

SEX, RACE, AND CLASS BIAS IN CENSUS BUREAU REPORTING OF OCCUPATIONS: A PRELIMINARY ASSESSMENT

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ABSTRACT

Reporting of occupations within the broad occupational categories of the 1970 Decennial Census of Population varies by sex and race, is more detailed for upper-middle class occupations than working and lower class occupations, and varies from one printed source to another. These variations hinder use of census data for research, particularly for studying race and sex discrimination in the United States. The differences in reporting by sex, race, and class appear to represent biases against lower-status groups. Possible remedies are suggested to produce more comparable and useful breakdowns of occupational categories.



BIOGRAPHY

Pamela Oliver received her B.A. in sociology from Stanford University and her M.A. from the University of North Carolina, Chapel Hill, in 1972. She is currently working on her Ph.D. at North Carolina. Her major interest is developing exchange theory so that it can apply to inter-group relations, focusing on unbalanced power relations. She is also interested in evolutionary theory, family sociology, and male-female relations.

INTRODUCTION

The purpose of this paper is to ask a question: why do most Population reports from the 1970 Decennial Census group detailed occupational categories differently for men than for women, for blacks than for whites, and for low status people than for high status people? In the absence of compelling reasons for the different groupings, reason and anticipated usage would call for the breakdowns to be identical. Even where it is not possible to use identical groupings, much greater parallelism and comparability ought to be possible than exists now.

My own research rarely requires census materials, and I am not an expert in their use. Perhaps most users of census data are similarly infrequent users. I discovered the discrepancies in occupational groupings while seeking data on the relative economic resources of black men and black women to prepare a lecture in family sociology. This effort convinced me that the presentation of census data is sometimes not only unhelpful, but even biased. I shall sketch some problems in the data, provide a few examples, and outline some possible solutions. I am not prepared to suggest a complete solution to the problem.

The publications and tables which I examined are listed below. These are generally-available publications. The tables will not be reprinted in this article.

U. S. Bureau of the Census, *Statistical Abstract of the United States: 1973* (Washington: U.S. Government Printing Office, 1973), Tables 372, 375, and 386.

Census of Population: 1970, Vol. 1, Chapter D, *Detailed Characteristics*, Part 1, United States Summary, No. PC(1)-D1 (Washington: U.S. Government Printing Office, 1973), Tables 221, 223, 224.

Census of Population: 1970, Vol. 2, Subject Reports, *Earnings By Occupation and Education*, No. PC(2)-8B, (Washington: U.S. Government Printing Office, 1973), Tables 1, 2, 7, 8.

Data Use and Access Laboratories, *1970 Census of Population Fourth Count Summary Tape [Sample]*, Technical Document No. ST-4P (Arlington, Va.; June 1972), pp. 30-33, 38-39, and 43-44.

SEX AND RACE DIFFERENCES IN OCCUPATIONAL REPORTING

Probably everyone familiar with census materials knows that different detailed occupational categories are often used for men than for women, and for whites than for blacks. A table with sex or race as a column variable uses only one detailed classification of occupations, but when race or sex are row variables, differences in the detailing of occupational categories are common. Examples of these differences are provided below. The task is to weigh the disadvantages of this practice.

The major disadvantage to differential detailing is, of course, that it makes comparisons between sexes or races impossible. One might, for example, want to know whether the sex and race differences in the median income of clerical workers can be attributed to the kind of job each group holds, or whether the discrimination is directly linked to either race or sex. A likely, and available, source of answering this question would seem to be *Earnings by Occupation and Education*, PC(2)-8B. But the detailed occupational categories from this report shown in Table 1 make the question unanswerable.

Similar differences in categories may be found in all twelve standard occupational categories except Laborers, Farmers and farm managers, and Private household workers, where no detailing is provided. (The other nine standard categories are: Professional, technical and kindred workers; Managers and administrators, except farm; Sales workers; Clerical and kindred workers; Craftsmen and kindred workers;

Table 1

Categories of Clerical Occupations in PC(2)-8B, *Earnings by Occupation and Education*, Tables 1, 2, 7 and 8, by Sex and Race, U. S., 1970

		Female	
		White	Black
	Bank teller		Secretary
	Bookkeeper		Stenographer
	Cashier		Typist
	Counter clerk, except food		
	File clerk		
	Office machine operator		
	Payroll & time-keeping clerk		
	Secretary		
	Shipping & receiving clerk		
	Statistical clerk		
	Stenographer		
	Typist		
		Male	
		White	Black
	Bank teller		(no detailing)
	Bookkeeper		
	Cashier		
	Mail carrier, post office		
	Payroll & timekeeping clerk		
	Postal clerk		
	Shipping & receiving clerk		

Operatives, except transport; Transport equipment operatives; Farm laborers and farm foremen; and Service workers, except private household.) Differences in detailed categories within major categories for each sex and race are also found in the complex tables of *Detailed Characteristics* and the condensed tables in the *Statistical Abstract*, although different detailed categories are used in each source.

What is the reason for these differences in categories? I have not been able to infer a reasonable basis for the differences from the data. One might think that the most common occupations would be detailed, and that races and sexes are differently reported because they have different frequencies in occupations. I have not examined every category in every

source, but a spot check reveals that this is *not* what is done. For example, consider the category "Operatives, except transport." There are one-and-a-half times more male operatives than female operatives in the experienced civilian labor force. In *Earnings by Occupation and Education*, Tables 1 and 2, male operatives, white and black, are detailed into only two groups:

Mine operatives, n.e.c.

All other operatives, except transport.

On the other hand, female operatives, white and black, are detailed into six groups in Tables 7 and 8:

Assemblers

Checkers, examiners, inspectors: manufacturing

Dressmakers & seamstresses, except factory

Laundry & dry cleaning operatives, n.e.c.

Textile operatives

All other operatives, except transport.

Mine operatives, although reported as a detailed category for males, are *not* the most frequent kind of operative listed in Table 221 of *Detailed Characteristics*. For the male experienced labor force, there are only 160,591 "mine operatives," compared to, for example, 528,397 "assemblers," and 376,829 "checkers, examiners, inspectors: manufacturing." Neither of these categories are comparable to the female categories. Even the women's categories are not based on frequency. There are 145,885 female "clothing ironers and pressers" (not detailed), and only 96,768 "dressmakers and seamstresses, except factory," which is detailed. In sum, the choice of types of operatives to be detailed in *Earnings by Occupation and Education* is unrelated to frequencies and seems capricious and pointless.

CLASS DIFFERENCES IN OCCUPATIONAL REPORTING

To see if the Census Bureau appeared more interested in some occupational categories than in others, I examined the percentage in the residual group (persons not included in detailed categories) of each classification in *Earnings by Occupation and Education*. Table 2 seems to indicate that the Bureau is more interested in certain groups, and thus reports more detail for these groups.

Besides showing that variation by race and sex in the method of detailing occupations is *not* designed to reduce the size of the residual categories, the most striking feature of Table 2 is the evident class bias. The Census Bureau is apparently more interested in itemizing the occupations of high status people than of low status people. The small percentage of residual white males in high status occupations should be noted. On the other hand, even in the high status occupations, blacks are reported with less detail. The Bureau does seem to have an interest in itemizing the occupations of female service workers. White female clerical workers and male transport operatives are also detailed more than my generalization concerning the status of occupations would suggest. However, the fine detailing of "managers" for white males only, and the gross lumping for other groups, clearly shows concern for those in power.

Similarly, professional, technical and kindred workers are, for white men, detailed to the point of absurdity. "Sociologists (not university teachers)" is a detailed category, even though there are only 808 white male non-university sociologists in the country. This particular census subject report is designed to permit study of the effects of education and occupation on income. Why waste page after page (each occupational grouping uses a whole page of the volume) showing that assorted finely-differentiated professionals have a certain mean income which does not vary by education (because they all have "four or more years of college"), while neglecting to present data on the effects of education on the income of black people in the "white collar" occupations? Why is the difference in income between a chemist and a geologist (white male only) more interesting or important than the differences in income among different kinds of operatives, even white male operatives? The only answer I can think of is that it depends where one is situated in the power structure, and the people who designed that report are sitting near the top.

Other features of Table 2 seem not so much biased as peculiar. Why detail transport operatives more than other operatives? Why detail female service workers more than male service workers? Why detail black female professionals and sales workers more than black males?

The other census publications I examined also detail occupations differently for the sexes, and sometimes for the races. However, my cursory

Table 2

Percentage in the Residual Category of Each Major
Occupation Category in PC(2)-8B, by Sex and Race, U.S., 1970*

Major Occupational Category	Males		Females	
	White	Black	White	Black
Professional, technical, and kindred workers	12.6	53.4	15.3	28.5
Managers and administrators, except farm	12.3	86.0	77.8	all
Sales workers	9.8	54.2	16.3	34.3
Clerical and kindred workers	63.1	all	30.3	76.6
Craftsmen and kindred workers	15.7	34.6	all	all
Operatives, except transport	97.4	99.0	69.2	73.1
Transport equipment operatives	36.7	37.1	all	all
Laborers, except farm	all	all	all	all
Farmers and farm managers	all	all	all	all
Farm laborers & foremen	14.5	all	18.5	19.4
Service workers, except private household	66.3	85.9	0.9	10.9
Private household workers	all	all	all	all

*"all" means that there was no detailing of the category

examination did not reveal so much skewing as is present in *Earnings by Occupation and Education*.¹

RECOMMENDATIONS

Having outlined the problem and shown some examples of it, I would like to sketch some possible remedies.

- (1) Wherever possible, the Census Bureau should use identical occupational detailing for both sexes and all racial groups.
- (2) Where there are space limitations or the frequencies are too small for identical groupings, the Bureau should use groupings that are as comparable as possible across race and sex lines.
- (3) If it is necessary to decrease the number of classifications of occupations, it is better for the user if several occupations are collapsed into one category, rather than the current practice of selecting one or two occupations for detailed reporting and throwing the rest (usually the majority) into a residual.

- (4) Most people in the United States are not professionals or managers. The study of our society would be improved if all levels of society were given equal treatment in census reports. If resources are scarce, the professional categories should be detailed less than they are now, and the clerical workers, operatives, and service workers detailed more. This simply asks that the degree of precision in reporting of census data be proportional to the population in each occupation.

NOTE

1. Briefly looking at the census computer tape files, no race bias is present in detailing of occupations on the Fourth Count Population Summary Tapes, because of the file structure—each race (total, white, black, Spanish American) has a separate record. Similarly, little class bias is evident, if only because major occupations are never detailed by more than 6 or 7 categories. However, several tables or pairs of tables present fewer categories for females than for males.

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