employee classes. Instead, black presence is greatest both among those establishments employing *fewer than 10* service workers and among those places with *over 100* such workers.

It should be noted that the same relationships between percent black and concentration in that occupation is found when concentration is measured in terms of the *proportion* of the establishment's work force that is in a given occupational category. For example, where sales workers are less than 5 percent of a company's employment, only 1.9% of the sales workers are black, but where sales workers constitute 40 percent or more of the total employment, the black proportion among them rises to 6.1 percent. For clerical workers, the comparable figures are 4.5 percent and 14.1 percent.[6]

Although all of these factors—industry, size of establishment, proportion black in other occupations, and number and proportion of the work force in the given occupation—are related to the occupation-specific racial composition of workers, each may or may not account for the between-establishment segregation of that occupational category.

In fact, in only one case does holding a factor constant substantially reduce the level of segregation among establishments[7] (see Table 5). For example, the overall segregation index for service workers is 38. Controlling on industry, on size of firm, or on the number or proportion of employees who are service workers, the segregation index among similarly classed establishments is still at least 35. Only the proportion black among workers in the other categories has an effect on occupation-specific segregation scores. For service workers, for example, the index is reduced to 22.

However, even controlling for the proportion of blacks in other occupational categories at the same place of employment, service workers and laborers are still more segregated than are the other occupational categories, and managers and professional workers are less segregated than the others, although the differences between occupations are sharply reduced.

Table 5. RACIAL SEGREGATION IN EMPLOYMENT WITHIN OCCUPATIONAL CATEGORY, CONTROLLING FOR SITUATIONAL FACTORS

		Segregation Index Controlling* for				
	Overall Segregation Index	Industry	Total No. Employees	Number Employed in Occup. Category	% Total Employed in Occup. Category	% Black in Remaining 8 Occupational Categories
Managers	13	13	13	13	13	09
Professionals	14	13	13	14	13	07
Technical workers	20	19	19	20	20	11
Sales workers	21	20	21	20	20	14
Clerical workers	19	17	18	17	17	14
Craft workers	16	16	16	16	16	10
Operatives	25	25	25	25	25	10
Laborers	42	41	42	41	41	16
Service workers	38	35	36	36	38	22
All jobs	20	19	19	..	..	..
(No. of categories for control variables)		(8)	(6)	(6)	(6)	(9)

*The control procedure involves interpreting S as the proportion of variance in the dichotomous individual-level variable "race" that is between-establishments. The controlled S is the proportion of variance between establishments, among establishments that are alike on the control variable, i.e., in the same industry.

These calculations, as opposed to those in earlier tables, omit all other ethnic groups from the denominator. Thus, "percent black for (non-Hispanic) whites" is based on a denominator of black and non-Hispanic white workers only. The segregation indices are only slightly affected by this change in procedure.

Discussion and Summary

To a large extent, then, segregation of blacks and non-Hispanic whites in the same general occupational category is a corollary of the general degree of segregation that exists across places of work. In other words, the racial composition of any single occupational group at a particular place of work tends to follow the racial composition of workers in other occupations at the establishment.

The other control variables analyzed are not nearly so powerful. That is, even though different industries and different sized firms vary in the proportion of black workers who are hired; and even though racial

composition of specific occupational categories covaries with the concentration of the establishment's employment within that category, the overall magnitude of the segregation indices is only marginally affected by these considerations.

Descriptively, the data show conclusively that major differences exist among occupations in the amount of racial segregation across work locations. Both men and women in laborer and service positions, and to a lesser extent those in semi-skilled employment, are much more racially segregated among establishments than are workers in other occupations. However, since these occupations do include a larger proportion of black workers than do the other categories, the average white worker's experience of black co-workers is in fact a bit higher in these three occupations than in those occupations where the racial isolation of white workers derives not from between-place segregation but because of the absence of available blacks working in these occupational categories. Thus, from one perspective, although the whites in the low income/low prestige occupational categories are more segregated from black co-workers in a statistical sense, those in the higher skilled categories remain more isolated from them.

Differences among the occupations in their segregation indices are consistent for men and women and remain when controlling for industry, size, and concentration of employment in the occupation. They are attenuated—but still remain—when differences in the average racial composition of the other employees at the same place of work are taken into consideration.

It appears plausible that unskilled laborers and service workers are the most racially segregated of all occupational groups specifically *because* of the greater concentration of blacks (whose racial identity gives them low prestige among whites anyway) among these categories of workers. The concentration of such a low prestige group in their own occupation may make white workers especially desirous of obtaining employment in race-segregated situations. Thus, while the segregation index controls statistically for the racial composition of each occupational category, it may be that racial composition itself, combined with elements of group prestige and associated social behavior, causes the segregation differentials among occupations.

Our data have enabled us to proceed in limited ways to measure and understand racial segregation in employment, a matter that has received little systematic attention to date. Racial segregation that is due to differing *geographical* distributions of whites and blacks across regions and metropolitan areas is one component of the picture that was clearly missing in our analysis. Research is underway with other EEOC data that includes geographic identification that adds this consideration to the analysis.

In addition, the notion of "occupational category" is tremendously

broad. To what extent is racial segregation within one of our categories due to differential racial composition of the specific jobs within the category (and corresponding differentials among establishments in their requirements for such jobs)? With the EEOC data, it was not possible to proceed in this direction. One study has done so, using Bureau of Labor Statistics wage data, in regard to *sex* segregation among specific clerical occupations (F. Blau), but to date racial segregation has not been investigated in this way.

A final direction in which future research might be expected to go, once geographical information was available, is the comparison of American communities in terms of their overall tendencies towards social segregation by race—in employment, in school enrollment, and in residential location. To what extent do communities that are highly segregated on one of these dimensions tend to be segregated also on the others?

Segregation between the majority white population and the various minority ethnic groups that constitute this society is, in its broadest sense, one of the two or three most critical problems of the century. To the extent that blacks and whites in the same kind of work, by being employed in separate and distinct establishments, are prevented from developing the kind of peer-like, non-hierarchical social integration that characterizes co-workers' interaction, the opportunity structure (which still operates to a large extent by the informal network of job peers) will continue to discriminate against the black and other ethnic minority worker.

Notes

1. In the rest of the paper, when the term "white workers" is used, it refers only to *non-Hispanic* white workers.
2. Schools and tax-exempt private clubs are exempt. Also, employers in the state of Hawaii file different reports and are not included in the data discussed here. On the other hand, the survey population includes government contractors with total employment between 50 and 99, who would otherwise not be included.
3. In 1975, the most recent year for which EEOC data are available, the survey covered 29.8 million private non-agricultural workers, or about 48 percent of this labor force. Coverage was most complete in the industries whose establishments tend to be large. For example, coverage was estimated to be 80 percent in durable goods manufacturing and 71 percent in non-durable manufacturing, but only 31 percent in retail trade and 29 percent in wholesale trade employment.
4. The S index is equivalent to the square of a correlation ratio (Farley). It is equal to the proportion of the variance in the individual-level dependent variable, "race," that is "between-establishments." The S index was chosen for the segregation measurement over the more widely used dissimilarity index (D) for a number of reasons. The most important is that the expected value of D has been demonstrated to be highly dependent on P_b and on n_i, the number of persons counted in each establishment (Cortese et al.). Both of these factors vary widely across occupational categories. The expected value of S, on the other hand, has been shown to be independent of P_b and approaching zero for even modest-sized n_i (Becker).
5. For both occupational categories, the relationships between number of such workers and the proportion of them who were black are completely monotonically increasing over the six categories of size used in the analysis.
6. Using a multiple regression procedure, which treated each establishment as a unit of

analysis, we were able to disentangle the roles of relative and absolute size of the occupation's work force in affecting its racial composition. It appears that the *proportion* of the establishment's work force employed as *sales* workers or as *professionals* is a more reliable predictor of the occupation's racial composition (β = .14 and .16) than is the *number* of workers in the category. However, both proportion and number of workers are independently significant predictors of the racial composition of *clerical* workers (β = .13 and .15). Squared terms for proportion employed in the occupation and number employed in the occupation were entered into regression equations for professional, technical, and service workers. In each case, the additional terms for *proportion* employed (but not for *number* employed) were responsible for statistically significant increases in the R^2 statistic. The least-squares models support the prior descriptive analysis that blacks are hired in somewhat smaller numbers for professional and technical jobs when such jobs are either *rare* or *dominant* in the establishment's total employment. The opposite pattern holds for service workers—the black percentage is *higher* under such conditions.

7. The procedure for holding the control variable constant involves treating the segregation index as the between-establishment proportion of the variance in the individual variable "race" treated as a dichotomous variable (see note 4 and Becker). (The requirement that the dependent variable be dichotomous means that in these analyses, workers other than non-Hispanic whites or blacks are not considered in the universe of same-category workers whose segregation is being measured.) The segregation index value for an occupational category, controlling on any given situational variable (industry, proportion black in other categories, etc.), is the proportion of the total variance in the dichotomous dependent variable "race" remaining between-establishments after the proportion of variance attributable to the grouping variable is removed.

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