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ABSTRACT

This study is the Civil Service Commission's first on the educational attainment of federal employees as of August 1974. It covers such subjects as minority group employment, employment of women, white-collar workers' occupations, blue-collar workers' occupations, pay structure, geographic distribution, and monthly manpower and pay reports. In the first of four parts, the introduction states that the report presents and analyzes educational attainment data for male and female full-time permanent General Schedule employees--federal civilian employees within their minority/non-minority groups. Part 2 defines the data parameters and study population. In part 3 statistics are given for educational attainment of General Schedule employees by minority/non-minority group and by sex. For instance, an educational attainment by minority group overview reveals that the Oriental group has the highest educational level, followed by the non-minority group. Black, Spanish-surnamed, and American Indian groups had considerably smaller percentages of employees with higher education. Part 4 compares Civil Service Commission data with U.S. Census data. Also, comparisons with Census data for employed white-collar workers are presented. Eleven text tables and eleven figures provide quantitative data throughout the document. Twelve tables based on the Civil Service Commission Central Personnel Data File and three based on U.S. Census data are appended. (CSS)

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Federal Civilian Personnel Statistics

Educational Attainment of General Schedule Employees By Minority Group and Sex

August 31, 1974

U. S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION



U. S. Civil Service Commission
Bureau of Manpower Information Systems

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FOREWORD

This report is the second in a series of statistical monographs which present analyses of data from the United States Civil Service Commission's Central Personnel Data File (CPDF). The series places special emphasis on the employment in the Federal civilian work force of men and women of minority groups. The first monograph in this series is:

Federal Civilian Employment, by Minority
Group and Sex, November 30, 1972
(Publication SM 72-100)

The present study is the Civil Service Commission's first on the educational attainment of Federal employees, and adds still another dimension to existing periodic Federal manpower studies, which cover such subjects as:

- Minority group employment
- Employment of women
- Occupations of white-collar workers
- Occupations of blue-collar workers
- Pay structure
- Geographic distribution
- Monthly manpower and pay reports

This report was prepared by Ann Carmel of the Special Programs Section (Maxine H. Barron, Chief) in the Manpower Statistics Division (John E. Curran, Chief). Computer programming of the data was done by Mary K. Bowyer of the Information Systems Development Division.

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PART ONE. INTRODUCTION AND HIGHLIGHTS

1. Introduction

Educational attainment is one of the most important factors in determining the effective utilization of the abilities and potentials of Federal civilian employees. It is also one of the principal criteria used in assessing the qualifications of a prospective employee for a specific position under the Federal civil service.

This report presents and analyzes educational attainment data for a major segment of the Federal civilian population—full-time permanent General Schedule men and women employees within their minority (or non-minority) groups.

This is not a sample study; it includes all employee records from the Civil Service Commission's computer file (as of August 31, 1974) meeting the criteria and requirements of the study.

Item:	Employee records included in the study	Employee records not included in the study
Tenure	Permanent	Temporary, or other non-permanent
Work schedule	Full-time	Part-time, intermittent or other
Pay system	General Schedule (and similar)	Wage systems and other pay systems
Minority (or non-minority) group	Specified	Not designated or specified
Education level attained	Specified	Not specified

Of the elements available in the Commission's Central Personnel Data File (CPDF) for cross-tabulation by educational attainment, the following were selected for inclusion in the study:

- GS (General Schedule) grade
- Occupational category
- Leading occupations

In addition, date of attainment of highest degree is shown (in relation to grade) for college graduates.

The variable of primary concern in this study—education level attained—is essentially quantitative; that is, it tells how many years of academic training have been (successfully) completed, whether a bachelor's degree has been earned, and whether an employee has pursued any graduate studies. To obtain additional refinement of these data (such as number of years of graduate study or which advanced degrees have been obtained) and to add other factors (such as tabulation by agency and/or by area), further studies would have to be undertaken.

Academic discipline (field of study), one of the three available education elements (the other two being education level and year of attainment of highest degree), was not used in the present study. Although academic discipline is present in the computer file, it is subdivided into so many fields that any effective use of this element was beyond the time and facilities available for this first educational attainment study. Of special interest for future investigation would be the relating of academic discipline to the employee's occupation. Field of study could also be analyzed in relation to age and to GS grade.

Some limitations should be recognized in connection with any citation or other use that may be made of the data presented in this report. Since the study population was limited to General Schedule (and similar) employees having permanent tenure and full-time work schedules, the data in the report should be regarded as applying primarily to that segment of the Federal employee population having the specified characteristics.

(In August 1974, the study population of full-time permanent General Schedule and similar employees comprised 74 percent of all Federal civilian non-Postal white-collar employees of all tenures and work schedules.)

The educational attainment data of this study cannot be applied to all Federal civilian employees, since the total Federal work force includes blue-collar workers, as well as employees who, though they may be under the General Schedule and similar pay systems, have tenure other than permanent and work schedules other than full-time.

Caution should also be used in extending the findings of this study to white-collar employees in State and local governments, because the types of occupations of white-collar Federal workers do not necessarily occur in the same proportions in State and local governments.

For example, the leading professional occupation for Federal women employees is nursing. This is primarily because the two largest non-Defense Executive Branch agencies—the Veterans Administration and the Department of Health, Education and Welfare—have heavy concentrations of medical-related occupations, and nursing staffs are predominantly female. Among State and local government employees, on the other hand, women teachers outnumber female registered nurses by over nine to one (1970 Census data).

The fact that these caveats should be observed does not mean that comparisons outside of the permanent full-time Federal white-collar employee group cannot be made. The last section of this report compares the data of this study with data for all U.S. white-collar workers, based on U.S. Bureau of the Census surveys. The differences in the compositions of the groups being compared and in the definitions used by this study and by the Census are given in Part Four and in Technical Appendix II.

While the data of this report make possible the comparisons of educational attainment and job status among male and female white-collar workers in the principal minority (and non-minority) groups, further study is needed to determine the reasons for any differences among the groups. Future studies might take into consideration major fields of study, advanced degrees, and the quality of education—factors which are important in the selection of employees for appointments and promotions and have relevance to their ability to perform satisfactorily in their positions. Additional factors which might be considered are: length of Federal service; the nature and level of that service; the extent of training other than formal education; and length of service outside of the Federal Government.

It is hoped that the data base and the analyses provided by the present study will be helpful in

furthering investigations into the relationships between educational attainment and employment.

Within its recognized limitations, this report should be able to provide resource material and take-off points for studies of the educational backgrounds of Federal employees, especially in relation to studies of minority groups and of women. Such studies ideally would be in-depth investigations which could yield qualitative as well as quantitative measures of educational attainment. Of primary interest would be surveys of the educational attainment of women and of minority groups in relation to the types of positions for which they are hired, as well as to the pace of their career advancement.

The data of this report, in addition to their use in programs concerned with the employment of women and of minority groups and in the equal employment opportunity field in general, could also be of use to Congressional committees, to educational institutions, and to various special interest groups.

The report is divided into four sections:

Part One. Introduction and Overview

Part Two. Basic Data and Composition of Study Population

Part Three: General Findings

Analysis of:

- Educational attainment of General Schedule employees
- Educational attainment and GS grade
- Year of attainment of highest degree
- Educational attainment and occupation

Part Four. Comparisons with U.S. Census Data

2. Highlights

* Employees Included in the Study Population

Civil Service Commission records, as of August 31, 1974, of Federal civilian employees who were under the **General Schedule and similar pay systems** and who had:

- Full-time work schedule
- Permanent tenure
- Minority (or non-minority) group designated
- 'Education level attained' specified

* Composition of the Study Population (1,162,919 full-time permanent General Schedule employees)

By Sex:

Men	60%
Women	40%

By Minority-Group Designation:

Minority-group employees	16.9%
Black	12.8%
Spanish-surnamed	2.5%
American Indian	0.8%
Oriental	0.9%
Other than minority	83.1%

Within the Minority Category:

Black	75.3%
Spanish-surnamed	14.6%
American Indian	4.9%
Oriental	5.2%

By Minority-Sex Combination:

	Men	Women
All groups	100.0%	100.0%
Minority-group employees	11.7	24.8
Black	7.7	20.3
Spanish-surnamed	2.5	2.5
American Indian	0.6	1.2
Oriental	0.9	0.9
Other than minority	88.3	75.2

*** Percent Distribution by Educational Attainment
By Sex**

	Total	Men	Women
All education levels	100%	100%	100%
High school or less	32	24	44
Less than high school graduate	5	5	5
High school graduate	27	19	39
Training beyond high school (no college)	13	9	19
College	55	67	37
Less than bachelor's degree	25	24	27
Bachelor's degree—no graduate study	14	19	6
Graduate study	16	24	5

By Minority Group

	Black	Spanish-Surnamed	American Indian	Oriental	Non-Minority
All education levels	100%	100%	100%	100%	100%
High school or less	41	42	38	19	30
Training beyond high school (no college)	17	12	23	11	13
College	42	46	39	70	57
Less than bachelor's	29	30	26	28	24
Bachelor's degree—no graduate study	7	8	5	18	15
Graduate study	7	8	8	24	18

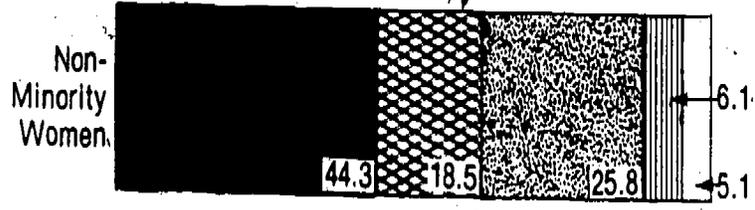
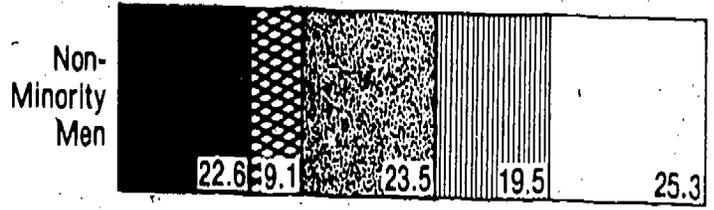
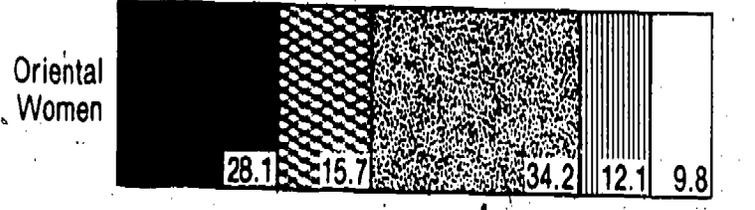
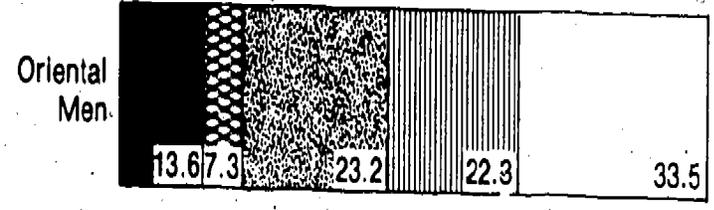
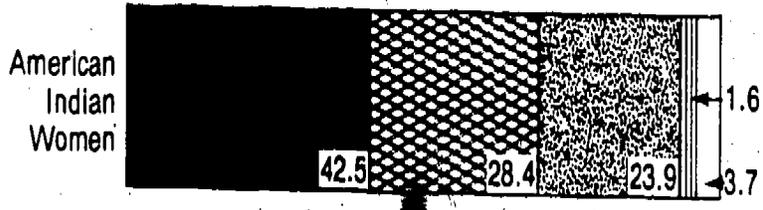
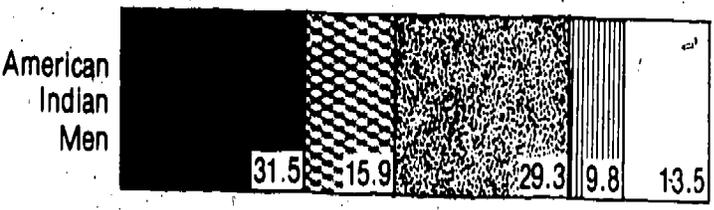
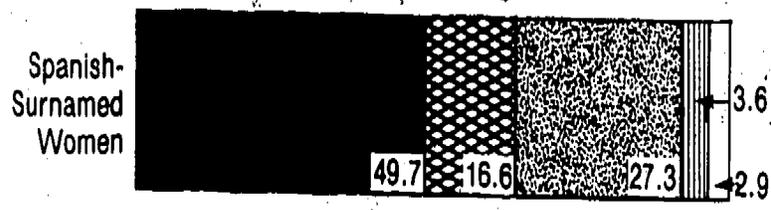
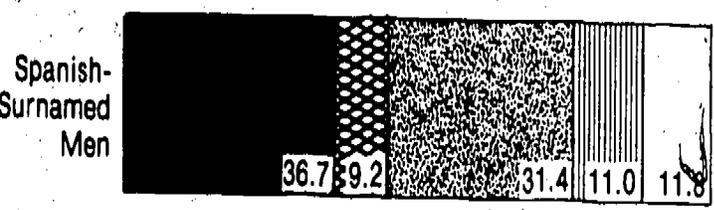
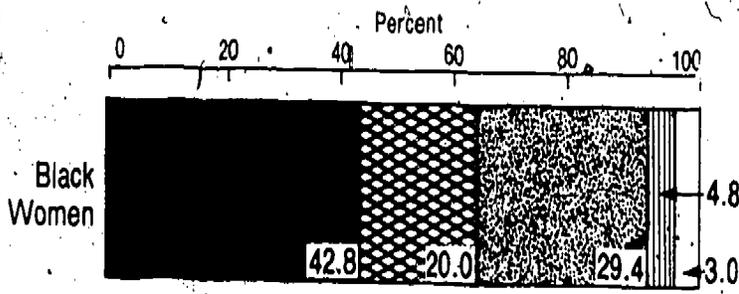
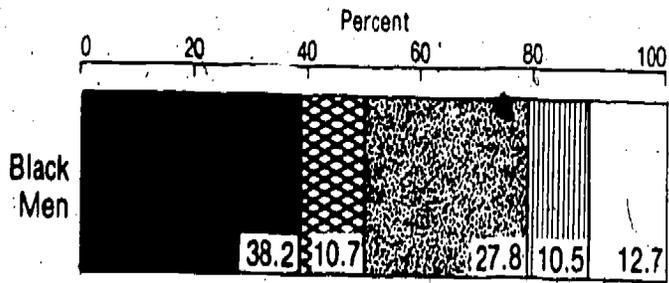
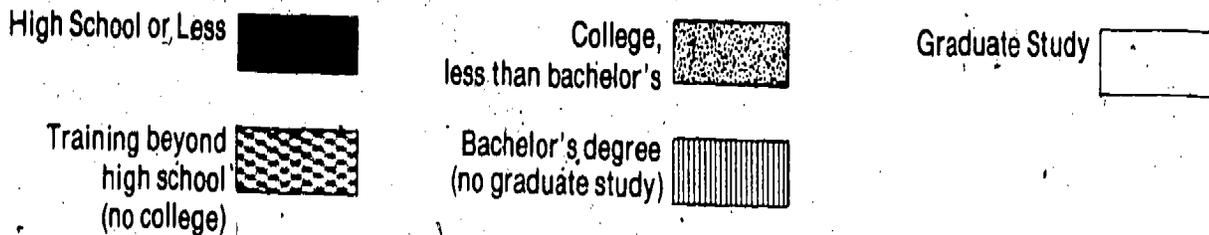
By Minority-Sex Combination

(See Figure A.)

***Occupation and Educational Attainment**

	General Schedule Employees: Percentage Distribution by Occupational Category			
	Total	Profes- sional	Clerical	Technical, Admin. & Other
All Education Levels	100	19	31	50
By Sex:				
Men	100	29	8	63
Women	100	5	64	31
By Minority Group:				
Black	100	6	49	45
Spanish-Surnamed	100	9	42	49
American Indian	100	11	29	60
Oriental	100	33	27	40
Non-Minority	100	21	28	51

Figure A
Educational Attainment of Men and Women Employees
by Minority (and Non-Minority) Group
Full-Time Permanent General Schedule Employees
August 1974



Source: Appendix Table 1B.

**General Schedule Employees: Percentage
Distribution by Occupational Category**

	Total	Profes- sional	Clerical	Technical, Admin. & Other
College Graduates	100	54	4	42
By Sex:				
Men	100	58	1	41
Women	100	34	18	48
By Minority Group:				
Black	100	38	10	52
Spanish-Surnamed	100	46	4	50
American Indian	100	56	3	41
Oriental	100	64	6	30
Non-Minority	100	56	3	41

***Leading Occupations of College Graduates**

Men: Engineering, Accounting, Administration
 Women: Nurse, General Clerical, Teaching

* The following relationships appear in the study population of full-time permanent General Schedule (and similar) employees:

By Sex:

Women have higher percentages than men in the following categories:

- High school graduates (no additional education or training)
- Training beyond high school (but no college)

Men have higher percentages than women in the following categories:

- Any college attendance
- College graduates
- Graduate study

By Minority (or Non-Minority) Group:

-Oriental Americans lead in percentage with:

- Any college attendance
- College graduates

-The non-minority group is second to the Oriental group in:

- Any college attendance
- College graduates

By Minority-Sex Combination:

- Oriental men lead in educational attainment; non-minority men are second in rank; Oriental women rank third.

PART TWO. BASIC DATA AND COMPOSITION OF THE STUDY POPULATION

3. Basic Data of the Study

This report presents and analyzes educational attainment data for full-time permanent General Schedule (and similar) employees in relation to:

- GS grade
- Occupational category
- Leading occupations

These factors are tabulated and analyzed, for men and women employees separately, for the following groups:

- All employees
- Minority-group employees:
 - Black
 - Spanish-surnamed
 - American Indian
 - Oriental
- Employees other than minority

Determination of Minority-Group Status

Information on the minority-group designation of Federal employees is required to satisfy reporting provisions of the Equal Employment Opportunity Act of 1972 (Public Law 92-261).

The minority (or non-minority) group designations are based on visual observations of supervisors and on their knowledge of what each employee considers himself or herself to be (or is regarded to be) in the work environment or the community. (There can be no overlap, such as occurs in Census data, in which Spanish-origin persons are tabulated twice: once as Spanish-origin and again under their racial designation.) The following groups are therefore reported as mutually exclusive:

Black. The minority group referred to as 'Black' in this report is the same as groups designated 'Negro' and 'Negro/Black' in other reports of the Civil Service Commission's Bureau of Manpower Information Systems:

Spanish-Surnamed. Persons of Mexican, Puerto Rican, Cuban, and other Spanish-speaking origins. Included are persons of Spanish-speaking background whose surnames are no longer Spanish because of marriage or some other reason.

American Indian. Members of Federally-recognized tribes and/or members of tribes located primarily on the Eastern Seaboard who identify as Indians and are regarded as such in the community in which they live.

Oriental. Includes persons of East Asian and Pacific Island origin, such as Chinese, Japanese, Koreans, Filipinos, Indonesians, and Polynesians.

Non-Minority. Includes, in addition to white, persons who do not fall into the other four categories, such as Aleuts and Eskimos.

While the limitations of this procedure are recognized, it is considered to be an adequate method of obtaining information on minority-group designation for program management purposes.

The minority survey coverage is world-wide, but excludes Federal employees in Hawaii, Guam, and Puerto Rico. Employees in these three areas are grouped together as 'Nondesignated' (as to minority group). They are therefore not covered in this report, either as minority-group employees or as part of the total study population. (See Technical Appendix I for the number of nondesignated employees.)

Coverage of the Report

The present study covers Federal civilian employees under the General Schedule and similar pay systems having active records in the Central Personnel Data File of the U.S. Civil Service Commission and meeting the following qualifications:

- Permanent tenure
- Full-time work schedule
- Minority (or non-minority) group specified
- 'Education level attained' specified

The Central Personnel Data File (CPDF)

The Civil Service Commission's Central Personnel Data File is an automated file, organized and maintained on the basis of standard personnel forms and certain payroll documents that come into the Commission from most Federal agencies. The coverage of the CPDF comprises the records of individual civilian employees in:

- The Executive Branch (almost in its entirety)

The Legislative Branch (approximately 40 percent)

The Judicial Branch (only a very small percentage)

As of August 1974, the date of the present

study, over 98 percent of all Federal civilian employees were in the Executive Branch.

The included and excluded agencies are shown, by branch, in the following tabulation:

Branch	Included in CPDF	Not Included in CPDF
Executive Branch	All Executive Departments Almost all Executive Branch agencies	Excluded by law: Central Intelligence Agency National Security Agency Other Executive Branch agencies White House Office Board of Governors, Federal Reserve System Tennessee Valley Authority
Legislative Branch	General Accounting Office Government Printing Office U.S. Tax Court	Congressional staffs Library of Congress Architect of the Capitol Botanic Garden
Judicial Branch	Only Administrative Office of U.S. Courts	Almost entire Judicial Branch

Definitions of Study Population Criteria: Full-Time Permanent General Schedule and Similar

In addition to minority (or non-minority) status, defined above, the principal criteria for the inclusion of CPDF employee records in the study population were:

- Work schedule—full-time
- Tenure—permanent
- Pay system—General Schedule and similar

Full-Time. Full-time employees include those regularly scheduled to work the number of hours and days required by the administrative work-week for their employment group or class—usually 40 hours per week.

Permanent. 'Permanent' employees are those serving under career, career-conditional, or excepted appointments which contain no time limitations.

General Schedule and similar. The General Schedule pay system covers, with specific exemptions, positions in the Executive Branch of the Federal Government (and certain agencies in the Legislative and Judicial branches). Not included

under General Schedule and similar are:

- the Executive Schedule (which covers positions above the GS-18 level)
- the wage-systems (blue-collar) pay plans
- the U.S. Postal Service pay systems
- other statutory systems, such as the Foreign Service systems and the Department of Medicine and Surgery systems of the Veterans Administration

The 'and similar' in 'General Schedule and similar' refers to positions in certain agencies which, having been authorized by Congress to fix compensation for all or part of their organizations, have elected to follow the General Schedule system, although not required by law to do so.

As of August 1974, the date of the present study, 72 percent of the full-time permanent Federal civilian employees were under the General Schedule and similar pay systems; 23 percent were under wage-systems pay plans, and 5 percent were under other pay plans. (This tabulation does not include the U.S. Postal Service, which has its own system of tenure classification.)

White-Collar and General Schedule Employees

All occupations in the General Schedule and similar pay systems are white-collar occupations. In addition, there are white-collar employees in other pay systems. These are chiefly:

- the Executive Schedule
- the U.S. Foreign Service
- the U.S. Postal Service
- the Department of Medicine and Surgery of the Veterans Administration

Education Elements in the CPDF

In addition to having minority (or non-minority) status designated, and having full-time work schedules and permanent tenure, and being under the General Schedule and similar pay systems, CPDF records had to have the educational attainment level specified to be eligible for inclusion in the study.

The Central Personnel Data File, which became operational in mid-1972, originally included no data on the educational background of employees. Starting in 1973, information was collected from employees with permanent tenure (regardless of work schedule) on the following education elements:

- For employees of all education levels—
 - Highest education level attained
- For employees with a bachelor's degree or higher—
 - Year of attainment of highest degree
 - Academic discipline

The education elements, once entered into the CPDF, became available for cross-tabulation with the other data elements already in the file.

The present study uses two of the three elements; 'academic discipline', because of the great number of academic disciplines (i.e., subjects), is not included in this report.

Period of the Report

The data for this study were extracted from Central Personnel Data File records as of August 31, 1974. Education is as of 1973 and 1974. Some agencies send in information on any additional education obtained by their employees. However, for most departments and agencies, the only update on education in CPDF is information for new employees.

'Aging' of education elements since initial collection would not be expected to affect the data or conclusions of this study. While the first input of the education data was in 1973, agencies continued to send in initial education data throughout 1974. By August 31, 1974, the date of the present study, over 92 percent of the active non-Postal records in the Central Data Personnel File had entries for 'education level attained'. (See Technical Appendix I, below.)

U.S. Census data used for comparison with data for the study population are, where possible, from the March 1974 Census Current Population Survey (educational attainment is surveyed by the Census once a year, in March). The 1974 Census data are supplemented by information from the 1970 Census of Population.

4. Composition of the Study Population

Before proceeding to a consideration of the educational attainment of the study population, its distribution by sex and by minority (or non-minority) group will be described.

Men and Women General Schedule Employees

As of August 1974, there were 1,162,919 full-time permanent employees under the General Schedule (or similar) pay system meeting the requirements for this study. Three-fifths were men and two-fifths were women:

	Number	Percent
Total full-time permanent General Schedule employees	1,162,919	100.0
Men	698,213	60.0
Women	464,706	40.0

Source: Appendix Table 1B.

Minority (and Non-Minority) Groups

The distribution of the study population with regard to minority (or non-minority) group is as follows:

	Number	Percent
Total full-time permanent General Schedule employees	1,162,919	100.0
Minority-group employees	196,838	16.9
Black	148,246	12.8
Spanish-surnamed	28,734	2.5
American Indian	9,720	0.8
Oriental	10,138	0.9
Employees other than minority	966,081	83.1

Source: Appendix Table 1A.

Minority-Sex Combinations

The distribution by minority (or non-minority) group for men and women GS employees is as follows:

	Men	Women
All full-time permanent General Schedule employees	698,213	464,706
Percent distribution:		
Total	100.0	100.0
Minority-group employees	11.7	24.8
Black	7.7	20.3
Spanish-surnamed	2.5	2.5
American Indian	0.6	1.2
Oriental	0.9	0.9
Employees other than minority	88.3	75.2

Source: Tabulations for Appendix Table 1B.

Percentage of Women in each Minority (and Non-Minority) Group

Because minority employees constitute only one-sixth of the study population, averages for all General Schedule employees will be fairly close to averages for the non-minority group. This is truer for men than for women employees, because of the larger proportion of women than men in the total for minority groups:

	Percentage of women in each minority (or non-minority) group
All full-time permanent General Schedule employees	40.0
Minority-group employees	58.6
Black	63.6
Spanish-surnamed	40.0
American Indian	58.6
Oriental	39.4
Employees other than minority	36.2

Source: Appendix Table 1B.

Among the five minority (and non-minority) groups, the highest percentages of women are in the Black (64 percent) and American Indian (59 percent) groups. Thus, minority-group employees have 59 percent women, while non-minority employees have only 36 percent women.

PART THREE. GENERAL FINDINGS

5. Educational Attainment of General Schedule Employees, by Minority (and Non-Minority) Group, and by Sex

The educational attainment levels of General Schedule (and similar pay systems) employees are shown in the first two Appendix tables:

Table 1A. Education level attained, by minority group

Table 1B. Educational level attained, by minority group, and by sex

After a discussion of educational attainment for:

← Minority (and non-minority) groups

— Men and women employees

— Minority-sex combinations

each level of educational attainment will be analyzed in relation to these three factors.

Educational Attainment, by Minority Group

An overview of the distribution of the minority (and non-minority) groups by education level attained shows that the Oriental group has the highest level of education, followed by the non-minority group. The three remaining groups—Black, Spanish-surnamed, and American Indian—had considerably smaller percentages of employees with higher education:

	Percentage distribution by education level				
	Black	Spanish-surnamed	American Indian	Oriental	Non-minority
All education levels	100.0	100.0	100.0	100.0	100.0
High school or less	41.2	41.9	37.9	19.3	30.4
Training beyond high school (no college)	16.6	12.1	23.2	10.6	12.5
Any college	42.2	46.0	38.9	70.1	57.0
Bachelor's degree only	6.9	8.0	5.0	18.3	14.7
Graduate study	6.5	8.2	7.8	24.2	18.0

Source: Appendix Table 1A.

Educational Attainment of Men and Women Employees

Men and women General Schedule (and similar) employees have quite different patterns of educational attainment:

	Percentage distribution by education level		
	Total	Men	Women
All education levels	100.0	100.0	100.0
Less than high school graduate	5.1	5.2	4.9
High school graduate	27.0	18.9	39.1
Training beyond high school (no college)	13.1	9.3	18.9
Any college	54.8	66.6	37.1
Bachelor's degree (no graduate study)	13.5	18.5	5.8
Graduate study	16.3	24.0	4.7

Source: Appendix Tables 1A and 1B.

This distribution shows that after the lowest education level (5 percent for both men and women), the women have twice the percentage that the men have of high school graduates (no further training or education) and of training beyond high school (no college). Conversely, almost twice the percentage of men, compared with women employees, had attended college. At the college graduate level, three times the percentage of men had bachelor's degrees (no graduate study) and five times the percentage of men as of women had graduate study.

Educational Attainment, by Minority-Sex Combination

Again a pattern emerges of high educational attainment for the Oriental group—both men and women. For the non-minority General Schedule employees, the men rank second to the Oriental men. Non-minority women, however, rank in the middle of the women's groups—about the same as Black women employees.

	Percentage distribution by educational level				
	Black	Spanish-surnamed	American Indian	Oriental	Non-minority
Men					
All education levels	100.0	100.0	100.0	100.0	100.0
High school or less	38.2	36.7	31.5	13.6	22.6
Training beyond high school (no college)	10.7	9.2	15.9	7.3	9.1
Any college	51.0	54.2	52.6	79.1	68.3
Bachelor's only	10.5	11.0	9.8	22.3	19.5
Graduate study	12.7	11.8	13.5	33.5	25.3
Women					
All education levels	100.0	100.0	100.0	100.0	100.0
High school or less	42.8	49.7	42.5	28.1	44.3
Training beyond high school (no college)	20.0	16.6	28.4	15.7	18.5
Any college	37.2	33.7	29.2	56.2	37.1
Bachelor's only	4.8	3.6	1.6	12.1	6.1
Graduate study	3.0	2.9	3.7	9.8	5.1

Source: Appendix Table 1B.

In the following sections, each major level of educational attainment will be considered in relation to minority (or non-minority) group and to sex.

Less Than High School Graduation

Only five percent of the General Schedule (or similar) employees did not achieve high school graduation. The percentage for the Oriental group was the lowest—less than three percent. The groups having the highest percentages who did not graduate from high school—the Blacks and the Spanish-surnamed—also showed the greatest differences between men and women employees, the men being higher for these two groups. For the remaining groups, the percentages were similar for men and women.

	Percentage of employees with less than high school graduation		
	Total	Men	Women
All General Schedule employees	5.1	5.2	4.9
Black	9.9	13.0	8.2
Spanish-surnamed	9.2	11.6	5.5
American Indian	8.4	8.2	8.5
Oriental	2.7	2.7	2.8
Other than minority	4.2	4.4	4.0

Source: Appendix Tables 1A and 1B.

High School Graduation (no advanced training or education)

Over one-fourth (27 percent) of the General Schedule employees graduated from high school, but did not take any advanced training or education. What is most striking in this category is that the percentages for women are much higher than the percentages for men—twice as high for the non-minority group and about two and one-half times as high for the Oriental group:

	Percentage of employees with high school graduation (but no advanced training or education)		
	Total	Men	Women
All General Schedule employees	27.0	18.9	39.1
Black	31.2	25.3	34.6
Spanish-surnamed	32.7	25.1	44.1
American Indian	29.5	23.2	33.9
Oriental	16.6	10.9	25.4
Other than minority	26.2	18.2	40.4

Source: Appendix Tables 1A and 1B.

As in the previous category (less than high school graduation), Oriental men and Oriental women have the smallest percentages, and non-minority men have the second lowest percentage among the groups of men. Non-minority women, however, have the second to highest percentages with high school graduation, being outranked only by Spanish-surnamed women.

The relatively low percentages of Oriental men and women and non-minority men having no education beyond high school reflect the high percentages of these groups who attended college.

Training Beyond High School (but no college)

For this category, as for 'high school graduation' the differences between the percentages for men and women in the minority (or non-minority) groups were greater than the differences among the groups. Approximately twice as many women as men, proportionately, had technical training beyond high school:

	Percentage of employees with training beyond high school (but no college)		
	Total	Men	Women
All General Schedule employees	13.1	9.3	18.9
Black	16.6	10.7	20.0
Spanish-surnamed	12.1	9.2	16.6
American Indian	23.2	15.9	28.4
Oriental	10.6	7.3	15.7
Other than minority	12.5	9.1	18.5

Source: Appendix Tables 1A and 1B.

This training beyond high school is principally in private vocational schools. Those schools training white-collar workers fall into two main categories—business schools and trade and technical schools.

The majority of students at the business school are women (approximately three-quarters are women students, according to the Association of Independent Colleges and Schools, the organization of the accredited business schools).

According to the National Association of Trade and Technical Schools (representing all accredited schools of this type), the 1975 distribution of trade and technical schools was:

	Percentage of students	Estimated percentage of women
All trade and technical schools	100	(not available)
Electronics (including computer hardware)	20	10
Paramedical (medical technologists, dental assistants, etc.)	17	80-90
Computer software (programming and key-punch)	13	10

The remaining 50 percent of private trade and technical schools include automotive, advertising and commercial art, welding, broadcasting, fashion and interior design, drafting, aviation, and miscellaneous other fields.

Any College Attendance

The pattern for employees with any college education is, as would be expected, the reverse of that for employees with high school or less. This is true for the groups as a whole and for men and women employees separately. Oriental men and women, and non-minority men (the three groups having the lowest percentages at the high school or less level) were highest in college attendance:

	Percentage of employees with any college attendance		
	Total	Men	Women
All General Schedule employees	54.8	66.6	37.1
Black	42.2	51.0	37.2
Spanish-surnamed	46.0	54.2	33.7
American Indian	38.9	52.6	29.2
Oriental	70.1	79.1	56.2
Other than minority	57.0	68.3	37.1

Source: Appendix Tables 1A and 1B.

In every group, substantially higher percentages of men than of women had attended college. The greatest difference in the percentages for men and women was (as had been the case for 'training beyond high school') in the non-minority group.

One Year or Less of College

The differences observed among the groups in the percentages having any college attendance are further accentuated by the numbers of employees who were enrolled in college for one year or less. Looked at as percentages of each group of employees of all education levels, very little difference is apparent:

	Percentage of employees who attended college for one year or less		
	Total	Men	Women
All General Schedule employees	14.9	12.8	17.9
Black	18.2	15.2	19.9
Spanish-surnamed	18.3	17.8	19.2
American Indian	17.5	17.6	17.5
Oriental	13.6	10.7	18.1
Other than minority	14.2	12.5	17.3

Source: Appendix Tables 1A and 1B.

However, if the numbers completing one year or less are considered in relation to the numbers having any college attendance, differences in pattern are seen, especially in the percentages for men and women employees:

	Employees with one year or less college as percentage of employees with any college		
	Total	Men	Women
All General Schedule employees	27.1	19.3	48.3
Black	43.0	29.8	53.5
Spanish-surnamed	39.8	32.8	56.8
American Indian	45.1	33.4	60.0
Oriental	19.5	13.6	32.2
Other than minority	25.0	18.3	46.7

Source: Tabulations for Appendix Tables 1A and 1B.

To illustrate the great differences in the percentages for men and for women employees, it can be seen that: the highest percentages for the groups of men (33 percent for Spanish-surnamed men and for American Indian men) are approximately the same as the lowest percentage among the women's groups (32 percent for Oriental women). Thus the already lower percentages of women than men having any college attendance are reduced still further because of the higher percentages of women employees (in each minority or non-minority group) who have entered college but completed only one year or less.

Two Years or more of College

The high percentages of women having one year or less of college attendance results in a great disparity in the percentages of men and of women employees having two years or more of college attendance:

	Percentage of employees (of all education levels) in each minority-sex combination having two years or more of college attendance.	
	Men	Women
All General Schedule employees	53.8	19.2
Black	35.9	17.3
Spanish-surnamed	36.4	14.6
American Indian	35.0	11.7
Oriental	68.4	38.1
Other than minority	55.8	19.8

Source: Appendix Table 1B.

Oriental men and women and non-minority men are even more outstanding with respect to this factor than they are for 'Any college attendance'.

Bachelor's Degree and Above

There are increasing disproportions in the percentages of men and women who attained college graduation, when compared with other levels of educational attainment:

Percentage distribution of General Schedule employees by education level attained:	Men	Women	Index (Men ÷ Women) × 100
	All education levels	100.0	100.0
High school or less	24.1	44.0	55
Training beyond high school (but no college)	9.3	18.9	49
Any college	66.6	37.1	180
Bachelor's degree only	18.5	5.8	319
Graduate study	24.0	4.7	511

Source: Appendix Table 1B.

The trend shown here is the consequence of the smaller proportions of women in each group entering college, accentuated by the greater percentage of women who completed no more than the first year (or less) of college, and added to by the higher proportions of women than men who had from two to four years of college but did not complete a bachelor's degree.

Following are the percentages of General Schedule employees who are college graduates, by minority-sex combination:

	Percentage of employees with bachelor's degrees and above		
	Total	Men	Women
All General Schedule employees	29.7	42.6	10.5
Black	13.4	23.2	7.8
Spanish-surnamed	16.3	22.8	6.5
American Indian	12.7	23.3	5.3
Oriental	42.5	55.9	22.0
Other than minority	32.7	44.8	11.3

Source: Appendix Tables 1A and 1B.

The foregoing tabulation, especially in relationship to GS grade group, will be discussed in the 'College Graduate' section of the following chapter.

6. - Educational Attainment and GS Grade

In the preceding chapter, the distribution of General Schedule employees was shown by level of education attainment in relation to minority (and non-minority) group, to sex, and to minority-sex combination. The present chapter brings in an additional factor—GS grade group. Following is an outline of the ways in which the relationship of educational attainment to GS grade will be considered:

Employees of all education levels

Education level within GS grade group

Median education level within each grade group

GS grade group within education level

Median grade group within each education level

Employees completing only one year or less of college

Employees with bachelor's degrees (and above)

College graduates as percentages of employ-

ees of all education levels, within each grade group

Women college graduates as percentages of all college graduates, within each grade group

College graduates in GS grades GS12 and above as percentage of college graduates of all grade groups (GS1-GS18)

College graduates in GS grades GS12 and above as percentages of employees of all education levels in GS grades GS 12 and above

Education Level within GS Grade Group

The distribution of employees by education level within each GS grade group is shown, by minority-sex combination, in Appendix Table 3. As would be expected, the level of educational attainment tends to rise in successively higher grade groups. There are, to be sure, some differences within grade groups. These differences are displayed in Table A, which shows the median education level at each grade group for the ten minority-sex combinations.

Table A. Median Education Level Attained in Each GS Grade Group, by Minority Group, and by Sex, Full-Time Permanent General Schedule & Similar Employees, August 1974

Sex and GS Grade Group	Total	Black	Spanish-Surnamed	American Indian	Oriental	Non-Minority
Men						
General Schedule—total	2-4 yrs. col.	1 yr. college	1 yr. college	1 yr. college	Bachelor's	2-4 yrs. col.
GS- 1 thru GS- 4	H. S. grad.	H. S. grad.	H. S. grad.	Training	1 yr. college	H. S. grad.
GS- 5 thru GS- 8	Training	Training	Training	Training	1 yr. college	Training
GS- 9 thru GS-11	2-4 yrs. col.	2-4 yrs. col.	1 yr. college	1 yr. college	Bachelor's	2-4 yrs. col.
GS-12 thru GS-13	Bachelor's	Bachelor's	Bachelor's	2-4 yrs. col.	Grad. study	Bachelor's
GS-14 thru GS-15	Grad. study	Grad. study	Grad. study	Bachelor's	Grad. study	Grad. study
GS-16 thru GS-18	Grad. study	Grad. study	Grad. study	Grad. study	Grad. study	Grad. study
Women						
General Schedule—total	Training	Training	Training	Training	1 yr. college	Training
GS- 1 thru GS- 4	H. S. grad.	H. S. grad.	H. S. grad.	H. S. grad.	Training	H. S. grad.
GS- 5 thru GS- 8	Training	Training	Training	Training	1 yr. college	Training
GS- 9 thru GS-11	1 yr. college	1 yr. college	1 yr. college	1 yr. college	Bachelor's	1 yr. college
GS-12 thru GS-13	Bachelor's	Bachelor's	Grad. study	1 yr. college	Grad. study	Bachelor's
GS-14 thru GS-15	Grad. study	Grad. study	Grad. study	Grad. study	Grad. study	Grad. study
GS-16 thru GS-18	Grad. study	Grad. study	Grad. study	Grad. study	Grad. study	Grad. study

Abbreviations:
 H. S. grad. —High school graduate (no additional training or education)
 Training —Training beyond high school—no academic college
 1 yr. college—One year or less college
 2-4 yrs. col.—Two to four years college—no bachelor's degree
 Bachelor's —Bachelor's degree—no graduate study
 Grad. study —Graduate study

Source: Appendix Tables 1B and 3.

Table A shows Oriental men again high in educational attainment, followed by non-minority men and by Oriental women. The medians for Oriental men and for Oriental women in the highest grade groups (GS12-GS13 and above) fell in the highest education level—graduate study. (There were no Oriental women, of any education level, in the highest grade group, GS16-GS18.)

From Appendix Table 3 it can be seen that the differences in percentage distributions by education level among the minority-sex combinations in any given GS grade group are not as great as the differences in the percentage distributions by education level from one GS grade group to another. Much greater differences (than in Appendix Table 3) among the minority-sex combinations are shown in Appendix Table 2B, which presents the percentage distributions of GS grade group within education level. (Table 2B will be discussed in the following section.)

Therefore, given the emphasis of the present report, which considers primarily comparisons by minority group and by sex, greater importance is

given to the discussion of GS grade within education level (Table 2B) than to education level within GS grade (Table 3), where the greatest differences are from grade group to grade group, rather than across minority-sex combinations.

GS Grade Group within Education Level

Holding education level constant, there is considerable variation in the percentage distributions of employees by GS grade group:

- Among the minority (and non-minority) groups (Appendix Table 2A)
- Between men, employees and women employees (columns 1 and 2 of Appendix Table 2B)
- Among the minority-sex combinations (the remaining columns of Appendix Table 2B)

Based on Appendix tables 2A and 2B, referred to above, text table B, below, presents an overview of the relationship of GS grade to education level. It shows median GS grade-group within education level for each of the ten minority-sex combinations.

Table B. Median GS Grade Group at Each Major Education Level, by Minority Group, and by Sex, Full-Time Permanent General Schedule & Similar Employees, August 1974

Sex and Education Level	Total	Black	Spanish-Surnamed	American Indian	Oriental	Non-Minority
Men						
All education levels	GS 9-GS11	GS 5-GS 8	GS 5-GS 8	GS 9-GS11	GS 9-GS11	GS 9-GS11
High school or less	GS 5-GS 8	GS 5-GS 8	GS 5-GS 8	GS 5-GS 8	GS 9-GS11	GS 5-GS 8
Training beyond high school (no college)	GS 9-GS11	GS 5-GS 8	GS 5-GS 8	GS 5-GS 8	GS 9-GS11	GS 9-GS11
College, less than bachelor's degree	GS 9-GS11	GS 5-GS 8	GS 5-GS 8	GS 5-GS 8	GS 9-GS11	GS 9-GS11
Bachelor's degree—no graduate study	GS 9-GS11	GS 9-GS11	GS 9-GS11	GS 9-GS11	GS 9-GS11	GS 9-GS11
Graduate study	GS12-GS13	GS12-GS13	GS12-GS13	GS12-GS13	GS12-GS13	GS12-GS13
Women						
All education levels	GS 5-GS 8	GS 5-GS 8	GS 1-GS 4	GS 1-GS 4	GS 5-GS 8	GS 5-GS 8
High school or less	GS 5-GS 8	GS 1-GS 4	GS 1-GS 4	GS 1-GS 4	GS 5-GS 8	GS 5-GS 8
Training beyond high school (no college)	GS 5-GS 8	GS 5-GS 8	GS 1-GS 4	GS 1-GS 4	GS 5-GS 8	GS 5-GS 8
College, less than bachelor's degree	GS 5-GS 8	GS 5-GS 8	GS 5-GS 8	GS 1-GS 4	GS 5-GS 8	GS 5-GS 8
Bachelor's degree—no graduate study	GS 5-GS 8	GS 5-GS 8	GS 5-GS 8	GS 5-GS 8	GS 5-GS 8	GS 5-GS 8
Graduate study	GS 9-GS11	GS 9-GS11	GS 9-GS11	GS 9-GS11	GS 9-GS11	GS 9-GS11

Source: Appendix Table 2B.

At every education level, Table B shows Oriental men with median grade groups higher than or equal to those of the other groups of men. Non-minority men have medians as high as those for Oriental men, except at the 'High school or less' level. Black, Spanish-surnamed, and American Indian men have identical medians at every education level; however, the median for American Indian men for all education levels combined is one grade group higher than the corresponding medians for Black men and Spanish-surnamed men.

Among the five groups of women, Oriental and non-minority women rank the highest; Black women rank third in median grade group, followed by Spanish-surnamed women and American Indian women.

At each education level and within each minority

(and non-minority) group, men employees either outrank women in median GS grade group or (less often) have the same median.

Within each educational level in Appendix Table 2B, there are great differences in the distribution of men and of women employees by GS grade. These differences are much greater than the differences among minority (and non-minority) groups for men and women employees combined (Table 2A). The pattern of higher GS grades for men than for women is observed within each education level for each minority (or non-minority) group.

An extreme example is seen in the percentages of men and of women at each education level who are in the lowest grade group (GS-1 through GS-4):

	Pct. of men at the specified education level who are in grades GS-1 thru GS-4	Pct. of women at the specified education level who are in grades GS-1 thru GS-4
All education levels	7.6	39.8
High school or less	17.6	49.6
Training beyond high school	9.5	39.3
College, less than bachelor's	8.7	36.0
Bachelor's degree only	1.3	12.2
Graduate study	0.4	4.8

Source: Appendix Table 2B.

GS Grade and Percentage of College-Educated Employees with One Year of College or Less

In Chapter 5 it was seen that there are pronounced differences in the percentages of employees (with any college attendance) having no more

than one year of college, whether among minority (and non-minority) groups or between men and women employees. In considering these employees by GS grade within this education level, a definite pattern by grade group emerges, as shown in Table C, for the minority-sex combinations.

Table C. Employees in Each GS Grade Group Completing One Year or Less of College as a Percentage of Employees with Any College Attendance, by Minority Group, and by Sex, August 1974

Sex and GS Grade Group	Total	Black	Spanish-Surnamed	American Indian	Oriental	Non-Minority
Men						
General Schedule—total	19.3	29.8	32.8	33.4	13.6	18.3
GS- 1 thru GS- 4	55.1	59.6	67.2	76.6	40.3	52.6
GS- 5 thru GS- 8	34.3	41.8	45.8	53.1	25.3	32.8
GS- 9 thru GS-11	22.0	22.6	28.6	25.2	14.3	21.9
GS-12 thru GS-13	12.9	11.0	12.5	16.0	7.1	12.0
GS-14 thru GS-15	5.7	4.2	6.7	8.5	1.6	5.8
GS-16 thru GS-18	2.0	1.9	5.3	0	0	2.0

See footnote at end of table.

Sex and GS Grade Group	Total	Black	Spanish- Surnamed	American Indian	Oriental	Non-Minority
Women						
General Schedule—total	48.3	53.5	56.8	60.0	32.2	46.7
GS— 1 thru GS— 4	64.0	67.4	71.6	78.9	46.4	62.6
GS— 5 thru GS— 8	52.8	55.7	57.6	60.0	37.4	52.0
GS— 9 thru GS—11	26.6	30.6	26.5	21.5	14.6	26.0
GS—12 thru GS—13	16.0	14.0	8.5	33.3	4.5	16.5
GS—14 thru GS—15	6.3	5.3	7.7	8.3	0	6.5
GS—16 thru GS—18	2.2	9.1	—	—	—	1.2

Source: Tabulations for Appendix Table 3.

Summarizing some of the data of Table C:

	Employees with one year or less of college as a percentage of those with any college attendance	
	Men	Women
Total, GS—1 thru GS—8	38.3	57.1
Black	47.5	60.3
Spanish-surnamed	51.5	64.0
American Indian	59.9	70.3
Oriental	28.5	40.5
Non-minority	36.0	56.0

Source: Tabulations for Appendix Table 2B.

The concentration in the lower GS grades of employees who attended college but had no more than one year, is thus seen to be more pronounced for minority men other than Oriental and for all groups of women other than Oriental.

College Graduates in Relation to GS Grade Group

Of the entire study population of full-time permanent General Schedule (and similar) employees, 29.7 percent were college graduates (having bachelor's degrees with or without graduate study). The leading group was the Oriental (42.5%), followed by non-minority (32.7%), Spanish-surnamed (16.3%), Black (13.4%), and American Indian (12.7). (See Appendix Table 1A.)

The percentage of college graduate men (42.6%) was approximately four times the percentage for college graduate women (10.5%). Table D shows these percentages, as well as those for the individual minority-sex combinations, which range from 23 to 56 percent for the five minority (and non-minority) groups of men and from 5 to 22 percent for the five groups of women. These percentages are for employees of all GS grade groups (i.e.,

the 'total' lines on Table D for men and for women employees).

The body of Table D gives the percentages of college graduate employees in each grade group for total men, total women, and for each minority-sex combination. This table will be illustrated by three charts (figures 1, 2, and 3) and will be discussed later in this chapter.

Because the relationship of the attainment of bachelor's degrees (and above) to GS grade group is of interest and importance for this study, the subject will be dealt with from three viewpoints (the latter two emphasizing the higher GS grades—GS—12 thru GS—18—where the majority of the employees are college graduates).

The three viewpoints, and the questions they will seek to answer are:

- A. Of the *entire study population*—full-time permanent General Schedule (and similar) employees—what is the percentage of college graduates in each grade group, for each minority-sex combination? This section will

Table D. Percentage of Employees in Each GS Grade Group Having Bachelor's Degree and Above, by Minority Group, and by Sex, August 1974

Sex and GS Grade Group	Total	Black	Spanish-Surnamed	American Indian	Oriental	Non-Minority
Men						
General Schedule—total	42.6	23.2	22.8	23.3	55.9	44.8
GS- 1 thru GS- 4	4.3	2.5	1.5	0.4	10.9	5.4
GS- 5 thru GS- 8	18.4	10.4	10.5	6.5	32.7	20.1
GS- 9 thru GS-11	39.7	39.3	29.4	35.4	51.8	40.0
GS-12 thru GS-13	61.4	61.8	56.8	48.3	75.1	61.3
GS-14 thru GS-15	78.0	77.7	71.1	62.2	90.0	78.0
GS-16 thru GS-18	88.7	86.8	77.2	71.4	100.0	88.8
Women						
General Schedule—total	10.5	7.8	6.5	5.3	22.0	11.3
GS- 1 thru GS- 4	2.4	1.6	1.2	0.5	7.8	2.6
GS- 5 thru GS- 8	7.8	6.8	5.5	3.0	15.9	8.0
GS- 9 thru GS-11	35.7	32.6	36.2	39.5	50.3	36.0
GS-12 thru GS-13	55.4	54.9	74.1	33.8	70.0	55.2
GS-14 thru GS-15	77.6	77.9	73.3	76.9	89.2	77.4
GS-16 thru GS-18	86.1	64.2	—	—	—	89.7

Source: Appendix Table 3.

- cover all grade groups, from GS-1 through GS-18.
- B. Of the *college graduates*, what percentage in each minority-sex combination were in any of the grades from GS-12 through GS-18? In this section, these grades will not be separated by grade group; only the totals for grades GS-12 through GS-18 will be shown.
- C. Of *employees (of all education levels) in the three highest GS grade groups:*

GS-12 thru GS-13
 GS-14 thru GS-15
 GS-16 thru GS-18

what percentage, by grade group and by minority-sex combination, had graduated from college? In this section, college graduates will also be considered by level of educational attainment:

- Bachelor's degree but no graduate study
- Any graduate study

The circle diagram shows the relationships of populations A, B, and C.

Following the section on Population A, there will be a section (A1) on the percentage of women in each grade group, by minority (and non-minority) group for:

- General Schedule (and similar) women of all education levels
- General Schedule (and similar) women college graduates

A. **Percentage of college graduates in the study population, by grade group and minority-sex combination.** The percentages of General Schedule (and similar) employees in each GS grade group who have bachelor's degrees and above, by minority-sex combination, are shown in Table D, above, and in figures 1, 2, and 3.

Figure 1, which illustrates the data for men in the five minority (and non-minority) groups, again shows Oriental men in a leading position with respect to educational attainment. Figure 2 (women employees in the five groups) also shows the Oriental group leading with respect to the percentage of employees in each grade having bachelor's degrees.

The five curves in the men's chart (Figure 1) are smoother and more consistent than the lines in

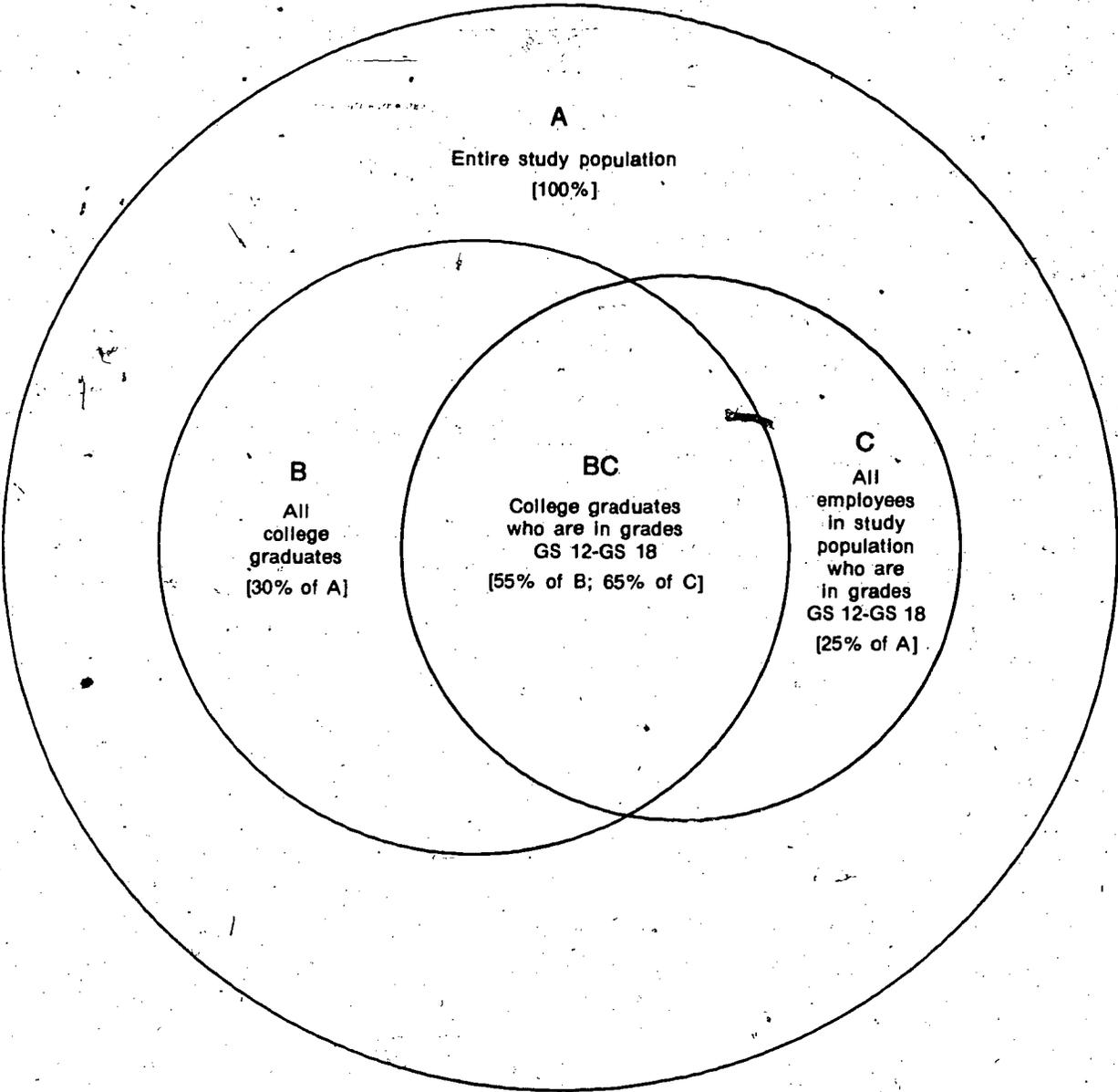
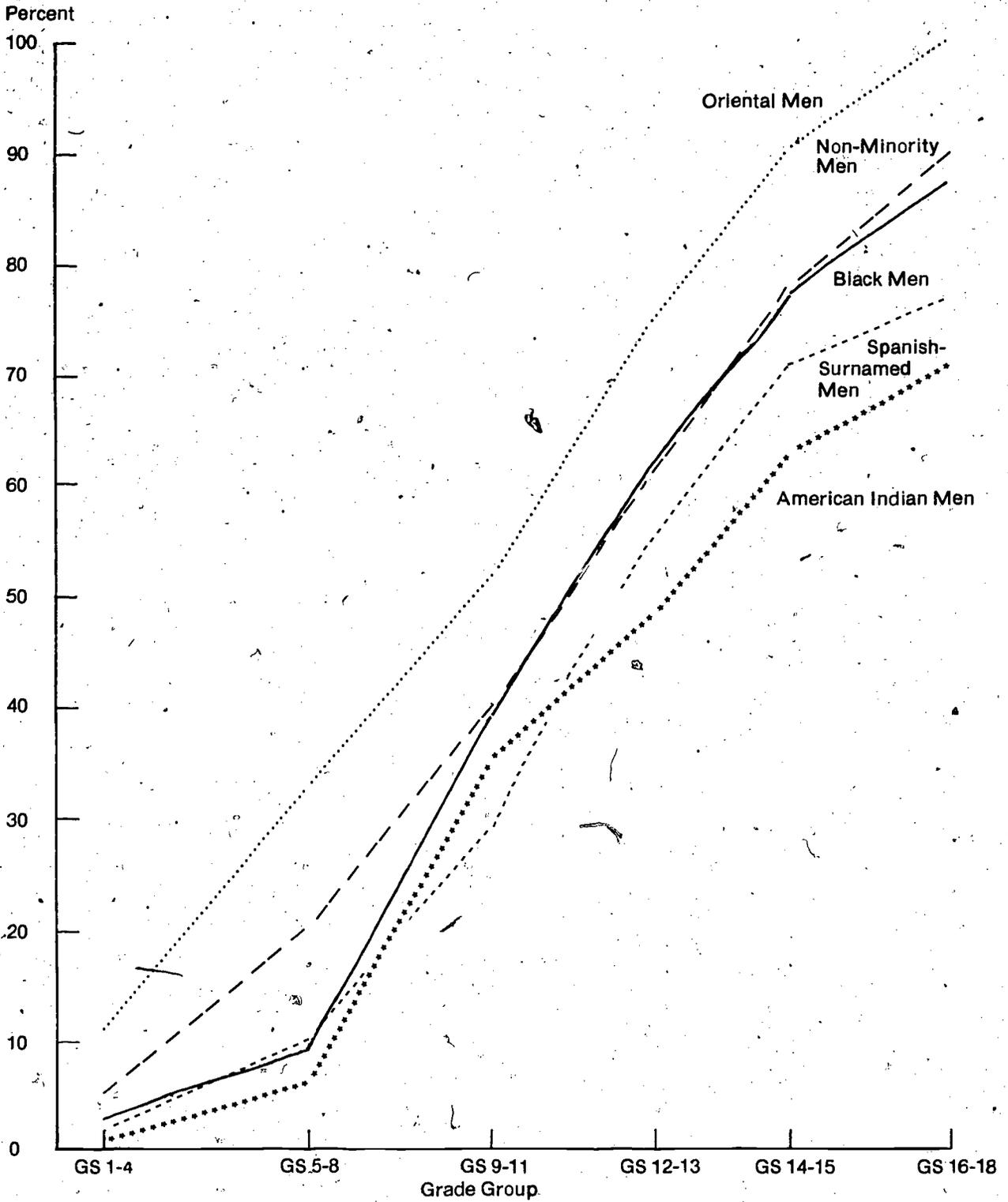
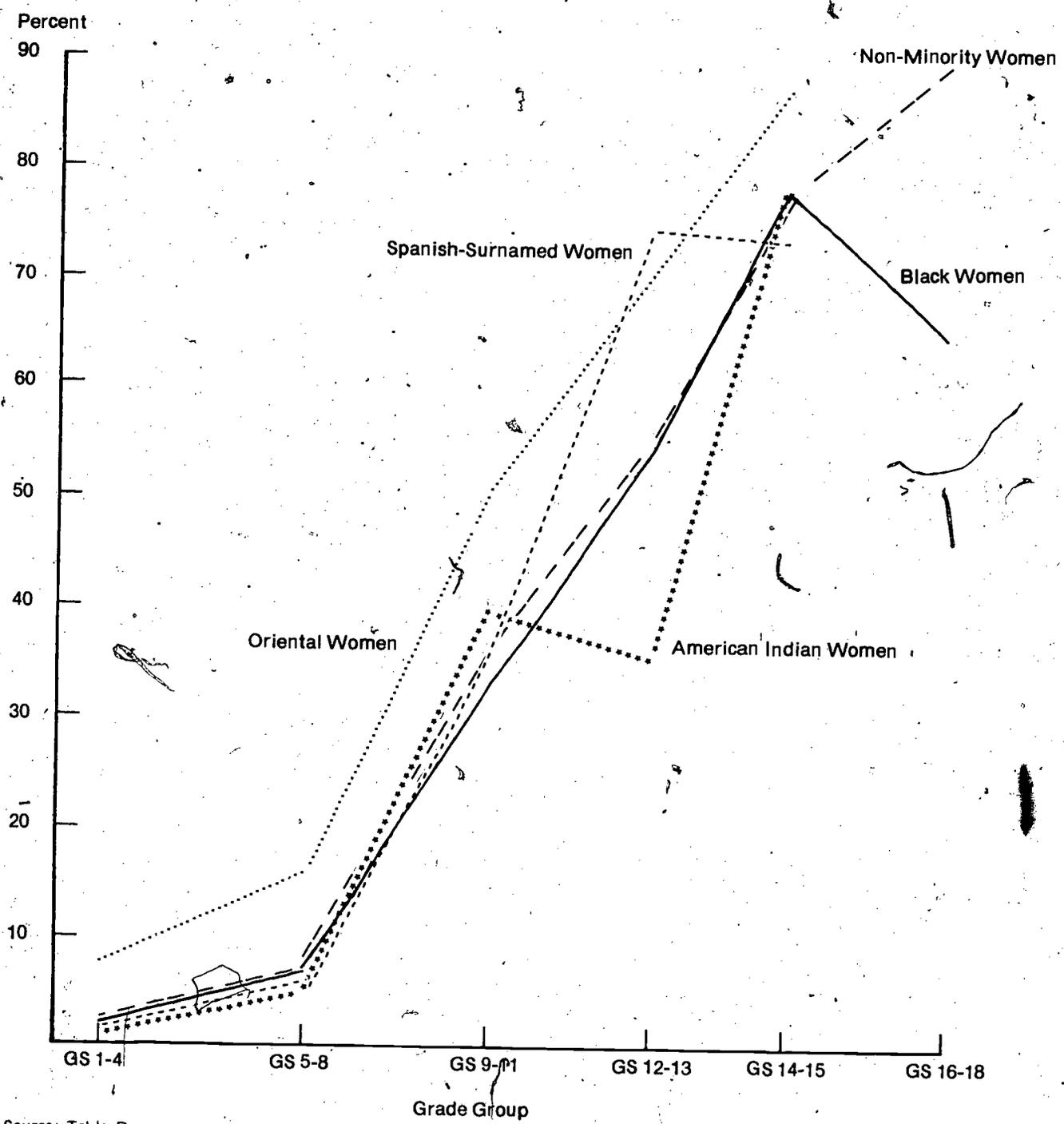


Figure 1
 Percentage of Men in Each Grade Group Having Bachelor's Degree and Above, General Schedule Employees, by Minority Group, August 1974



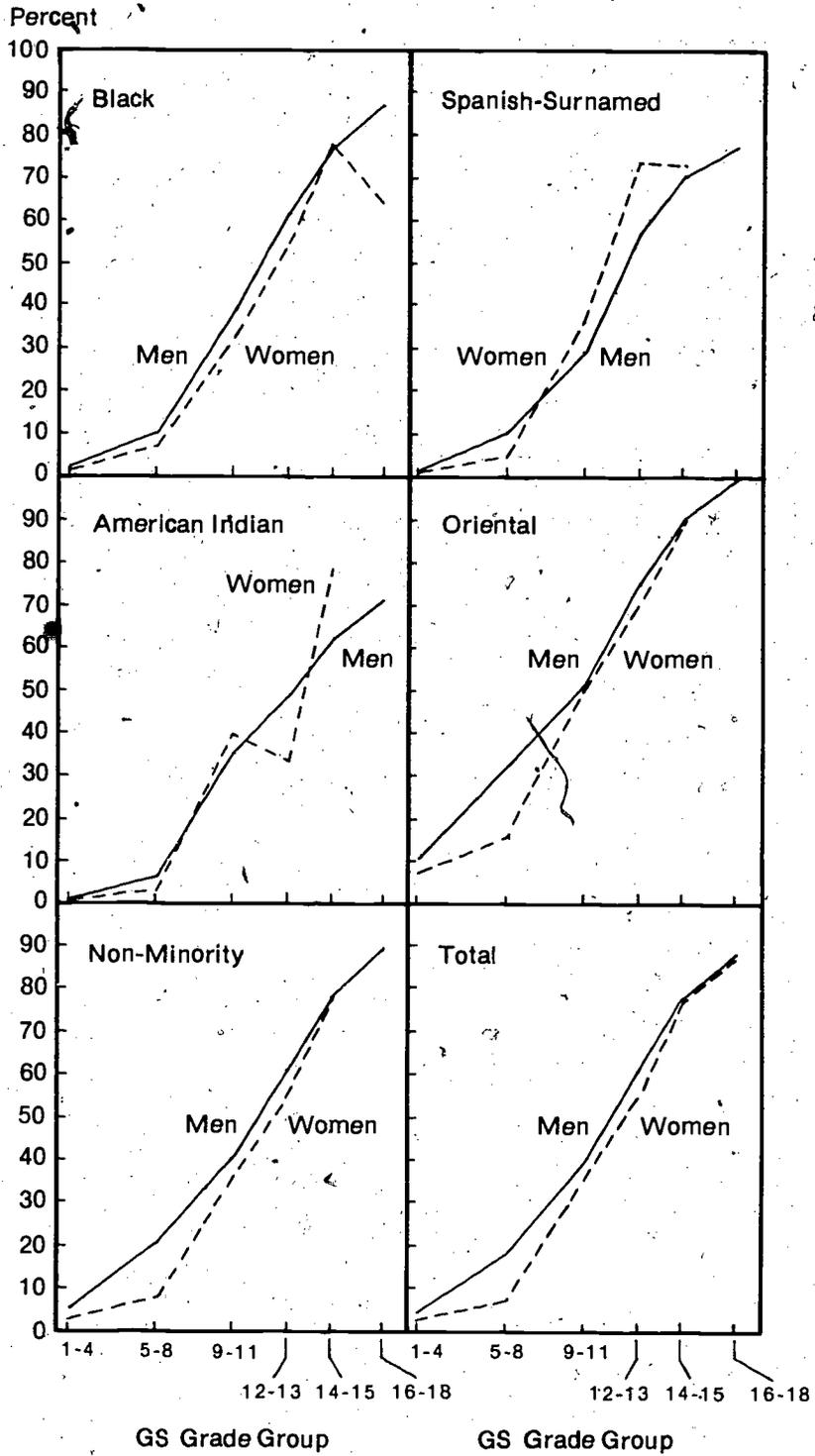
Source: Table D.

Figure 2
 Percentage of Women in Each Grade Group Having Bachelor's Degree and Above, General Schedule Employees, by Minority Group, August 1974



Source: Table D.

Figure 3
 Percentage of Men and of Women In Each Grade Group Having Bachelor's
 Degree and Above, General Schedule Employees,
 by Minority Group, August 1974



Source: Table D.

the women's chart (Figure 2), the percentages for the women being especially irregular in trend in grades GS-12 and above. This irregularity is chiefly attributable to the small numbers of women in these higher grades; in fact, three of the minority groups—Spanish-surnamed, American Indian, and Oriental—have no women in the group GS-16 through GS-18.

However, despite these irregularities, it can be seen (from Table D and Figure 3) that, in the higher grade groups, women employees approach (and in some cases exceed) men employees in per-

centages with bachelor's degrees.

Figure 3 is based on the same Table D data as are figures 1 and 2, but in the case of Figure 3, the juxtaposition is pairs of lines for men and women in each of the panels of Figure 3, whereas Figure 1 shows the five men's groups and Figure 2 shows the five women's groups. The only instances in Figure 3 in which the percentage of women college graduates exceed the percentage of men college graduates by more than one percentage point occur in the Spanish-surnamed and American Indian groups:

	Percentage of employees in specified group who are college graduates		Difference (in percentage points) by which women are higher
	Men	Women	
Spanish-surnamed:			
GS 9-GS11	29.4	36.2	6.8
GS12-GS13	56.8	74.1	17.3
GS14-GS15	71.1	73.3	2.2
American Indian:			
GS 9-GS11	35.4	39.5	4.1
GS14-GS15	62.2	76.9	14.7

Source: Table D.

Other than these exceptions, the men's percentages either exceeded those for the women or, in a few instances, were approximately the same. The greatest difference in the percentages of men and women with bachelor's degrees was in the non-minority group. Here, while the differences between percentages for men and women were less than one percentage point in grades GS-14 and above, and about 4 percentage points in grade groups GS9-GS11 and GS12-GS13, there were very great differences in the lower grades. The percentage of men college graduates in grade group GS1-GS4 was over twice that for women graduates; in group GS5-GS8, the percentage of non-minority men who were college graduates was two and one-half times the percentage of women who had bachelor's degrees (20 percent for the non-minority men and 8 percent for the non-minority women).

A1. Percentage of women in each grade group, by minority group and by education level. Table E shows the percentage of women employees in each GS grade group for each of the minority (and non-minority) groups. The upper section of the table has data for General Schedule (and similar) employees of all education levels; the lower section shows the percentages for college graduates.

In every case—for both section of the table, for the total column, and for each minority (and non-minority) group—the percentage of women decreases in each successively higher grade group. For three of the minority groups (Spanish-surnamed, American Indian, and Oriental), there are no women employees in the group GS-16 through GS-18.

Table E. Percentage of Women Employees in Each GS Grade Group, by Minority Group, Employees of All Education Levels and College Graduate Employees, August 1974

Education Level and GS Grade Group	Women Employees as Percentage of All Employees in Specified GS Grade Group and Minority (or Non-Minority) Group					
	Total	Black	Spanish- Surnamed	American Indian	Oriental	Non-Minority
All education levels—total	40.0	63.6	40.0	58.6	39.4	36.2
GS- 1 thru GS- 4	77.8	75.3	65.2	82.3	75.8	79.3
GS- 5 thru GS- 8	58.1	67.5	42.5	58.7	60.5	56.6
GS- 9 thru GS-11	18.6	41.6	14.5	29.7	23.8	16.8
GS-12 thru GS-13	6.6	21.1	5.1	9.1	8.7	6.0
GS-14 thru GS-15	3.4	12.2	2.9	7.3	5.8	3.1
GS-16 thru GS-18	2.2	11.0	—	—	—	2.0
College graduates—total	14.1	36.9	15.9	24.2	20.4	12.5
GS- 1 thru GS- 4	65.3	66.6	61.7	84.2	69.1	65.0
GS- 5 thru GS- 8	36.9	57.6	28.4	39.4	42.7	34.3
GS- 9 thru GS-11	17.0	37.1	17.4	32.0	23.2	15.3
GS-12 thru GS-13	6.0	19.2	6.6	9.2	8.2	5.4
GS-14 thru GS-15	3.4	12.2	3.0	8.9	5.8	3.1
GS-16 thru GS-18	2.2	8.4	—	—	—	2.0

Source: Tabulations for Appendix Table 3.

B. Percentage of college graduates in grades GS-12 through GS-18, by minority-sex combination. Following are the percentages, within each minority-sex combination, of employees with bachelor's degree and above (as 100 percent) who were in grades GS-12 through GS-18:

	Total	Men	Women
All full-time permanent GS college graduates	54.6	60.4	20.3
Black	34.7	45.4	16.4
Spanish-surnamed	40.8	45.6	15.0
American Indian	37.7	46.3	11.0
Oriental	48.3	56.0	18.0
Other than minority	56.4	61.4	21.3

Source: Tabulations for Appendix Tables 2A and 2B.

The data in the foregoing tabulation, which are shown (except for the 'total' column) in Figure 4, illustrate the predominance of college graduate men (as compared with college graduate women) in the higher grades. Figure 4 can be summarized as follows:

College graduate men:

Lowest: 45.4 percent (Black men) and 45.6 percent (Spanish-surnamed men)
Highest: 61.4 percent (non-minority men)

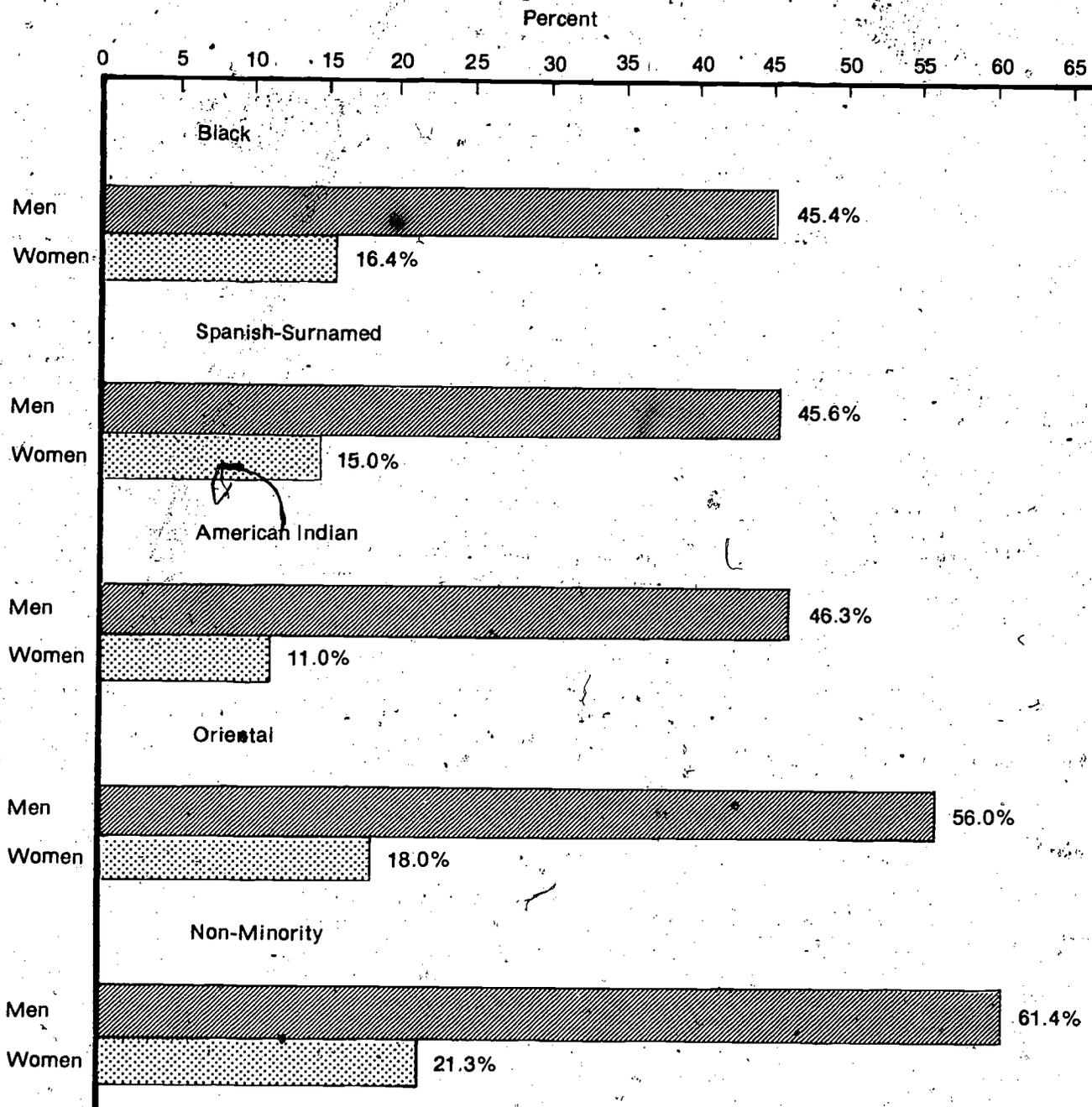
College graduate women:

Lowest: 11.0 percent (American Indian women)
Highest: 21.3 percent (non-minority women)

Thus the lowest percentage of college graduate men in grades GS-12 through GS-18 (45 percent) is more than twice the highest percentage of college graduate women in these grades (21 percent).

C. Percentage of employees (of all education levels) in grade groups GS-12 through GS-18 who were college graduates, by minority-sex combination. Table F presents college graduate employees in grade groups GS-12 through GS-18 as percentages of employees of all education levels in these grade groups. The

Figure 4
 Percentage of Employees with
 Bachelor's Degree and Above Who Were in
 Grades GS-12 thru GS-18, by Minority Group and by Sex;
 General Schedule Employees; August 1974



Source: Tabulations for Appendix Table 2B.

percentages are calculated within each of the ten minority-sex combinations for the grade groups:

GS-12 thru GS-13
 GS-14 thru GS-15
 GS-16 thru GS-18

The same calculations have also been made for

two subdivisions of the college graduate educational attainment level (Table F):

Percentage of employees (of all education levels) having bachelor's degree but no graduate study

Percentage of employees (of all education levels) having any graduate study

Table F. College Graduate Men and Women in Grade Groups GS12-GS13 thru GS16-GS18 as Percentages of Employees of All Education Levels in these Grade Groups, by Education Level Attained, and by Minority Group, August 1974

Sex, Education Level, and GS Grade Group	College Graduates (of the specified education level) as Percentage of Employees of All Education Levels in the Specified Grade Group					
	Total	Black	Spanish-Surnamed	American Indian	Oriental	Non-Minority
Men						
All college graduates:						
GS-12 thru GS-13	61.4	61.7	56.8	48.3	75.1	61.4
GS-14 thru GS-15	78.0	77.7	71.1	62.2	90.0	78.0
GS-16 thru GS-18	88.6	86.7	77.3	71.4 ^a	100.0	88.7
Bachelor's degree—no graduate study:						
GS-12 thru GS-13	23.5	19.7	21.8	17.0	24.8	23.6
GS-14 thru GS-15	19.5	14.8	18.0	18.3	10.4	19.7
GS-16 thru GS-18	14.6	8.0	22.7	14.3 ^a	0	14.8
Graduate study:						
GS-12 thru GS-13	37.9	42.1	35.0	31.3	50.3	37.7
GS-14 thru GS-15	58.5	62.9	53.1	43.9	79.6	58.3
GS-16 thru GS-18	74.1	78.8	54.5	57.1 ^a	100.0	74.0
Women						
All college graduates:						
GS-12 thru GS-13	55.4	54.9	74.1	33.8	70.0	55.2
GS-14 thru GS-15	77.6	78.0	73.3	76.9	89.3	77.4
GS-16 thru GS-18	86.1	64.3	—	—	—	89.7
Bachelor's degree—no graduate study:						
GS-12 thru GS-13	18.3	18.0	23.0	4.4	18.4	18.4
GS-14 thru GS-15	10.4	11.8	13.3	7.7	7.1	10.3
GS-16 thru GS-18	10.9	7.1	—	—	—	11.5
Graduate study:						
GS-12 thru GS-13	37.1	36.9	51.1	29.4	51.6	36.8
GS-14 thru GS-15	67.2	66.1	60.0	69.2	82.1	67.1
GS-16 thru GS-18	75.2	57.1	—	—	—	78.2

^a Based on a total number (for employees of all education levels) of fewer than 10.
 Source: Tabulations for Appendix Table 2B.

The data of table F show that the only clear leaders among the ten minority-sex combinations are:

- for all college graduates (regardless of whether or not they had any graduate study), *Oriental men* (ranking first in each of the three grade groups)
- for employees who had graduate study, *Oriental women* (ranking first in two of the grade groups; there were no Oriental women in grades GS-16 through GS-18)

Employees with bachelor's degree but no graduate study showed no clear leader among the ten minority-sex combinations.

The data of Table F are illustrated in figures 5 through 9. These five charts—one for each minority (and non-minority) group—juxtapose data for men and women within each of the grade groups.

From a comparison of these five charts, it can be seen that:

- for grade group GS-12 thru GS-13, the men have higher percentages of college graduates than do the women, except for the Spanish-surnamed group, where the percentage of women college graduates (74.1 percent) is considerably higher than the figure for men college graduates (56.8 percent)
- considering the educational level subdivisions in grade group GS-12 thru GS-13, the most striking difference between the percentages for men and women in any given group is in the American Indian group: the percentage of men with no education beyond the bachelor's degree is 17.0 percent, almost four times the percentage for women at this level (4.4 percent)

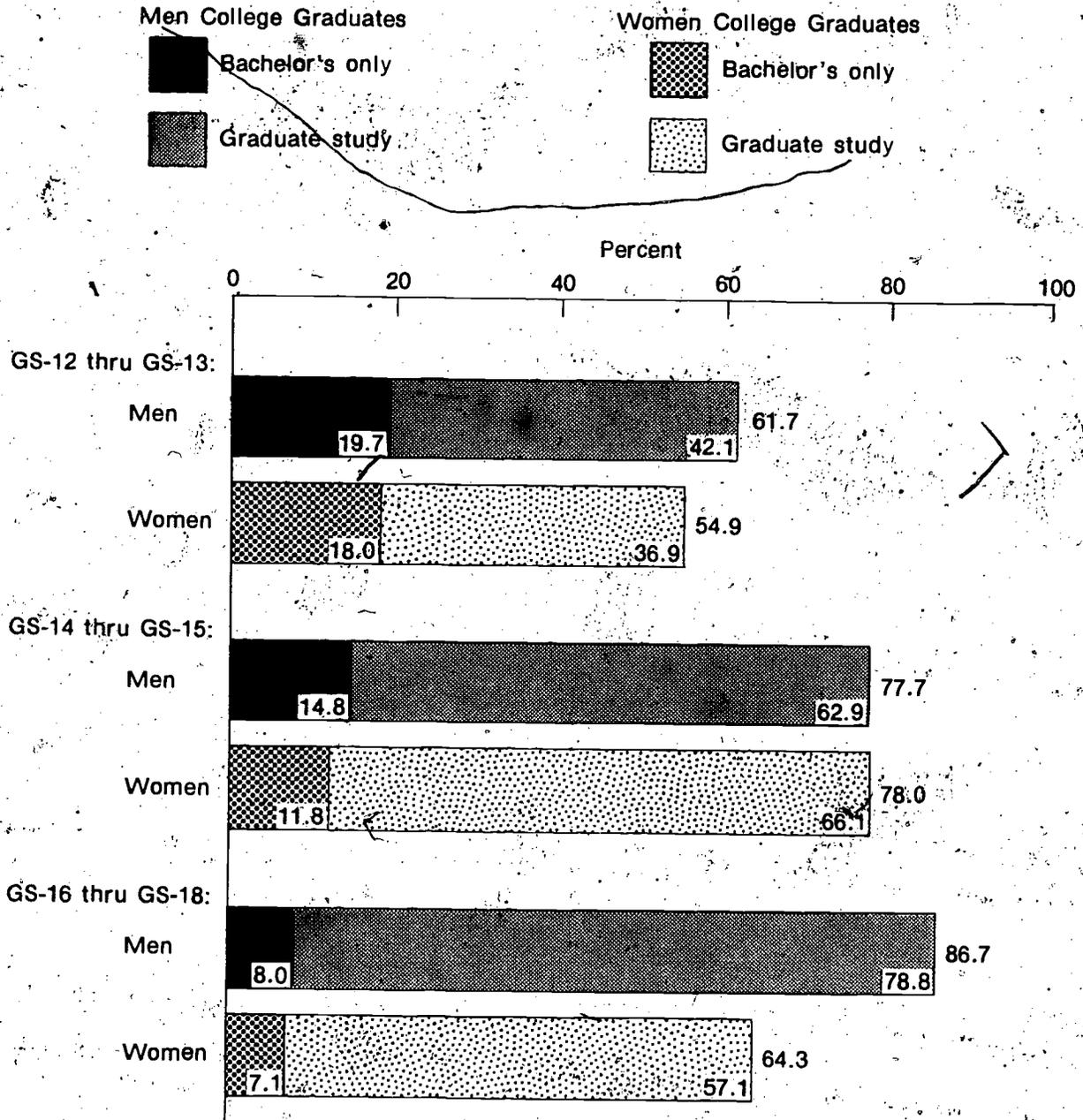
—grade group GS-14 thru GS-15, in contrast to the preceding grade group, shows the percentages for women college graduates as either higher than the percentages for men (Spanish-surnamed and American Indian), or differing from the percentages for men by less than one percentage point (the three remaining groups)

—In the highest grade group—GS-16 thru GS-18—there were no women (of any education level) in the Spanish-surnamed, American Indian, or Oriental groups. In the two remaining groups, the Black men far outstripped the Black women in percentage of college graduates (86.7 percent for the men, compared with 64.3 percent for the women). Among the non-minority employees, on the contrary, the percentages of college graduates were just about the same—88.7 percent for the men and 89.7 percent for the women

Thus, as shown by Table F and by figures 5 through 9, in grade group GS12-GS13, men employees tend to have somewhat higher percentages of college graduates than do women employees. In group GS14-GS15, the percentages of college graduates for men and for women are either approximately the same or else are slightly higher for women. For group GS16-GS18, three of the minority groups have no women employees of any education level; for the groups with women employees, Black men had much higher percentages of graduates than Black women, while in the non-minority group, approximately equal percentages of men and women had bachelor's degrees.

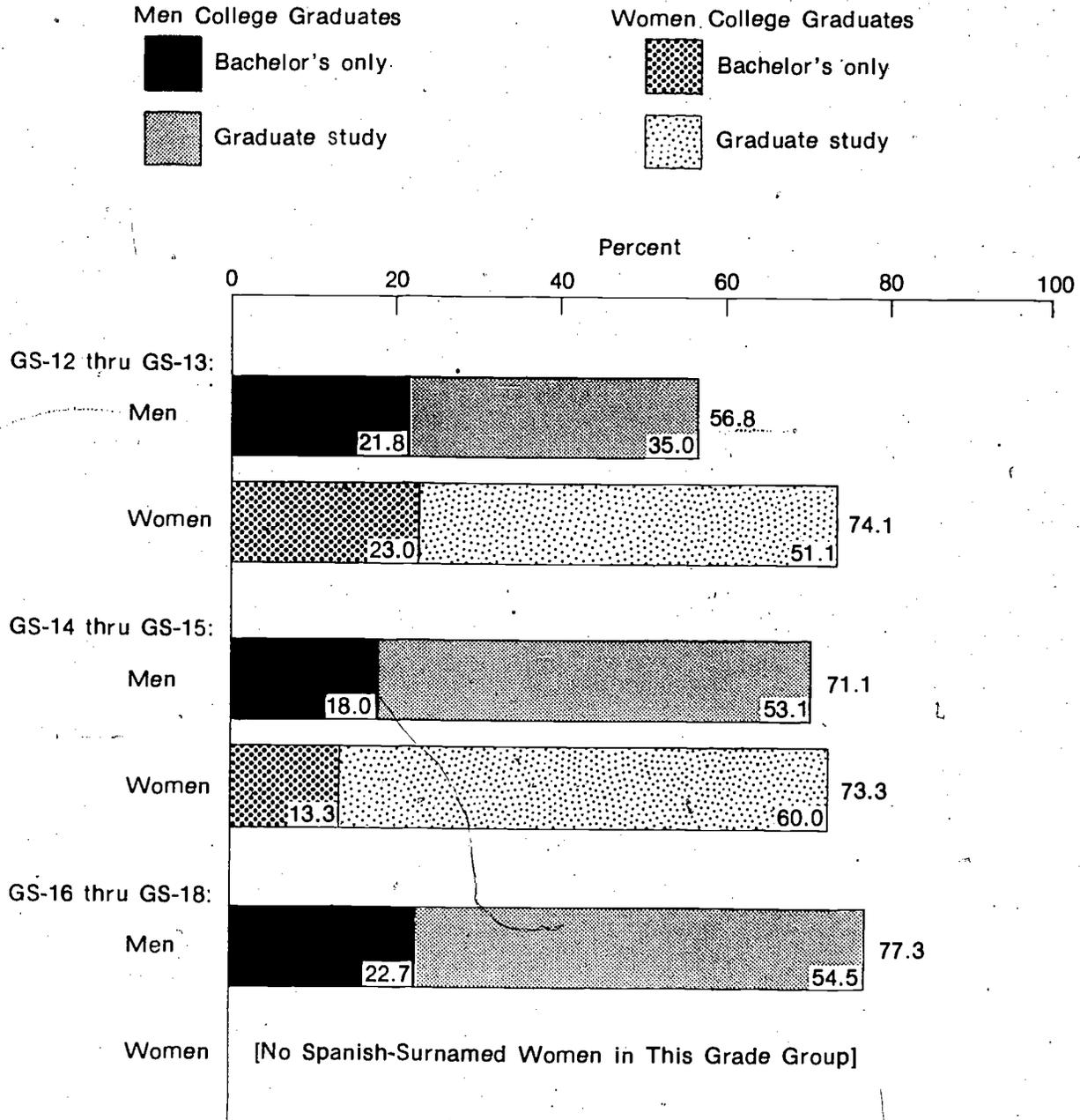
In summary, then, for those women who achieve the upper grade levels—GS-12 through GS-18—their educational attainment is almost the equivalent of the men's. However, of all women college graduate employees, relatively few women than men college graduates have as succeeded in reaching these upper levels.

Figure 5
 Black Men and Women College Graduates as Percentage of Black Employees of All Education Levels
 Grade Groups GS 12-13 thru GS 16-18, Full-Time Permanent Employees
 August 1974



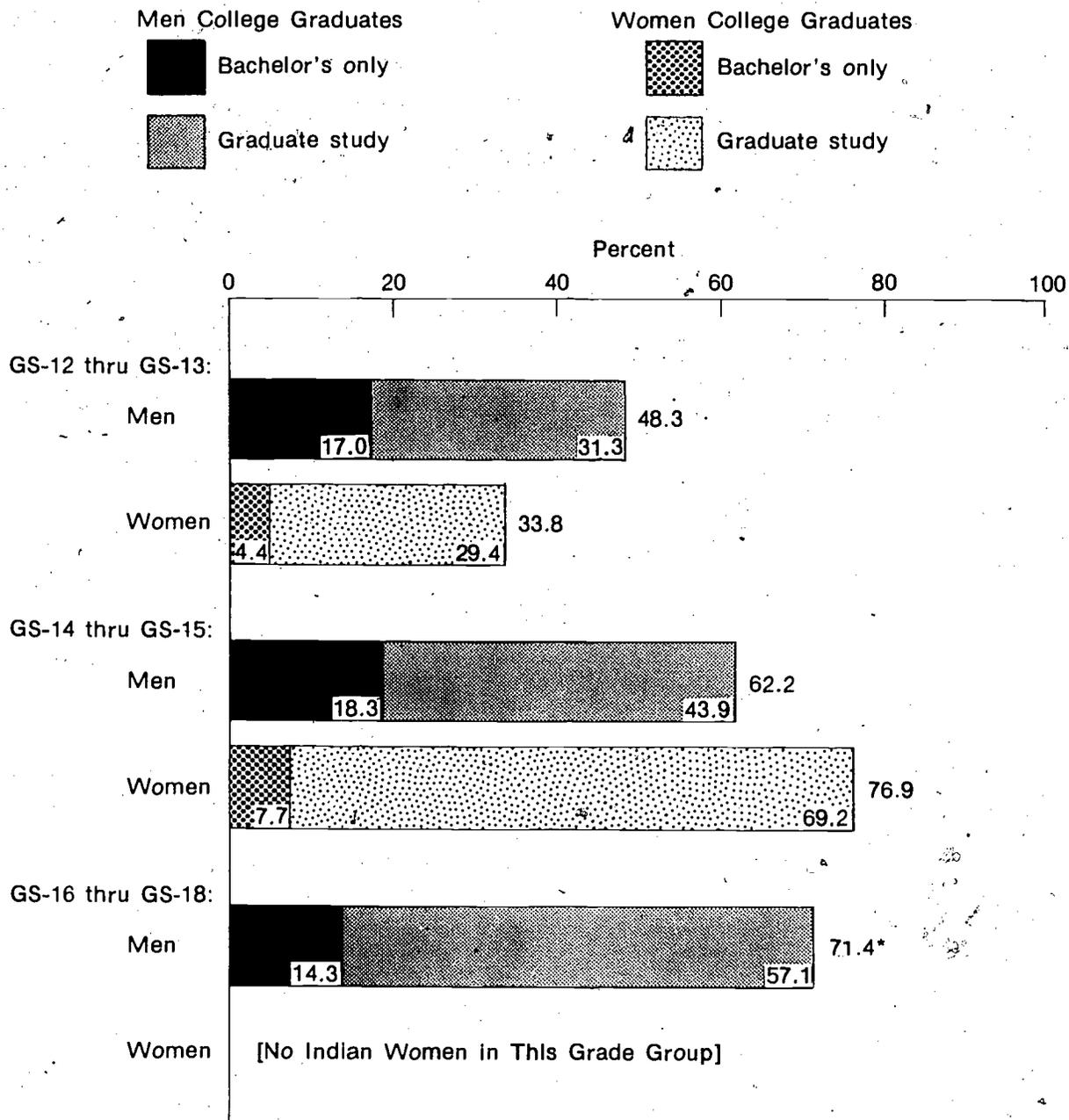
Source: Table F.

Figure 6
Spanish-Surnamed Men and Women College Graduates as Percentage of Spanish-Surnamed Employees
of All Education Levels, Grade Groups GS 12-13 thru GS 16-18, Full-Time Permanent Employees
August 1974



Source: Table F.

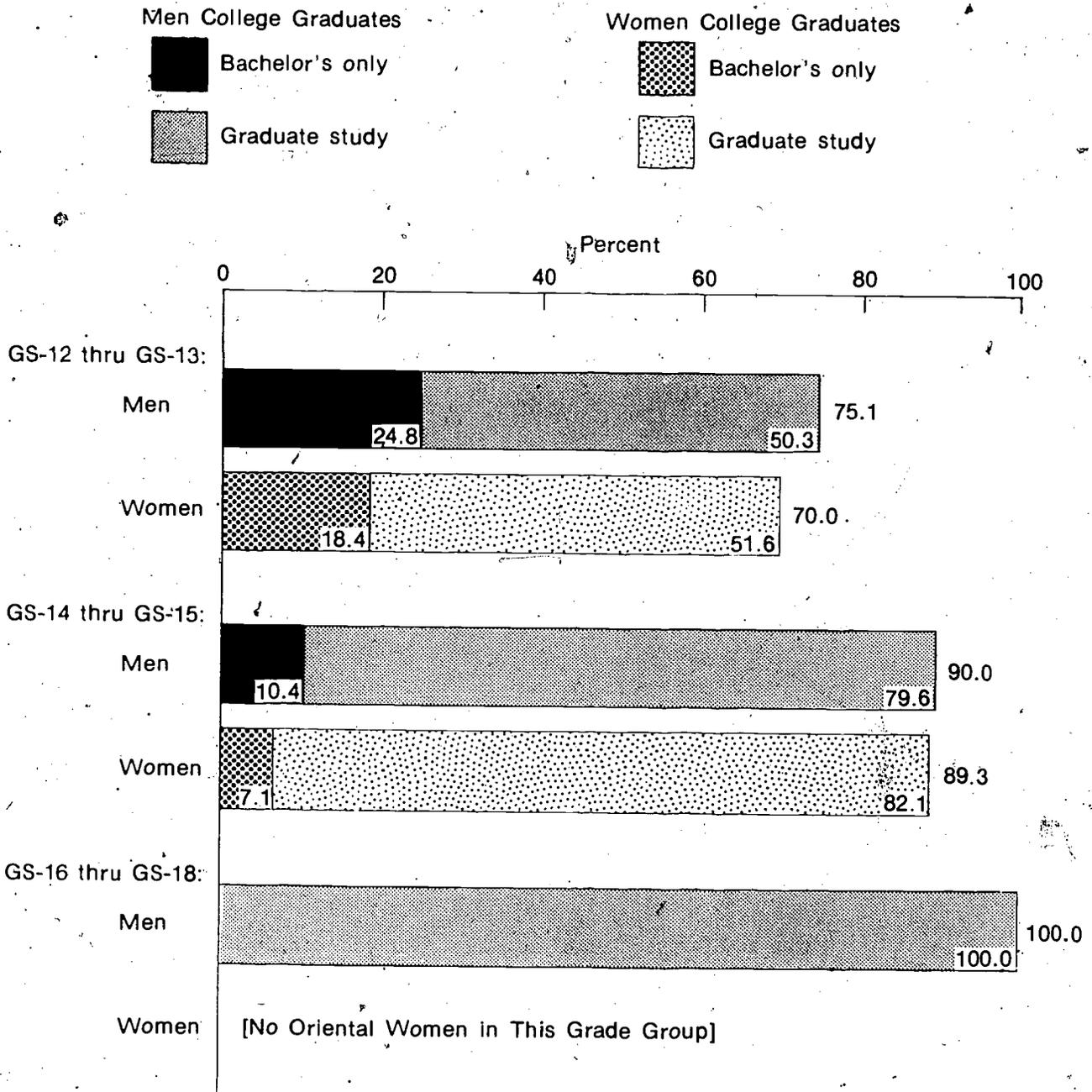
Figure 7
 American Indian Men and Women College Graduates as Percentage of American Indian Employees
 of All Education Levels, Grade Groups GS 12-13 thru GS 16-8, Full-Time Permanent Employees
 August 1974



*Based on a total (all education levels) of 7 men.

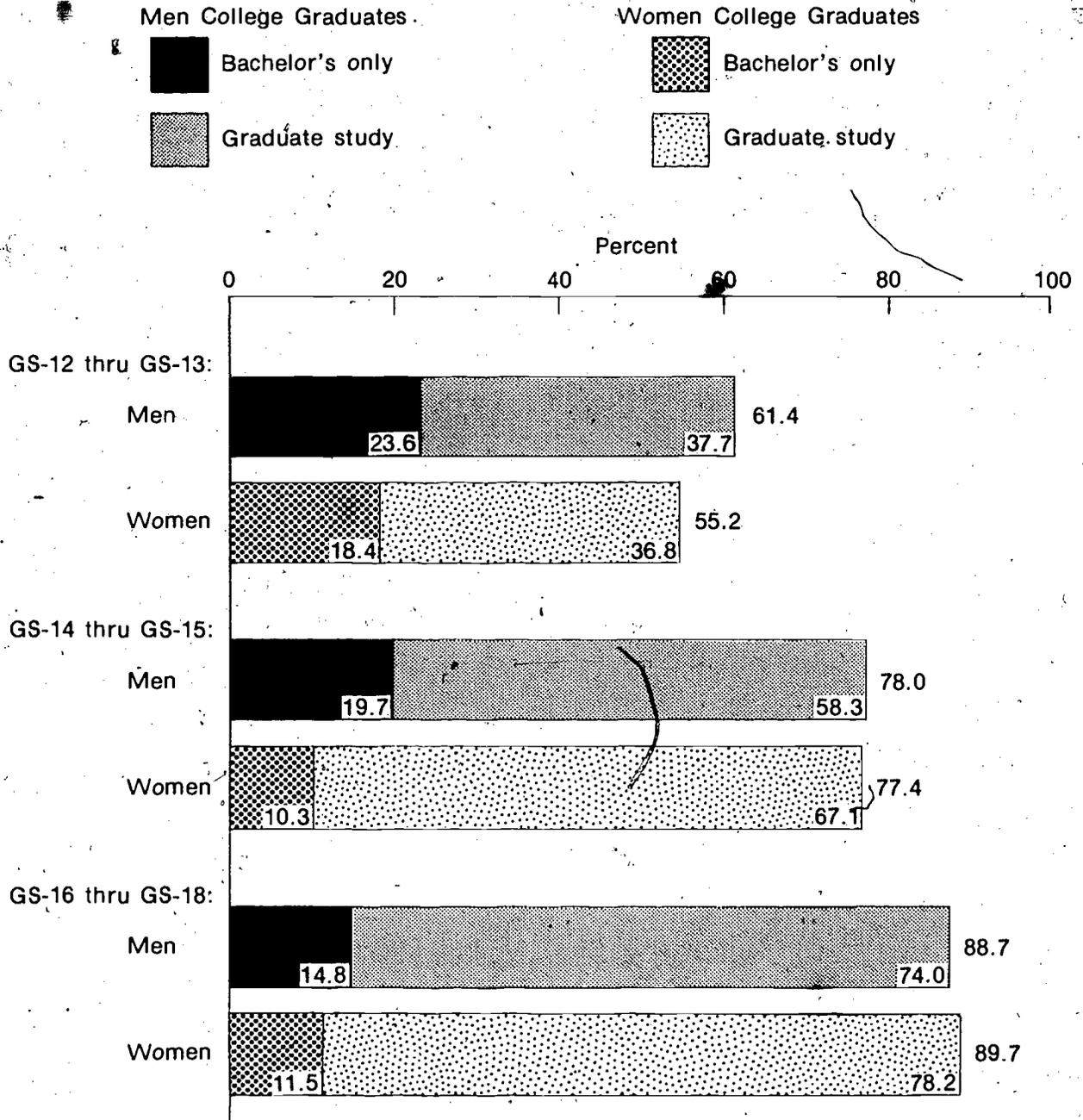
Source: Table F.

Figure 8
 Oriental Men and Women College Graduates as Percentage of Oriental Employees
 of All Education Levels, Grade Groups GS 12-13 thru GS 16-18, Full-Time Permanent Employees
 August 1974



Source: Table F.

Figure 9
 Non-Minority Men and Women College Graduates as Percentage of Non-Minority Employees
 of All Education Levels, Grade Groups GS 12-13 thru GS 16-18, Full-Time Permanent Employees
 August 1974



Source: Table F.

7. Year of Attainment of Highest Degree

The year of attainment of highest degree for General Schedule employees with bachelor's degree and above, is shown in Appendix Table 5. The dates the degrees were granted are grouped by decades (the 1940's and earlier, the 1950's, the 1960's, and the 1970's). For each minority-sex combination, the total for each decade is distributed by GS grade group.

The distribution of the college graduates by date of degree (regardless of GS grade) shows different patterns for the men and the women. The men in each minority group have their modal numbers in the 1960-69 decade (for Black men this extends over two decades—the 1950's and the 1960's):

	Period of attainment of highest degree				Total
	1949 and earlier	1950 thru 1959	1960 thru 1969	1970 thru 1974	
Black men	13.1	32.0	31.2	23.7	100.0
Spanish-surnamed men	10.6	24.0	36.0	29.5	100.0
American Indian men	11.1	29.7	38.5	20.6	100.0
Oriental men	13.5	29.6	35.4	21.6	100.0
Non-minority men	17.2	27.7	35.7	19.4	100.0

Source: Tabulations for Appendix Table 5.

The peak for four of the five groups of women comes a decade later—in the 1970's. This is all the more remarkable in that the period from 1970 through August 1974 is less than five years, while the earlier periods comprise ten years (or longer, in the case of the first period). Only the American Indian women are exceptions to this pattern:

	Period of attainment of highest degree				Total
	1949 and earlier	1950 thru 1959	1960 thru 1969	1970 thru 1974	
Black women	20.6	16.5	28.1	34.9	100.0
Spanish-surnamed women	12.4	13.6	29.9	44.1	100.0
American Indian women	13.7	16.7	41.1	28.4	100.0
Oriental women	15.5	22.3	30.3	32.0	100.0
Non-minority women	21.4	12.2	31.5	34.9	100.0

Source: Tabulations for Appendix Table 5.

Distributions by GS grade within each period of attainment of degree also show different patterns

for men and women employees, as well as some differences among the minority groups.

The data of Appendix Table 5 have been summed into three grade groups and two periods of attainment of degree. The earlier period, '1959 and earlier', can be assumed to include, with few exceptions, only those degree-holders over 35 years of age. The period 1960 through 1974 includes graduates 35 years of age and younger; however, it also includes some employees over 35, especially those who obtained bachelor's or advanced degrees after they had entered upon their careers. In general, though, it would not be too far from accurate to refer to the '1959 and earlier' group as the older, contrasted with the 1960-1974 group of predominantly younger employees.

The men showed considerable differences in distribution between the older and younger groups:

	Percentage distribution by GS grade group			
	GS-1 thru GS-8	GS-9 thru GS-13	GS-14 thru GS-18	Total
Degree attained 1959 or earlier				
Black men	15.1	68.2	16.7	100.0
Spanish-surnamed men	8.1	75.6	16.3	100.0
American Indian men	4.2	74.9	20.9	100.0
Oriental men	5.6	77.0	17.5	100.0
Non-minority men	3.0	67.8	29.2	100.0
Degree attained 1960 thru 1974				
Black men	23.1	68.7	8.3	100.0
Spanish-surnamed men	22.2	71.8	6.0	100.0
American Indian men	12.7	82.6	4.7	100.0
Oriental men	18.9	72.6	8.5	100.0
Non-minority men	15.3	74.4	10.3	100.0

Source: Tabulations for Appendix Table 5.

While the relative positions of the minority groups showed little difference between the older and the younger groups (both the younger and older Black men had the highest percentage of any minority groups in grades GS-1 through GS-8; the younger non-minority men and the older American Indian men had the lowest percentages in these grades), the differences among the minority groups were quite a bit smaller for the younger men. The older group of Black men had 7 percentage points more men in grades GS-1 through GS-8 than did the next-ranking group (the Span-

ish-surnamed), and had 12 percentage points more in these grades than did non-minority men. For the younger degree-holders, the ranking of these three groups in the lower grades was the same, but only one percentage point separated the Black men and the Spanish-surnamed men, while there was an 8-point difference between Black men and non-minority men for this lowest grade group.

For grades GS-14 through GS-18, the older non-minority men were 13 percentage points ahead of the older Black and Spanish-surnamed men. Among the younger college graduates in these high grades, the non-minority men were still in the lead, but only 2 percentage points ahead of Black men and Oriental men and 5 percentage points ahead of American Indian men.

The patterns for the women degree-holders differed from the patterns for the men in several respects. Most noticeable is the much higher proportion of women than men in the lower grades and the far lower proportion of women in the highest grades. This was true for all minority groups and for both the older and younger graduates:

	Percentage distribution by GS grade group			Total
	GS-1 thru GS-8	GS-9 thru GS-13	GS-14 thru GS-18	
Degree attained 1959 or earlier				
Black women	48.1	47.3	4.6	100.0
Spanish-surnamed women	44.0	53.4	2.6	100.0
American Indian women	24.2	70.3	5.5	100.0
Oriental women	39.2	55.3	5.5	100.0
Non-minority women	35.8	56.3	7.9	100.0
Degree attained 1960 thru 1974				
Black women	48.2	50.0	1.8	100.0
Spanish-surnamed women	43.8	55.3	0.9	100.0
American Indian women	23.1	74.5	2.4	100.0
Oriental women	49.4	49.4	1.3	100.0
Non-minority women	45.2	52.6	2.2	100.0

Source: Tabulations for Appendix Table 5.

In contrast to the men, who showed wide differences between the older and younger graduates in each minority group in the proportions in grades GS-1 through GS-8, only two groups of women had lower proportions in these grades for older women: Oriental and non-minority women each had a figure 10 percentage points lower for

the older group than for the younger in grades GS-1 through GS-8. The other three minority groups showed virtually no difference between the older and younger groups of women in these grades.

For grades GS-14 through GS-18, the differences among the five groups of women had a range of 5 percentage points for the older group (compared with 13 percentage points for the older group of men). The range among the minority groups for the younger women in the highest grades was 1½ percentage points (compared with 5½ percentage points for the younger men).

It should be noted that both the older and younger groups of American Indian women had far lower percentages in grades GS-1 through GS-8 than the other four groups of women. This is probably because of the extremely high proportion of college graduate Indian women in the teaching occupations. (See the Occupation section, below.)

8. Educational Attainment and Occupation

The subject of occupation will be discussed first by occupational category for all General Schedule employees and for college-graduate employees, followed by an overall occupational view of white-collar employees, and a detailed study of the leading occupations of college graduates within the individual minority-sex combinations.

Occupational (PATCO) Category

The General Schedule occupations are grouped into five categories: professional, administrative, technical, clerical, and 'other'. This system of categorization is usually referred to by the acronym PATCO.

Appendix Table 6 shows the distribution by PATCO category of General Schedule employees of two education levels:

Bachelor's degree and above
All education levels

within the ten minority-sex combinations. To facilitate comparisons among the four specified categories—professional, administrative, technical, and clerical—Table G has been calculated. In this text table, the data of Appendix Table 6 are calculated with the 'other occupations' category omitted. This was done because of the varying percentages in the 'other occupations' category, especially for the 'all education levels' section. The data of Table G are illustrated in figures 10 and 11.

Table G. Percentage Distribution of College Graduate Employees and Employees of All Education Levels into Four Occupational Categories^a, by Minority Group, and by Sex, General Schedule Employees, August 1974

Education Level, Sex, and Occupational Category	Total	Black	Spanish-Surnamed	American Indian	Oriental	Non-Minority
Bachelor's Degree and Above						
MEN						
Total, four occupational categories	291,090	12,080	3,832	912	3,328	270,938
Percent distribution	100.0	100.0	100.0	100.0	100.0	100.0
Professional occupations	58.2	45.0	49.9	53.4	70.2	58.7
Administrative occupations	34.8	40.7	41.6	38.4	21.0	34.6
Technical occupations	5.8	10.6	6.6	7.2	6.9	5.5
Clerical occupations	1.3	3.6	1.9	1.0	2.0	1.2
WOMEN						
Total, four occupational categories	47,844	7,205	724	296	858	38,761
Percent distribution	100.0	100.0	100.0	100.0	100.0	100.0
Professional occupations	34.2	27.0	31.2	66.2	45.2	35.2
Administrative occupations	33.6	34.6	42.7	20.9	22.8	33.5
Technical occupations	14.5	17.4	9.8	3.4	12.4	14.2
Clerical occupations	17.6	21.0	16.3	9.4	19.6	17.1
All Education Levels						
MEN						
Total, four occupational categories	564,492	35,336	12,492	3,158	5,098	508,408
Percent distribution	100.0	100.0	100.0	100.0	100.0	100.0
Professional occupations	31.4	16.1	15.9	17.1	47.6	32.7
Administrative occupations	37.7	27.2	31.0	39.0	26.7	38.7
Technical occupations	22.2	25.4	30.5	32.9	16.7	21.7
Clerical occupations	8.8	31.3	22.5	10.9	9.0	6.9
WOMEN						
Total, four occupational categories	398,526	74,088	10,105	4,283	3,260	306,790
Percent distribution	100.0	100.0	100.0	100.0	100.0	100.0
Professional occupations	5.1	3.1	2.8	9.2	13.1	5.5
Administrative occupations	11.4	8.6	8.4	25.7	13.6	12.0
Technical occupations	15.2	16.1	11.0	12.5	15.8	15.1
Clerical occupations	68.3	72.2	77.8	52.6	57.5	67.4

^a This table is based on data from Appendix Table 6, recalculated on the basis of the first four of the five 'PATCO' categories. The fifth category (in Table 6, but omitted from this table) is 'Other General Schedule occupations'. As shown on Table 6, 'Other GS occupations' has percentages varying from 2% to 25% (of the PATCO total) for the ten minority-sex combinations. By omitting the 'Other GS' category, it is possible to make fair comparisons of the professional, administrative, technical, and clerical categories. The 'Other GS' category shows great differences in occupational composition for men and women employees. Thus, approximately 60% of the men in 'Other GS' occupations were in protective services (guard, police, U.S. marshal, fire prevention, border patrol agent, etc.) whereas almost three-fourths of the women in the 'Other GS' category were nursing assistants.

Figure 10
 Percentage Distribution into Four Occupational Categories of
 General Schedule Employees of All Education Levels,
 by Minority Group and Sex, August 1974

Professional Occupations Administrative Occupations Technical Occupations Clerical Occupations

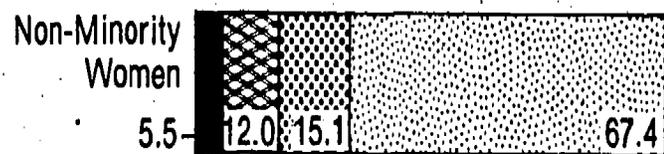
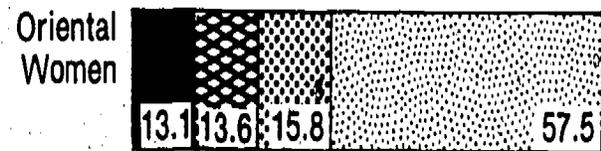
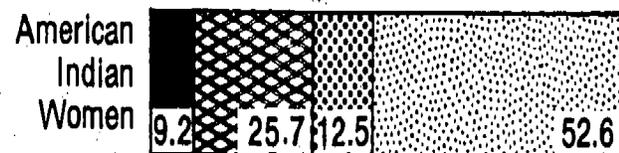
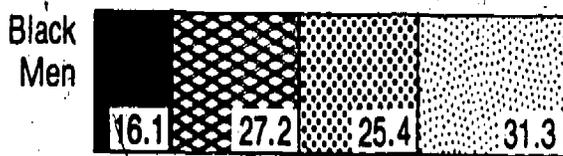
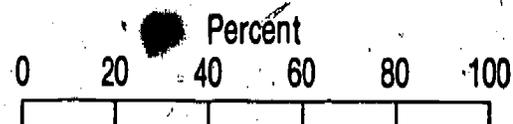
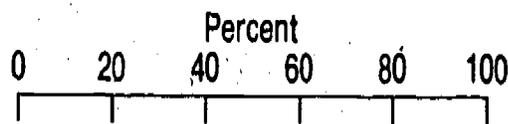
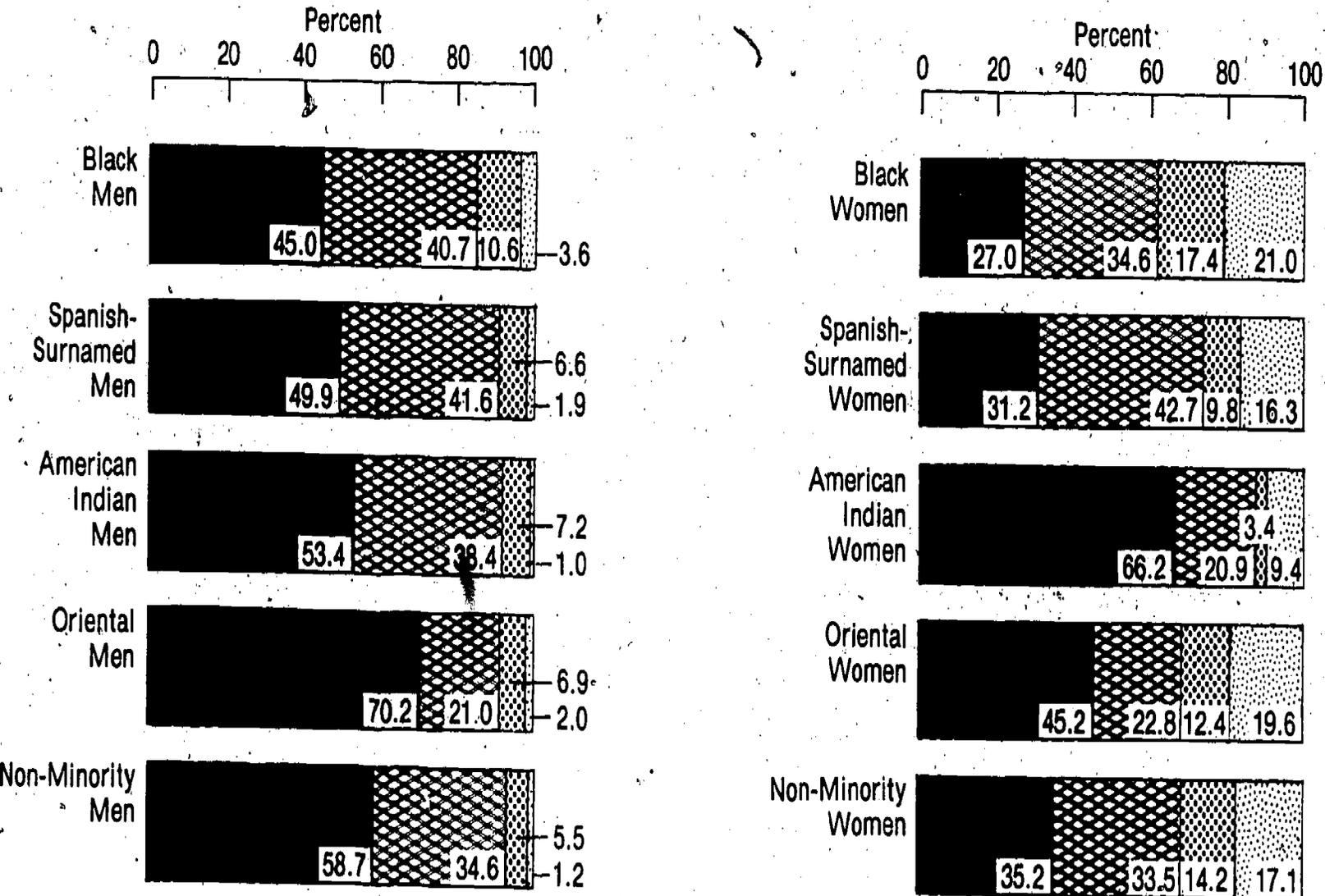


Figure 11.
 Percentage Distribution into Four Occupational Categories of
 General Schedule College Graduate Employees,
 by Minority Group and Sex, August 1974

Professional Occupations
 Administrative Occupations
 Technical Occupations
 Clerical Occupations



Source: Table G.

The data of Table G (and figures 10 and 11, which are based on Table G) are summarized in the two following sections. The percentages for each of the four occupational categories (professional, administrative, technical, and clerical) are presented (or summarized) in rank order for the minority-sex combinations. The first section is for employees of all educational levels; the second section is for college graduate employees.

All education levels. (Table G, lower half, and Figure 10). The percentages of individual minority-sex combinations in each occupational category were:

Professional—Oriental men, 48%; non-minority men, 33%; other groups of men, 16% to 17%

Oriental women, 13%; American Indian women, 9%; other groups of women, 3% to 6%

Administrative—American Indian and non-minority men, 39%; other groups of men, 27% to 31%

American Indian women, 26%; other groups of women, 8% to 14%

Technical—American Indian men, 33%; Spanish-surnamed men, 31%; Black men, 25%; non-minority men, 22%; Oriental men, 17%

Black and Oriental women, 16%; non-minority women, 15%; American Indian women, 13%; Spanish-surnamed women, 11%

Clerical—Black men, 31%; Spanish-surnamed men, 23%; other groups of men, 7% to 11%

Spanish-surnamed women, 78%; Black women, 72%; non-minority women, 67%; Oriental women, 58%; American Indian women, 53%

The percentages of women in clerical occupations are so high that the percentages for the men outrank women in the other three occupational categories. Oriental men and women lead other groups of men and women, respectively, in the professional category; this leadership is related to the high level of educational attainment of the Oriental group.

College Graduates (Table G, upper half, and Figure 11). For college graduate employees the percentages of individual minority-sex combinations in each occupational category were:

Professional—Oriental men, 70%; non-minority men, 59%; American Indian men, 53%; Spanish-surnamed men, 50%; Black men, 45%

American Indian women, 66%; Oriental women, 45%; non-minority women, 35%; Spanish-surnamed women, 31%; Black women, 27%

Administrative—Spanish-surnamed and Black men, 41%; American Indian men, 38%; non-minority men, 35%; Oriental men, 21%

Spanish-surnamed women, 43%; Black and non-minority women, 35% and 34%; Oriental and American Indian women, 23% and 21%

Technical—Black men, 11%; other groups of men, 6% to 7%

Black women, 17%; non-minority women, 14%; Oriental women, 12%; Spanish-surnamed women, 10%; American Indian women, 3%

Clerical—Black men, 4%; other groups of men, 1% to 2%

Black women, 21%; Oriental women, 20%; non-minority women, 17%; Spanish-surnamed women, 16%; American Indian women, 9%

Oriental men again lead in the professional category; however, among the women's groups, the leader in the professional category was the American Indian group of women, with Oriental women ranking second. The reason for the American Indian college graduate women having the lead in percentage of professionals is that this numerically small group (296 women college graduates in all occupational categories) were predominantly teachers. Among professional women of other groups, the leading category was nursing (see Table I, below).

Percentage of College Graduates in each PATCO Category (Appendix Table 6)

The foregoing discussion is based (as explained in the footnote to Table G and in the paragraph preceding the table) on the first four of the five PATCO categories. Returning to the five-category classification (by restoring "Other GS occupations"), as shown in Appendix Table 6, the sum-

mary below shows that, among the ten minority-sex combinations, Oriental men lead the men's groups and Oriental women lead the women's groups, while for both men and women, American Indian employees are in last place. The other three groups fall in between, often widely separated in percentage from the Oriental men and women, on the one hand, and American Indian men and women, on the other:

	Degree-holders in each category as a percentage of employees of all education levels in that category		
	American Indian group	Range of Black, Spanish-surnamed, and non-minority groups	Oriental group
Men			
Professional	90.0	95.7-95.9	96.3
Administrative	28.4	41.1-51.2	51.3
Technical	6.3	6.7-14.3	26.8
Clerical	2.6	2.6- 8.9	14.4
Women			
Professional	49.7	80.4-83.4	90.7
Administrative	5.6	35.4-39.2	44.2
Technical	1.9	6.4-11.9	20.6
Clerical	1.2	1.5- 3.2	9.0

Source: Appendix 6.

It should be noted that the percentages in the foregoing tabulation, which is taken directly from the lowest bank of Appendix Table 6, differ in two respects from Table G and from the summaries and charts based on Table G:

- the inclusion of the fifth PATCO category 'Other General Schedule occupations'
- the base of the percentages:

Table G—Each minority-sex combination (minus 'other GS occupations') is taken as 100 percent, and thus includes four occupational categories

Appendix Table 6—Each percentage is based on only one occupational category. Within each category, for each minority-sex combination, college graduates are taken as a percentage of employees of all education levels

within that one occupational category.

Leading Occupations of White-Collar Employees

Before proceeding to a discussion of the leading occupations of college graduates (based on Appendix tables 7 through 12), a presentation on the leading occupations of all white-collar employees will aid in placing in perspective the leading occupations of college graduates.

The following tabulation shows the five leading occupations of white-collar full-time permanent professional and nonprofessional employees (omitting Nondesignated employees and employees unspecified as to minority-group designation):

Data on occupation for all full-time permanent white-collar employees are being used instead of occupational data for General Schedule (and similar) employees of all educational levels, the latter data not having been tabulated. The somewhat larger number of white-collar employees (than General Schedule and similar employees in the study population) is partially because the white-collar category includes more employees than the 'General Schedule and similar' category, but also because of the exclusion from the study population of GS employees with minority (or non-minority) group not designated and/or educational attainment unspecified. (See Chapter 3, above, for definitions of 'white-collar' and 'General Schedule and similar').

Rank and occupation:	Number of employees, August 1974		
	Total	Men	Women
Total white-collar occupations	1,202,239	701,983	500,256
Total professional	262,299	214,516	47,783
1. Nurse	25,120	992	24,128
2. Accounting	19,539	17,951	1,588
3. Electronics Engineering	17,827	17,726	101
4. Internal Revenue Agent	13,755	12,928	827
5. General Engineering	14,086	14,030	56
Total nonprofessional	939,940	487,467	452,473
1. General Clerical & Administrative (clerical)	70,135	15,709	54,426
2. Clerk-Typist	60,794	2,518	58,276
3. Secretary	57,864	436	57,428
4. Clerk-Steno & Reporter	30,565	251	30,314
5. General Clerical & Administrative (technical)	28,409	16,814	11,595

Source: CPDF Tabulations.

From the foregoing tabulation it can be seen that the proportions of professional and nonprofessional white-collar employees are quite different for men and women:

	Percent of employees	
	Men	Women
All white-collar employees	100.0	100.0
Professional	30.6	9.6
Nonprofessional	69.4	90.4

Leading Occupations of College Graduates, by Minority-Sex Combination

Data on the leading occupations of employees with bachelor's degree and above are presented in Appendix tables 7 through 12. The leading occupations in Table 7 are selected from the total group of college graduates, without regard for minority group or sex. The leading occupations shown in tables 8 through 12 are selected separately for each of the ten minority-sex combinations.

For the college graduate group as a whole (as shown in Table 7), seven of the ten leading occupations were those in which men predominated. In only three (General Clerical & Administrative, Social Insurance Administration, and Computer Specialist) were there any considerable number of women. Because of their overwhelming numbers, non-minority men set the pattern for total college graduate employees.

The following five Appendix tables—8 through 12—show, for men and women separately, within each minority (or non-minority) group, the ten leading occupations. Before proceeding to a consideration of each of the ten minority-sex combina-

tions, an overall view is presented in text tables H and I.

Tables H and I list all of the occupations showing up in the leading ten for any of the minority-sex combinations, and give their rankings. Table H, for men college graduates, has 19 occupations, of which 13 are professional and 6 administrative. There are no technical or clerical occupations among the leading ten for men in any of the minority (or non-minority) groups.

Table I, for college graduate women, has 20 occupations—just about the same number as were listed for the men. However only half of these are professional, five are administrative, and the remaining five are technical and clerical. The leading professional occupation for women was nursing: in first rank for Black, Oriental and non-minority women, and in second place for Spanish-surnamed women.

Following are some of the significant trends in the leading occupations of the ten minority-sex combinations. (The order is not by table number, but by apparent occupational pattern.)

Oriental men (Table 11). The Oriental men lead all other groups of college graduates in the number of professional occupations among the leading ten: nine of the ten occupations are professional. Of these nine professional occupations, five are in the engineering field. The five engineering occupations together account for 22 percent of the entire group of Oriental college graduate men, and engineers in these five occupations are 50 percent of Oriental degree-holding men in the ten leading occupations.

Table H. Rankings of the Ten Leading Occupations of Each Minority (and Non-Minority) Group of College Graduate Men, August 1974

Category and Occupation	College Graduate Men				
	Black	Spanish-Surnamed	American Indian	Oriental	Non-Minority
	Rank	Rank	Rank	Rank	Rank
Professional Occupations:					
Accounting	3	1	7	2	3
Chemistry	4	—	—	5	—
Engineering:					
General Engineering	—	10	8	7	4
Aerospace Engineering	—	—	—	10	9
Civil Engineering	—	6	3	4	6
Electronics Engineering	6	8	—	1	2
Mechanical Engineering	—	—	—	8	10
Forestry	—	—	9	—	—
General Attorney	9	—	—	—	8
Internal Revenue Agent	5	5	10	6	7
Medical Officer	—	3	—	3	—
Teaching:					
Education & Vocational Training	—	—	1	—	—
General Education & Training	—	—	6	—	—
Administrative Occupations:					
General Clerical and Administrative ^a	1	2	2	9	5
Computer Specialist	7	—	—	—	—
Criminal Investigating	10	7	4	—	1
Equal Opportunity	2	9	—	—	—
Program Management	—	—	5	—	—
Social Insurance Administration	8	4	—	—	—

^a The occupation 'General Clerical and Administrative' is classified into occupational categories according to GS grade:
 Grades GS-1 through GS-6—Clerical
 GS-7 through GS-10—Technical
 GS-11 through GS-18—Administrative

A tabulation of February 1974 data showed that 77 percent of the degree-holding men in this occupation were grade GS-11 or above. This occupation is therefore classified as Administrative for college graduate men.
 Source: Appendix tables 8 through 12.

The occupation next in importance to engineering is accounting; accountants are approximately 6 percent of all Oriental college graduate men, and if the accounting-related profession of Internal Revenue Agent (4 percent of the group) is added to the 6 percent, there are 10 percent of these men in accounting and accounting-related occupations. Third in rank are physicians (Medical Officers), comprising 5 percent of the group.

Non-minority men (Table 12). The non-minority men have a pattern similar to that for Oriental men, with engineering predominant. Five engineering occupations are represented among the leading ten occupations. The five engineering occupations combined comprise 18 percent of all non-minority

college graduate men and 48 percent of those in the ten leading occupations. Accounting and Internal Revenue Agent combined are 8 percent of the total group of non-minority degree-holding men, followed by Criminal Investigating (5 percent of the group).

Spanish-surnamed men (Table 9). Whereas Oriental and non-minority men each had five engineering occupations among the leading ten, for the Spanish-surnamed men engineering accounted for three of the ten leading occupations. Together these engineers made up 11 percent of all Spanish-surnamed college graduate men, and 25 percent of those in the ten leading occupations. Accounting and Internal Revenue Agent together were 10 per-

Table I. Rankings of the Ten Leading Occupations of Each Minority (and Non-Minority) Group of College Graduate Women, August 1974

Category and Occupation	College Graduate Women				
	Black	Spanish-Surnamed	American Indian	Oriental	Non-Minority
	Rank	Rank	Rank	Rank	Rank
Professional Occupations:					
Accounting	8	—	—	10	—
Chemistry	—	—	—	5	—
Librarian	—	—	—	—	9
Medical Officer	—	10	—	3	—
Medical Technologist	—	6	—	4	7
Nurse	1	2	7.5	1	1
Social Science	—	—	10	—	—
Social Work	9	—	5	—	—
Teaching:					
Education & Vocational Training	7	3	1	2	3
General Education & Training	—	—	7.5	—	—
Administrative Occupations:					
Computer Specialist	10	—	—	8.5	6
Equal Opportunity	5	5	—	—	—
Social Insurance Administration	3	1	3	7	4
Social Services	—	—	4	—	—
Training Instruction	—	—	7.5	—	—
Technical & Clerical Occupations:					
General Clerical and Administrative ^a	2	4	2	6	2
Social Insurance Claims Examining (technical)	4	—	—	—	10
Claims, Clerical	—	7	—	—	—
Clerk-Typist	—	8	—	8.5	8
Secretary	6	9	7.5	—	5

^a The occupation 'General Clerical and Administrative' is classified into occupational categories according to GS grade:
 Grades GS-1 through GS-6—Clerical
 GS-7 through GS-10—Technical
 GS-11 through GS-18—Administrative.

A tabulation of February 1974 data showed that 67 percent of the degree-holding women in this occupation were grade GS-10 or below. This occupation is therefore classified under 'Technical & Clerical' for college graduate women.
 Source: Appendix tables 8 through 12.

cent of the entire group—practically as important numerically, as the 11 percent in engineering. Physicians were 5 percent of the group. The leading nonprofessional occupations were General Clerical and Administrative, Social Insurance Administration, Criminal Investigating, and Equal Opportunity.

Black men (Table 8). The leading occupation for this group was General Clerical and Administrative (7 percent of all Black college graduate men), followed by Equal Opportunity (almost 5 percent). Next come two professional occupations—Accounting and Chemistry. Among the leading ten occupations for Black degree-holding men, five occupations were professional. In addition to Accounting

and Chemistry (ranked third and fourth) there were: Internal Revenue Agent (fifth), Electronics Engineering (sixth) and General Attorney (ninth).

American Indian men (Table 10). Two teaching occupations account for 21 percent of all American Indian college graduate men and for 44 percent of those in the ten leading occupations. General Clerical and Administrative ranked second (with 10 percent of the entire group), followed by two engineering occupations, which together accounted for 6 percent of all degree-holding American Indian men.

Oriental women (Table 11). Oriental college graduate women, like the other women's groups in

the number of professional occupations—six of the top ten. Three of these professional occupations were in the medical field: Nurse, 13 percent of the entire group; Medical Officer, 5 percent; and Medical Technologist, 5 percent. These three medical professions together constituted 23 percent of the entire group of degree-holding Oriental women, and fully 45 percent of those in the ten leading occupations. Next in importance after medical occupations came teaching (6 percent), Chemistry (5 percent), and General Clerical and Administrative (4 percent), respectively, of the entire group.

Black women (Table 8). As was the case for Oriental women, the leading occupation of Black college graduate women was nursing (10 percent of the entire group and 22 percent of those in the ten leading occupations). Second in rank to nursing was the nonprofessional occupation General Clerical and Administrative, with 8.5 percent of the group. Most of the ten leading occupations of the Black degree-holding women were nonprofessional, the only professional occupations other than nursing being teaching, accounting, and social work, which ranked seventh, eighth, and ninth, respectively.

Non-minority women (Table 12). This group resembled the Black degree-holding women in having nursing ranked first (12 percent of all non-minority college graduate women, and 27 percent of those in the top ten occupations) and General Clerical and Administrative ranked second (6 percent of the group). Teaching ranked third (5.6 percent). This group had only four professional occupations among the leading ten (compared to eight out of ten for non-minority men). In addition to nursing and teaching, the non-minority women showed Medical Technologist (ranked seventh) and Librarian (ranked ninth) among the ten leading occupations.

Second most numerous to the four professional occupations (among the top ten for non-minority

college graduate women) were three clerical occupations: General Clerical and Administrative (second in rank); Secretary (fifth in rank) and Clerk-Typist (eighth in rank). The ranking of fifth place for Secretary was the highest ranking for this occupation for any of the groups of women.

Spanish-surnamed women (Table 9). The leading occupation for this group was Social Insurance Administration, with 13 percent of all Spanish-surnamed college graduate women and 23 percent of those in the ten leading occupations.

As was the case for all of the other women's groups (except for American Indian women), nursing was the leading professional occupation, with 10 percent of the entire group of Spanish-surnamed degree-holding women. Nursing ranked second (after Social Insurance Administration). The other professional occupations among the top ten for this group were: teaching (ranked third), Medical Technologist (ranked sixth) and Medical Officer (ranked tenth).

As was true for non-minority college graduate women, the Spanish-surnamed women had both Secretary and Clerk-Typist among the leading ten occupations.

American Indian women (Table 10). The pattern for this group is different from the patterns for the other four groups of women. The teaching occupations predominate among American Indian college graduate women (as they did among American Indian men). Fully 56 percent of this entire group of women (74 percent of American Indian degree-holding women in the ten leading occupations) were in one of three teaching occupations. Two of the teaching occupations are classified as professional and one (Training Instruction) is classified as administrative. Second to teaching, but far behind it, were Social Work and Social Services, which together accounted for 6 percent of the group. In contrast to all of the other groups of women, only two percent of the Indian women were in nursing.

PART FOUR. COMPARISONS WITH U.S. CENSUS DATA

9. Study Population Data and U.S. Census Data

To place the educational attainment of Federal General Schedule employees in a frame of comparison with the educational attainment of employed white-collar workers in the U.S. civilian population as a whole, data are presented in this section, in Table J, and in Appendix tables 13, 14, and 15.

For the purposes of comparison with the data of this report, only those Census tabulations can be used which have minority group. (All Census data are presented separately for males and for females.)

Data and Periods Available for Comparison

Direct comparison of the data of the present study with Census data is possible chiefly because of the March 1974 educational attainment data of the Census Current Population Survey. In addition to material from the Census Bureau's 1974 educational attainment report, data are also used from the Bureau of Labor Statistics report on the educational attainment of workers in 1974 (based on Census data, as collected and tabulated for the Bureau of Labor Statistics). Use has also been made of a sample survey of Federal Government workers conducted by the U.S. Bureau of the Census as part of the 1970 Census of Population.

Technical Appendix II gives a listing of pertinent Census and Bureau of Labor Statistics reports, a summary of sampling methods for the 1974 Census Current Population Survey, and a discussion of the use of the Census survey data by the Bureau of Labor Statistics.

Nature of the Data Being Compared

It should be observed that the two bodies of data being compared are different in nature:

Civil Service Commission data

The study population, as defined in the first part of this report is a universe, statistically speaking, but it is a specialized universe. The conclusions of this study cannot be said to apply, in every detail, to all Federal civilian employees, but only to those employees who are

under the General Schedule and similar pay systems, who have permanent tenure and full-time work schedules, and who meet the other qualifications for the study population. The errors it is subject to are principally those of underreporting for the education elements, for minority designations, and for other factors used for cross-classification. (See Technical Appendix I.)

U.S. Census data

The Census data used—both for 1974 and 1970—are based on sample surveys. These samples have been very carefully drawn, and have been proven to be representative of the populations sampled. (See Technical Appendix II.)

Similarities and Differences in the Federal Study Population and the U.S. Census Population

There are some differences between these two populations, but they are not significant enough to preclude comparisons:

Time periods. For the 1974 Census Current Population Survey data, which are as of March 1974, there is a five-month difference from the date for the study population (August 31, 1974), a difference which can be expected to have little effect for these large populations.

For the 1970 Census of Population data, the difference is approximately four and one-half years (April 1, 1970 for the Census; August 31, 1974 for the study population).

Race and national origin. The terms 'Negro' (as used in the Census reports) and 'Black' (as used in the present study) describe identical populations.

The Civil Service Commission designation 'Spanish-surnamed' is defined so as not to overlap with any other racial or national-origin designation. As set forth in the Introduction to this study, a Federal employee who is self-designated (or designated by his or her supervisor) as being in the Spanish-surnamed category cannot also be designated as either white, Black, or American Indian, although, in fact, persons in the Spanish-surnamed group may be members of any of these races. The Census Bureau, on the other hand, specifically states that 'Spanish origin' persons are also classified under their racial designations.

A corollary of the above situation is that the 'white' group in the Census data is larger than it would be had the Civil Service Commission designations been used, since the great majority of the Spanish origin persons tabulated in the Census data are classified as white. Thus the Civil Service Commission 'non-minority group' is smaller than it would be had the overlapping Census categories been used.

Employed. The study population was limited to full-time permanent employees. The Census Current

Population Survey definition is: "Employed persons comprise those civilians who, during the survey week, were either (1) 'at work'—those who did any work for pay or profit, or worked without pay for 15 hours or more on a family farm or business; or (2) 'with a job but not at work'—those who did not work and were not looking for work but had a job or business from which they were temporarily

absent. . . ." (Census Current Population Report P-20, No. 274, p. 9)

Educational attainment categories. The following tabulation compares the educational attainment categories used by the Civil Service Commission Central Personnel Data File and by the U.S. Census Bureau:

Civil Service Commission Central Personnel Data File	United States Bureau of the Census	Differences
Less than high school graduate	Less than 4 years high school	Census category slightly smaller—excludes those with 4 years of high school who did not graduate
High school graduate	4 years high school	Census slightly larger—includes those with 4 years of high school who did not graduate
Training beyond high school (other than college)	(No corresponding category)	*
1 thru 4 years college, but no bachelor's degree	1 thru 3 years college	Census category smaller—excludes those with 4 years of college but no bachelor's degree ^a
Bachelor's degree, no graduate study	4 years college	Census category larger—includes those with 4 years of college but no bachelor's degree
Graduate study	5 years college or more	Census category smaller—excludes those with some graduate study but less than one year

* It is known that some respondents in the Census Current Population Survey have stated that they had some college attendance, referring to attendance at business college or trade or technical schools. The amount of such inclusion of non-academic training as 'college attendance' cannot be determined. (Information from Population Division, U.S. Bureau of the Census.)

10. Comparisons With Census Data for Employed White-Collar Workers

As shown in the foregoing tabulation, there is close but not exact correspondence in the educational attainment categories used by the Federal

civil service and the U.S. Census. With regard to white-collar occupational categories, the match is exact. However, the Census combines the professional and technical categories; these are separate in the civil service classification:

Federal Employee Category	U.S. Census Category
Professional occupations	Professional, technical and kindred workers
Technical occupations	
Administrative occupations	Managers and administrators (nonfarm)
Clerical occupations	Clerical and kindred workers

Census Data Used for Comparison

The August 1974 data of the present study, for full-time permanent General Schedule (and similar) employees, will be compared with the following U.S. Census data:

—From March 1974 Census Current Population Survey

Educational attainment of employed men in white-collar occupations (Table J). Comparable data for women were not published by the Census Bureau

Educational attainment of employed white-collar workers, by major occupation group,

sex, race, and Spanish origin, based on Census data published by U.S. Bureau of Labor Statistics (Appendix Table 13)

—From April 1970 Census of Population data

Educational attainment of white-collar men employees of the Federal Government, by selected major occupation group, race, and Spanish origin (Appendix Table 14)

Educational attainment of white-collar women employees of the Federal Government, by selected major occupation group, race, and Spanish origin (Appendix Table 15)

Table J. Comparison of Educational Attainment Data for General Schedule Men, by Minority Group, with 1974 Census Data for Employed Men in White-Collar Occupations, by Race and Spanish Origin

Education Level *	Black Men	Spanish-Surnamed Men	Non-Minority Men
Full-Time Permanent General Schedule Men Employees (CPDF) Aug. 1974			
All education levels (number)	54,005	17,238	616,804
Percent distribution	100.0	100.0	100.0
1. Less than high school graduate	13.0	11.6	4.4
2. High school graduate & training (non-college) beyond high school	36.0	34.3	27.3
3. College, less than bachelor's	27.8	31.4	23.5
4. Bachelor's degree—no graduate study	10.5	11.0	19.5
5. Graduate study	12.7	11.8	25.3

See footnote at end of table.

**U.S. Employed White-Collar Men, Aged 25
thru 64 Years, (Census CPS) March 1974**

	Negro Men	Spanish Origin Men ^b	White Men
All education levels (thousands)	699	414	16,482
Percent distribution	100.0	100.0	100.0
1. Less than 4 years high school	17.4	23.4	9.7
2. Four years high school	34.8	27.1	29.5
3. One to three years college	20.1	22.2	19.7
4. Four years college	15.9	14.0	20.8
5. Five years college or more	11.7	13.3	20.2

^a The numbers 1 through 5 preceding the education levels indicate approximately equivalent education levels. See the tabulation in Chapter 9, above, comparing the education level categories used by the Civil Service Commission and the Bureau of the Census.
^b The Census category 'Spanish origin' overlaps the other Census categories, as persons of Spanish origin can be of any race. See footnote to Appendix Table 13 for the Census definition of 'Spanish origin'.
 Source: Civil Service Commission Central Personnel Data File (CPDF), Appendix Table 1B, U.S. Bureau of the Census, *Educational Attainment in the United States: March 1973 and 1974*, Current Population Reports, Series P-20, No. 274, pp. 54-60. These Census data were not published for employed women.

Comparison of 1974 Data for Federal and Total U.S. White-Collar Workers

From Table J, which shows educational attainment data for the study population men compared

with Census data for U.S. employed white-collar men, it can be seen that there are quite close correspondences. Summarizing some of the data of the table:

Percentage of men in the specified group having:	Negro/ Black	Spanish origin/ surnamed	White/ non- minority
Any college attendance			
Census—employed white-collar men	47.7	49.5	60.7
CPDF—General Schedule men	51.0	54.2	68.3
4 years or more of college (Census) or bachelor's degree and above (CPDF)			
Census—employed white-collar men	27.6	27.3	41.0
CPDF—General Schedule men	23.2	22.8	44.8

Source: Table J. Data are for March 1974 (Census) and August 1974 (CPDF).

Whether one considers workers with any college attendance or those who had at least four years of college, the two groups show similar percentages, and in both cases, the white/minority groups outrank the other groups of men. (The Census data of Table J were not published for employed white-collar women.)

Comparison of 1974 Data by Major Occupation Groups

Appendix Table 13 shows educational attainment data from the March 1974 Census Current Population Survey, as published by the Bureau of Labor Statistics. The data are for employed white-collar workers, both men and women (as con-

trasted with the data of Table J above, which were published only for men). Another difference from the data of Table J is that the former showed the group 'Negro' separately, while the data of Appendix Table 13 are for 'Negro and other (than white) races'. The group 'Negro and other races' would therefore include Oriental Americans and American Indians.

Table K compares the Census data of Appendix Table 13 with the study population data of Appendix Table 6, with respect to the percentage of college graduates (study population) and the percentage having four years of college or more (Census data).

Table K. Percentages of Men and Women in Each Major Occupational Category Who Were College Graduates, General Schedule Employees, by Minority Group, August 1974, and U.S. Employed White-Collar Workers, by Race and Spanish Origin, March 1974^a

Sex and Occupational Category	Total		Non-Minority/White		Minority (except Spanish)/Other than White		Spanish-Surnamed/Spanish-Origin	
	General Schedule	U.S. White-Collar	General Schedule	U.S. White-Collar	General Schedule	U.S. White-Collar	General Schedule	U.S. White-Collar
Men								
Professional and technical	61.6	64.9	62.9	64.8	50.4	66.0	37.3	45.3
Professional	95.7	81.5 ^b	95.7	n. a.	95.6	n. a.	95.9	n. a.
Technical	13.4	15.3 ^b	13.5	n. a.	14.5	n. a.	6.7	n. a.
Administrative and managerial ^c	47.6	30.6	47.6	30.6	48.9	31.0	41.1	19.5
Clerical	7.5	9.3	8.9	9.5	4.3	9.4 ^d	2.6	7.6
Women								
Professional and technical	28.9	60.2	30.3	60.2	24.2	54.7	21.3	51.3
Professional	80.3	85.1 ^b	80.4	n. a.	80.2		80.4	n. a.
Technical	11.5	26.2 ^b	11.9	n. a.	10.6		6.4	n. a.
Administrative and managerial ^c	35.3	16.9	35.4	16.5	34.8		36.4	18.9
Clerical	3.1	5.6	3.2	5.7	3.0	4.8 ^d	1.5	3.9

^a Education level attained: Federal General Schedule employees, bachelor's degree and over; U.S. white-collar workers, four years of college or more.

^b Excludes sub-category 'other professional & technical'.

^c Federal General Schedule employees, 'administrative'; U.S. white-collar workers, 'managers & administrators (nonfarm)'.

^d Includes sales workers.

Source: Appendix tables 6 (full-time permanent General Schedule & similar) and 13 (U.S. Census data). Additional Census data from U.S. Bureau of Labor Statistics Educational Attainment of Workers, March 1974. Special Labor Force Report 175, pp. A-17, A-18.

The occupational categories match in a general way. However, the Census data combine professional and technical into one category. They do not publish detailed occupations under this total category by race and Spanish origin, so the only way to compare the study population and Census data was to combine the categories for the study population. The result is a very close match for men workers, but a poor one for the women. (Compare the line 'Professional and technical' for men in Table K with the corresponding line for women.)

This line is the only one that can be compared within minority and non-minority groups. However, there is a comparison for all men and all women, without regard to minority group, for professional occupations and technical occupations separately. (See the first two columns on Table K.) Here the comparison is rather close. The difference therefore must be in the weighting of professional and technical occupations, and indeed this is the case:

	Percentage of persons of all education levels in the specified occupational category	
	Men	Women
Study population—Aug. 1974:		
Professional and technical	100	100
Professional	59	25
Technical	41	75
U.S. population (Census)—March 1974:		
Professional and technical ^a	100	100
Professional	73	64
Technical	27	36

^a Includes only those occupations which are specified as either professional and technical; excludes the category 'other professional and technical'.

Source: Appendix tables 6 and 13 and U.S. Bureau of Labor Statistics, Special Labor Force Report 175, pp. A-17, A-18.

It can be seen from this tabulation that the low percentage of college educated women in the combined 'professional and technical' category for the study population is a function of the very low percentage (25 percent) of professional women in this group; the U.S. population of employed professional and technical women had two-thirds in professional occupations, compared with only one-fourth for the Federal workers.

In the administrative category, both men and women Government workers, minority and non-minority alike, showed higher percentages with college educations than did the general population of administrative and managerial workers. Among clerical workers, on the other hand, the study population showed somewhat lower percentages of college graduates (except for Spanish-surnamed/origin women, where the percentages were about the same).

Educational Attainment Data for Federal Workers, 1970 (Census) and 1974 (CPDF)

As part of the 1970 Census of Population, a sample study was made of Federal, State, and local government workers. Appendix tables 14 (men) and 15 (women) give 1970 Census educational attainment data for selected white-collar occupational categories for white, Negro, and Spanish origin Federal workers. (No data were published for the American Indian or Oriental groups.)

Because the Census groups professional and technical workers together, these categories have been combined for the study population:

Percentage of Federal workers in the professional and technical occupations with:

	4 years of college or more (Census) April 1970	Bachelor's degree and above (CPDF) August 1974
Men		
Total, professional & technical occupations	51.8	61.6
Negro/Black	39.6	45.9
Spanish-origin/surnamed	35.7	37.3
White/non-minority	52.5	62.9
Women		
Total, professional & technical occupations	35.5	28.9
Negro/Black	28.2	22.5
Spanish-origin/surnamed	23.6	21.3
White/non-minority	36.9	30.3

Source: Appendix tables 6, 14, and 15.

The above tabulation shows a fairly good correspondence between the data for Federal white-collar workers from the two sources (separated by four years). However the differences that do exist are in opposite directions for men and for women employees. The 1974 percentages are higher for the three groups of men, but somewhat lower for the three groups of women. It would be expected that for both men and women the study population would have higher percentages than the 1970 groups for two reasons:

- Over time there has been a trend to increasing percentages of college graduates in any given category
- The study population was limited to employees having permanent tenure and full-time work schedules; the 1970 Census study sampled all Federal workers.

TECHNICAL APPENDIX I

Employee Records Not Included in the Study Population

There were several criteria for the inclusion of the Central Personnel Data File (CPDF) record of a Federal civilian employee in the present study:

- General Schedule (or similar) pay system
- Permanent tenure
- Full-time work schedule
- Designation as to minority (or non-minority) group
- Specification of the element 'Education level attained'

This section presents the numerical relationship of the study population so selected to the total active employee records in the Central Personnel Data File as of August 31, 1974. Employees not included in the study were chiefly:

- 1) Those not in the categories selected for the study, such as—
 - employees under pay systems other than General Schedule (or similar)
 - employees on work schedules (such as part-time and intermittent) other than full-time

—employees with tenure other than permanent

—'nondesignated' employees — employees stationed in Hawaii, Guam, and Puerto Rico. These employees are never included in any minority-group survey and are therefore classified as 'nondesignated (as to minority group)'

- 2) Eligible employees whose CPDF records were incomplete with respect to any factor under study (principally those having 'minority group' or 'education level attained' unspecified on their records).

Total Federal Civilian Employees and Full-Time Permanent General Schedule Employees

Total Federal civilian employment in August 1974 was 2,900,767.¹ Of these 2.9 million employees, approximately 2.8 million had active records in the U.S. Civil Service Commission's Central Personnel Data File (CPDF). The distribution of these records was as follows:

¹ U.S. Civil Service Commission, Bureau of Manpower Information Systems. *Federal Civilian Manpower Statistics: Monthly Release*, November 1974, p. 5. This figure excludes employees of the Central Intelligence Agency and National Security Agency.

	Active records in CPDF, Aug. 31, 1974		
	Total	Men	Women
Total employment	2,795,546	1,946,057	849,489
By work schedule:			
Full-time	2,504,235	1,769,453	734,782
Part-time	180,540	105,476	75,064
Intermittent	93,863	62,762	31,101
Unspecified	16,908	8,366	8,542
By tenure:			
Permanent	1,843,828	1,232,925	610,903
Permanent full-time	1,788,375	1,204,345	584,030
Permanent—other or unspecified work schedules	55,453	28,580	26,873
Temporary, 'other', and unspecified tenure ^a	951,718	713,132	238,586
Full-time permanent, by pay system:			
Total full-time permanent	1,788,375	1,204,345	584,030
General Schedule and similar	1,286,040	765,916	520,124

^a Includes U.S. Postal Service, with 728,030 employees: 583,325 men and 144,705 women. Source: Tabulations of CPDF records.

Not all full-time permanent General Schedule (or similar) employee records were eligible for the

study population. They were reduced in number for the following reasons:

	Full-time permanent General Schedule employee records (CPDF), Aug. 31, 1974		
	Total	Men	Women
Total full-time permanent General Schedule	1,286,040	765,916	520,124
Nondesignated ^a	-18,182	-11,343	-6,839
Minority unspecified	-21,791	-10,400	-11,391
Full-time permanent General Schedule minus nondesignated and (minority) unspecified	1,246,067	744,173	501,894
Records included in study population	-1,162,919	-698,213	-464,706
Records not included	83,148	45,960	37,188

^a Employees stationed in Hawaii, Guam, and Puerto Rico. Source: Tabulations of CPDF records.

The 83,148 records not in the study population represent seven percent of the 1,246,067 records theoretically eligible for inclusion. This seven percent represents principally records eligible on all counts except that the element 'Education level attained' was unspecified.

The nonreporting of education elements shows great variation by agency. In August 1974, the

range of nonreporting on educational attainment level was from under one percent to 22 percent. The overall average for all departments and agencies (excluding the U.S. Postal Service) was 7.9 percent. This figure is based on all active records in the Central Personnel Data File, regardless of minority-group designation, pay system, tenure, or work schedule.

TECHNICAL APPENDIX II

Educational Attainment Data for White-Collar Workers Published by U.S. Bureau of the Census and U.S. Bureau of Labor Statistics

1970 Census of Population

Data from the 1970 Census were used only when 1974 data on a specified subject were not available. The only 1970 Census report used in the present study was:

Government Workers. Subject Report PC(2)-7D

The data in this report were based on sample surveys. This 1970 survey of Federal, State, and local government workers was based on samples of the following sizes:

- Total workers, 20 percent
- Workers, by race, 20 percent
- Workers of Spanish origin, 5 percent

Census Current Population Survey for 1974

The U.S. Bureau of the Census Current Population Survey 1974 data on educational attainment are published in the following report:

U.S. Bureau of the Census. *Educational Attainment in the United States: March 1973 and 1974*. Current Population Reports, Series P-20, No. 274 (Dec. 1974)

The report is based on the Census Bureau's Current Population Survey (CPS) sample, which is described as follows:

"The current CPS sample is spread over 461 areas comprising 923 counties and independent cities with coverage in each of the 50 States and the District of Columbia. Approximately 47,000 occupied housing units are eligible for interview each month. Of this

number, 2,000 occupied units, on the average, are visited but interviews are not obtained because the occupants are not found at home after repeated calls or are unavailable for some other reason. In addition to the 47,000 there are also about 8,000 sample units in an average month which are visited but are found to be vacant or otherwise not to be interviewed.

"The estimating procedure used in this survey involved the inflation of the weighted sample results to independent estimates of the civilian noninstitutional population of the United States by age, race and sex. These independent estimates were based on statistics from the prior Census of Population; statistics of births, deaths, immigration, and emigration; and statistics on the strength of the Armed Forces." (above-cited report, p. 10)

Bureau of Labor Statistics Report, Based on 1974 Census CPS Data

Each year the U.S. Bureau of Labor Statistics publishes a report on educational attainment, based primarily on information from the March Current Population Survey, conducted and tabulated for the Bureau of Labor Statistics by the Bureau of the Census.

The 1974 data relate to the civilian noninstitutional population 16 years old and over, in the week ending March 16, 1974. They are published in the following report:

U.S. Bureau of Labor Statistics. *Educational Attainment of Workers: March 1974*. Special Labor Force Report 175. (Reprinted, with supplementary tables, from the February 1975 *Monthly Labor Review*)

According to this report (page A-4):

"To reduce sampling variability on the estimated number and characteristics of persons of Spanish origin, the March 1974 Current Population Survey sample of Spanish persons was doubled and the tabulations of data were adjusted to take this into account."

Therefore the statement on the size of the Census CPS sample, quoted earlier, is modified with respect to data published by the Bureau of Labor Statistics on persons of Spanish origin.

APPENDIX TABLES

(Percentages are rounded independently
and not forced to add to totals)

For List of Appendix Tables, see pp. vi and vii

TABLE 1A -- EDUCATION LEVEL ATTAINED, BY MINORITY GROUP
 Full-Time Permanent General Schedule
 & Similar Employees
 August 1974

Education Level	All Full-Time Permanent General Schedule Employees	Minority Employees					Employees Other Than Minority
		Total Minority	Black	Spanish-Surnamed	American Indian	Oriental	
Full-time permanent General Schedule employees - total.....	1,162,919	196,838	148,246	28,734	9,720	10,138	966,081
Education level attained:							
High school or less.....	372,683	78,691	61,013	12,032	3,685	1,961	293,992
Less than high school graduate.....	59,199	18,452	14,731	2,628	818	275	40,747
High school graduate.....	313,484	60,239	46,282	9,404	2,867	1,686	253,245
Training beyond high school, but no college.....	152,463	31,419	24,602	3,488	2,257	1,072	121,044
College.....	637,773	86,728	62,631	13,214	3,778	7,105	551,045
One year or less.....	172,852	35,313	26,960	5,265	1,705	1,383	137,539
2 to 4 years - no bachelor's degree.....	119,075	21,293	15,768	3,277	835	1,413	97,782
Bachelor's degree - no graduate study.....	156,455	14,901	10,255	2,308	483	1,855	141,554
Graduate study.....	189,391	15,221	9,648	2,364	755	2,454	174,170
Percent distribution by education level:							
All full-time permanent GS employees....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
High school or less.....	32.0	40.0	41.2	41.9	37.9	19.3	30.4
Less than high school graduate.....	5.1	9.4	9.9	9.2	8.4	2.7	4.2
High school graduate.....	27.0	30.6	31.2	32.7	29.5	16.6	26.2
Training beyond high school, but no college.....	13.1	16.0	16.6	12.1	23.2	10.6	12.5
College.....	54.8	44.1	42.2	46.0	38.9	70.1	57.0
One year or less.....	14.9	17.9	18.2	18.3	17.5	13.6	14.2
2 to 4 years - no bachelor's degree.....	10.2	10.8	10.6	11.4	8.6	13.9	10.1
Bachelor's degree - no graduate study.....	13.5	7.6	6.9	8.0	5.0	18.3	14.7
Graduate study.....	16.3	7.7	6.5	8.2	7.8	24.2	18.0
Percent distribution by minority group:							
All full-time permanent GS employees....	100.0	16.9	12.8	2.5	0.8	0.9	83.1
High school or less.....	100.0	21.1	16.4	3.2	1.0	0.5	78.9
Less than high school graduate.....	100.0	31.2	24.9	4.4	1.4	0.5	68.8
High school graduate.....	100.0	19.2	14.8	3.0	0.9	0.5	80.8
Training beyond high school, but no college.....	100.0	20.6	16.1	2.3	1.5	0.7	79.4
College.....	100.0	13.6	9.8	2.1	0.6	1.1	86.4
One year or less.....	100.0	20.4	15.6	3.0	1.0	0.8	79.6
2 to 4 years - no bachelor's degree.....	100.0	17.9	13.2	2.8	0.7	1.2	82.1
Bachelor's degree - no graduate study.....	100.0	9.5	6.6	1.5	0.3	1.2	90.5
Graduate study.....	100.0	8.0	5.1	1.2	0.4	1.3	92.0

TABLE 1B -- EDUCATION LEVEL ATTAINED, BY MINORITY GROUP, AND BY SEX
 Full-Time Permanent General Schedule & Similar Employees
 August 1974

Education Level	All Full-Time Permanent General Schedule Employees		Minority Employees								Employees Other Than Minority	
	Men	Women	Black		Spanish-Surnamed		American Indian		Oriental		Men	Women
			Men	Women	Men	Women	Men	Women	Men	Women		
Full-time permanent General Schedule employees - total...	698,213	464,706	54,005	94,241	17,238	11,496	4,021	5,699	6,145	3,993	616,804	349,277
Education level attained:												
High school or less.....	168,208	204,475	20,642	40,371	6,322	5,710	1,265	2,420	837	1,124	139,142	154,850
Less than high school graduates.....	36,356	22,843	6,999	7,732	1,991	637	331	487	165	110	26,870	13,877
High school graduate.....	131,852	181,632	13,643	32,639	4,331	5,073	934	1,933	672	1,014	112,272	140,973
Training beyond high school, but no college.....	64,728	87,735	5,794	18,808	1,578	1,910	641	1,616	447	625	56,268	64,776
College.....	465,277	172,496	27,569	35,062	9,338	3,876	2,115	1,663	4,861	2,244	421,394	129,651
One year or less.....	89,612	83,240	8,207	18,753	3,062	2,203	707	998	660	723	76,976	60,563
2 to 4 years - no bachelor's degree.....	78,468	40,607	6,809	8,959	2,346	931	470	365	769	644	68,074	29,708
Bachelor's degree - no graduate study.....	129,509	26,946	5,688	4,567	1,897	411	394	89	1,371	484	120,159	21,395
Graduate study.....	167,688	21,703	6,865	2,783	2,033	331	544	211	2,061	393	156,185	17,985
Percent distribution by education level:												
All full-time permanent GS employees.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
High school or less.....	24.1	44.0	38.2	42.8	36.7	49.7	31.5	42.5	13.6	28.1	22.6	44.3
Less than high school graduate.....	5.2	4.9	13.0	8.2	11.6	5.5	8.2	8.5	2.7	2.8	4.4	4.0
High school graduate.....	18.9	39.1	25.3	34.6	25.1	44.1	23.2	33.9	10.9	25.4	18.2	40.4
Training beyond high school, but no college.....	9.3	18.9	10.7	20.0	9.2	16.6	15.9	28.4	7.3	15.7	9.1	18.5
College.....	66.6	37.1	51.0	37.2	54.2	33.7	52.6	29.2	79.1	56.2	68.3	37.1
One year or less.....	12.8	17.9	15.2	19.9	17.8	19.2	17.6	17.5	10.7	18.1	12.5	17.3
2 to 4 years - no bachelor's degree.....	11.2	8.7	12.6	9.5	13.6	8.1	11.7	6.4	12.5	16.1	11.0	8.5
Bachelor's degree - no graduate study.....	18.5	5.8	10.5	4.8	11.0	3.6	9.8	1.6	22.3	12.1	19.5	6.1
Graduate study.....	24.0	4.7	12.7	3.0	11.8	2.9	13.5	3.7	33.5	9.8	25.3	5.1

TABLE 1B -- EDUCATION LEVEL ATTAINED, BY MINORITY GROUP, AND BY SEX:
 Full-Time Permanent General Schedule & Similar Employees: August 1974--Continued

Education Level	All Full-Time Permanent General Schedule Employees		Minority Employees								Employees Other Than Minority	
			Black		Spanish-Surnamed		American Indian		Oriental			
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Percent distribution by minority-sex combination: All full-time permanent GS employees.....	60.0	40.0	4.6	8.1	1.5	1.0	0.3	0.5	0.5	0.3	53.0	30.0
High school or less.....	45.1	54.9	5.5	10.8	1.7	1.5	0.3	0.6	0.2	0.3	37.3	41.6
Less than high school graduate.....	61.4	38.6	11.8	13.1	3.4	1.1	0.6	0.8	0.3	0.2	45.4	23.4
High school graduate.....	42.1	57.9	4.4	10.4	1.4	1.6	0.3	0.6	0.2	0.3	35.8	45.0
Training beyond high school, but no college.....	42.5	57.5	3.8	12.8	1.0	1.3	0.4	1.1	0.3	0.4	36.9	42.5
College.....	73.0	27.0	4.3	5.5	1.5	0.6	0.3	0.3	0.8	0.4	66.1	20.3
One year or less.....	51.8	48.2	4.7	10.8	1.8	1.3	0.4	0.6	0.4	0.4	44.5	35.0
2 to 4 years - no bachelor's degree.....	65.9	34.1	5.7	7.5	2.0	0.8	0.4	0.3	0.6	0.5	57.2	24.9
Bachelor's degree - no graduate study.....	82.8	17.2	3.6	2.9	1.2	0.3	0.3	0.1	0.9	0.3	76.8	13.7
Graduate study.....	88.5	11.5	3.6	1.5	1.1	0.2	0.3	0.1	1.1	0.2	82.5	9.5

TABLE 2A -- EDUCATION LEVEL ATTAINED, BY GS GRADE, AND BY MINORITY GROUP
Full-time Permanent General Schedule & Similar Employees
August 1974

Education Level and GS Grade Group	All Full-Time Permanent General Schedule Employees	Minority Employees					Employees Other Than Minority
		Total Minority	Black	Spanish - Surnamed	American Indian	Oriental	
Full-time permanent General Schedule employees - total.....	1,162,919	196,838	148,246	28,734	9,720	10,138	966,081
Percent distribution by GS grade.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GS- 1 thru GS- 4.....	20.4	36.1	37.8	32.2	41.2	16.0	17.2
GS- 5 thru GS- 8.....	31.5	40.1	41.9	36.6	32.0	31.1	29.8
GS- 9 thru GS-11.....	23.2	14.9	13.0	20.2	17.3	26.5	24.8
GS-12 thru GS-13.....	18.7	7.2	5.8	9.2	7.7	21.5	21.1
GS-14 thru GS-15.....	5.8	1.7	1.4	1.8	1.8	4.7	6.6
GS-16 thru GS-18.....	0.4	0.1	0.1	0.1	0.1	0.2	0.5
High school or less - total.....	372,683	78,691	61,013	12,032	3,685	1,961	293,992
Percent distribution by GS grade.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GS- 1 thru GS- 4.....	35.2	50.6	51.9	46.0	55.0	30.2	31.0
GS- 5 thru GS- 8.....	41.0	40.0	40.8	38.8	30.1	40.5	41.2
GS- 9 thru GS-11.....	15.8	7.4	5.8	12.2	10.9	20.4	18.1
GS-12 thru GS-13.....	6.9	1.8	1.4	2.6	3.6	8.2	8.3
GS-14 thru GS-15.....	1.1	0.2	0.2	0.3	0.4	0.7	1.5
GS-16 thru GS-18.....	a/	a/	a/	a/	-	-	a/
Training beyond high school, but no college - total.....	152,463	31,419	24,602	3,488	2,257	1,072	121,044
Percent distribution by GS grade.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GS- 1 thru GS- 4.....	26.7	39.1	39.4	37.4	46.7	22.3	23.4
GS- 5 thru GS- 8.....	41.4	47.3	48.8	41.5	40.5	45.9	39.9
GS- 9 thru GS-11.....	21.2	10.2	9.0	16.2	8.8	22.4	24.0
GS-12 thru GS-13.....	9.3	2.9	2.4	4.5	3.6	8.7	10.9
GS-14 thru GS-15.....	1.4	0.4	0.4	0.5	0.4	0.7	1.7
GS-16 thru GS-18.....	a/	a/	a/	a/	a/	-	0.1
College, less than bachelor's degree - total.....	291,927	56,606	42,728	8,542	2,540	2,796	235,321
Percent distribution by GS grade.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GS- 1 thru GS- 4.....	20.3	31.0	32.1	26.8	35.5	23.3	17.7
GS- 5 thru GS- 8.....	36.2	45.7	47.4	41.0	37.5	41.3	33.9
GS- 9 thru GS-11.....	25.0	16.9	15.1	23.5	18.2	23.6	27.0
GS-12 thru GS-13.....	15.4	5.5	4.7	7.7	7.2	10.8	17.8
GS-14 thru GS-15.....	3.0	0.8	0.6	1.1	1.7	0.9	3.5
GS-16 thru GS-18.....	0.1	a/	a/	a/	a/	-	0.1
Bachelor's degree - no graduate study - total.....	156,455	14,901	10,255	2,308	483	1,855	141,554
Percent distribution by GS grade.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GS- 1 thru GS- 4.....	3.2	6.8	8.0	3.4	2.5	5.6	2.8
GS- 5 thru GS- 8.....	21.2	34.4	37.2	29.3	21.9	28.6	19.8
GS- 9 thru GS-11.....	34.7	36.2	35.6	38.1	44.5	34.6	34.6
GS-12 thru GS-13.....	32.2	19.3	16.2	25.0	24.4	28.5	33.5
GS-14 thru GS-15.....	8.3	3.2	2.9	4.0	6.4	2.6	8.8
GS-16 thru GS-18.....	0.4	0.1	0.1	0.2	0.2	-	0.5
Graduate study - total.....	189,391	15,221	9,648	2,364	755	2,454	174,170
Percent distribution by GS grade.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GS- 1 thru GS- 4.....	0.9	2.0	2.2	1.8	0.9	1.4	0.8
GS- 5 thru GS- 8.....	6.2	10.3	11.8	8.8	4.1	7.3	5.8
GS- 9 thru GS-11.....	26.7	35.3	34.8	37.3	53.0	30.1	26.0
GS-12 thru GS-13.....	43.5	38.0	36.5	39.8	30.7	44.8	44.0
GS-14 thru GS-15.....	20.9	13.6	13.7	11.7	10.7	15.6	21.6
GS-16 thru GS-18.....	1.8	0.9	1.0	0.5	0.5	0.8	1.9

a/ Less than 0.05 percent.

TABLE 2B -- EDUCATION LEVEL ATTAINED, BY GS GRADE, BY MINORITY GROUP, AND BY SEX
 Full-Time Permanent General Schedule & Similar Employees
 August 1974

Education Level and GS Grade Group	All Full-Time Permanent General Schedule Employees		Minority Employees								Employees Other Than Minority	
	Men	Women	Black		Spanish- Surnamed		American Indian		Oriental		Men	Women
			Men	Women	Men	Women	Men	Women	Men	Women		
Full-time permanent General Schedule employees - total...	698,213	464,706	54,005	94,241	17,238	11,496	4,021	5,699	6,145	3,993	616,804	349,277
Percent distribution by GS grade.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GS- 1 thru GS- 4.....	7.6	39.8	25.7	44.8	18.7	52.5	17.6	57.8	6.4	30.8	5.6	37.8
GS- 5 thru GS- 8.....	22.0	45.8	37.4	44.5	35.0	38.9	31.9	32.1	20.2	47.8	20.2	46.6
GS- 9 thru GS-11.....	31.4	10.8	20.8	8.5	28.8	7.3	29.3	8.7	33.3	16.0	32.4	11.5
GS-12 thru GS-13.....	29.1	3.1	12.5	1.9	14.5	1.2	16.8	1.2	32.4	4.8	31.0	3.5
GS-14 thru GS-15.....	9.3	0.5	3.4	0.3	2.9	0.1	4.1	0.2	7.3	0.7	10.1	0.6
GS-16 thru GS-18.....	0.6	a/	0.2	a/	0.1	-	0.2	-	0.3	-	0.7	a/
High school or less - total.....	168,208	204,475	20,642	40,371	6,322	5,710	1,265	2,420	837	1,124	139,142	154,850
Percent distribution by GS grade.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GS- 1 thru GS- 4.....	17.6	49.6	41.6	57.1	31.0	62.7	27.0	69.7	15.4	41.2	13.4	46.9
GS- 5 thru GS- 8.....	38.0	43.5	45.1	38.6	43.8	33.3	40.4	24.8	32.7	46.3	36.6	45.4
GS- 9 thru GS-11.....	27.9	5.9	9.6	3.8	20.0	3.7	22.3	5.0	33.8	10.5	31.0	6.5
GS-12 thru GS-13.....	14.1	1.0	3.2	0.4	4.7	0.2	9.2	0.6	16.4	2.0	16.2	1.1
GS-14 thru GS-15.....	2.3	0.1	0.4	a/	0.6	0.2	1.0	-	1.7	-	2.7	1.1
GS-16 thru GS-18.....	0.1	a/	a/	a/	a/	-	-	-	-	-	0.1	a/
Training beyond high school, but no college - total.....	64,728	87,735	5,794	18,808	1,578	1,910	641	1,616	447	625	56,268	64,776
Percent distribution by GS grade.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GS- 1 thru GS- 4.....	9.5	39.3	25.8	43.6	20.0	51.7	5.3	55.1	8.3	32.3	7.4	37.4
GS- 5 thru GS- 8.....	28.0	51.3	46.8	49.4	39.1	43.5	42.7	39.5	31.3	56.3	25.6	52.4
GS- 9 thru GS-11.....	39.5	7.7	19.1	5.9	30.1	4.7	20.0	4.4	40.0	9.8	42.0	8.3
GS-12 thru GS-13.....	17.8	1.5	6.8	1.0	9.7	0.2	10.5	0.9	18.6	1.6	21.5	1.7
GS-14 thru GS-15.....	3.2	0.1	1.4	0.1	1.0	0.1	1.4	0.1	1.8	-	3.4	0.1
GS-16 thru GS-18.....	0.1	a/	a/	a/	0.1	-	0.2	-	-	-	0.1	a/

TABLE 2B -- EDUCATION LEVEL ATTAINED, BY GS GRADE, BY MINORITY GROUP, AND BY SEX
 Full-Time Permanent General Schedule & Similar Employees -- August 1974--Continued

Education Level and GS Grade Group	All Full-Time Permanent General Schedule Employees		Minority Employees								Employees Other Than Minority	
			Black		Spanish- Surnamed		American Indian		Oriental			
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
College, less than bachelor's degree - total.....	168,080	123,847	15,016	27,712	5,408	3,134	1,177	1,363	1,429	1,367	145,050	90,271
Percent distribution by GS grade.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GS- 1 thru GS- 4.....	8.7	36.0	22.8	37.2	16.6	44.4	17.2	51.3	12.8	34.3	6.9	35.1
GS- 5 thru GS- 8.....	25.8	50.4	40.5	51.2	37.4	47.4	35.3	39.3	29.6	53.6	23.7	50.4
GS- 9 thru GS-11.....	35.5	10.9	24.8	9.9	32.7	7.6	29.9	8.1	36.6	10.1	36.7	11.3
GS-12 thru GS-13.....	24.9	2.5	10.2	1.7	11.6	0.6	14.1	1.2	19.4	1.8	27.1	2.9
GS-14 thru GS-15.....	5.0	0.2	1.6	0.1	1.7	0.1	3.4	0.1	1.6	0.2	5.5	0.3
GS-16 thru GS-18.....	0.2	a/	0.1	a/	a/	-	0.1	-	-	-	0.2	a/
Bachelor's degree - no graduate study - total....	129,509	26,946	5,688	4,567	1,897	411	394	89	1,371	484	120,159	21,395
Percent distribution by GS grade.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GS- 1 thru GS- 4.....	1.3	12.2	4.7	12.1	1.5	12.2	0.8	10.1	1.9	16.1	1.2	12.1
GS- 5 thru GS- 8.....	16.1	45.7	28.0	48.6	25.9	45.0	17.3	42.7	21.9	47.7	15.3	45.0
GS- 9 thru GS-11.....	35.4	31.4	39.0	31.4	38.9	34.8	44.9	42.7	36.8	28.5	35.2	31.3
GS-12 thru GS-13.....	36.8	9.8	23.4	7.2	28.7	7.5	29.2	3.4	36.0	7.2	37.6	10.5
GS-14 thru GS-15.....	9.8	0.9	4.8	0.7	4.8	0.5	7.6	1.1	3.4	0.4	10.2	1.0
GS-16 thru GS-18.....	0.5	a/	0.2	a/	0.3	-	0.3	-	-	-	0.5	a/
Graduate study - total.....	167,688	21,703	6,865	2,783	2,033	331	544	211	2,061	393	156,185	17,985
Percent distribution by GS grade.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GS- 1 thru GS- 4.....	0.4	4.8	1.2	4.9	0.9	7.3	-	3.3	0.8	4.6	0.3	4.7
GS- 5 thru GS- 8.....	4.4	19.6	7.4	22.9	7.0	19.9	2.8	7.6	5.2	18.3	4.2	19.3
GS- 9 thru GS-11.....	24.6	43.4	31.9	41.9	35.4	49.2	44.3	75.4	27.0	46.3	24.0	43.1
GS-12 thru GS-13.....	46.0	24.6	41.5	24.0	42.9	20.8	39.0	9.5	48.6	24.9	46.2	25.0
GS-14 thru GS-15.....	22.7	7.2	16.8	6.0	13.2	2.7	13.2	4.3	17.4	5.9	23.2	7.5
GS-16 thru GS-18.....	2.0	0.4	1.3	0.3	0.6	-	0.7	-	1.0	-	2.0	0.4

a/ Less than 0.05 percent.

TABLE 3 -- GS GRADE, BY EDUCATION LEVEL ATTAINED, BY MINORITY GROUP, AND BY SEX
 Full-Time Permanent General Schedule & Similar Employees
 August 1974

GS Grade and Education Level	All General Schedule Employees		Minority Employees								Employees Other than Minority	
	Men	Women	Black		Spanish-Surnamed		American Indian		Oriental		Men	Women
			Men	Women	Men	Women	Men	Women	Men	Women		
All General Schedule and Similar employees a/...	698,213	464,706	54,005	94,241	17,238	11,496	4,021	5,699	6,145	3,993	616,804	349,277
Percent of all minority-sex combinations.....	60.0	40.0	4.6	8.1	1.5	1.0	0.3	0.5	0.5	0.3	53.0	30.0
GS-1 thru GS-4.....	52,743	184,814	13,859	42,247	3,219	6,034	709	3,292	392	1,230	34,564	132,011
Percent of all minority-sex combinations.....	22.2	77.8	5.8	17.8	1.4	2.5	0.3	1.4	0.2	0.5	14.5	55.6
Percent distribution by education level.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than high school graduate.....	18.4	7.2	23.0	12.3	23.8	7.8	18.1	13.6	6.1	4.9	16.2	5.4
High school graduate.....	37.8	47.6	39.0	42.3	37.0	51.5	30.2	37.6	26.8	32.8	37.7	49.6
Training beyond high school, but no college..	11.7	18.7	10.8	19.4	9.8	16.4	22.8	27.1	9.4	16.4	12.0	18.4
One year college or less.....	17.7	16.9	16.2	17.5	19.8	17.4	22.1	17.1	23.2	21.3	17.9	16.7
2 to 4 years college - no bachelor's degree..	10.1	7.2	8.5	6.8	8.2	5.7	6.3	4.1	23.5	16.8	10.8	7.3
Bachelor's degree - no graduate study.....	3.2	1.8	1.9	1.3	0.9	0.8	0.4	0.3	6.6	6.3	4.0	2.0
Graduate study.....	1.1	0.6	0.6	0.3	0.6	0.4	0	0.2	4.3	1.5	1.4	0.6
GS-5 thru GS-8.....	153,553	212,904	20,207	41,935	6,038	4,468	1,284	1,828	1,244	1,908	124,780	162,765
Percent of all minority-sex combinations.....	41.9	58.1	5.5	11.4	1.6	1.2	0.4	0.5	0.3	0.5	34.1	44.4
Percent distribution by education level.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than high school graduate.....	10.4	4.0	16.6	5.7	15.4	3.4	11.6	1.9	5.7	1.9	9.2	3.6
High school graduate.....	31.2	37.8	29.5	31.5	30.4	39.2	28.2	30.9	16.3	25.3	31.6	39.6
Training beyond high school, but no college..	11.8	21.2	13.4	22.2	10.2	18.6	21.3	35.0	11.3	18.4	11.5	20.8
One year college or less.....	16.0	19.6	16.9	22.6	20.2	22.4	20.6	19.4	16.9	20.3	15.6	18.7
2 to 4 years college - no bachelor's degree..	12.2	9.7	13.2	11.2	13.3	10.9	11.8	10.0	17.1	18.1	12.0	9.2
Bachelor's degree - no graduate study.....	13.6	5.8	7.9	5.3	8.1	4.1	5.3	2.1	24.1	12.1	14.8	5.9
Graduate study.....	4.8	2.0	2.5	1.5	2.4	1.5	1.2	0.9	8.6	3.8	5.3	2.1
GS-9 thru GS-11.....	219,124	50,141	11,222	7,978	4,959	844	1,180	498	2,045	637	199,718	40,184
Percent of all minority-sex combinations.....	81.4	18.6	4.2	3.0	1.8	0.3	0.4	0.2	0.8	0.2	74.2	14.9
Percent distribution by education level.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than high school graduate.....	3.7	1.8	3.4	1.5	5.3	1.1	3.6	1.2	2.8	1.9	3.7	1.9
High school graduate.....	17.7	22.3	14.3	17.7	20.2	23.9	20.3	22.9	11.0	16.6	17.9	23.2
Training beyond high school, but no college..	11.7	13.4	9.9	13.8	9.6	10.5	10.8	14.3	8.8	9.6	11.8	13.5
One year college or less.....	14.8	16.6	16.4	20.5	18.6	17.1	16.4	13.3	11.1	10.5	14.6	16.0
2 to 4 years college - no bachelor's degree..	12.4	10.2	16.8	13.9	17.0	11.1	13.4	8.8	14.5	11.1	12.1	9.5
Bachelor's degree - no graduate study.....	20.9	16.9	19.8	18.0	14.9	16.9	15.0	7.6	24.6	21.7	21.2	16.7
Graduate study.....	18.8	18.8	19.5	14.6	14.5	19.3	20.4	31.9	27.2	28.6	18.8	19.3

See footnotes at end of table.

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TABLE 3 -- GS GRADE, BY EDUCATION LEVEL ATTAINED, BY MINORITY GROUP, AND BY SEX
Full-Time Permanent General Schedule & Similar Employees: August 1974 -- Continued



GS Grade and Education Level	All General Schedule Employees		Minority Employees								Employees Other than Minority	
	Men	Women	Black		Spanish-Surnamed		American Indian		Oriental		Men	Women
			Men	Women	Men	Women	Men	Women	Men	Women		
GS-12 thru GS-13.....	203,226	14,420	6,768	1,813	2,495	135	677	68	1,993	190	191,293	12,214
Percent of all minority-sex combinations.....	93.4	6.6	3.1	0.8	1.1	0.1	0.3	b/	0.9	0.1	87.9	5.6
Percent distribution by education level.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than high school graduate.....	1.1	1.0	0.9	0.8	1.4	1.5	1.6	0	0.6	0.5	1.1	1.0
High school graduate.....	10.6	12.8	8.8	8.6	10.5	8.9	15.7	22.1	6.3	11.6	10.7	13.5
Training beyond high school, but no college..	6.3	9.2	5.8	10.4	6.1	2.2	9.9	20.6	4.2	5.3	6.3	9.1
One year college or less.....	9.8	12.3	9.3	11.3	10.2	7.4	11.7	19.1	6.3	3.7	9.8	12.6
2 to 4 years college - no bachelor's degree..	10.8	9.3	13.4	14.0	15.0	5.9	12.9	4.4	7.6	8.9	10.7	8.7
Bachelor's degree - no graduate study.....	23.5	18.3	19.7	18.0	21.8	23.0	17.0	4.4	24.8	18.4	23.6	18.4
Graduate study.....	37.9	37.1	42.1	36.9	35.0	51.1	31.3	29.4	50.3	51.6	37.7	36.8
GS-14 thru GS-15.....	65,112	2,326	1,836	254	505	15	164	13	451	28	62,156	2,016
Percent of all minority-sex combinations.....	96.6	3.4	2.7	0.4	0.7	b/	0.2	b/	0.7	b/	92.2	3.0
Percent distribution by education level.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than high school graduate.....	0.4	0.3	0.6	0.8	0	0	0	0	0	0	0.4	0.3
High school graduate.....	5.6	6.0	3.9	5.1	7.9	6.7	7.9	0	3.1	0	5.6	6.3
Training beyond high school, but no college..	3.2	4.7	4.4	4.7	3.2	6.7	5.5	7.7	1.8	0	3.1	4.8
One year college or less.....	5.2	5.6	3.8	4.7	5.9	6.7	7.3	7.7	1.6	0	5.2	5.8
2 to 4 years college - no bachelor's degree..	7.6	5.7	9.6	6.7	11.9	6.7	17.1	7.7	3.5	10.7	7.5	5.5
Bachelor's degree - no graduate study.....	19.5	10.4	14.8	11.8	18.0	13.3	18.3	7.7	10.4	7.1	17.7	10.3
Graduate study.....	58.5	67.2	62.9	66.1	53.1	60.0	43.9	69.2	79.6	82.1	58.3	67.1
GS-16 thru GS-18.....	4,455	101	113	14	22	0	7	0	20	0	4,293	87
Percent of all minority-sex combinations.....	97.8	2.2	2.5	0.3	0.5	-	0.2	-	0.4	-	94.2	1.9
Percent distribution by education level.....	100.0	100.0	100.0	100.0	100.0	-	100.0	-	100.0	-	100.0	100.0
Less than high school graduate.....	0.2	2.0	0.9	0	0	-	0	-	0	-	0.2	2.3
High school graduate.....	2.9	1.0	2.7	7.1	9.1	-	0	-	0	-	2.9	0
Training beyond high school, but no college..	1.5	5.0	0.9	14.3	4.5	-	14.3	-	0	-	1.5	3.4
One year college or less.....	1.9	2.0	1.8	7.1	4.5	-	0	-	0	-	1.9	1.1
2 to 4 years college - no bachelor's degree..	4.8	4.0	7.1	7.1	4.5	-	14.3	-	0	-	4.8	3.4
Bachelor's degree - no graduate study.....	14.6	10.9	8.0	7.1	22.7	-	14.3	-	0	-	14.8	11.5
Graduate study.....	74.1	75.2	78.8	57.1	54.5	-	57.1	-	100.0	-	74.0	78.2

a/ The percent distribution by education level for total full-time permanent General Schedule employees is shown on Table 2B.

b/ Less than 0.05 percent

TABLE 4 -- PERCENT DISTRIBUTION OF EMPLOYEES WITH BACHELOR'S DEGREE AND ABOVE BY GS GRADE AND BY MINORITY GROUP AND SEX
 Full-Time Permanent General Schedule & Similar Employees
 August 1974

Item and GS Grade	All General Schedule Degree- Holding Employees		Minority Employees								Employees Other Than Minority	
			Black		Spanish- Surnamed		American Indian		Oriental			
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
General Schedule employees with bachelor's degree and above.....	297,197	48,649	12,553	7,350	3,930	742	938	300	3,432	877	276,344	39,380
GS- 1 thru GS- 4.....	2,295	4,323	344	687	46	74	3	16	43	96	1,859	3,450
GS- 5 thru GS- 8.....	28,270	16,565	2,100	2,857	634	251	83	54	407	303	25,046	13,100
GS- 9 thru GS-11.....	87,101	17,877	4,405	2,603	1,456	306	418	197	1,060	320	79,762	14,451
GS-12 thru GS-13.....	124,809	7,992	4,179	996	1,418	100	327	23	1,496	133	117,389	6,740
GS-14 thru GS-15.....	50,773	1,805	1,427	198	359	11	102	10	406	25	48,479	1,561
GS-16 thru GS-18.....	3,949	87	98	9	17	0	5	0	20	0	3,809	78
Percent distribution by minority group and by sex.....	85.9	14.1	3.6	2.1	1.1	0.2	0.3	0.1	1.0	0.3	79.8	11.4
GS- 1 thru GS- 4.....	34.7	65.3	5.2	10.4	0.7	1.1	a/	0.2	0.6	1.5	28.1	52.1
GS- 5 thru GS- 8.....	63.1	36.9	4.7	6.4	1.4	0.6	0.2	0.6	0.9	0.7	55.9	29.2
GS- 9 thru GS-11.....	83.0	17.0	4.2	2.5	1.4	0.3	0.4	0.2	1.0	0.3	76.0	13.8
GS-12 thru GS-13.....	94.0	6.0	3.1	0.7	1.1	0.1	0.2	a/	1.1	0.1	88.4	5.1
GS-14 thru GS-15.....	96.6	3.4	2.7	0.4	0.7	a/	0.2	a/	0.8	a/	92.2	3.0
GS-16 thru GS-18.....	97.8	2.2	2.4	0.2	0.4		0.1		0.5		94.4	1.9
Percent distribution by GS grade group..	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GS- 1 thru GS- 4.....	0.8	8.9	2.7	9.3	1.2	10.0	0.3	5.3	1.3	10.9	0.7	8.8
GS- 5 thru GS- 8.....	9.5	34.1	16.7	38.9	16.1	33.8	8.8	18.0	11.9	34.5	9.1	33.3
GS- 9 thru GS-11.....	29.3	36.7	35.1	35.4	37.0	41.2	44.6	65.7	30.9	36.5	28.9	36.7
GS-12 thru GS-13.....	42.0	16.4	33.3	13.6	36.1	13.5	34.9	7.7	43.6	15.2	42.5	17.1
GS-14 thru GS-15.....	17.1	3.7	11.4	2.7	9.1	1.5	10.9	3.3	11.8	2.9	17.5	4.0
GS-16 thru GS-18.....	1.3	0.2	0.8	0.1	0.4	0	0.5	0	0.6	0	1.4	0.2

TABLE 5 -- YEAR OF ATTAINMENT OF HIGHEST DEGREE, BY GS GRADE, BY MINORITY GROUP, AND BY SEX
 General Schedule Employees with Bachelor's Degree and Above
 August 1974

Minority Group and Year of Attainment of Degree	Total Men	Percent Distribution of Degree-Holding Men a/							Total Women	Percent Distribution of Degree-Holding Women a/						
		Total	GS-1 thru GS-4	GS-5 thru GS-8	GS-9 thru GS-11	GS-12 thru GS-13	GS-14 thru GS-15	GS-16 thru GS-18		Total	GS-1 thru GS-4	GS-5 thru GS-8	GS-9 thru GS-11	GS-12 thru GS-13	GS-14 thru GS-15	GS-16 thru GS-18
All GS Degree-holding employees:																
1949 and earlier....	49,913	100.0	0.7	4.2	21.0	43.5	27.5	3.1	10,182	100.0	10.3	32.8	32.6	18.0	5.9	0.4
1950 thru 1959.....	82,327	100.0	0.4	2.4	21.1	49.1	25.2	1.9	6,336	100.0	6.9	22.6	38.3	23.4	8.3	0.4
1960 thru 1969.....	105,207	100.0	0.3	4.9	33.7	47.8	12.6	0.6	15,042	100.0	4.7	20.2	46.4	24.8	3.8	0.1
1970 thru 1974.....	58,398	100.0	2.1	32.5	40.4	20.6	4.4	0.1	16,934	100.0	12.5	51.4	30.2	5.4	0.5	b/
Black degree-holders:																
1949 and earlier....	1,630	100.0	4.5	16.1	31.6	32.4	13.9	1.5	1,505	100.0	11.4	43.9	29.4	12.4	2.7	0.2
1950 thru 1959.....	3,993	100.0	2.8	10.0	30.8	39.2	16.3	1.0	1,205	100.0	7.1	32.0	36.1	18.0	6.4	0.3
1960 thru 1969.....	3,902	100.0	1.3	8.8	37.9	40.3	11.0	0.7	2,053	100.0	5.3	24.5	44.3	22.6	3.3	b/
1970 thru 1974.....	2,965	100.0	3.6	36.5	39.3	16.9	3.6	0.2	2,555	100.0	12.3	50.7	31.5	4.9	0.5	b/
Spanish-surnamed degree holders:																
1949 and earlier....	413	100.0	1.2	12.3	28.1	45.0	12.6	0.7	91	100.0	22.0	24.2	36.3	15.4	2.2	0
1950 thru 1959.....	938	100.0	1.4	4.4	29.2	47.4	16.6	1.0	100	100.0	14.0	28.0	40.0	15.0	3.0	0
1960 thru 1969.....	1,405	100.0	0.4	6.3	39.9	44.3	8.7	0.3	220	100.0	4.1	17.7	50.9	25.0	2.3	0
1970 thru 1974.....	1,152	100.0	1.8	39.2	43.0	13.5	2.3	0.1	324	100.0	9.3	49.4	36.7	4.6	0	0
American Indian degree-holders:																
1949 and earlier....	104	100.0	0	5.8	42.3	33.7	17.7	1.0	41	100.0	14.6	22.0	53.7	9.8	0	0
1950 thru 1959.....	278	100.0	0	3.6	33.8	40.6	20.5	1.4	50	100.0	2.0	12.0	72.0	4.0	10.0	0
1960 thru 1969.....	360	100.0	0.3	3.1	49.2	41.7	5.8	0	123	100.0	1.6	13.0	74.0	8.1	3.3	0
1970 thru 1974.....	193	100.0	1.0	29.0	52.9	14.5	2.6	0	85	100.0	8.2	27.1	55.3	8.2	1.2	0
Oriental degree-holders:																
1949 and earlier....	461	100.0	1.7	5.4	29.5	48.6	14.1	0.7	135	100.0	8.1	34.1	35.6	17.8	4.4	0
1950 thru 1959.....	1,011	100.0	1.1	3.8	24.1	52.3	17.3	1.4	194	100.0	12.9	24.2	34.5	22.2	6.2	0
1960 thru 1969.....	1,211	100.0	0.4	6.2	31.3	49.9	12.0	0.2	264	100.0	5.7	27.3	44.3	20.5	2.3	0
1970 thru 1974.....	737	100.0	2.6	36.5	40.2	18.3	2.4	0	279	100.0	15.8	49.1	30.5	4.3	0.4	0
Non-Minority degree holders:																
1949 and earlier.....	47,305	100.0	0.6	3.7	20.5	43.8	28.3	3.2	8,410	100.0	10.0	30.9	33.0	19.0	6.6	0.5
1950 thru 1959.....	76,107	100.0	0.3	1.9	20.4	49.6	25.9	1.9	4,787	100.0	6.5	20.2	38.6	25.2	9.0	0.5
1960 thru 1969.....	98,329	100.0	0.3	4.8	33.4	48.1	12.8	0.6	12,382	100.0	4.6	19.5	46.4	25.5	4.0	0.1
1970 thru 1974.....	53,351	100.0	2.0	32.0	40.3	21.0	4.5	0.1	13,691	100.0	12.5	51.8	29.6	5.5	0.5	b/

a/ For percent distribution of degree-holders by GS grade within minority-sex combination, see Table 4.

b/ Less than 0.05 percent.

TABLE 6 -- EMPLOYEES WITH BACHELOR'S DEGREE AND ABOVE AND EMPLOYEES OF ALL EDUCATION LEVELS, BY OCCUPATIONAL CATEGORY, BY MINORITY GROUP, AND BY SEX
Full-Time Permanent General Schedule & Similar Employees.
August 1974

Education Level and Occupational Category	GS Employees of Specified Education		Minority Employees								Employees Other Than Minority	
	Men	Women	Black		Spanish-Surnamed		American Indian		Oriental		Men	Women
			Men	Women	Men	Women	Men	Women	Men	Women		
Bachelor's Degree and Above												
All General Schedule occupations.....	292,740	48,215	12,403	7,297	3,868	731	920	300	3,359	870	272,190	39,017
Professional occupations.....	169,343	16,384	5,442	1,946	1,911	226	487	196	2,336	388	159,167	13,628
Administrative occupations.....	101,274	16,065	4,920	2,495	1,593	309	350	62	698	196	93,713	13,003
Technical occupations.....	16,766	6,961	1,283	1,253	254	71	66	10	228	106	14,935	5,521
Clerical occupations.....	3,707	8,434	435	1,511	74	118	9	28	66	168	3,123	6,609
Other General Schedule occupations....	1,650	371	323	92	36	7	8	4	31	12	1,252	256
Percent distribution by occupational category.....												
All General Schedule occupations.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Professional occupations.....	57.8	34.0	43.9	26.7	49.4	30.9	52.9	65.3	69.5	44.6	58.5	34.9
Administrative occupations.....	34.6	33.3	39.7	34.2	41.2	42.3	38.0	20.7	20.8	22.5	34.4	33.3
Technical occupations.....	5.7	14.4	10.3	17.2	6.6	9.7	7.2	3.3	6.8	12.2	5.5	14.2
Clerical occupations.....	1.3	17.5	3.5	20.7	1.9	16.1	1.0	9.3	2.0	19.3	1.1	16.9
Other General Schedule occupations....	0.6	0.8	2.6	1.3	0.9	1.0	0.9	1.3	1.0	1.4	0.5	0.7
All Education Levels												
All General Schedule occupations.....	614,425	423,115	46,999	85,135	14,811	10,541	3,514	5,331	5,299	3,338	543,802	318,770
Professional occupations.....	177,003	20,391	5,675	2,332	1,992	281	541	394	2,427	428	166,368	16,956
Administrative occupations.....	212,869	45,478	9,618	6,361	3,873	849	1,232	1,101	1,361	443	196,785	36,724
Technical occupations.....	125,036	60,420	8,981	11,912	3,812	1,114	1,040	535	851	514	110,352	46,345
Clerical occupations.....	49,584	272,237	11,062	53,483	2,815	7,861	345	2,253	459	1,875	34,903	206,765
Other General Schedule occupations....	49,933	24,589	11,663	11,047	2,319	436	356	1,048	201	78	35,394	11,980
Percent distribution by occupational category.....												
All General Schedule occupations.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Professional occupations.....	28.8	4.8	12.1	2.7	13.4	2.7	15.4	7.4	45.8	12.8	30.6	5.3
Administrative occupations.....	34.6	10.7	20.5	7.5	26.1	8.1	35.1	20.7	25.7	13.3	36.2	11.5
Technical occupations.....	20.4	14.3	19.1	14.0	25.7	10.6	29.6	10.0	16.1	15.4	20.3	14.5
Clerical occupations.....	8.1	64.3	23.5	62.8	19.0	74.6	9.8	42.3	8.7	56.2	6.4	64.9
Other General Schedule occupations....	8.1	5.8	24.8	13.0	15.7	4.1	10.1	19.7	3.8	2.3	6.5	3.8
Degree-Holders in Each Category as Percent of All Employees in that Category												
All General Schedule occupations.....	47.6	11.4	26.4	8.6	26.1	6.9	26.2	5.6	63.4	26.1	50.1	12.2
Professional occupations.....	95.7	80.3	95.9	83.4	95.9	80.4	90.0	49.7	96.3	90.7	95.7	80.4
Administrative occupations.....	47.6	35.3	51.2	39.2	41.1	36.4	28.4	5.6	51.3	44.2	47.6	35.4
Technical occupations.....	13.4	11.5	14.3	10.5	6.7	6.4	6.3	1.9	26.8	20.6	13.5	11.9
Clerical occupations.....	7.5	3.1	3.9	2.8	2.6	1.5	2.6	1.2	14.4	9.0	8.9	3.2
Other General Schedule occupations....	3.3	1.5	2.8	0.8	1.6	1.6	2.2	0.4	15.4	15.4	3.5	2.1

TABLE 7 -- TEN LEADING OCCUPATIONS OF EMPLOYEES HAVING BACHELOR'S DEGREE AND ABOVE, BY MINORITY GROUP AND BY SEX
 Full-Time Permanent Employees
 August 1974

Rank and Occupation	Degree-Holding Employees						Employees Other Than Minority	
	Total		Men		Women		Men	Women
	Number	Percent	Number	Percent	Number	Percent		
Total, all occupations.....	370,964	100.0	313,381	100.0	57,583	100.0	291,247	47,102
Subtotal, 10 leading occupations of degree-holding employees.....	122,875	33.1	111,903	35.7	10,972	19.1	105,165	8,739
1. General Clerical and Administrative...	16,637	4.5	12,869	4.1	3,768	6.5	11,522	2,954
2. Electronics Engineering.....	14,931	4.0	14,838	4.7	93	0.2	14,068	84
3. Criminal Investigating.....	14,756	4.0	14,653	4.7	103	0.2	14,196	95
4. Accounting.....	14,502	3.9	13,628	4.3	874	1.5	12,608	635
5. General Engineering.....	12,179	3.3	12,134	3.9	45	0.1	11,654	40
6. Civil Engineering.....	12,008	3.2	11,953	3.8	55	0.1	11,379	47
7. Internal Revenue Agent.....	11,385	3.1	10,738	3.4	647	1.1	10,039	516
8. General Attorney.....	9,486	2.6	8,693	2.8	793	1.4	8,333	700
9. Social Insurance Administration.....	8,809	2.4	5,836	1.9	2,973	5.2	5,279	2,265
10. Computer Specialist.....	8,182	2.2	6,561	2.1	1,621	2.8	6,087	1,403
Minority Employees								
	Black		Spanish-Surnamed		American Indian		Oriental	
	Men	Women	Men	Women	Men	Women	Men	Women
Total, all occupations.....	13,223	8,175	4,287	891	952	308	3,762	1,107
Subtotal, 10 leading occupations of degree-holding employees.....	3,657	1,800	1,595	215	266	35	1,220	183
1. General Clerical and Administrative...	942	696	222	59	97	16	86	43
2. Electronics Engineering.....	345	7	163	0	13	1	249	1
3. Criminal Investigating.....	226	6	165	2	25	0	41	0
4. Accounting.....	541	192	249	13	21	1	209	33
5. General Engineering.....	191	3	118	0	20	0	151	2
6. Civil Engineering.....	178	6	174	1	39	0	183	1
7. Internal Revenue Agent.....	346	93	182	13	18	2	153	23
8. General Attorney.....	262	83	55	6	9	1	34	3
9. Social Insurance Administration.....	293	542	204	113	17	12	43	41
10. Computer Specialist.....	333	172	63	8	7	2	71	36

TABLE 10 -- TEN LEADING OCCUPATIONS OF AMERICAN INDIAN MEN AND AMERICAN INDIAN WOMEN WITH BACHELOR'S DEGREE AND ABOVE
Full-Time Permanent Employees
August 1974

Rank and Occupation	Degree-Holding Employees in the Specified Occupations				American Indian Men in This Occupation as a Percent of:	
	American Indian Men		All Employees		Total	Total Men
	Number	Pct. Distrib.	Total	Men	(1) ÷ (3)	(1) ÷ (4)
	(1)	(2)	(3)	(4)	(5)	(6)
Total, all occupations	952	100.0	370,964	313,381	0.3	0.3
Subtotal, 10 leading occupations of degree-holding American Indian men.....	465	48.8	96,624	87,884	0.5	0.5
1. Education and Vocational Training.....	181	19.0	7,965	4,858	2.3	3.7
2. General Clerical and Administrative.....	97	10.2	16,637	12,869	0.6	0.8
3. Civil Engineering.....	39	4.1	12,008	11,953	0.3	0.3
4. Criminal Investigating.....	25	2.6	14,756	14,653	0.2	0.2
5. Program Management.....	23	2.4	1,749	1,708	1.3	1.3
6. General Education and Training.....	22	2.3	369	274	6.0	8.0
7. Accounting.....	21	2.2	14,502	13,628	0.1	0.2
8. General Engineering.....	20	2.1	12,179	12,134	0.2	0.2
9. Forestry.....	19	2.0	5,074	5,069	0.4	0.4
10. Internal Revenue Agent.....	18	1.9	11,385	10,738	0.2	0.2
	Degree-Holding Employees in the Specified Occupations				American Indian Women in This Occupation as a Percent of:	
	American Indian Women		All Employees		Total	Total Women
	Number	Pct. Distrib.	Total	Women	(1) ÷ (3)	(1) ÷ (4)
	(1)	(2)	(3)	(4)	(5)	(6)
Total, all occupations.....	308	100.0	370,964	57,583	0.1	0.5
Subtotal, 10 leading occupations of degree-holding American Indian women.....	234	76.0	48,222	20,151	0.5	1.2
1. Education and Vocational Training.....	160	51.9	7,965	3,107	2.0	5.1
2. General Clerical and Administrative.....	16	5.2	16,637	3,768	0.1	0.4
3. Social Insurance Administration.....	12	3.9	8,809	2,973	0.1	0.4
4. Social Services.....	11	3.6	457	247	2.4	4.5
5. Social Work.....	7	2.3	2,560	1,142	0.3	0.6
7.5 General Education and Training.....	6	1.9	369	95	1.6	6.3
7.5 Nurse.....	6	1.9	6,927	6,563	0.1	0.1
7.5 Secretary.....	6	1.9	1,704	1,683	0.4	0.4
7.5 Training Instruction.....	6	1.9	1,389	170	0.4	3.5
10. Social Science.....	4	1.3	1,411	403	0.3	1.0

TABLE 13 -- CENSUS 1974 CURRENT POPULATION SURVEY: EDUCATIONAL ATTAINMENT OF EMPLOYED WHITE-COLLAR WORKERS, BY MAJOR OCCUPATION GROUP, SEX, RACE, AND SPANISH ORIGIN, UNITED STATES, MARCH 1974

Sex, Occupation, and Race or Spanish Origin a/	All Education Levels		Percent Distribution by Education Level			
	Number (thousands)	Percent	Less than 4 Years High School	4 Years High School	1 to 3 Years College	4 Years College or More
MEN						
Professional, technical & kindred workers:						
White.....	6,725	100.0	3.3	15.1	16.9	64.8
Negro & other races.....	450	100.0	3.8	12.7	17.6	66.0
Spanish origin.....	150	100.0	6.7	22.0	26.0	45.3
Managers & administrators (nonfarm):						
White.....	6,926	100.0	14.0	34.0	21.4	30.6
Negro & other races.....	274	100.0	19.7	32.8	16.4	31.0
Spanish origin.....	163	100.0	33.5	30.5	16.5	19.5
Clerical & kindred workers:						
White.....	2,999	100.0	19.6	45.0	25.9	9.5
Negro & other races (incl. sales wkrs.)...	523	100.0	20.3	44.0	26.4	9.4
Spanish origin.....	157	100.0	34.4	31.8	26.1	7.6
WOMEN						
Professional, technical & kindred workers:						
White.....	4,659	100.0	2.6	17.7	19.5	60.2
Negro & other races (incl. mgrs. & admin.)	598	100.0	7.3	20.4	17.4	54.7
Spanish origin.....	76	100.0	5.3	23.7	19.7	51.3
Managers & administrators (nonfarm):						
White.....	1,572	100.0	17.8	46.4	19.4	16.5
Negro & other races (incl. with pr. & tech.)						
Spanish origin.....	37	100.0	29.7	35.1	16.2	18.9
Clerical & kindred workers:						
White.....	10,550	100.0	12.6	61.1	20.7	5.7
Negro & other races (incl. sales wkrs.)...	1,076	100.0	14.7	51.3	29.2	8.8
Spanish origin.....	357	100.0	22.1	53.2	20.7	3.9

a/ The Definition of 'Spanish origin' used by the Bureau of the Census for the Current Population Survey is "Persons of Spanish origin . . . were determined on the basis of a question that asked for self-identification of the person's origin-descent. . . Persons of Spanish origin were those who indicated that their origin was Mexican, Puerto Rican, Cuban, Central or South American, or some other Spanish origin." (Persons of Spanish Origin in the United States: March 1974, U.S. Bureau of the Census Current Population Report, Series P-20, No. 280, p.8.) Persons of Spanish origin can be of any race. Thus there is an overlap in the count, Spanish origin persons also being counted under their racial designation.

Source: U.S. Dept. of Labor, Bureau of Labor Statistics. Educational Attainment of Workers: March 1974. Special Labor Force Report 175, pp. 68 and A-19. (Based on data from U.S. Bureau of Census Current Population Survey.) For Negro and other races the BLS combined some of the occupational categories.

TABLE 14 -- 1970 CENSUS OF POPULATION: EDUCATIONAL ATTAINMENT OF WHITE-COLLAR MEN EMPLOYEES OF THE FEDERAL GOVERNMENT BY SELECTED MAJOR OCCUPATION GROUP, RACE, AND SPANISH ORIGIN, APRIL 1970

Occupation and Race or Spanish Origin a/	All Education Levels		Percent Distribution by Education Level				
	Number	Percent	Elementary School or less	1 to 3 Years High School	4 Years High School	1 to 3 Years College	4 Years College or More
Professional, technical & kindred workers....	507,891	100.0	1.8	4.9	22.7	18.8	51.8
White men.....	470,319	100.0	1.7	4.7	22.6	18.5	52.5
Negro men.....	26,399	100.0	4.2	8.7	23.6	23.9	39.6
Spanish origin men.....	11,149	100.0	6.5	8.5	28.1	21.2	35.7
Managers & administrators (nonfarm).....	228,617	100.0	4.1	9.8	34.4	20.7	31.1
White men.....	214,740	100.0	3.9	9.6	34.8	20.6	31.1
Negro men.....	10,497	100.0	6.8	13.5	27.5	22.9	29.3
Spanish origin men.....	5,165	100.0	11.5	12.7	34.2	19.6	22.0
Clerical & kindred workers.....	699,865	100.0	5.9	17.5	50.2	19.1	7.3
White men.....	582,727	100.0	5.7	17.0	51.3	18.5	7.4
Negro men.....	106,481	100.0	6.6	20.5	44.4	22.0	6.5
Spanish origin men.....	24,259	100.0	8.4	20.9	47.2	20.5	3.1

a/ The definition of 'Spanish origin' used in the 1970 Census of Population was "Persons of Spanish origin are those persons who indicated that their origin was Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish origin." (Subject Report PC(2)-1C Persons of Spanish Origin, p. viii.) Persons of Spanish origin can be of any race. Thus there is an overlap in the count, Spanish persons also being counted under their racial designation.

Source: U.S. Bureau of the Census. 1970 Census of Population. Subject Report PC(2)-7D Government Workers, pp. 46, 47 and 56, 57. The statistics in this report are based on a 20-percent sample adjusted to represent the total population, except statistics on persons of Spanish origin, which are based on a 5-percent sample (Ibid., p. vi).

TABLE 15 -- 1970 CENSUS OF POPULATION: EDUCATIONAL ATTAINMENT OF WHITE-COLLAR WOMEN EMPLOYEES OF THE FEDERAL GOVERNMENT BY SELECTED MAJOR OCCUPATION GROUP, RACE, AND SPANISH ORIGIN, APRIL 1970

Occupation and Race or Spanish Origin a/	All Education Levels		Percent Distribution by Education Level				
	Number	Percent	Elementary School or less	1 to 3 Years High School	4 Years High School	1 to 3 Years College	4 Years College or More
Professional, technical & kindred workers.....	174,522	100.0	2.1	7.3	30.7	24.4	35.5
White women.....	139,929	100.0	1.7	6.1	30.9	24.5	36.9
Negro women.....	29,836	100.0	4.0	12.9	30.5	24.5	28.2
Spanish origin women.....	4,665	100.0	6.6	11.6	34.0	24.2	23.6
Managers & administrators (nonfarm).....	51,411	100.0	4.5	12.3	47.6	20.4	15.2
White women.....	45,413	100.0	4.5	12.6	48.6	19.8	14.5
Negro women.....	5,151	100.0	3.4	11.1	39.1	25.8	20.6
Spanish origin women.....	1,176	100.0	16.7	15.6	41.3	14.6	11.7
Clerical & kindred workers.....	703,048	100.0	2.7	13.1	60.3	19.7	4.3
White women.....	554,844	100.0	2.7	12.2	61.6	19.3	4.3
Negro women.....	134,053	100.0	2.7	17.4	55.0	21.1	3.9
Spanish origin women.....	21,776	100.0	4.7	17.7	58.2	16.6	2.8

a/ The definition of "Spanish origin" used in the 1970 Census of Population was "Persons of Spanish origin are those persons who indicated that their origin was Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish origin." (Subject Report PC(2)-1C Persons of Spanish Origin, p. viii.) Persons of Spanish origin can be of any race. Thus there is an overlap in the count, Spanish persons also being counted under their racial designation.

Source: U.S. Bureau of the Census. 1970 Census of Population. Subject Report PC(2)-7D Government Workers, pp. 47, 48 and 56, 57. The statistics in this report are based on a 20-percent sample adjusted to represent the total population, except statistics on persons of Spanish origin, which are based on a 5-percent sample (Ibid., p. vi).

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