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IMPLICATIONS OF WOMEN'S WORK PATTERNS FOR PROGRAM DEVELOPMENT  
IN VOCATIONAL AND TECHNICAL EDUCATION.

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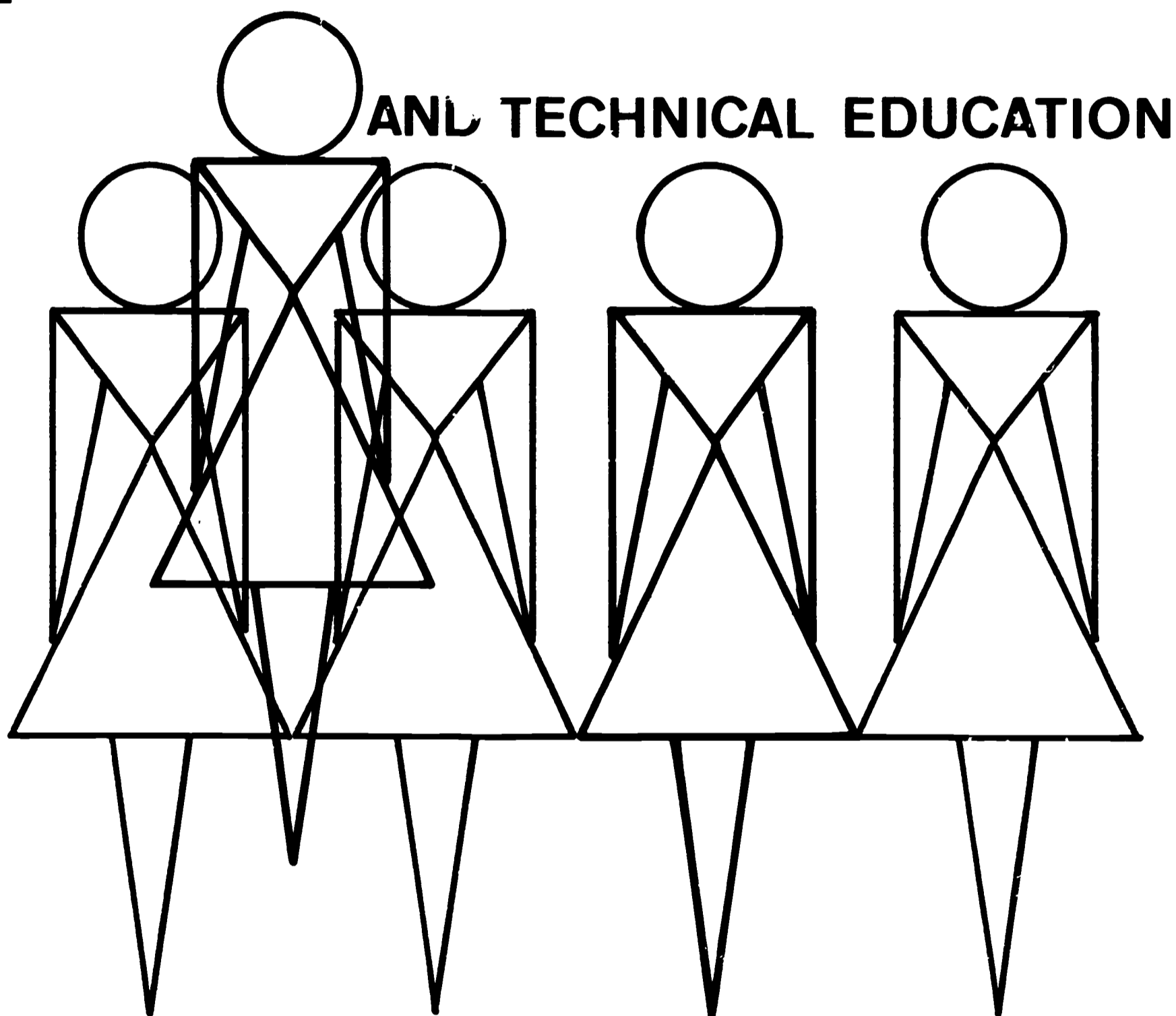
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THE IMPLICATIONS OF WOMEN'S LABOR FORCE PARTICIPATION  
FOR EDUCATORS AND LEADERS PLANNING PROGRAMS IN VOCATIONAL AND  
TECHNICAL EDUCATION WERE DERIVED AT A 2-DAY CONFERENCE BY 30  
PEOPLE REPRESENTING THE VARIOUS SERVICES IN  
VOCATIONAL-TECHNICAL EDUCATION AND RELATED AREAS.  
IMPLICATIONS AND RECOMMENDATIONS FOR VOCATIONAL AND TECHNICAL  
EDUCATION CONCERNED THE NEED FOR BETTER AND FASTER  
COMMUNICATION, THE NEED FOR RESEARCH UPON WHICH PREDICTIONS  
CAN BE BASED, AND THE NEED FOR RESOURCES SUCH AS GUIDANCE  
WORKERS, SPECIALISTS, CURRICULUM GUIDES, AND PREPARED  
EDUCATIONAL MEDIA MATERIALS. IN BUSINESS AND OFFICE EDUCATION  
AND DISTRIBUTIVE EDUCATION, THE IMPLICATIONS WERE RELATED TO  
(1) CRITERIA FOR PROGRAM DEVELOPMENT TO COORDINATE EFFORTS  
ACROSS VOCATIONAL SERVICE LINES, (2) PREPARATION OF TEACHERS  
ORIENTED TOWARD FLEXIBLE PROGRAMING, SENSITIVITY TO  
INDIVIDUAL STUDENTS, AND A BROAD OUTLOOK OF VOCATIONAL  
EDUCATION, AND (3) RESEARCH ON STANDARDS FOR OCCUPATIONAL  
PERFORMANCE AND EMPLOYABILITY. IMPLICATIONS FOR HEALTH  
OCCUPATIONS CONCERNED CRITERIA FOR PROGRAM DEVELOPMENT,  
STANDARDS OF CERTIFICATION FOR VARIOUS OCCUPATIONAL LEVELS,  
AND RESEARCH IN DEVELOPING PROGRAMS, CURRICULUMS, AND  
INSTRUCTIONAL MATERIALS. IN HOME ECONOMICS, IMPLICATIONS WERE  
RELATED TO DEVELOPING APPROPRIATE MATERIALS, METHODS, SUBJECT  
MATTER, AND SERVICES FOR JUNIOR AND SENIOR HIGH, COLLEGE, AND  
ADULT LEVELS OF EDUCATION. RECRUITING WOMEN FOR TECHNICAL  
EDUCATION PROGRAMS AND STUDYING POSSIBLE NEW TECHNICAL  
OCCUPATIONS, TECHNICAL EDUCATION PROGRAMS, AND JOB  
REQUIREMENTS WERE IMPLIED FOR TRADE AND INDUSTRIAL AND  
TECHNICAL EDUCATION. IMPLICATIONS FOR COUNSELING AND GUIDANCE  
WERE RELATED TO DEVELOPING IN STUDENTS REALISTIC SELF  
CONCEPTS AND A REALISTIC VIEW OF THE WORLD OF WORK.  
DEMOGRAPHIC DATA ARE PRESENTED IN 52 GRAPHS. A BIBLIOGRAPHY  
IS INCLUDED. (FP)

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# IMPLICATIONS OF WOMEN'S WORK PATTERNS FOR VOCATIONAL



# AND TECHNICAL EDUCATION

VT003368

THE CENTER FOR VOCATIONAL AND TECHNICAL EDUCATION  
THE OHIO STATE UNIVERSITY  
980 KINNEAR ROAD  
COLUMBUS, OHIO 43212

Research Series No. 19

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3. To encourage the development of research to improve vocational and technical education in institutions of higher education and other appropriate settings;
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# IMPLICATIONS OF WOMEN'S WORK PATTERNS FOR PROGRAM DEVELOPMENT IN VOCATIONAL AND TECHNICAL EDUCATION

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## **PREFACE**

This publication is the result of a project devoted to the implications of women's work patterns for program planning in vocational and technical education. It was developed because of a belief that for vocational and technical education to better serve the needs of girls and women it was necessary to:

1. Know more about the labor force participation of women, and
2. Consider the implications of this information in planning programs.

Vocational and technical educators should find the assembled data on women and the implications drawn and recommendations made by a group of vocational-technical education leaders helpful in identifying steps to take to better meet the needs of girls and women for vocational and technical education. An annotated bibliography has also been prepared as a part of this project and is available from The Center.

In the spring of 1966 Dr. June Cozine, Head, Home Economics Education, Oklahoma State University; Dr. Marjorie East, Head, Home Economics Education, Pennsylvania State University; and Dr. Patricia Tripple, Professor, Home Economics Education, University of Nevada, participated in a meeting to discuss research and information needed relative to the development of home economics programs for occupational preparation. The initial idea for this project grew out of this meeting. Miss Rose Terlin and other members of the U. S. Department of Labor, Women's Bureau, consulted with the project staff early in the fall of 1966 concerning the development of the project. Dr. Elizabeth Ray, Professor, Home Economics Education, Pennsylvania State University, also served as a consultant to the project staff.

We are indebted to the work conference participants for their thoughtful consideration and enthusiastic participation in identifying implications and making recommendations for action. See Appendix A for the list of those attending the work conference.

Recognition should be given to Dr. Elizabeth Ray, Professor, Home Economics Education, Pennsylvania State University for her critical review and helpful suggestions for refining the manuscript prior to publication.

Acknowledgment is also due Dr. A. J. Miller, Specialist in Technical Education at The Center and Sally Markworth, The Center Editorial Director for their review and assistance in the development of this publication.

Dr. Sylvia L. Lee, Specialist in Home Economics Education at The Center, Kathleen Howell, Louise Vetter, and Patricia Smith, research associates in Home Economics Education at The Center composed the project staff.

Robert E. Taylor  
Director

## INTRODUCTION

In planning and evaluating any vocational and technical education program one needs to obtain as much information as possible about the group to be served. Because of the way in which women's labor force participation differs from that of men, there is a need to consider information relative to women as well as to men in program planning.

The charts presented in this publication are based on national data primarily from the Bureau of Labor Statistics. These data present the national trends. States and local school districts would be wise to seek similar information for their own area. Using a combination of national information and local information will help temper the differences between the two. Local conditions can be taken into account while apparent trends at the national level can also be considered.

Certainly more needs to be known about the individuals within a specific occupational group. Until such information is available, it is hoped the general data presented in this report will provide some of the information needed in planning and evaluating those vocational and technical education programs that serve primarily women. This is not to say men should not be enrolled in these programs but rather that if a program serves primarily women, information about women should be taken into account in planning it. Neither is this to say women should not be enrolled in courses that serve primarily men.

It is hoped the implications identified and the recommendations made will stimulate states and local districts to consider what they are doing now, to identify changes that need to be made, and to implement activities to achieve the needed changes.

The majority of the demographic material is presented in the first chapter because it is believed the recommendations and implications will have more meaning if the reader studies the charts first.

The implications and recommendations were derived by 30 people representing the various services in vocational and technical education and related groups at a two-day work conference. The participants received demographic data and a suggested reading list prior to the work conference. Items that appeared on the reading list are included in the bibliography at the end of this report.

Sylvia L. Lee, Specialist  
Home Economics Education

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IMPLICATIONS OF WOMEN'S WORK PATTERNS  
FOR PROGRAM DEVELOPMENT IN  
VOCATIONAL AND TECHNICAL EDUCATION

# 1

## SETTING THE STAGE

This report focuses on the implications of what we know about women's labor force participation for program planning and evaluation in vocational and technical education. The implications were identified by participants at a work conference assembled for this purpose.

Some might question whether it is appropriate to place special emphasis on women. Those who question may feel women should be entering more occupations and therefore want less emphasis on the fact that certain occupations are, in a sense, identified with the feminine sex. Others who raise questions feel that more men should be entering the fields now identified as the domain of women and therefore are also concerned with any emphasis that would lead to the continued identification of these occupations with women. Both of these arguments may have validity. Still others question whether it is appropriate to encourage women to work outside the home. With 35% of the labor force composed of women and 37% of women 14 years and older in the labor force,<sup>1</sup> the argument of whether women should be prepared for employment does not seem in keeping with the realities of the times.

Vocational and technical education is charged with meeting the needs of individuals, both youth and adult, for preparation to enter or re-enter employment and for upgrading of employment skills. In addition, it is charged with providing programs that are realistic in the light of actual and anticipated opportunities for employment. Kaufman, *et al.*<sup>2</sup> reported that the fundamental weakness of vocational offerings for females was the limited number of options. They found few girls recognized that they were likely to be working sometime during their lives and were not aware of their probable vocational careers.

In contrast to this, it is reported that 9 out of 10 women will work at paid employment sometime during their lives,<sup>3</sup> that single women will work an average of 40 years and that married women who return to work will work on the average approximately 23 years.<sup>4</sup> Yet, programs to help prepare females for their role in the world of work are limited. Girls at the high school level and girls and women at the post-high school level should have access to more vocational and technical education courses that now primarily serve boys and men in addition to being provided with more program opportunities which prepare for employment areas that have high female participation.

There is a need to determine if programs are being provided for adult women, and if so, whether they are organized in ways that make it easy for mature women to participate. What, if any, is vocational and technical education's responsibility to the "in-out-in" employee? Can programs be organized to serve this group? Will these women need up-dating, a chance to refresh their skills or retraining? What of the adult women who are "novice" employees? There are undoubtedly large numbers of women in the 35-55 year age bracket entering the labor force who have never been employed and who have little or no preparation for employment. If ways could be found to provide vocational and technical education programs for this age group and the 25-34 age group that took into account women's home responsibilities, would they be more likely to seek employment which would make better use of their capabilities?

The *1965 Handbook on Women Workers*<sup>5</sup> presents a comprehensive discussion of women and employment. Special Labor Force Reports present more detailed information in many cases. An effort was made to identify the more detailed information which would be helpful and pertinent in discussing program planning in vocational and technical education.

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1 U. S. Department of Labor, Women's Bureau, *1965 Handbook on Women Workers* (Washington, D.C.: Government Printing Office, Bulletin 290, 1966), p. 2.

2 Jacob J. Kaufman, *et al.*, *The Role of the Secondary Schools in the Preparation of Youth for Employment* (University Park, Pennsylvania: Institute for Research on Human Resources, 1967), p. 10-13.

3 U. S. Department of Labor, Women's Bureau, *1965 Handbook*, p. 5.

4 President's Commission of the Status of Women, Report of the Commission, *American Women* (Washington, D.C.: Government Printing Office, 1963), pp. 6-7.

5 U. S. Department of Labor, Women's Bureau, *1965 Handbook*, pp. 1-321.

Participants in the work conference received demographic data and a suggested reading list prior to the work conference. The majority of the demographic material is included at the end of this chapter. Items that appeared on this reading list are included in the bibliography. The implications and recommendations were derived by thirty people representing the various services in vocational and technical education and related groups.

Chapter two presents a summary of the questions raised, implications drawn and recommendations for action and further research proposed by discussion groups organized to include representatives of several service areas. Chapter three presents the same kinds of information from discussion groups organized by service areas. Hopefully, the material presented is an accurate statement of views expressed and any overstatement of a case made in the heat of discussion has been tempered by the passage of time and the editorial pencil of the project staff.

### **Highlights of Information Available to Conference Participants**

A brief presentation of the highlights of the figures will aid the reader in his study of the materials. Over 26 million women are in the labor force in comparison to over 51 million men (Figure 1, page 4). The educational status of women in the labor force and the labor force participation rates of women by educational levels are presented in Figures 2 and 3, pages 5 and 6. There is a direct relationship between the educational attainment of women and their labor force participation. Well over half of the college graduates, but less than one-third of women who have completed grade school only, are in the labor force. (Note however, the slight decrease of participation rate from high school graduates, 45 percent, to those women with 1-3 years of college, 41 percent, Figure 3, page 6.) Breakdowns of this information by age groups are presented in Figures 4 and 5, pages 7 and 8. Information about the relationships between labor force participation and marital status and labor force participation and color is presented in Figures 6 and 7, pages 9 and 10. In 1964, of the approximately 56 million women who were married, 20 million were in the labor force (close to one third). About 10 million mothers with children under 18 years of age were working. A higher rate of labor force participation was shown by non-white women of working age than by white women. A classification of these information categories by age groups is presented in Figures 8 and 9, pages 11 and 12.

Information for the variables of educational level, marital status, and color in relationship to labor force participation is also presented by specific age groups (Figures 10-33, pages 13 - 24) to facilitate discussions among vocational and technical educators where a specific age group is under consideration. For example, discussion of the immediately post-high school group can be facilitated by using Figures 10 and 11, page 13, which pertain only to 18 and 19 year old women.

The relationships between marital status and occupational groups of employed women are indicated in Figures 34, 35 and 36, pages 25, 26, and 27. Median salary incomes of year-round full-time workers in 1964 are presented in Figure 37, page 28. Note the discrepancies - white males have a median salary income of \$6,497, white females a median salary of \$3,859; non-white males have a median salary of \$4,285, non-white females a median salary of \$2,674. Note the steady increase of median income of women by years of school completed as illustrated in Figure 38, page 29. Compare incomes received by number of earners and type of family (male head or female head) by checking Figures 39 and 40, pages 30.

Figure 42, pages 32 and 33, which depicts the life span of women including cyclical changes, shows that 37.7% of the 18 and 19 year old women are in school, 43.3% are in the labor force, and nearly a quarter (23.4%) are married. Of the young women ages 20 through 24, only 11.8% are in school, and 46.5% are working, while 60.7% are married. Note the difference between age groups. The percentages for a given age group do not add up to 100% because some individuals appear in more than one category.

Data published in the *1965 Handbook on Women Workers*<sup>6</sup> shows that in each age group, the percentage of increase in the labor force participation of women exceeds the percentage of total population increase for the specific groups. It is true that the difference is not great between the percentages of increase for total population and work force participation for women between the ages of 18 and 24 (16.6% population increase and 19.7% work force participation increase). But it is understandable in light of the fact that these are the years when young women marry (highest incidence of marriage is at age 18, and the median age for marriage is 20) and bear children (median age of mother at birth of first child is 22, and at birth of second child is 24).

The discrepancy between rates of population increase and rates of labor force participation becomes increasingly greater with the progression of age-group categories. For women between the ages of 35 and 44, there is a total population increase of 36.4% and a work force participation increase of 117.0%. For the 45 to 54 group, the population increase is 49.7% as compared to a labor force participation increase of 207.8%. For women 55 through 64, the labor force participation rate soars to a high of 292.1%, while the population increase stands at 70.2%.

The relative numbers of women students in each service area of vocational education for 1965-66 is indicated on Figure 41, page 31. Over 50% of the people enrolled in vocational courses are women. If home economics enrollment is subtracted about 30% of the people who are enrolled in wage-earning programs are women. (Some of the home economics students are also enrolled in wage earning programs, but figures were not available to calculate the percentage.)

Figure 42, pages 32 and 33 may serve as a convenient reference in viewing the total life span of women's lives. The steady elevation of labor force participation rates as well as fluctuations in marriage rates by age group; is readily observable. The arrival and departure of children may also be seen within the context of the total life cycle.

The information presented as indicative of the changed patterns of women's lives is intended in no way to deny recognition of the changes taking place in the roles of men. More aptly, the purpose to be served by the data is that of focussing more direct attention on changes that are taking place in the employment patterns of women, what these changes mean and how they should be taken into account in planning vocational and technical educational programs for girls and women.

The following definitions will help with the interpretation of the charts:

**Labor Force Participation Rate** – the percent of the specific population referred to which is in the labor force.

**Labor Force** – all civilians classified as employed or unemployed as defined below.

**Employed** – those who were "at work" or "with a job, but not at work" (vacation, illness, etc.) at time of survey.

**Unemployed** – those who did not work at all during the survey week and were looking for work, regardless of whether they were eligible for unemployment insurance benefits.

**Non-white group** includes Negroes, Indians, Japanese and Chinese, among others.

**For education graphs** –

assume 12 years of school = high school graduate;

assume 16 years of school = college graduate.

**For occupation group graphs** –

**Medical and other Health Workers** includes physicians, nurses, medical technicians, etc.

**Professional, Technical, and Kindred workers** includes such positions as accountants, artists, dietitians, librarians, musicians, religious workers, social workers, etc.

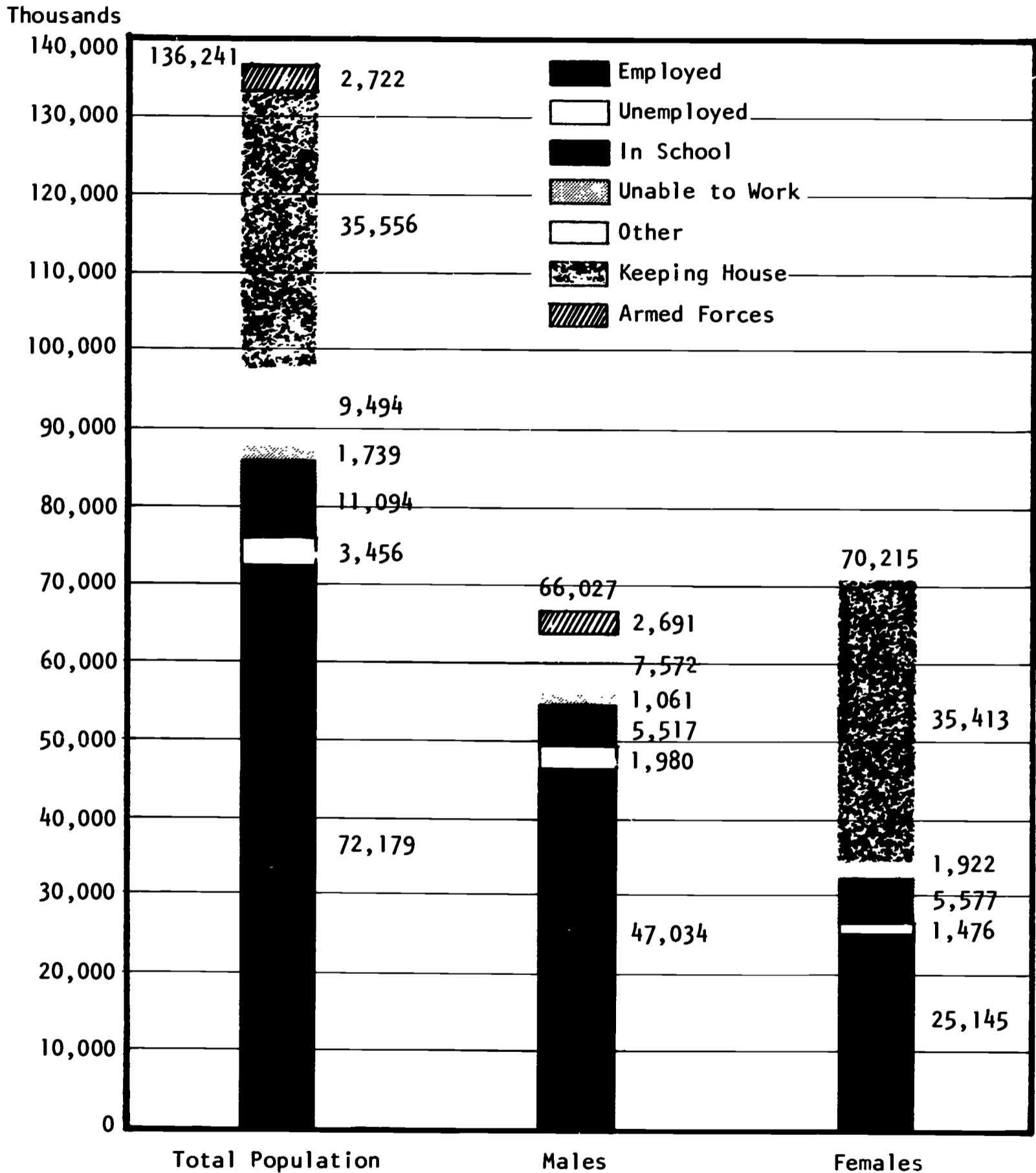
**Service Workers, except Private Household** includes such positions as hospital attendants, cleaning women, hairdressers and cosmetologists, practical nurses, waitresses, etc.

<sup>6</sup> U. S. Department of Labor, Women's Bureau, *1965 Handbook*, p. 14.

Figure 1

Employment Status of the Population, by Sex, 1965

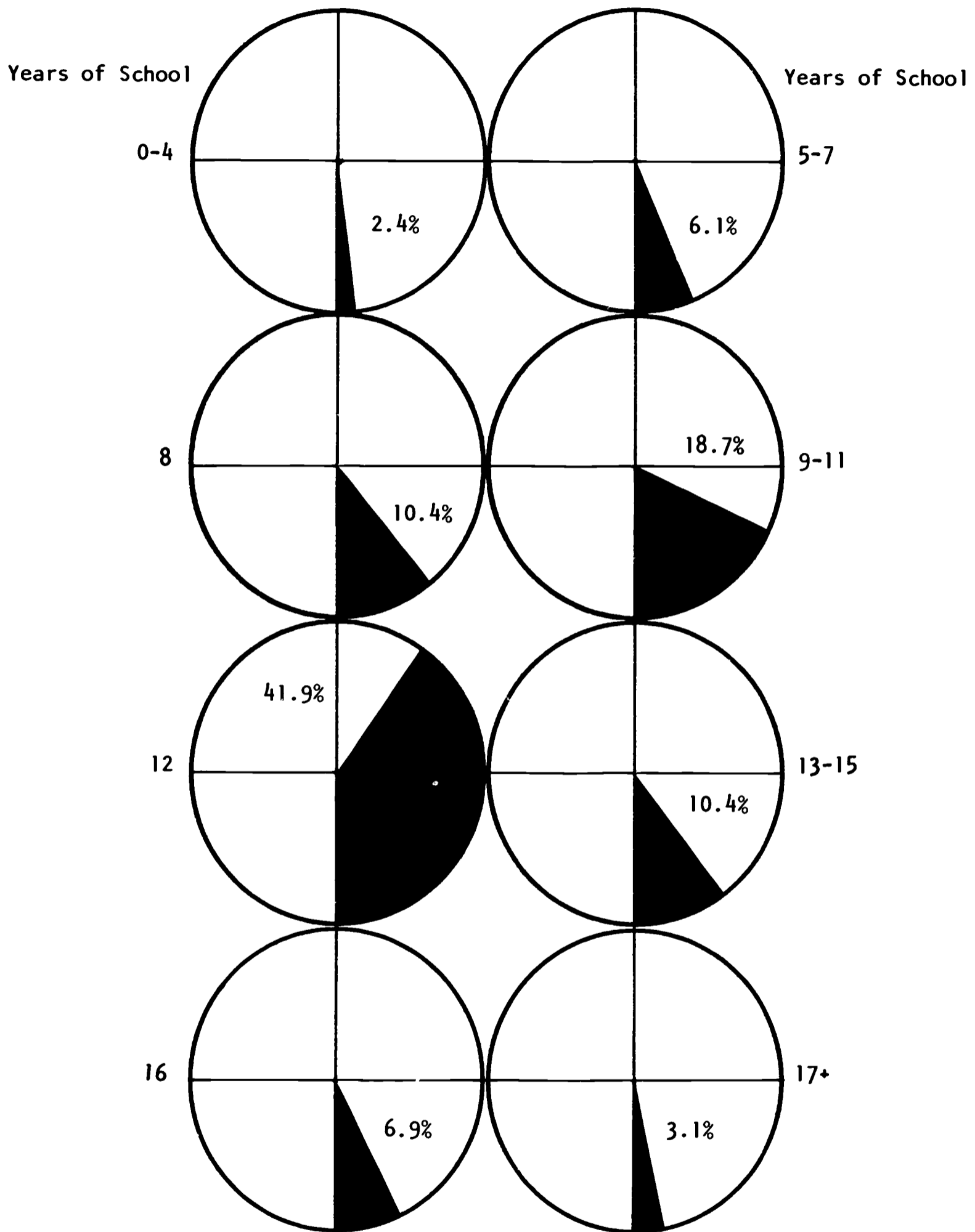
(Thousands of persons 14 years of age and over)



Source: U. S. Department of Labor, Bureau of Labor Statistics. LABOR FORCE AND EMPLOYMENT IN 1965 (Special Labor Force Report No. 69), Table A-1, p. A-7.

Figure 2

Educational Status of Women, 18 Years and Over, In the Labor Force, March 1965

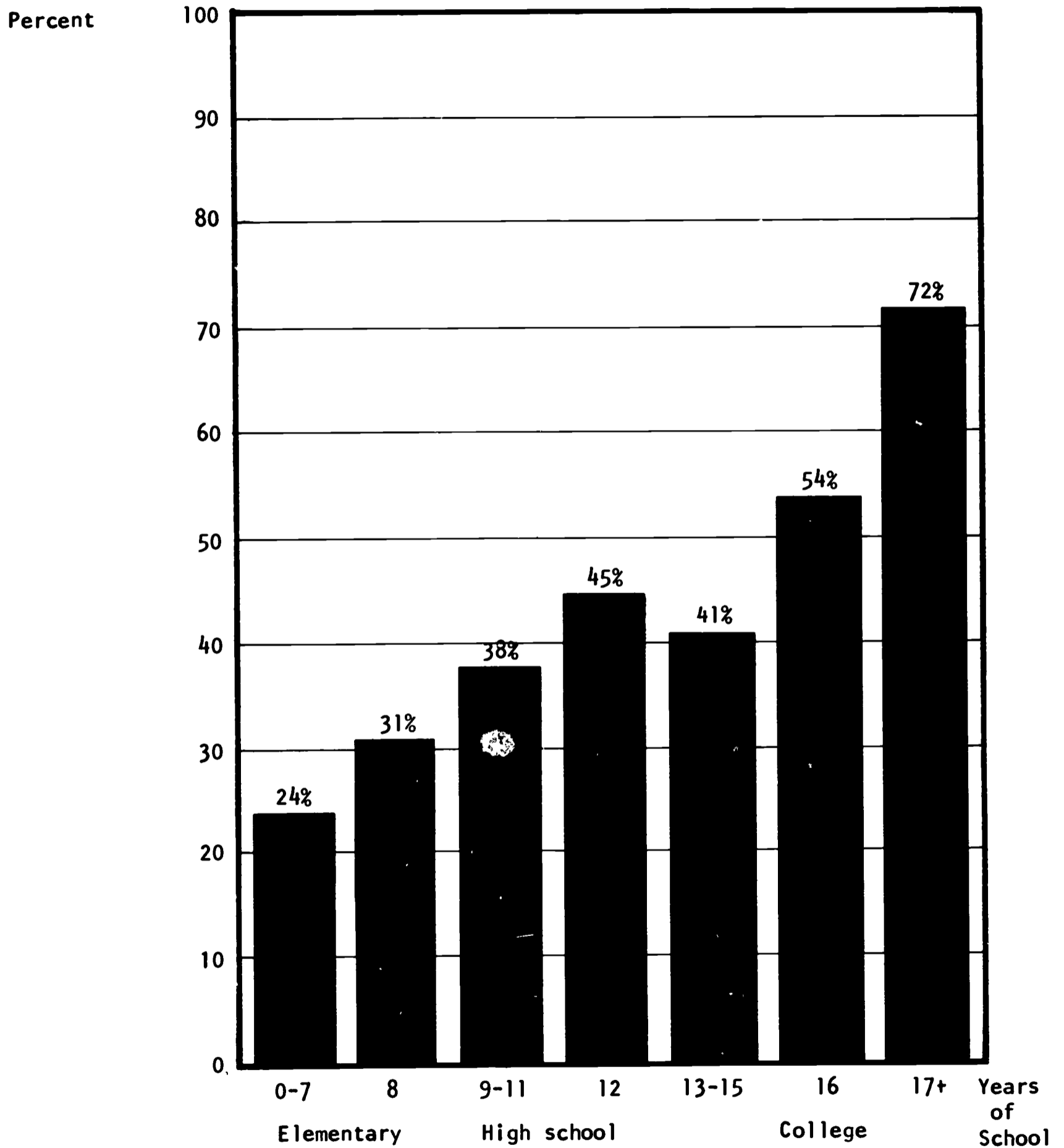


These figures are based on a labor force total of 24,867,000 women and are rounded to the nearest tenth.

Source: U. S. Department of Labor, Bureau of Labor Statistics, EDUCATIONAL ATTAINMENT OF WORKERS, MARCH 1965 (Special Labor Force Report No. 65), Table D, p. A-9.

Figure 3

Labor Force Participation Rates of Women, by Educational Levels, March 1965  
(Women 18 years of age and over)

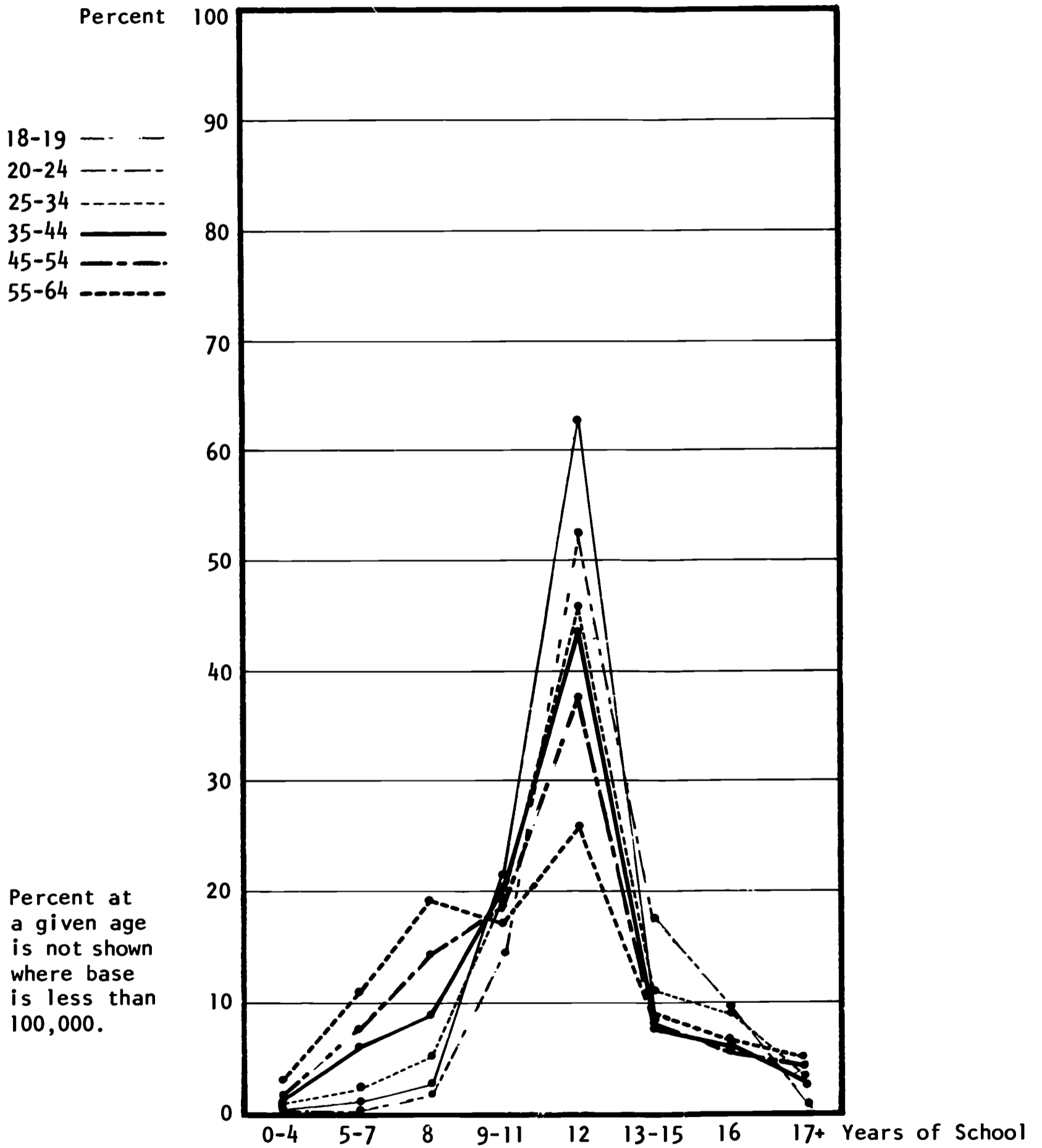


Source: U. S. Department of Labor, Women's Bureau, TRENDS IN EDUCATIONAL ATTAINMENT OF WOMEN, June 1966, p. 9.



Figure 4

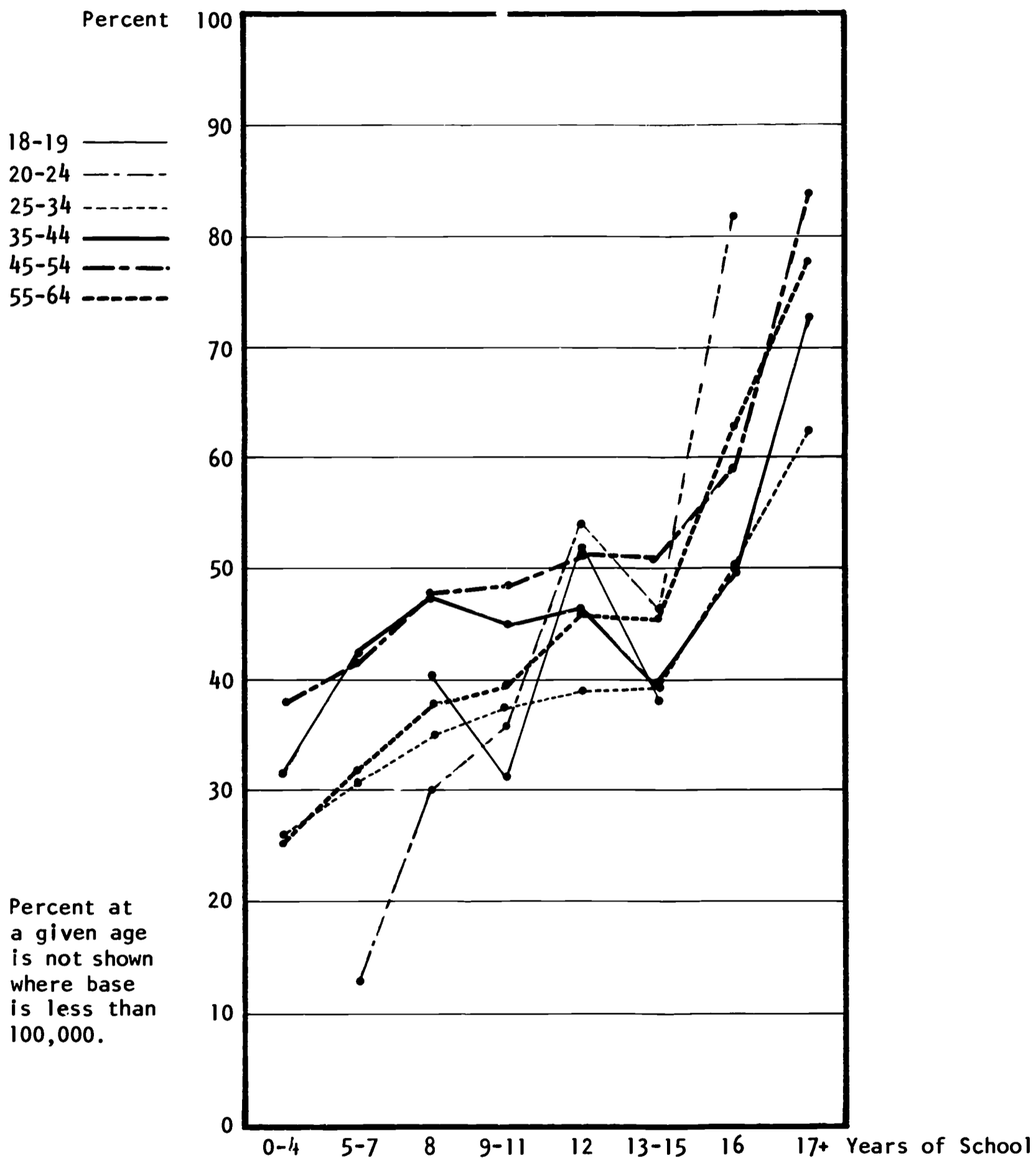
Educational Status of Women, By Age,  
In the Labor Force, March 1965



Source: U. S. Department of Labor, Bureau of Labor Statistics, EDUCATIONAL ATTAINMENT OF WORKERS, MARCH 1965 (Special Labor Force Report No. 65), Table D, p. A-9.

Figure 5

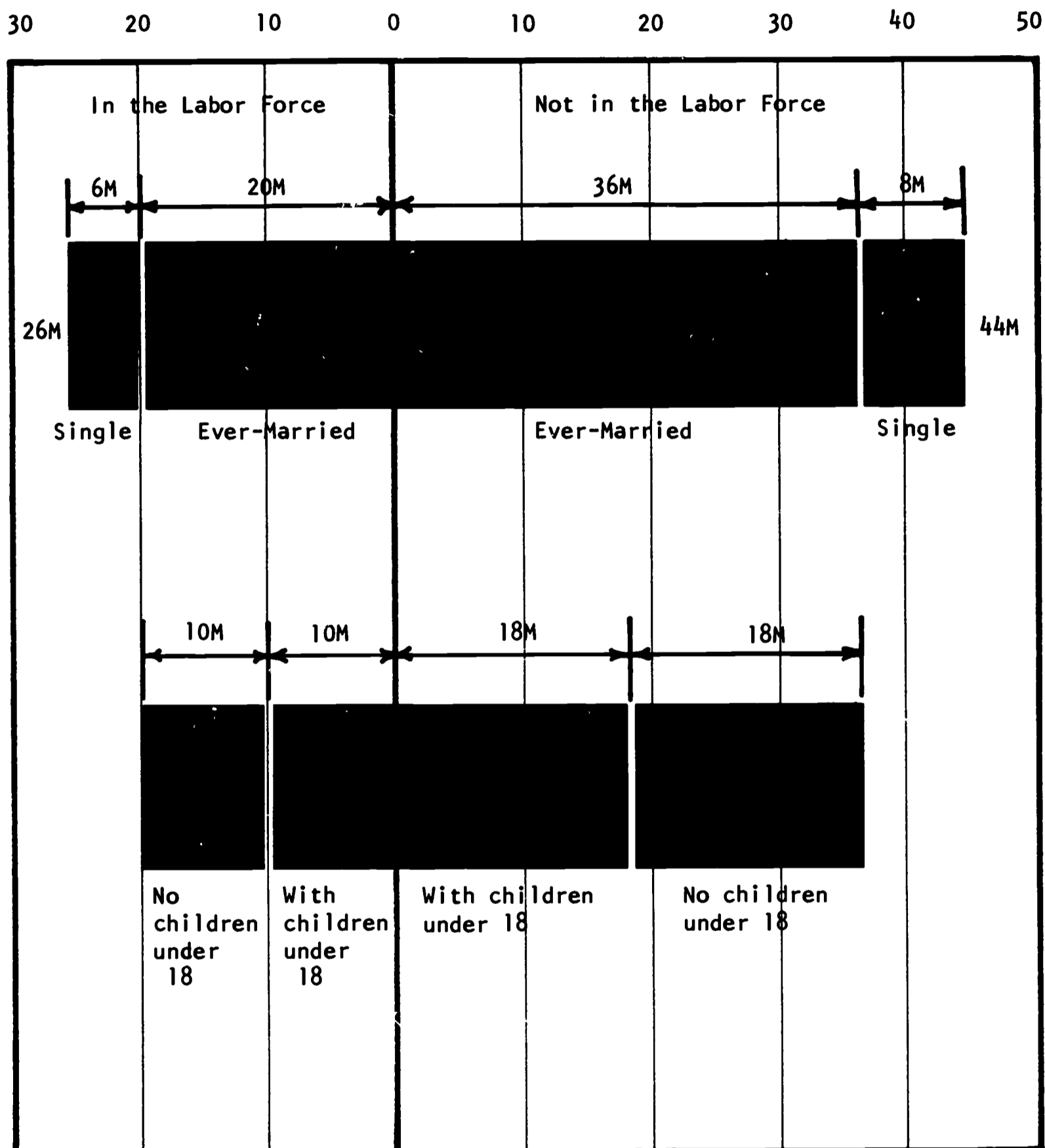
Labor Force Participation of Women By Years of School Completed, March 1965



Source: U. S. Department of Labor, Bureau of Labor Statistics, EDUCATIONAL ATTAINMENT OF WORKERS, MARCH 1965 (Special Labor Force Report No. 69), Table E, p. A-10.

Figure 6

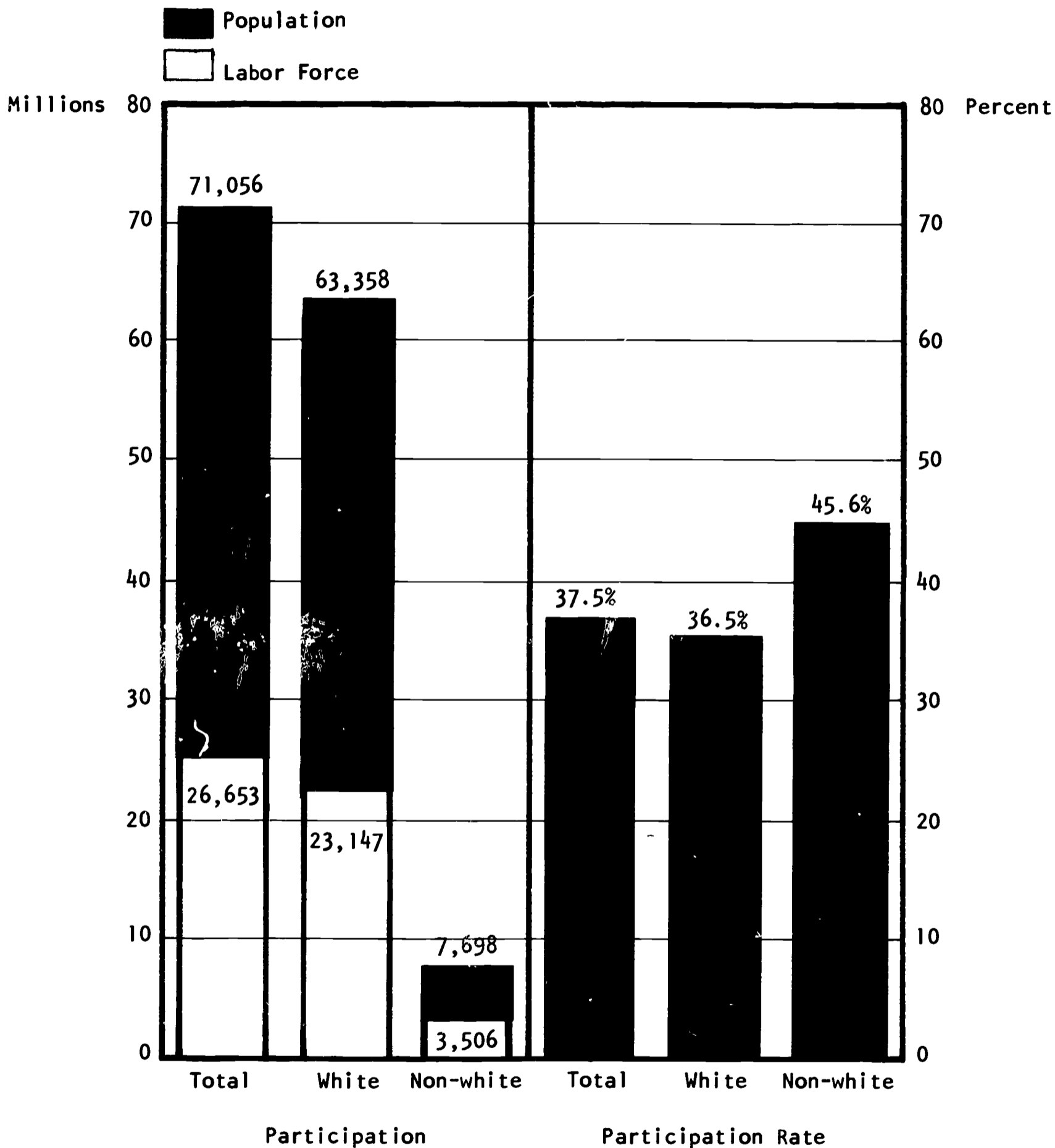
Labor Force Participation of Women by Marital Status and Number of Children  
Millions of Women 14 and Over, March 1964



Source: U. S. Department of Labor, Bureau of Labor Statistics, MARITAL AND FAMILY CHARACTERISTICS OF WORKERS, MARCH 1965 (Special Labor Force Report No. 64), Table F, p. A-13.

Figure 7

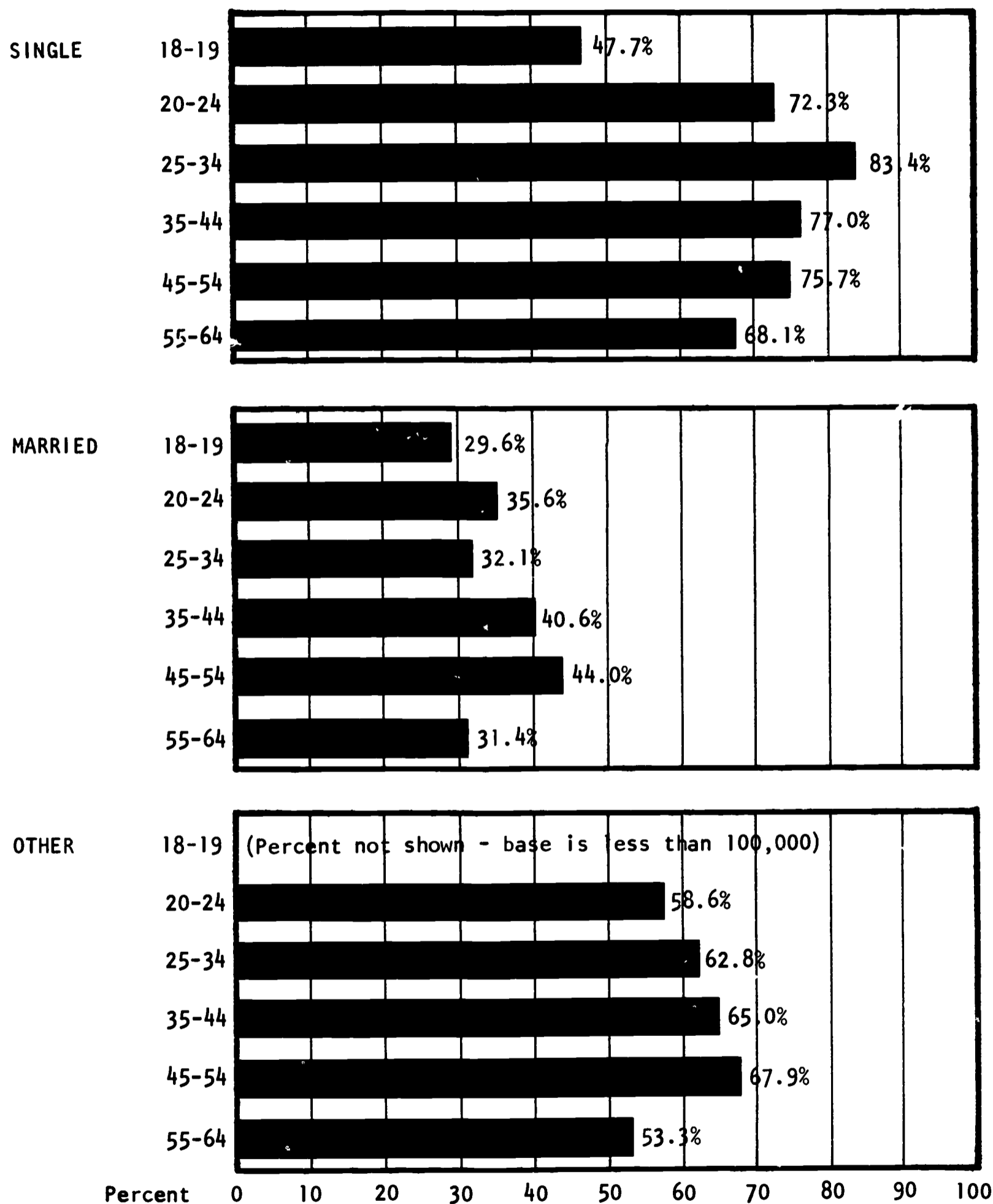
Labor Force Participation and Labor Force Participation Rates of Women 14 Years and Over, By Color, 1965



Source: U. S. Department of Labor, Bureau of Labor Statistics, LABOR FORCE PROJECTIONS BY COLOR, 1970-80 (Special Labor Force Report No. 73), Table 1, p. 966.

Figure 8

Labor Force Participation Rates of Women By Age and Marital Status, March 1965

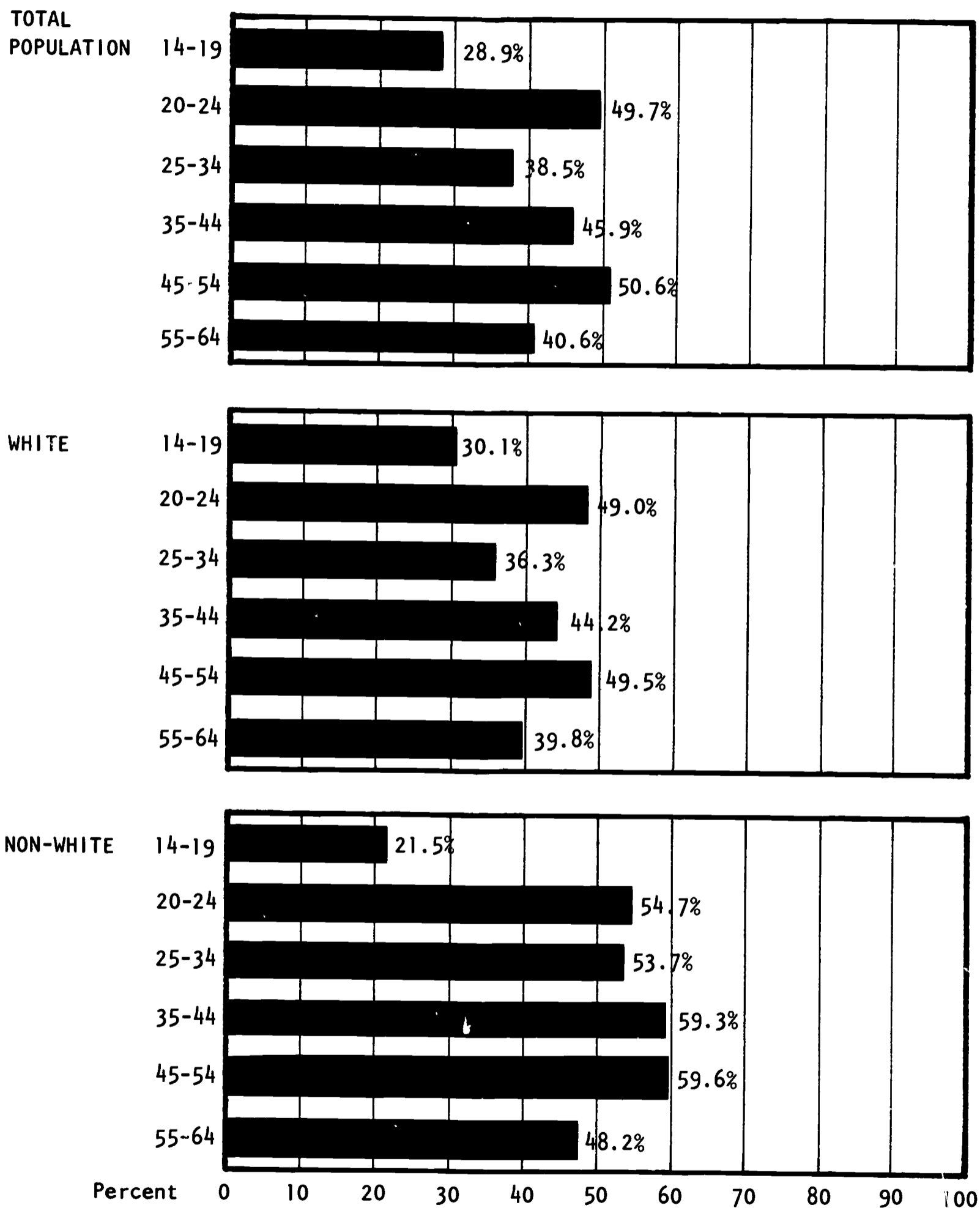


Source: U. S. Department of Labor, Bureau of Labor Statistics, MARITAL AND FAMILY CHARACTERISTICS OF WORKERS, MARCH 1965 (Special Labor Force Report No. 64), Table B, p. A-8.



Figure 9

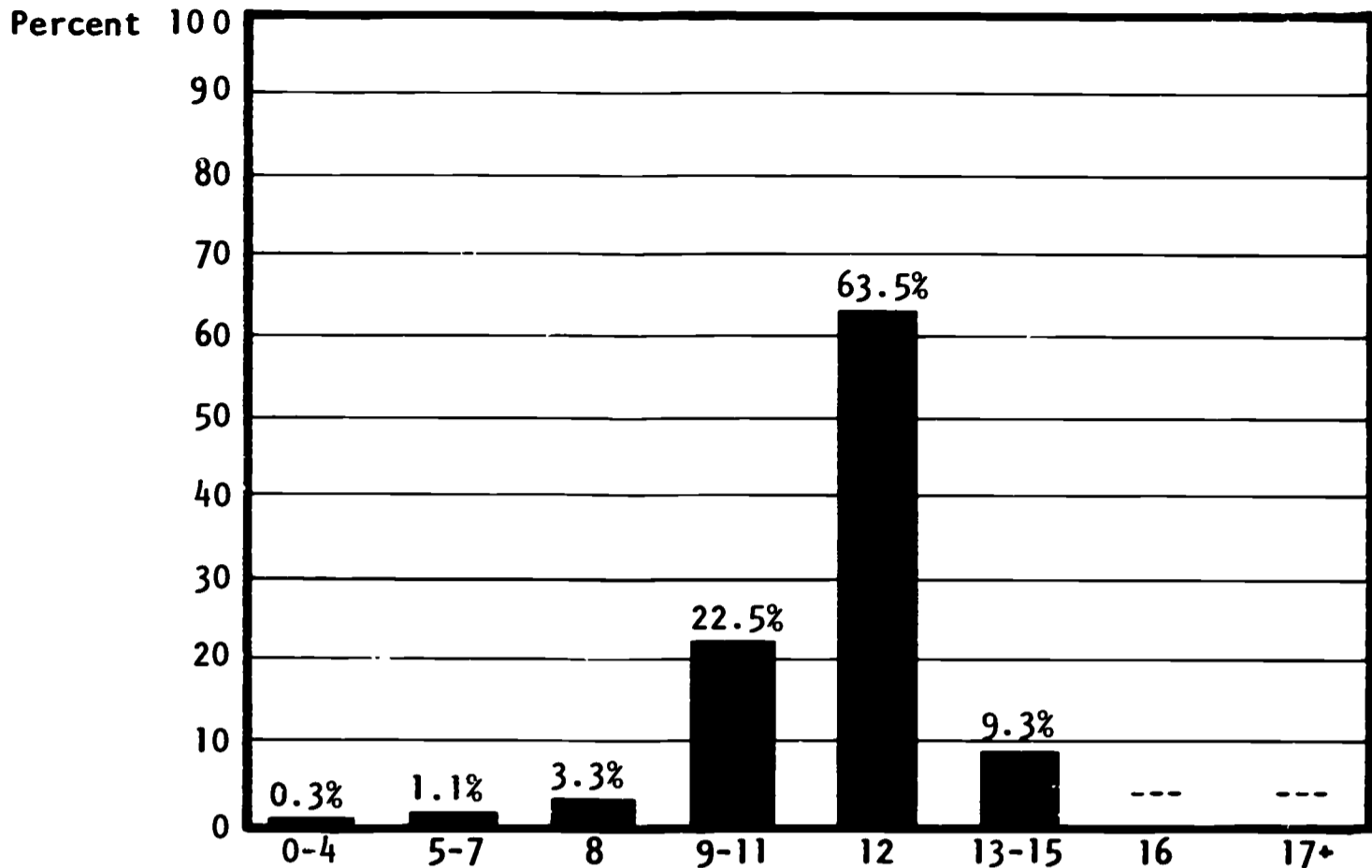
Labor Force Participation Rates of Women By Age and Color, 1965



Source: U. S. Department of Labor, Bureau of Labor Statistics, LABOR FORCE PROJECTIONS BY COLOR, 1970-80 (Special Labor Force Report No. 73), Table 1, p. 966.

Figure 10

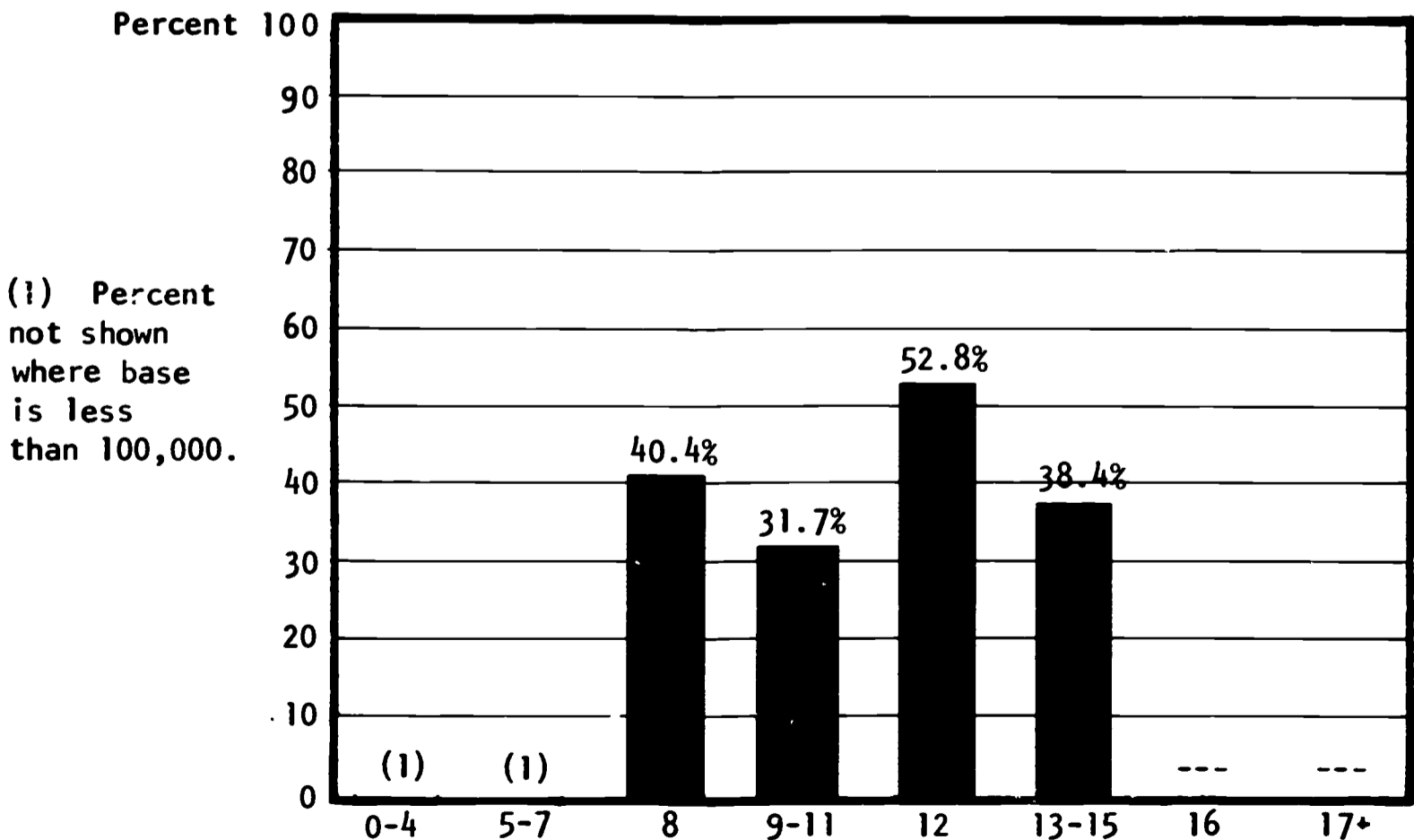
Educational Status of Women, Age 18-19 Years  
In The Labor Force, March 1965



Source: U. S. Department of Labor, Bureau of Labor Statistics, EDUCATIONAL ATTAINMENT OF WORKERS, MARCH 1965 (Special Labor Force Report No. 69), Table D, p. A-9. Years of School

Figure 11

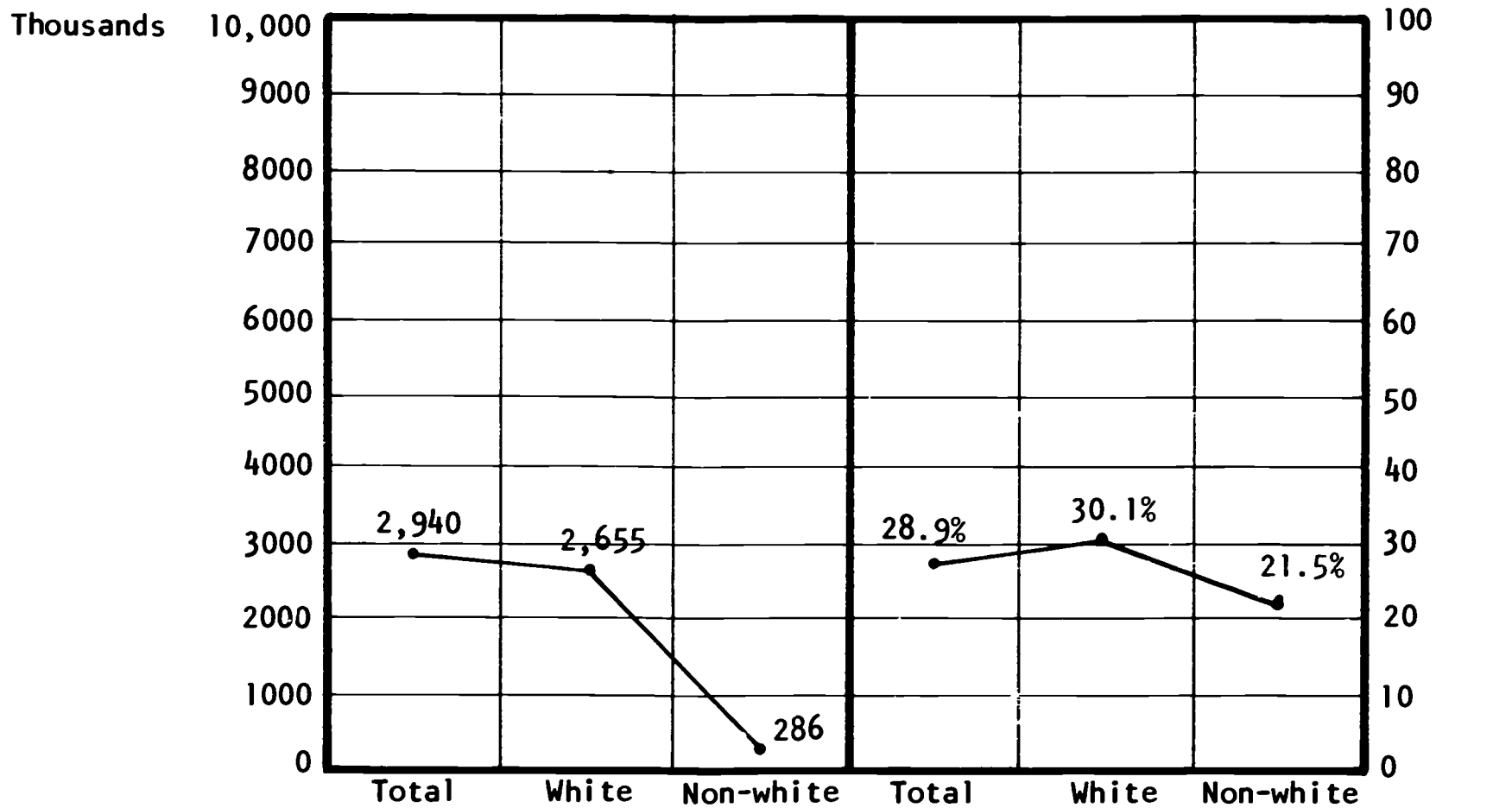
Labor Force Participation of Women, Age 18-19,  
By Years of School Completed, March 1965



Source: U. S. Department of Labor, Bureau of Labor Statistics, EDUCATIONAL ATTAINMENT OF WORKERS, MARCH 1965 (Special Labor Force Report No. 69), Table E, p. A-10. Years of School

Figure 12

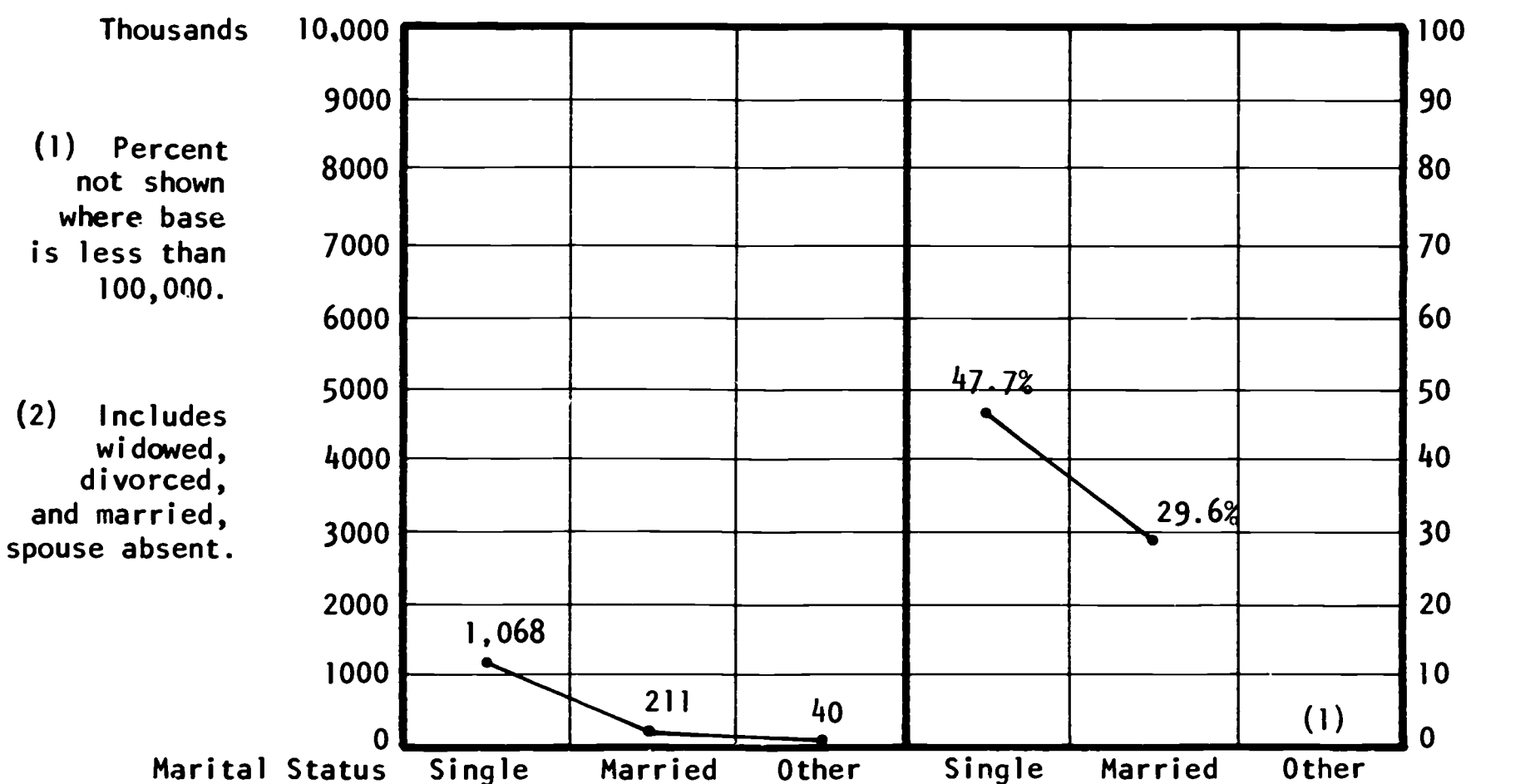
Labor Force Participation and Labor Force Participation Rates of Women, 14-19, By Color, 1965



Source: U. S. Department of Labor, Bureau of Labor Statistics, LABOR FORCE PROJECTIONS BY COLOR, 1970-80 (Special Labor Force Report No. 73), Table 1, p. 966.

Figure 13

Labor Force Participation and Labor Force Participation Rates of Women, 18-19, By Marital Status, March 1965



(1) Percent not shown where base is less than 100,000.

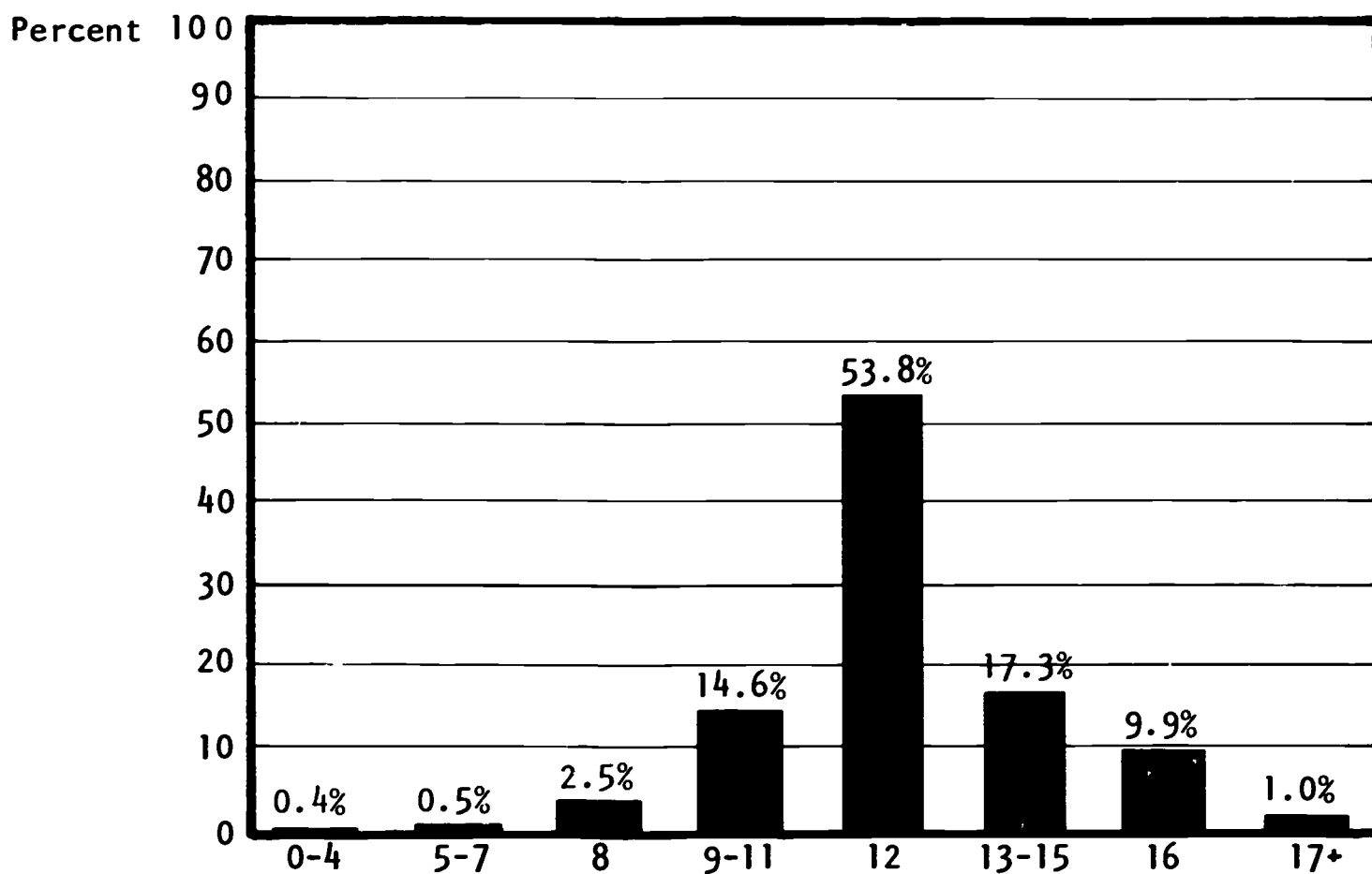
(2) Includes widowed, divorced, and married, spouse absent.

Source: U. S. Department of Labor, Bureau of Labor Statistics, MARITAL AND FAMILY CHARACTERISTICS OF WORKERS, MARCH 1965 (Special Labor Force Report No. 64), Table B, p. A-8.



Figure 14

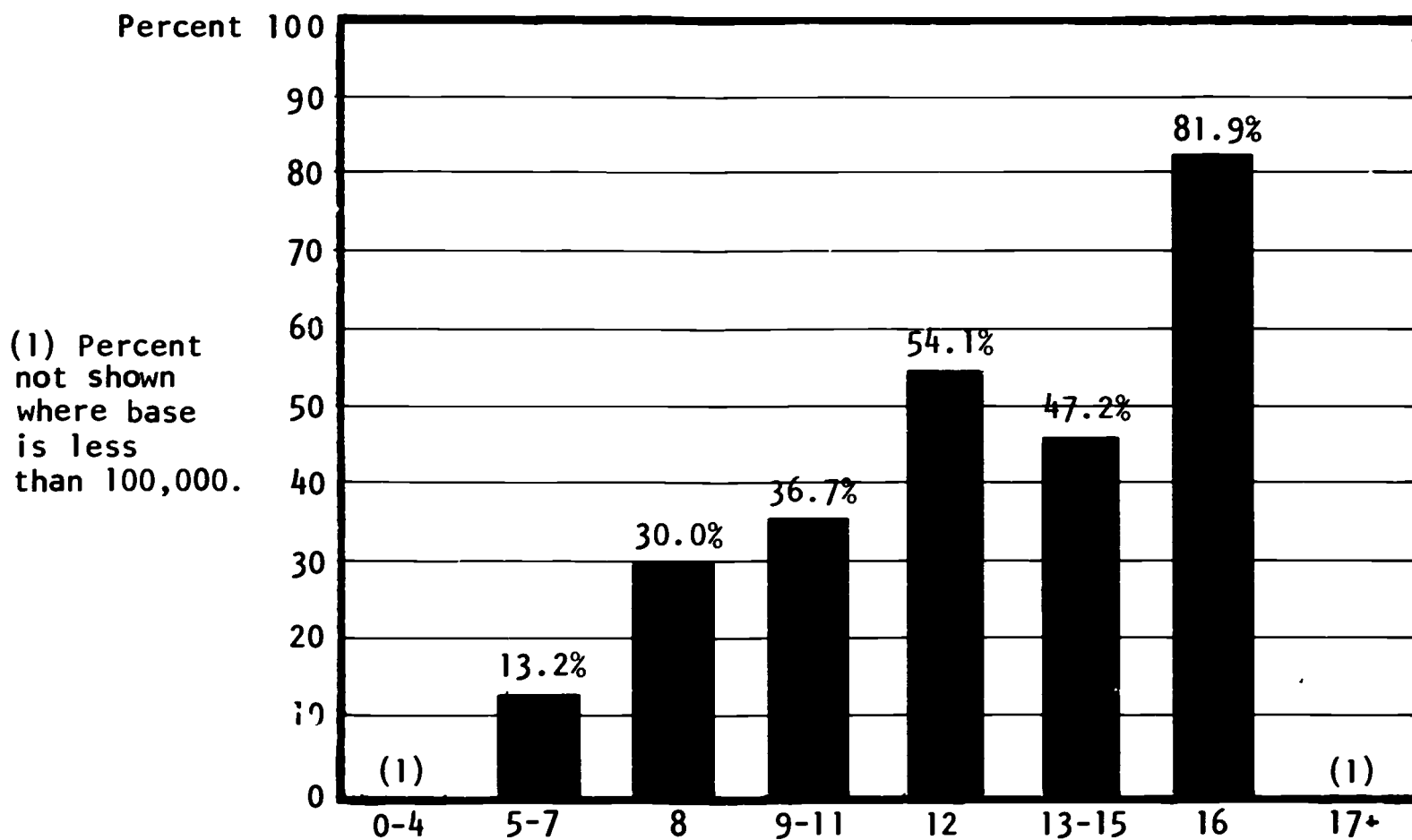
Educational Status of Women, Age 20-24 Years,  
In The Labor Force, March 1965



Source: U. S. Department of Labor, Bureau of Labor Statistics, EDUCATIONAL ATTAINMENT OF WORKERS, MARCH 1965 (Special Labor Force Report No. 69), Table D, p. A-9. Years of School

Figure 15

Labor Force Participation of Women, Age 20-24,  
By Years of School Completed, March 1965

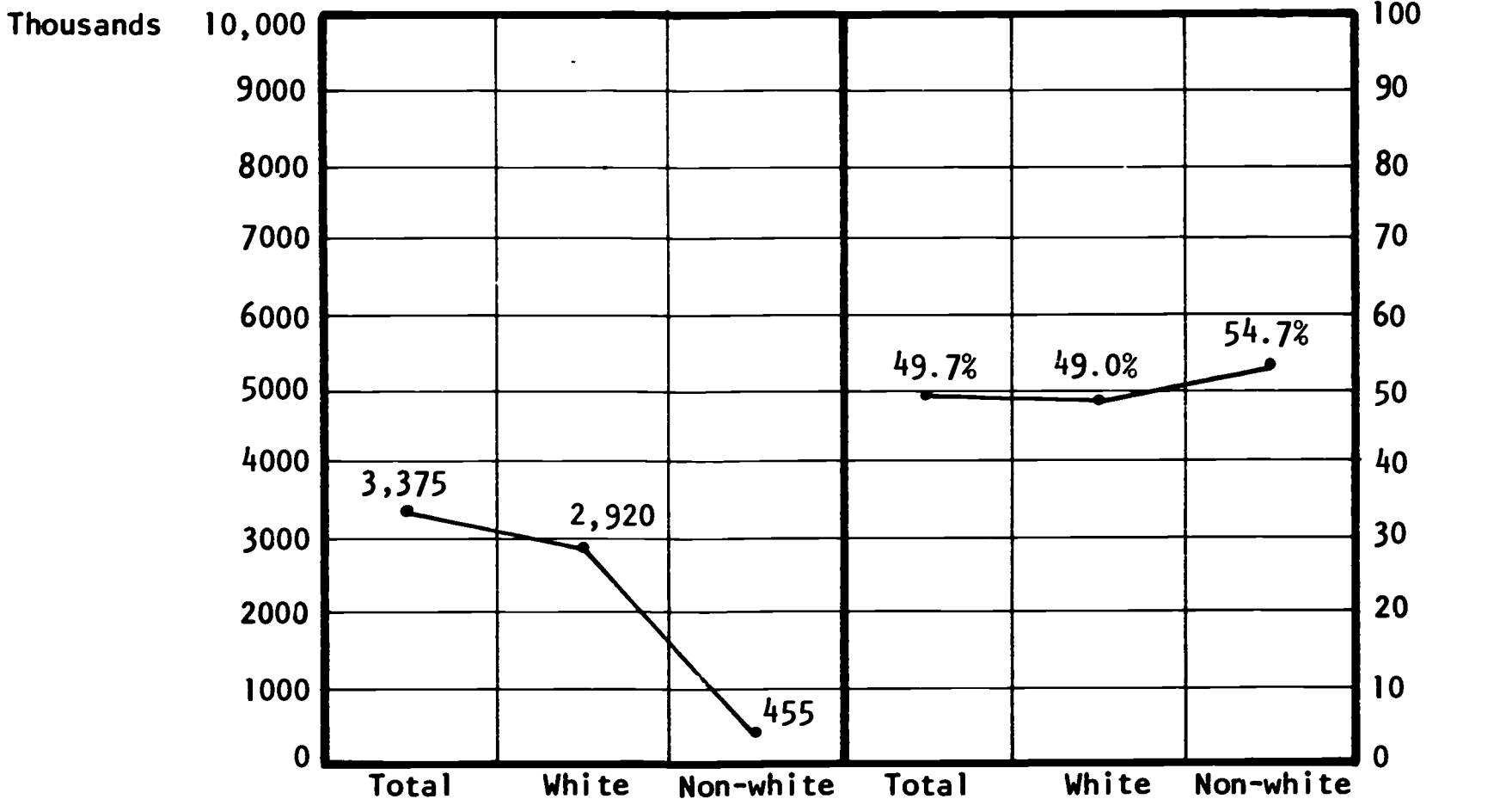


(1) Percent not shown where base is less than 100,000.

Source: U. S. Department of Labor, Bureau of Labor Statistics, EDUCATIONAL ATTAINMENT OF WORKERS, MARCH 1965 (Special Labor Force Report No. 69), Table E, p. A-10. Years of School

Figure 16

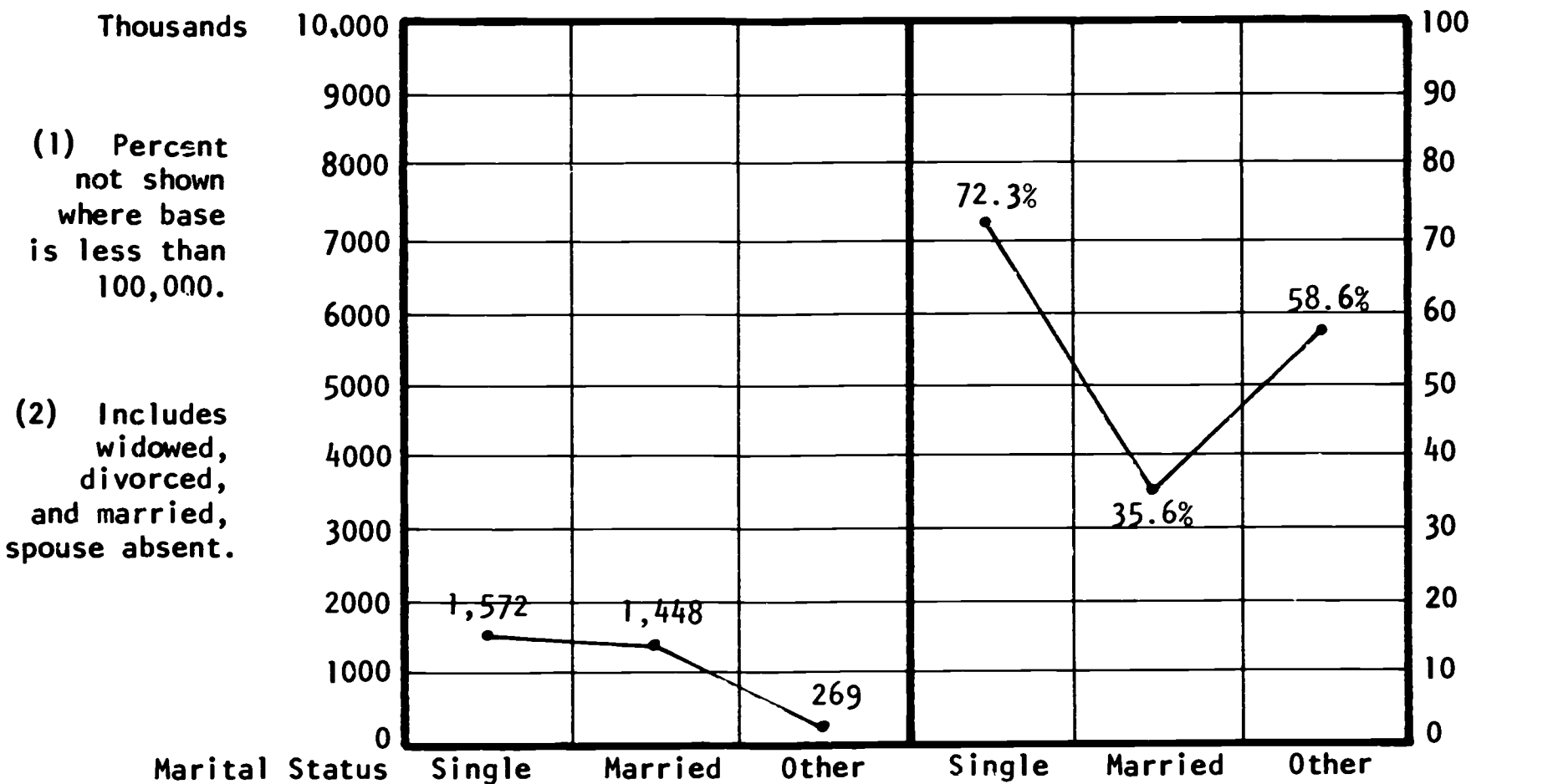
Labor Force Participation and Labor Force Participation Rates of Women, 20-24, By Color, 1965



Source: U. S. Department of Labor, Bureau of Labor Statistics, LABOR FORCE PROJECTIONS BY COLOR, 1970-80 (Special Labor Force Report No. 73), Table 1, p. 966.

Figure 17

Labor Force Participation and Labor Force Participation Rates of Women, 20-24, By Marital Status, March 1965



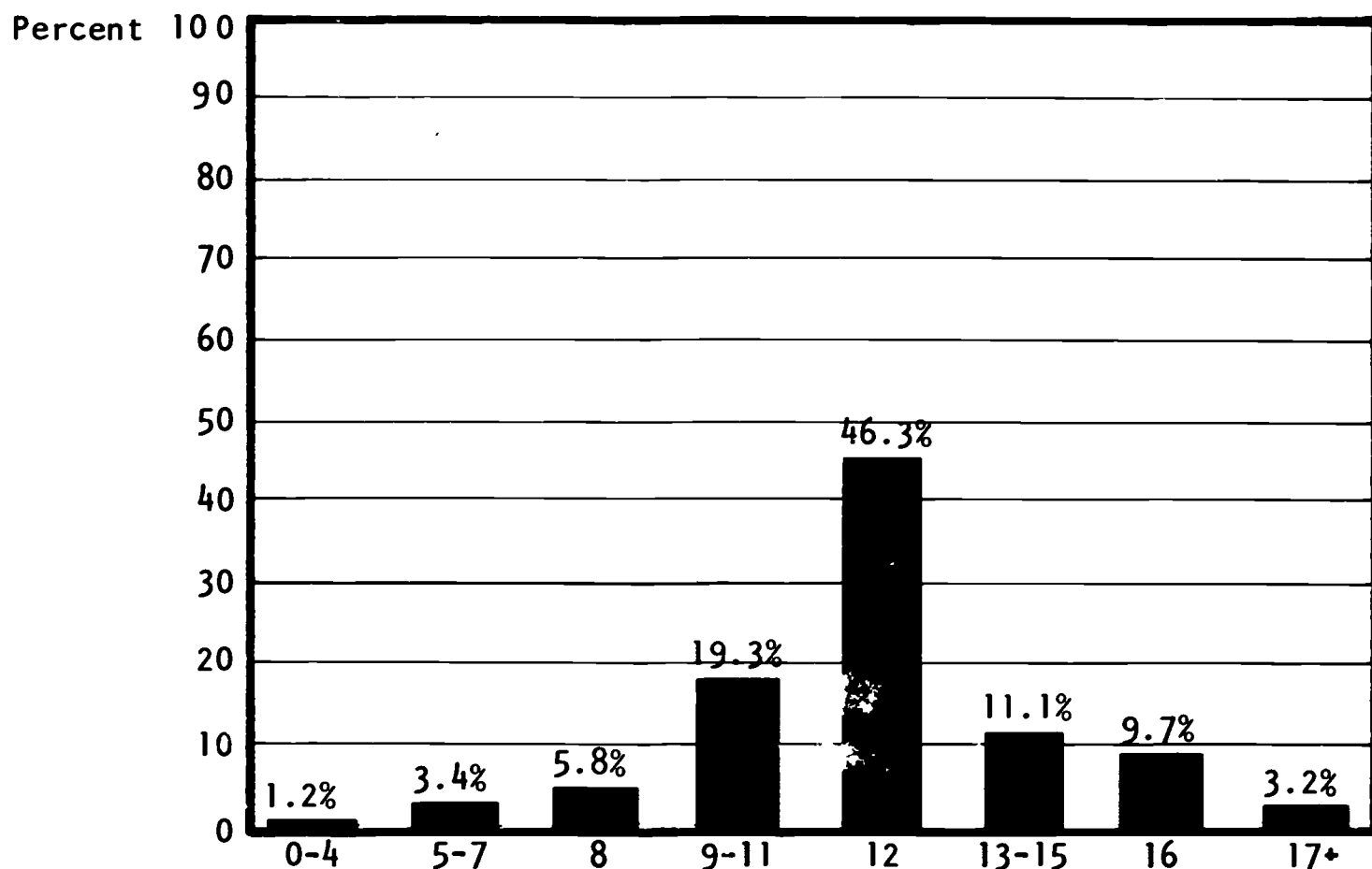
(1) Percent not shown where base is less than 100,000.

(2) Includes widowed, divorced, and married, spouse absent.

Source: U. S. Department of Labor, Bureau of Labor Statistics, MARITAL AND FAMILY CHARACTERISTICS OF WORKERS, MARCH 1965 (Special Labor Force Report No. 64), Table B, p. A-8.

Figure 18

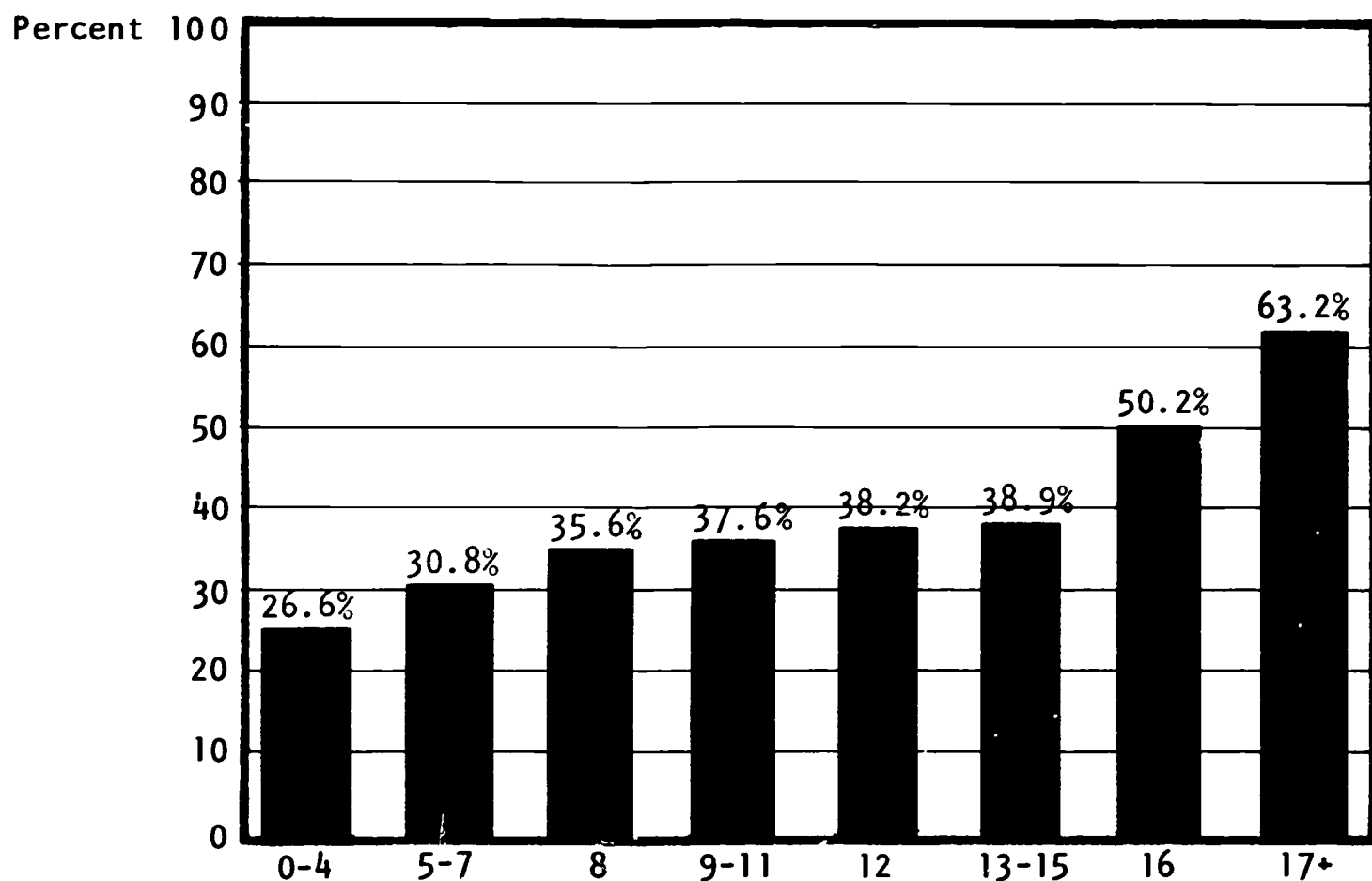
Educational Status of Women, Age 25 to 34 Years,  
In The Labor Force, March 1965



Source: U. S. Department of Labor, Bureau of Labor Statistics, EDUCATIONAL ATTAINMENT OF WORKERS, MARCH 1965 (Special Labor Force Report No. 69), Table D, p. A-9. Years of School

Figure 19

Labor Force Participation of Women, Age 25 to 34 ,  
By Years of School Completed, March 1965

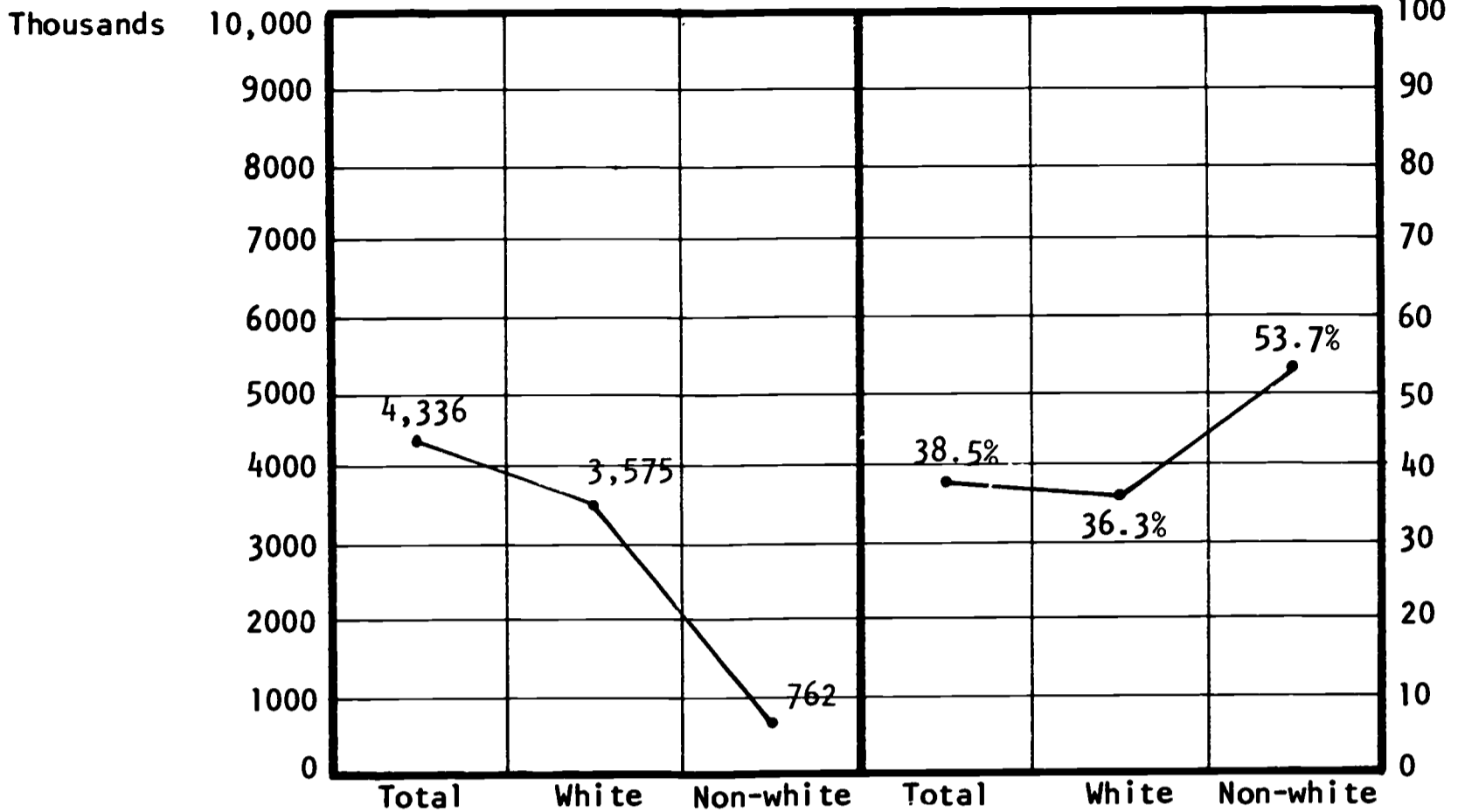


Source: U. S. Department of Labor, Bureau of Labor Statistics, EDUCATIONAL ATTAINMENT OF WORKERS, MARCH 1965 (Special Labor Force Report No. 69), Table E, p. A-10. Years of School

Figure 20

Labor Force Participation and Labor Force Participation Rates of Women, 25-34, By Color, 1965

Percent

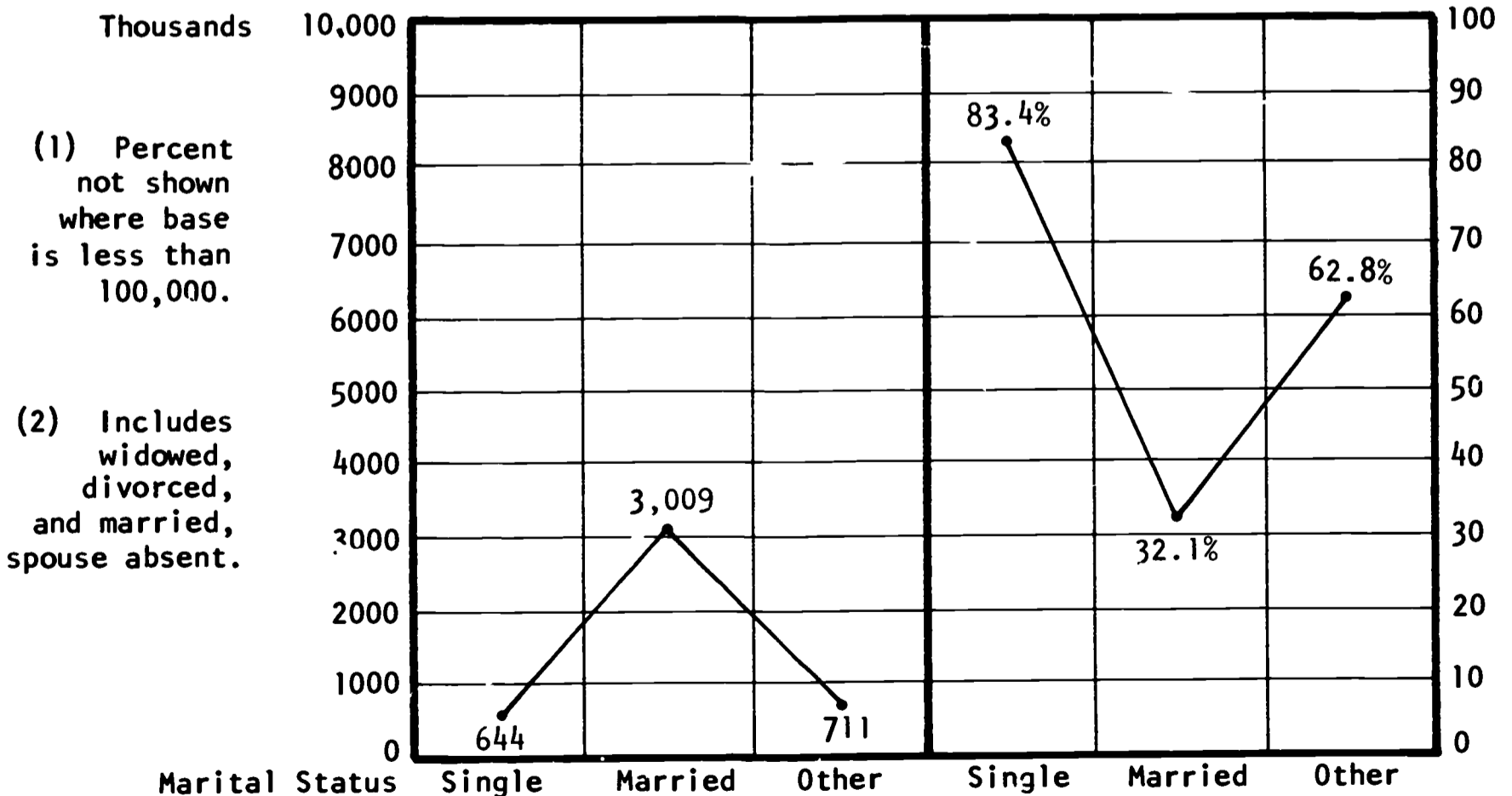


Source: U. S. Department of Labor, Bureau of Labor Statistics, LABOR FORCE PROJECTIONS BY COLOR, 1970-80 (Special Labor Force Report No. 73), Table 1, p. 966.

Figure 21

Labor Force Participation and Labor Force Participation Rates of Women, 25-34, By Marital Status, March 1965

Percent



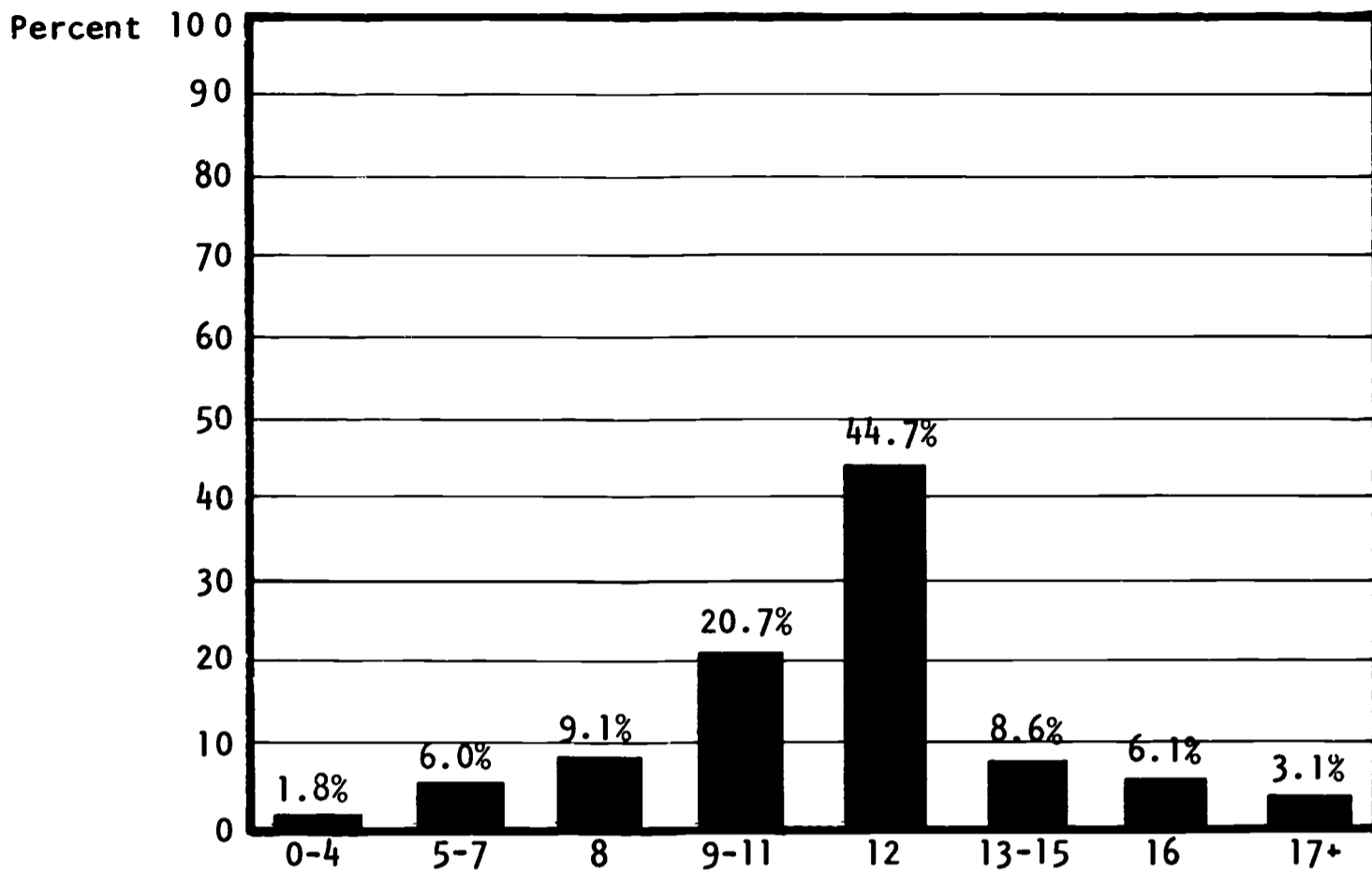
(1) Percent not shown where base is less than 100,000.

(2) Includes widowed, divorced, and married, spouse absent.

-18- Source: U. S. Department of Labor, Bureau of Labor Statistics, MARITAL AND FAMILY CHARACTERISTICS OF WORKERS, MARCH 1965 (Special Labor Force Report No. 64), Table B, p. A-8.

Figure 22

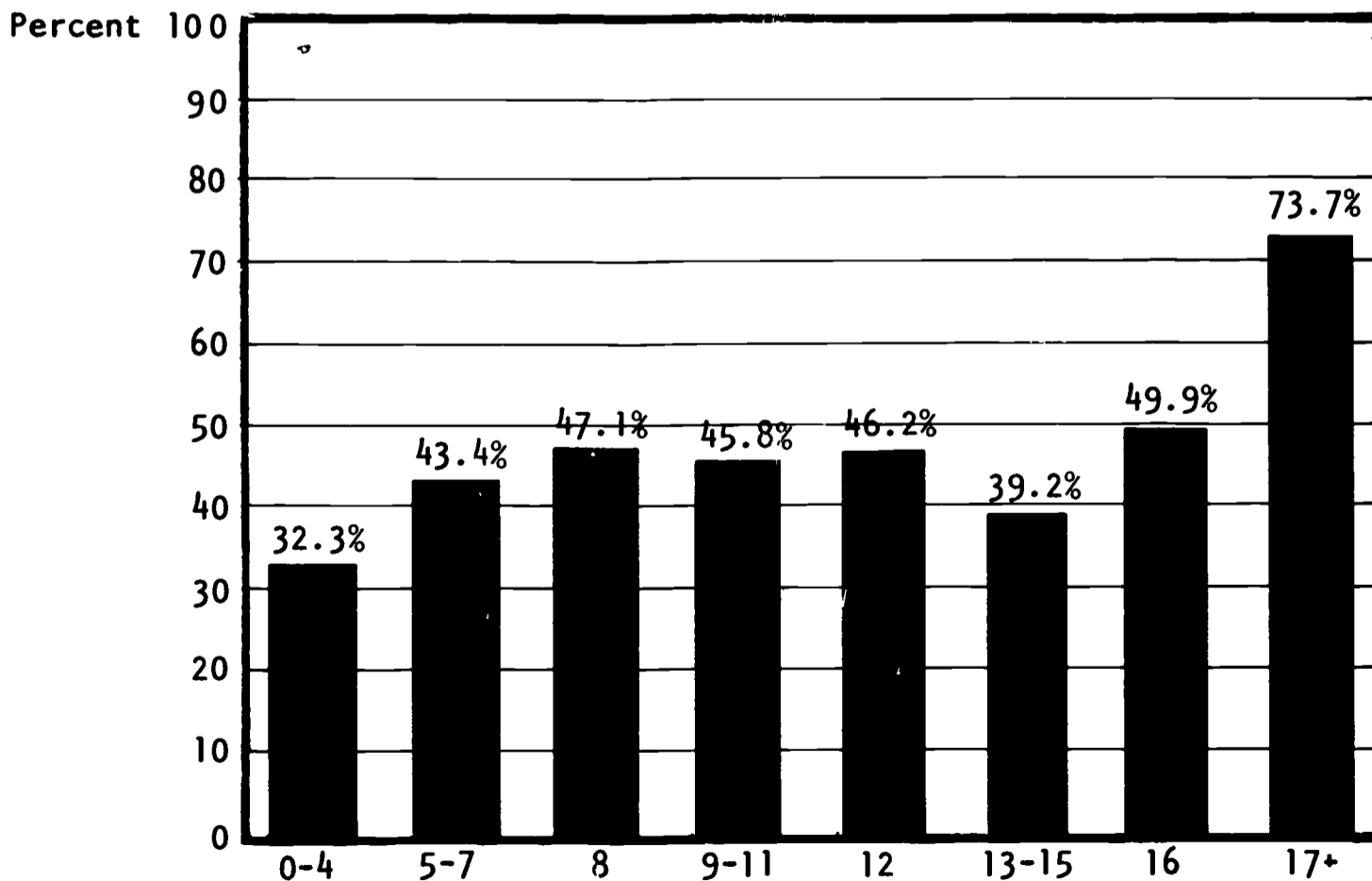
Educational Status of Women, Age 35 to 44 Years,  
In The Labor Force, March 1965



Source: U. S. Department of Labor, Bureau of Labor Statistics, EDUCATIONAL ATTAINMENT OF WORKERS, MARCH 1965 (Special Labor Force Report No. 69), Table D, p. A-9.

Figure 23

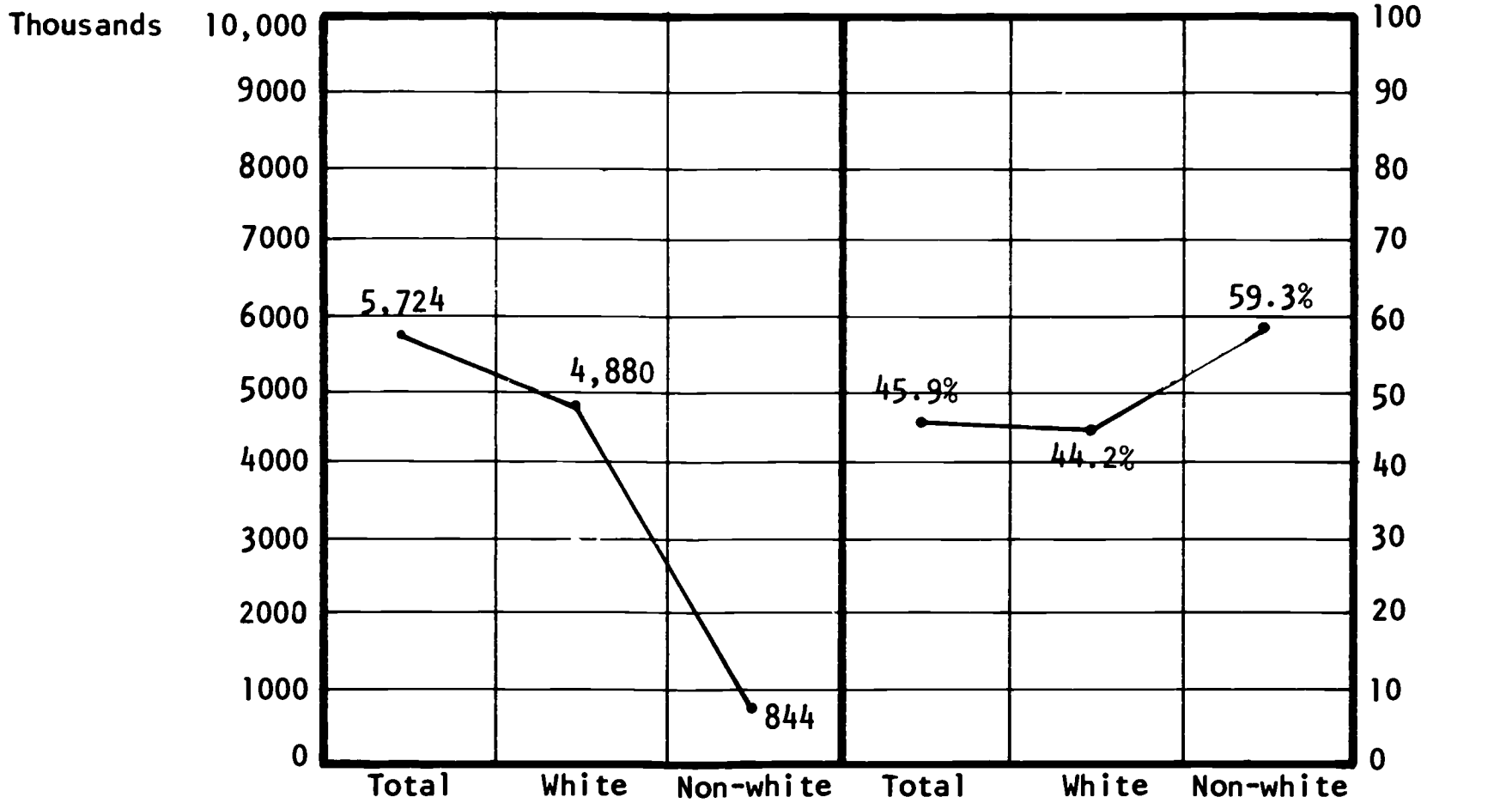
Labor Force Participation of Women, Age 35-44,  
By Years of School Completed, March 1965



Source: U. S. Department of Labor, Bureau of Labor Statistics, EDUCATIONAL ATTAINMENT OF WORKERS, MARCH 1965 (Special Labor Force Report No. 69), Table E, p. A-10.

Figure 24

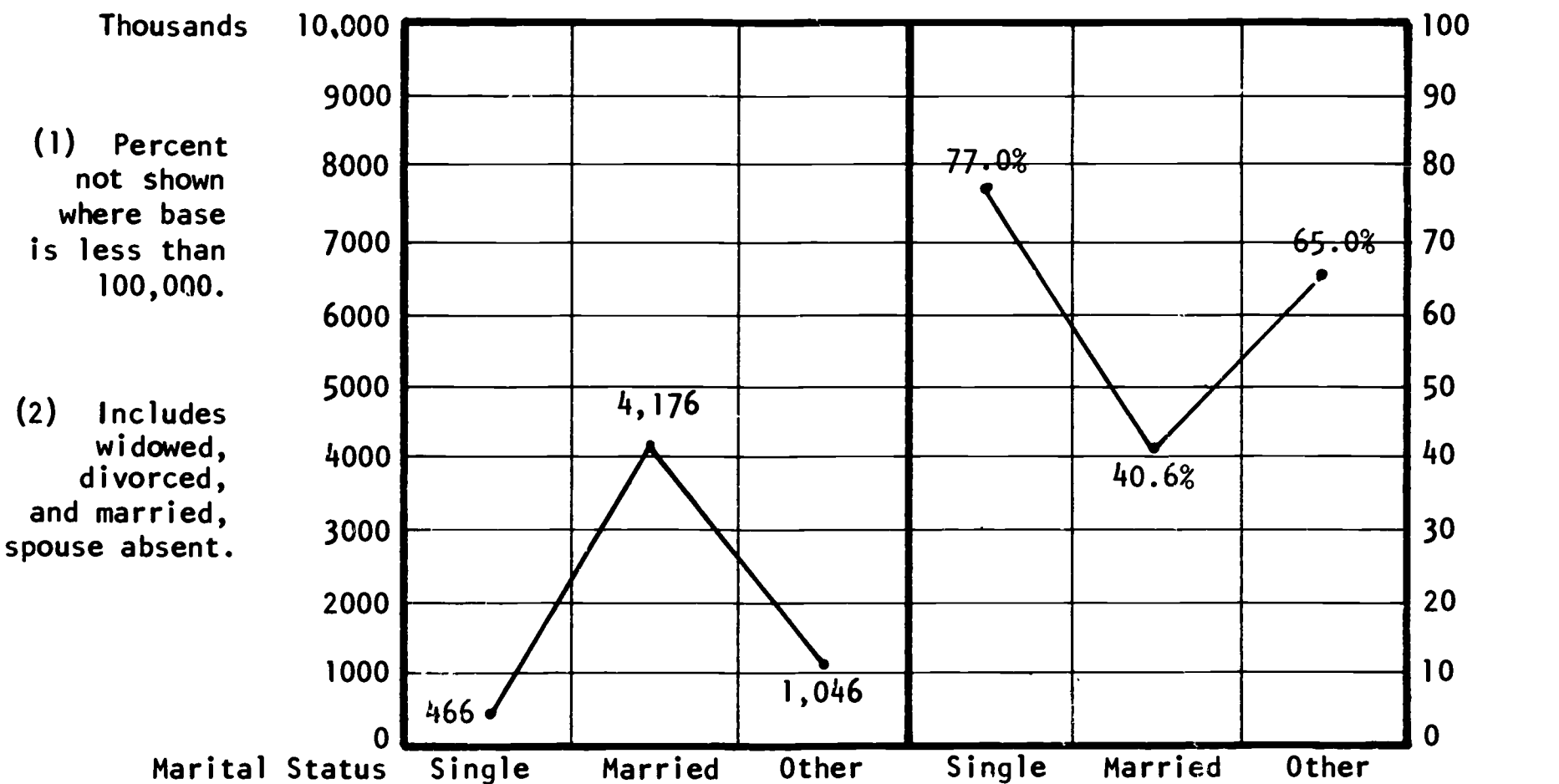
Labor Force Participation and Labor Force Participation Rates of Women, 35-44, By Color, 1965



Source: U. S. Department of Labor, Bureau of Labor Statistics, LABOR FORCE PROJECTIONS BY COLOR, 1970-80 (Special Labor Force Report No. 73), Table 1, p. 966.

Figure 25

Labor Force Participation and Labor Force Participation Rates of Women, 35-44, By Marital Status, March 1965



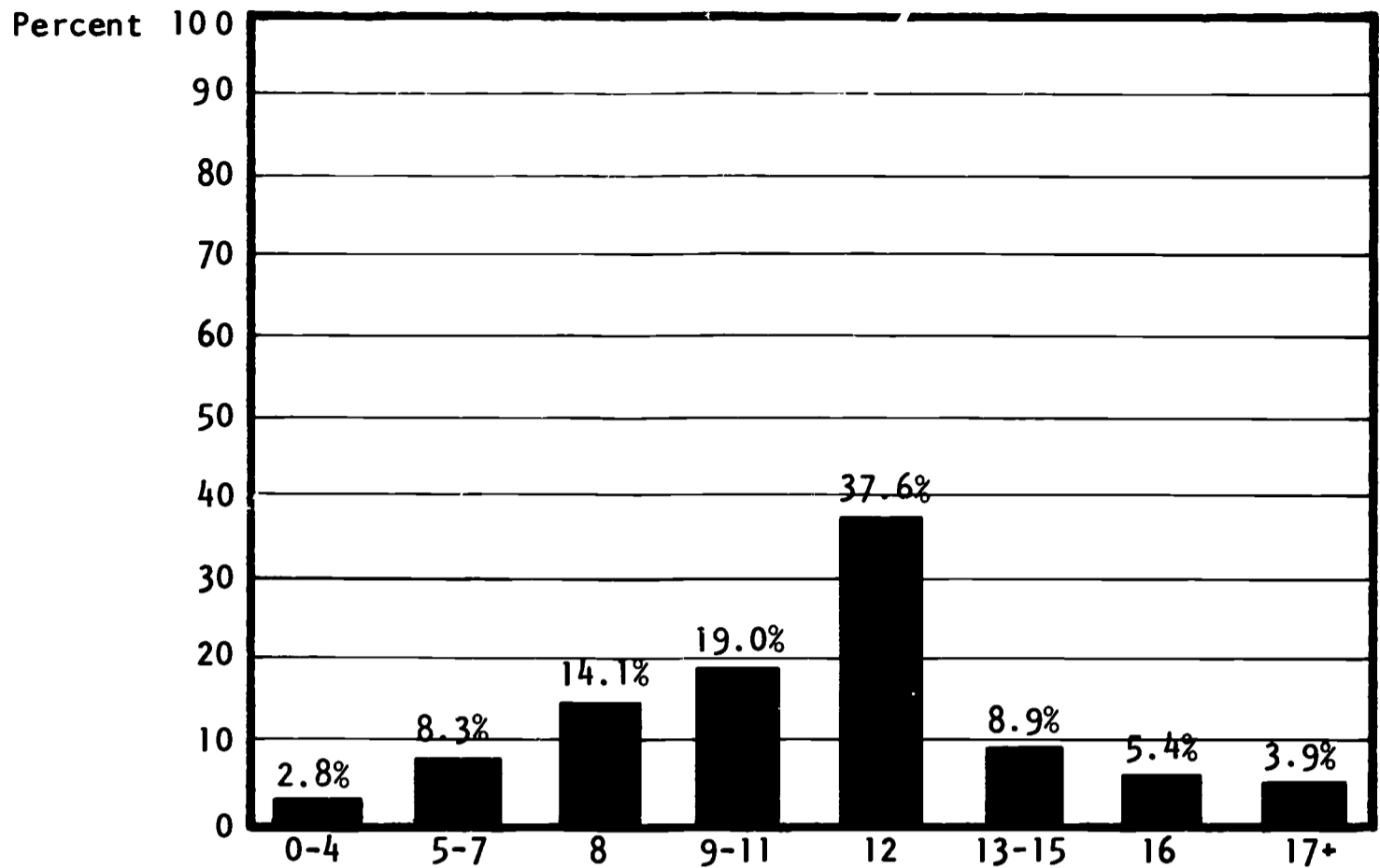
(1) Percent not shown where base is less than 100,000.

(2) Includes widowed, divorced, and married, spouse absent.

-20- Source: U. S. Department of Labor, Bureau of Labor Statistics, MARITAL AND FAMILY CHARACTERISTICS OF WORKERS, MARCH 1965 (Special Labor Force Report No. 64), Table B, p. A-8.

Figure 26

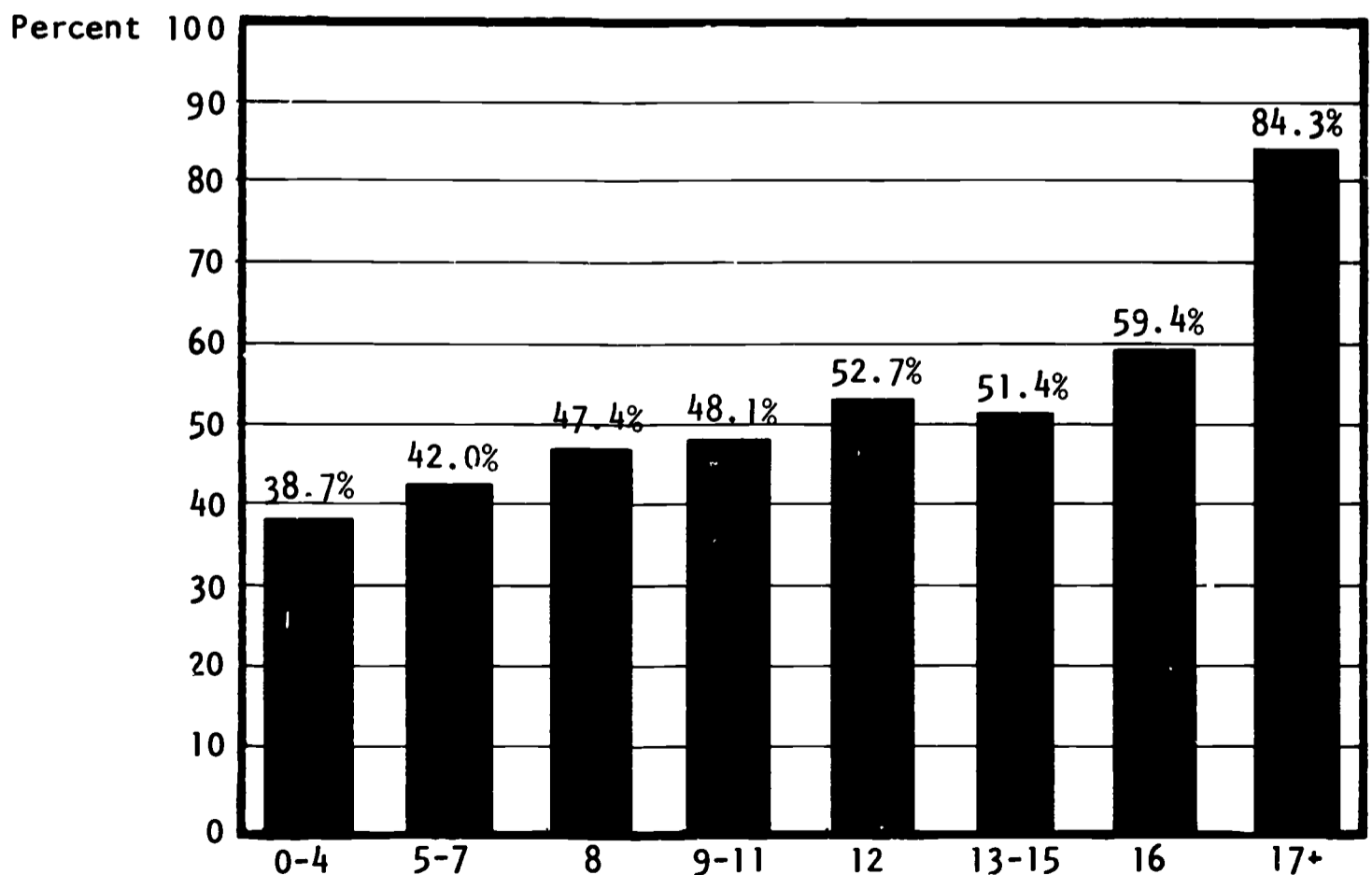
Educational Status of Women, Age 45-54 Years,  
In The Labor Force, March 1965



Source: U. S. Department of Labor, Bureau of Labor Statistics, EDUCATIONAL ATTAINMENT OF WORKERS, MARCH 1965 (Special Labor Force Report No. 69), Table D, p. A-9.

Figure 27

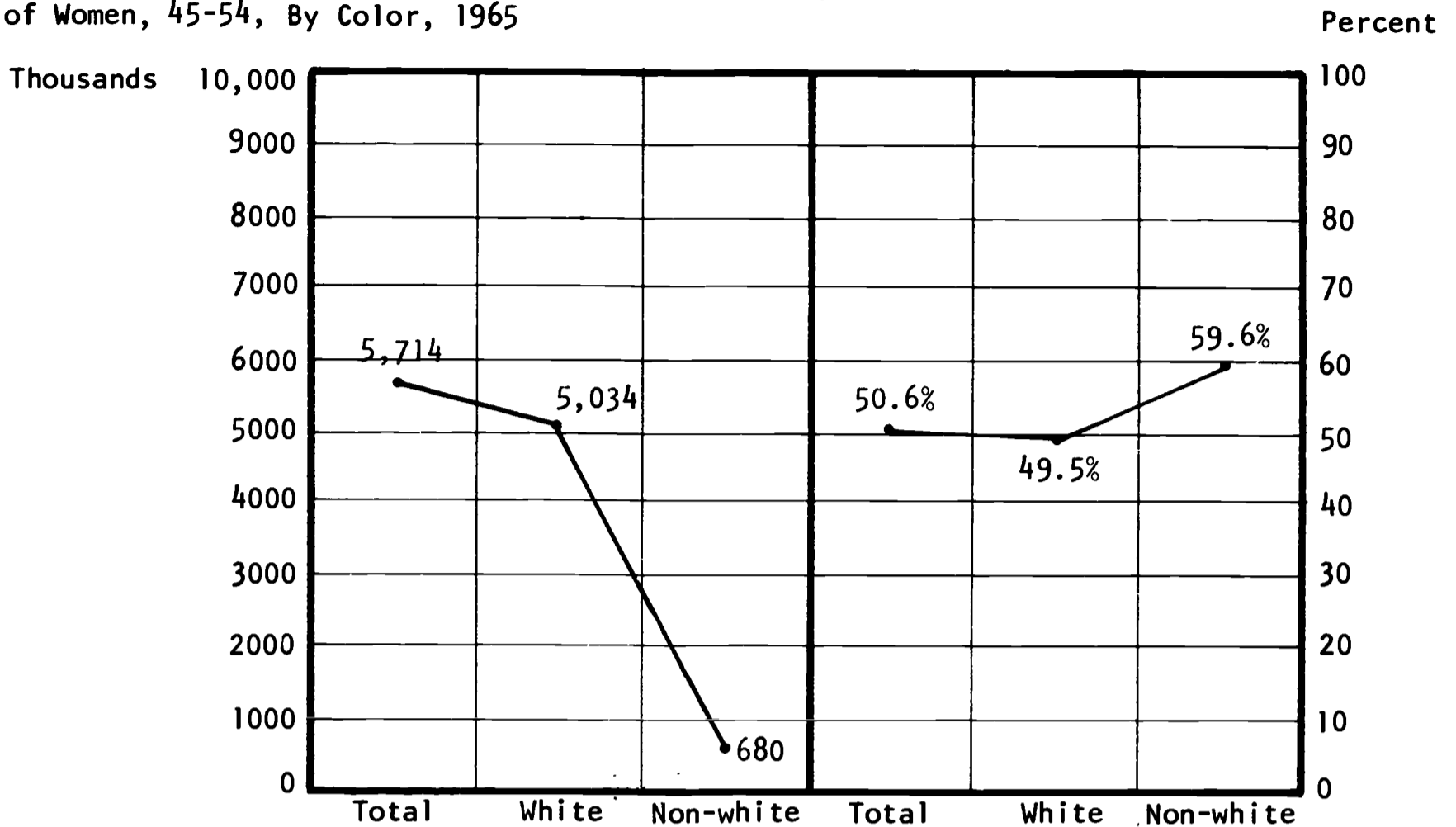
Labor Force Participation of Women, Age 45-54,  
By Years of School Completed, March 1965



Source: U. S. Department of Labor, Bureau of Labor Statistics, EDUCATIONAL ATTAINMENT OF WORKERS, MARCH 1965 (Special Labor Force Report No. 69), Table E, p. A-10.

Figure 28

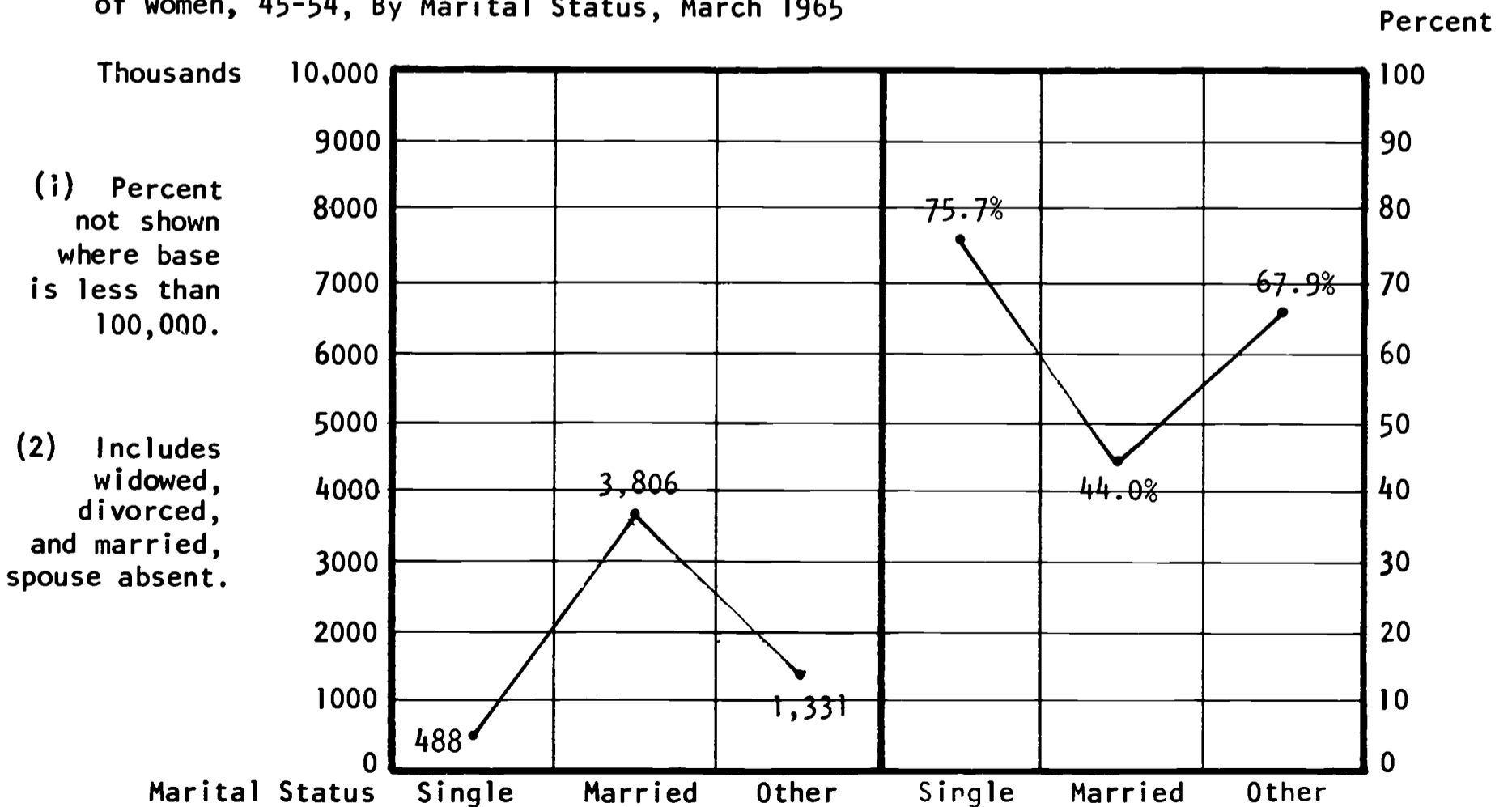
Labor Force Participation and Labor Force Participation Rates of Women, 45-54, By Color, 1965



Source: U. S. Department of Labor, Bureau of Labor Statistics, LABOR FORCE PROJECTIONS BY COLOR, 1970-80 (Special Labor Force Report No. 73), Table 1, p. 966.

Figure 29

Labor Force Participation and Labor Force Participation Rates of Women, 45-54, By Marital Status, March 1965

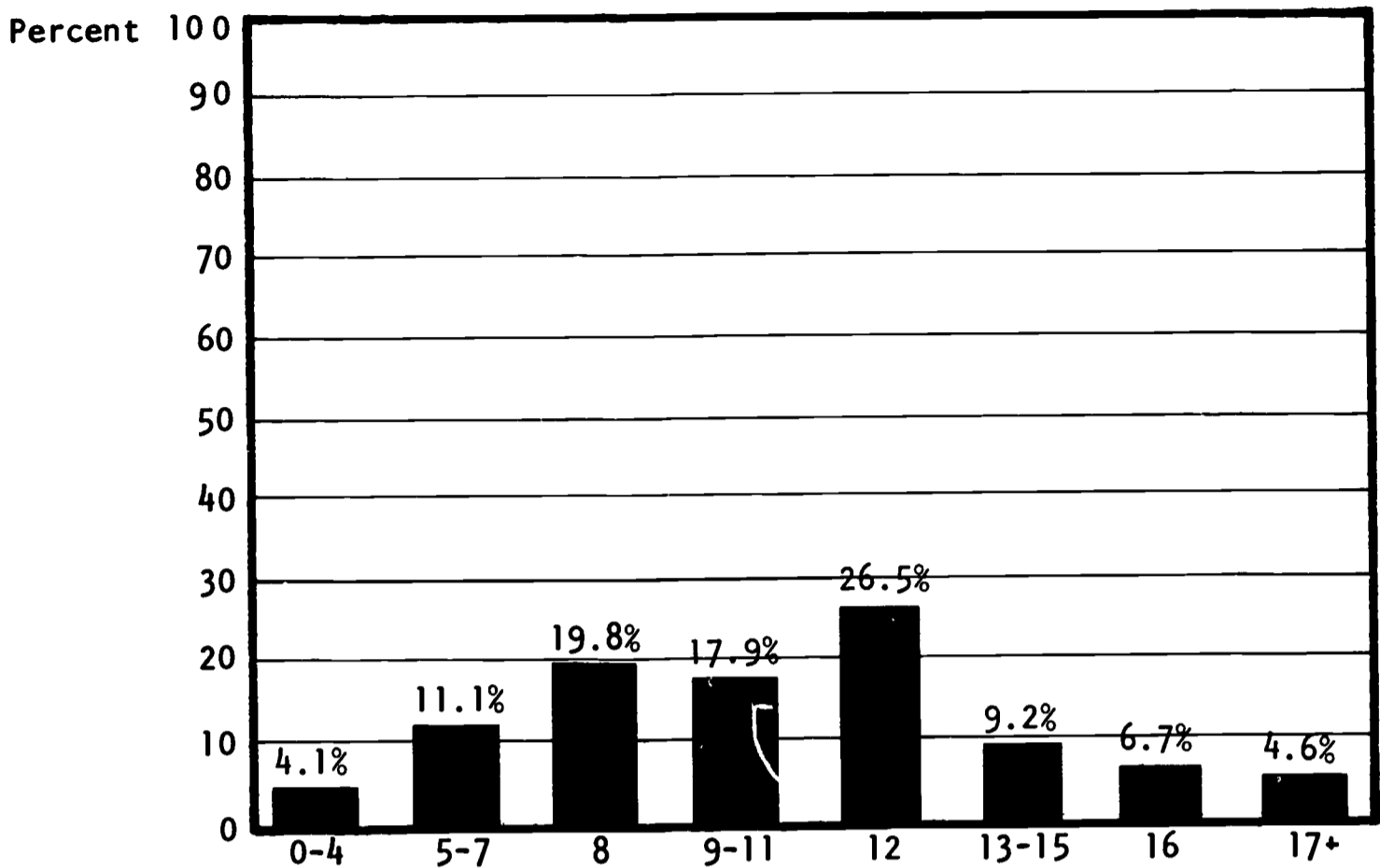


Source: U. S. Department of Labor, Bureau of Labor Statistics, MARITAL AND FAMILY CHARACTERISTICS OF WORKERS, MARCH 1965 (Special Labor Force Report No. 64), Table B, p. A-8.



Figure 30

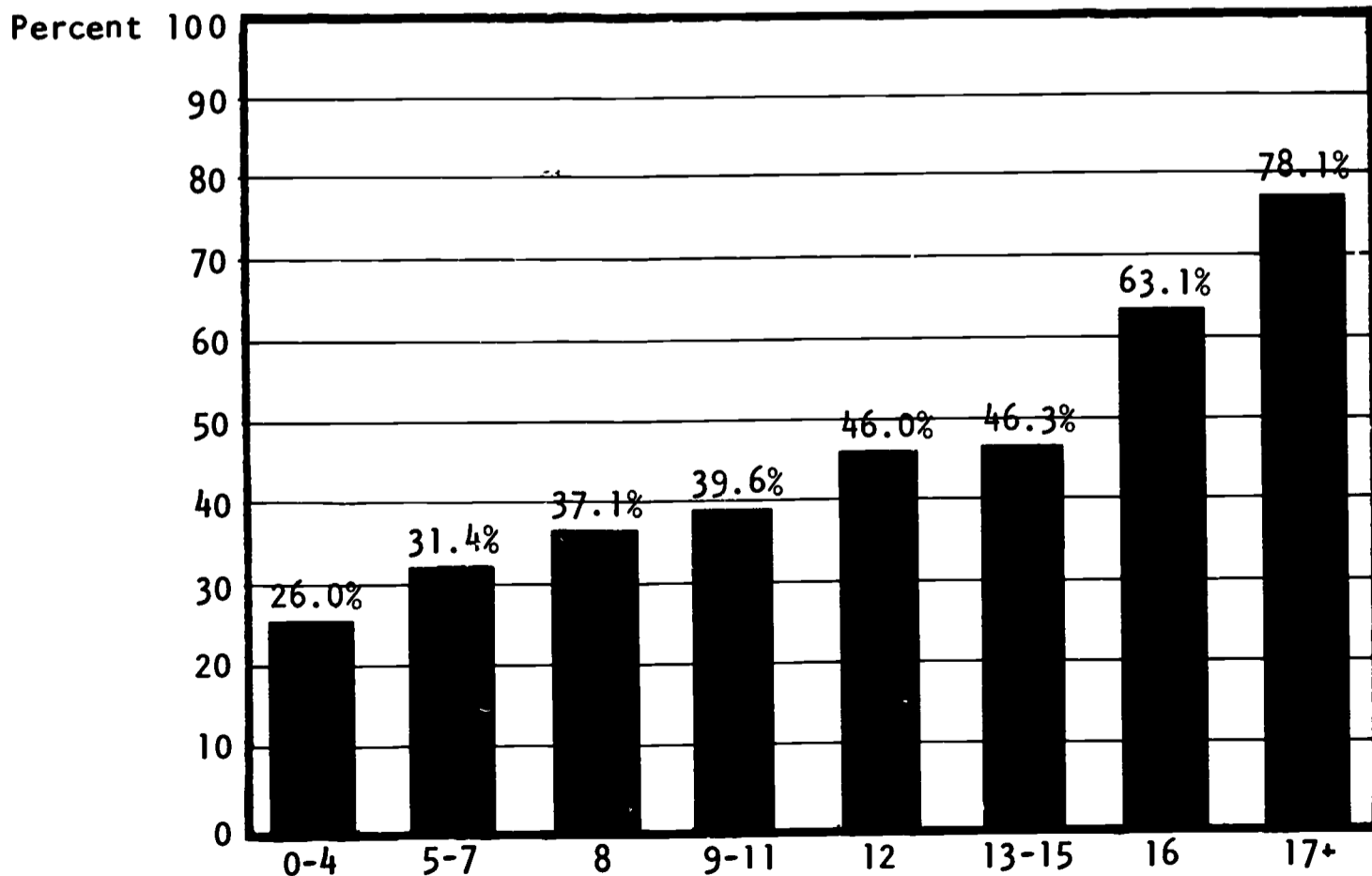
Educational Status of Women, Age 55-64 Years,  
In The Labor Force, March 1965



Source: U. S. Department of Labor, Bureau of Labor Statistics, EDUCATIONAL ATTAINMENT OF WORKERS, MARCH 1965 (Special Labor Force Report No. 69), Table D, p. A-9.

Figure 31

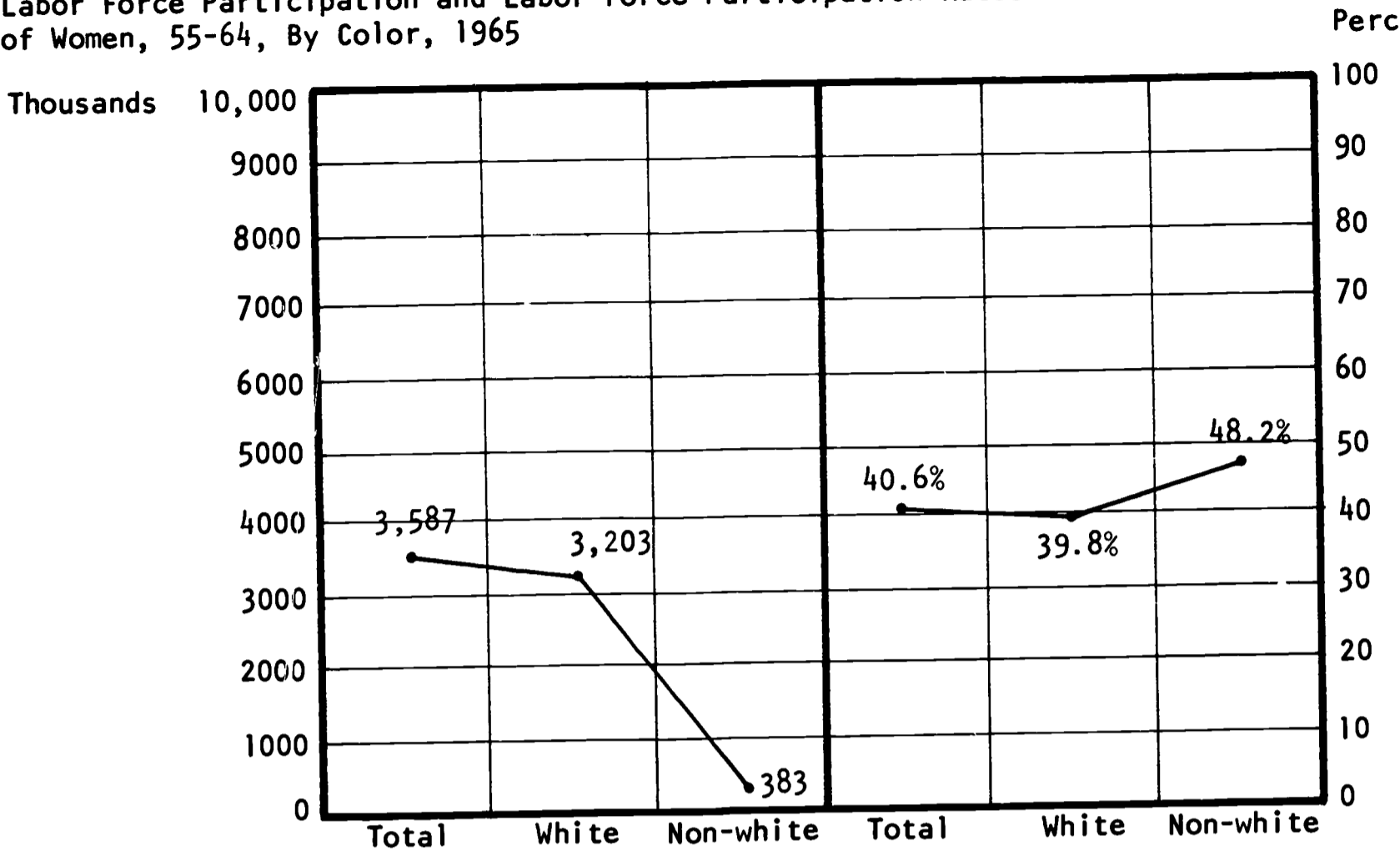
Labor Force Participation of Women, Age 55 to 64,  
By Years of School Completed, March 1965



Source: U. S. Department of Labor, Bureau of Labor Statistics, EDUCATIONAL ATTAINMENT OF WORKERS, MARCH 1965 (Special Labor Force Report No. 69), Table E, p. A-10.

Figure 32

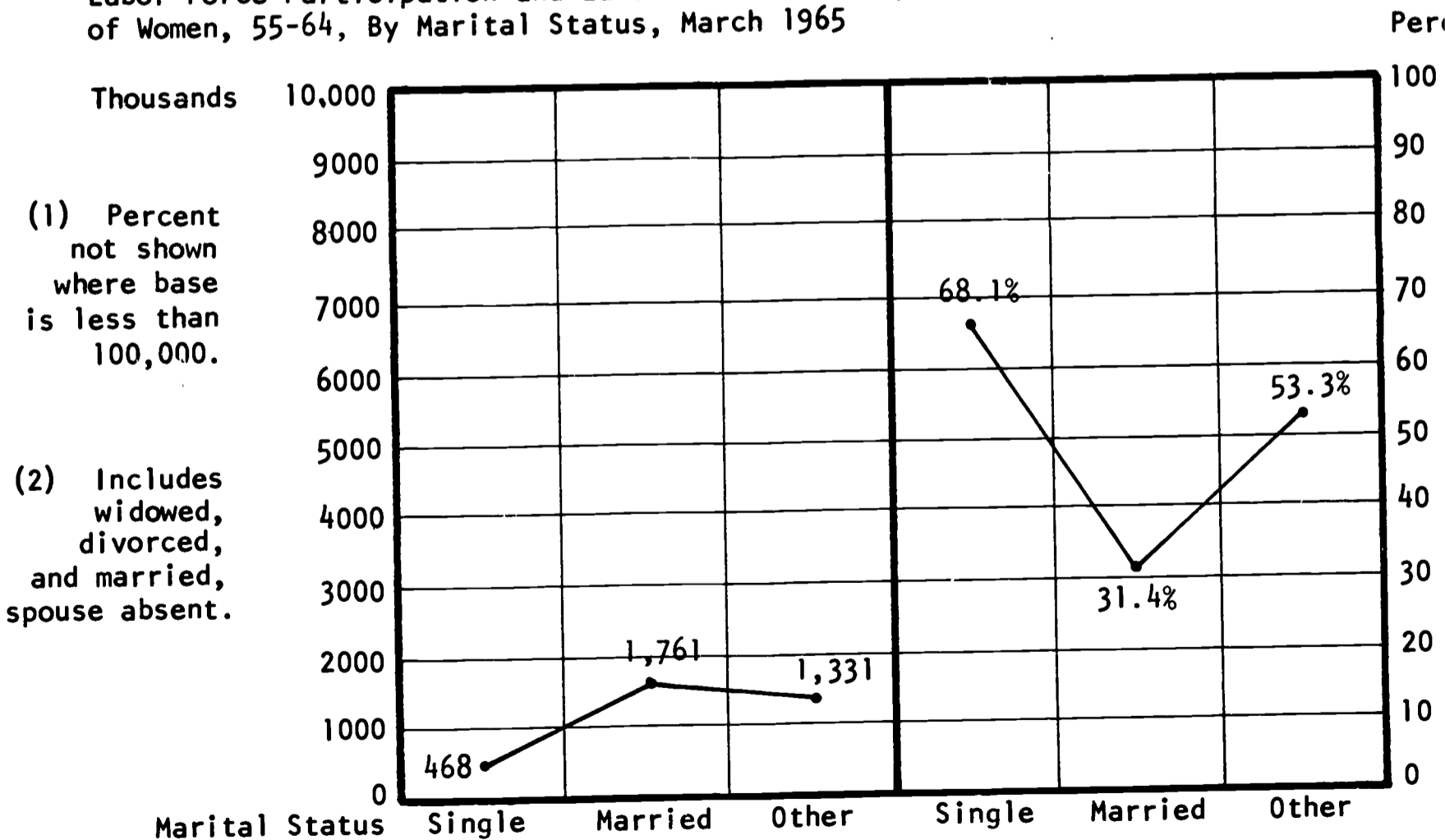
Labor Force Participation and Labor Force Participation Rates of Women, 55-64, By Color, 1965



Source: U. S. Department of Labor, Bureau of Labor Statistics, LABOR FORCE PROJECTIONS BY COLOR, 1970-80 (Special Labor Force Report No. 73), Table 1, p. 966.

Figure 33

Labor Force Participation and Labor Force Participation Rates of Women, 55-64, By Marital Status, March 1965



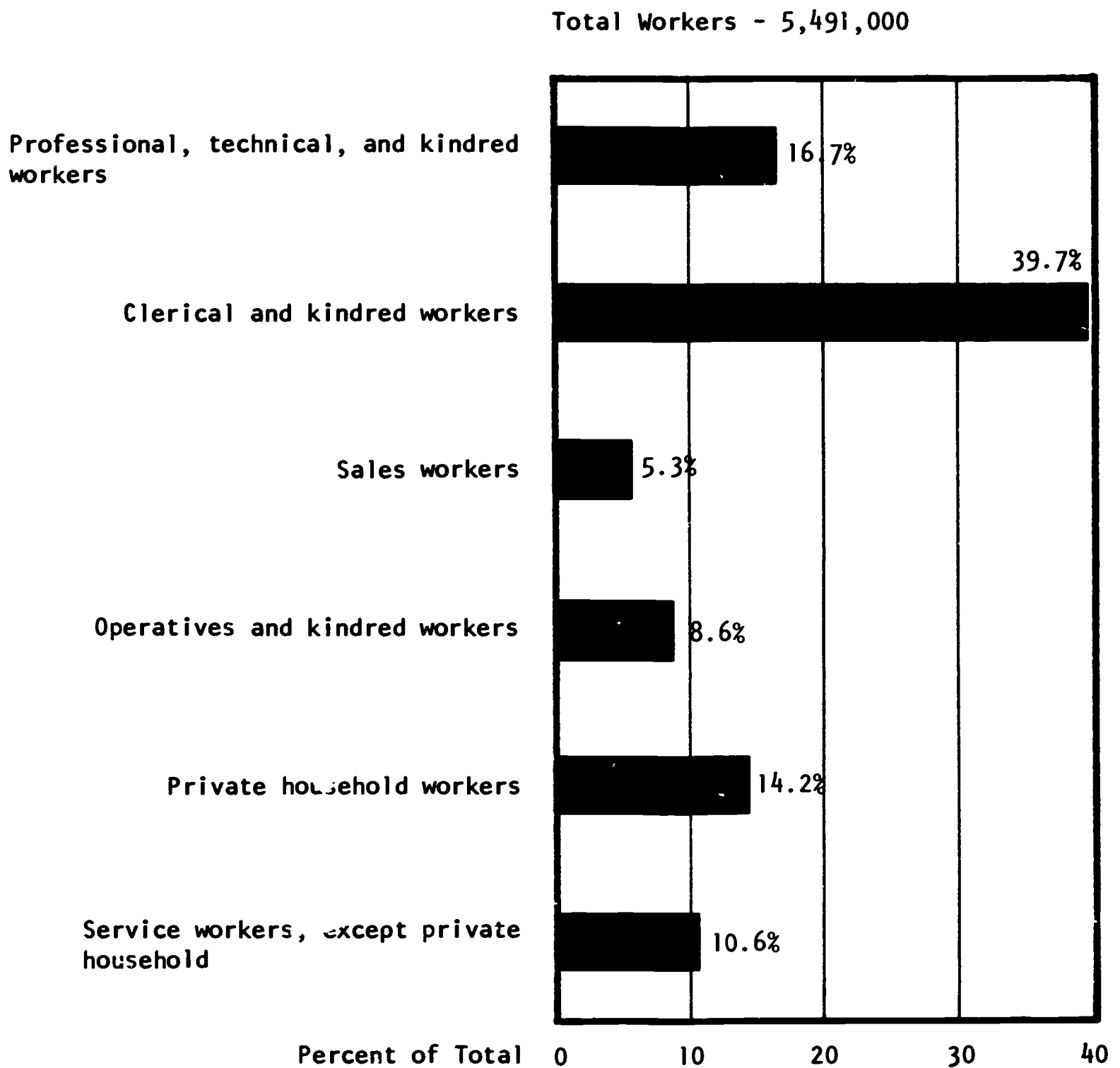
(1) Percent not shown where base is less than 100,000.

(2) Includes widowed, divorced, and married, spouse absent.

-24- Source: U. S. Department of Labor, Bureau of Labor Statistics, MARITAL AND FAMILY CHARACTERISTICS OF WORKERS, MARCH 1965 (Special Labor Force Report No. 64), Table B, p. A-8.

Figure 34

Major Occupation Group of Employed Women, 14 Years Old and Over,  
Who Were Single March 1965

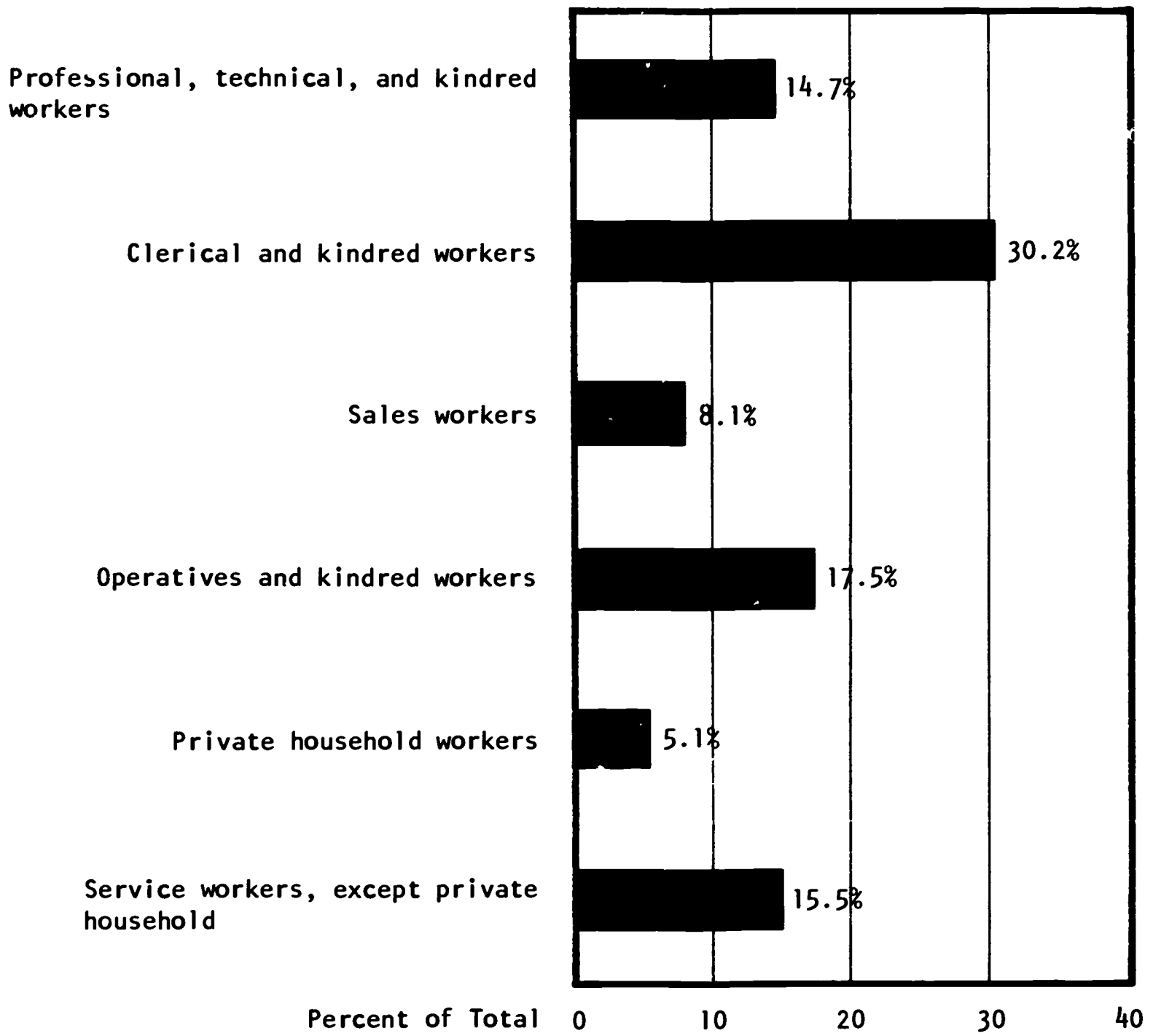


Source: U. S. Department of Labor, Bureau of Labor Statistics, MARITAL AND FAMILY CHARACTERISTICS OF WORKERS, MARCH 1965 (Special Labor Force Report No. 64), Table E, p. A-11.

Figure 35

Major Occupation Group of Employed Women, 14 Years Old and Over,  
Who Were Married, March 1965

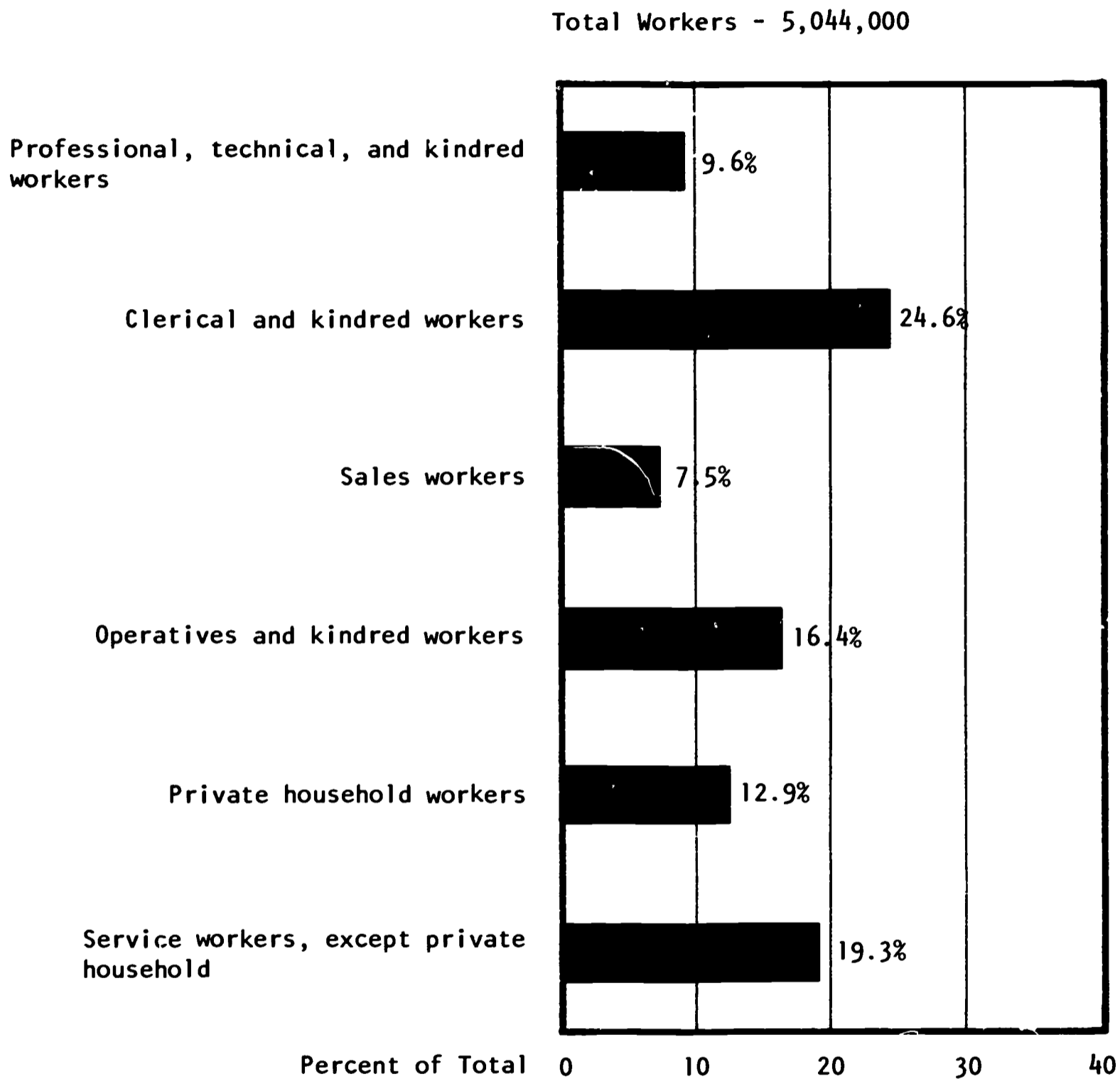
Total Workers - 13,959,000



Source: U. S. Department of Labor, Bureau of Labor Statistics, MARITAL AND FAMILY CHARACTERISTICS OF WORKERS, MARCH 1965 (Special Labor Force Report No. 64), Table E, p. A-11.

Figure 36

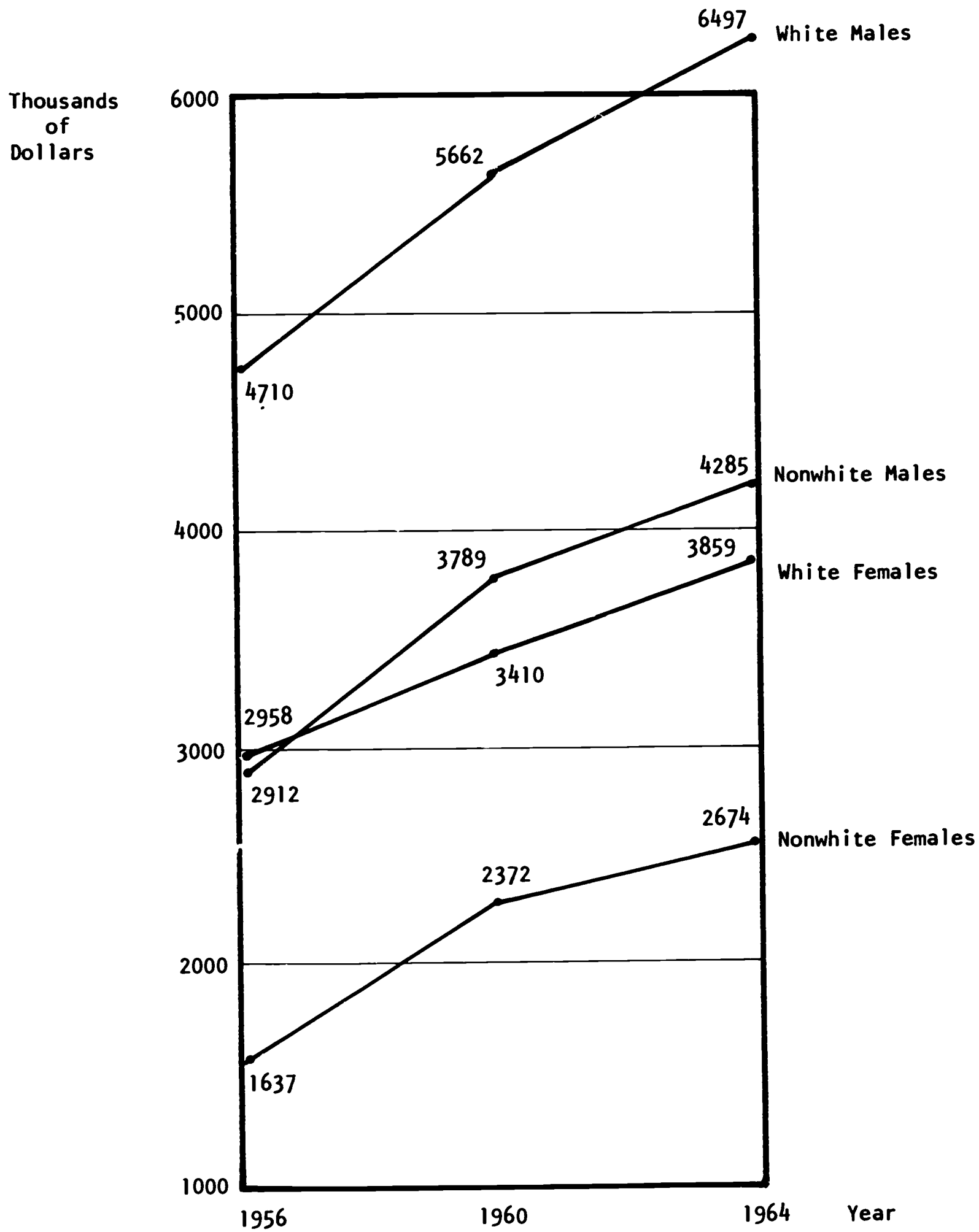
Major Occupation Group of Employed Women, 14 Years Old and Over,  
Who Were Widowed, Divorced, or Married, Spouse Absent, March 1965



Source: U. S. Department of Labor, Bureau of Labor Statistics, MARITAL AND FAMILY CHARACTERISTICS OF WORKERS, MARCH 1965 (Special Labor Force Report No. 64), Table E. p. A-11.

Figure 37

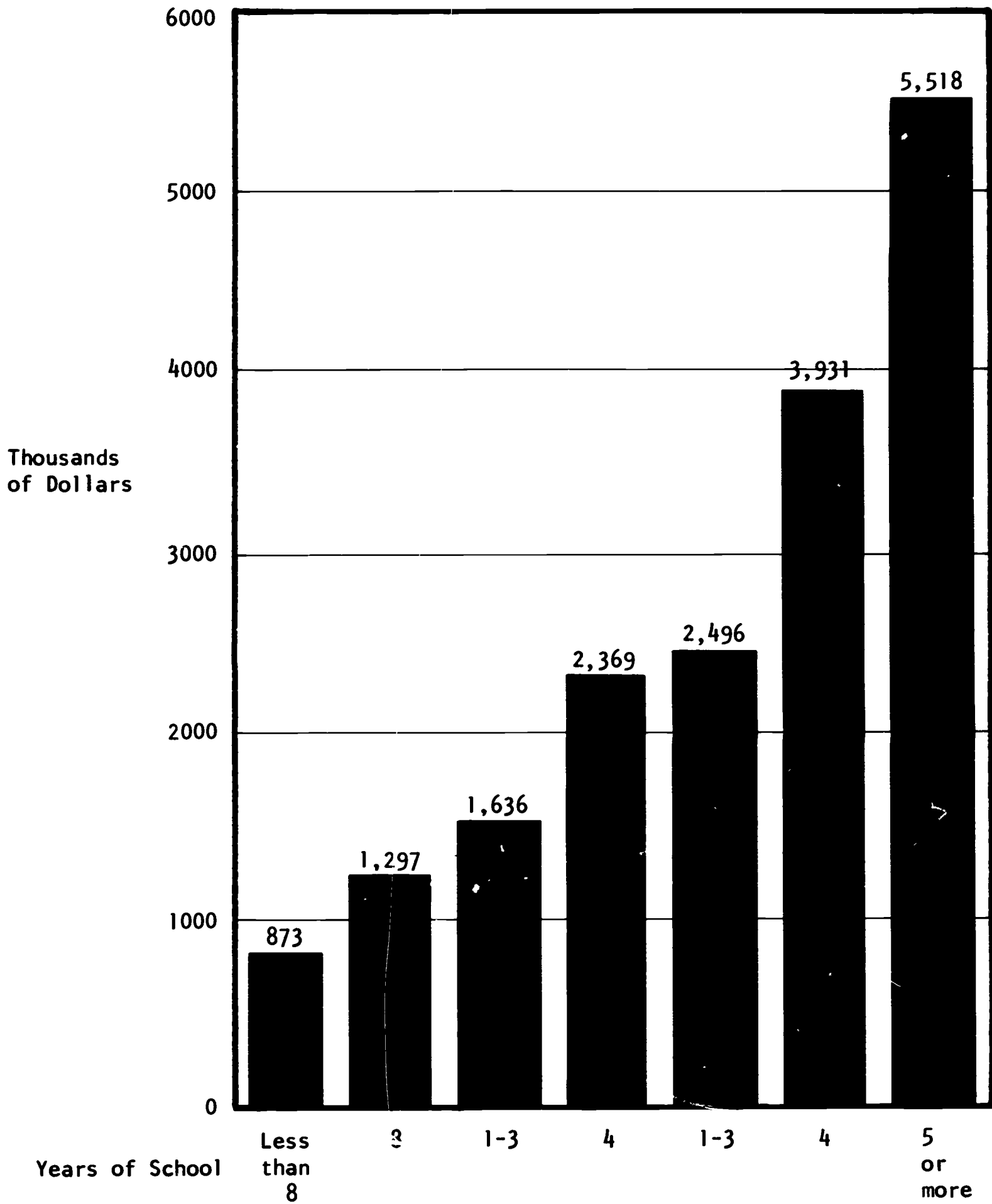
Median Wage or Salary Income of Year-Round Full-Time Worker  
By Sex and Color, 1956-64 (Persons 14 and over)



Source: U. S. Department of Labor, Women's Bureau, 1965 HANDBOOK ON WOMEN WORKERS, 1966, p. 130.

Figure 38

Median Income of Women in 1964, by Years of School Completed  
(Women 25 years of age and over)



Source: U. S. Department of Labor, Women's Bureau, 1965 HANDBOOK ON WOMEN WORKERS, 1966, p. 134.

Figure 39

1965 Median Income of U.S. Families  
By Type of Family

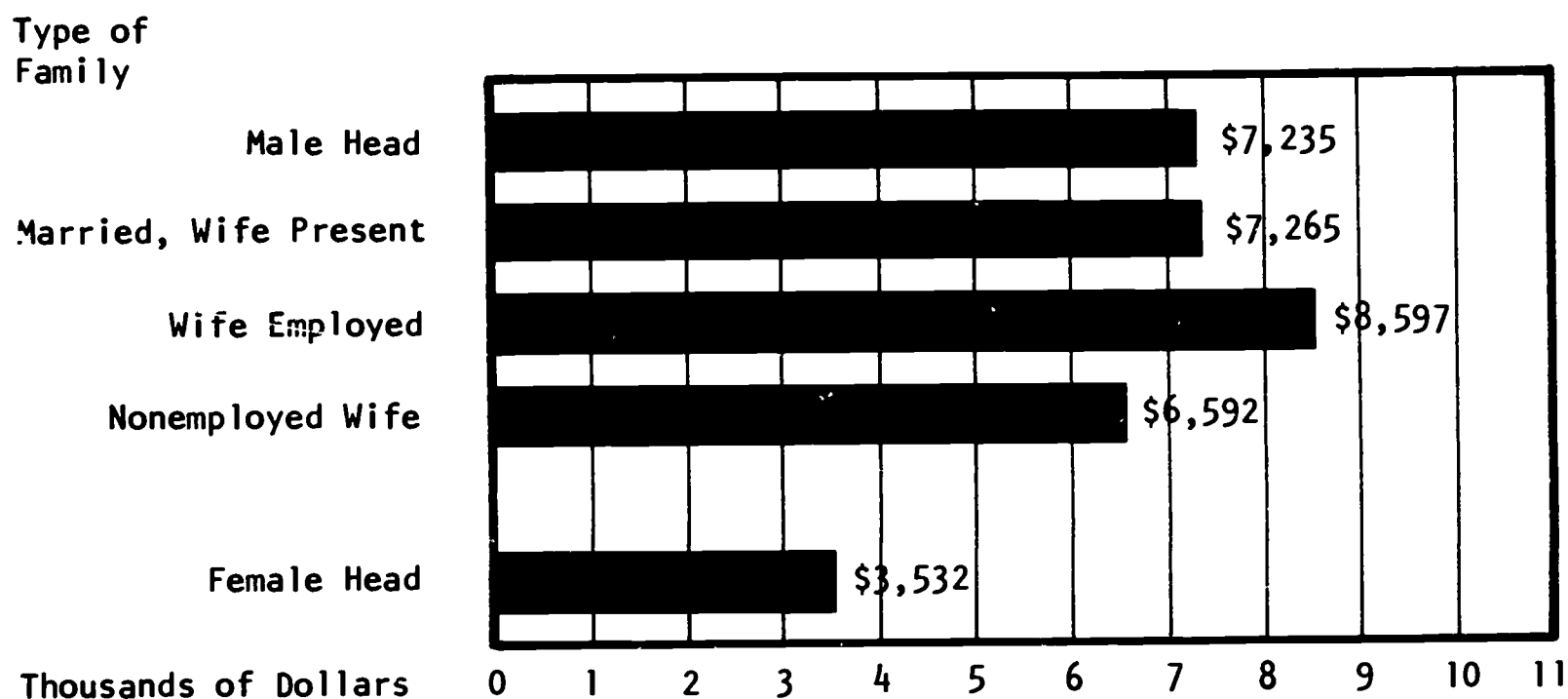
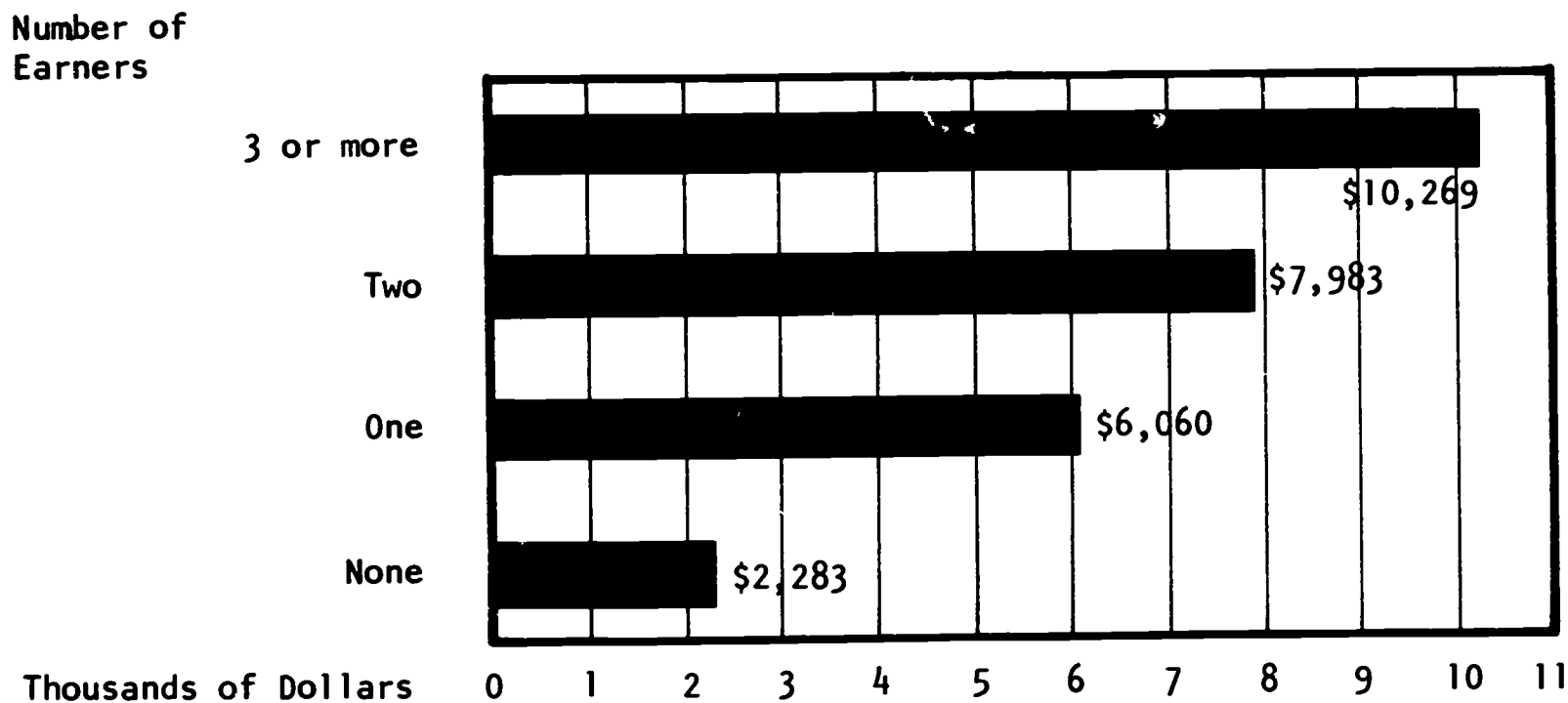


Figure 40

1965 Median Income of U. S. Families  
By Number of Earners

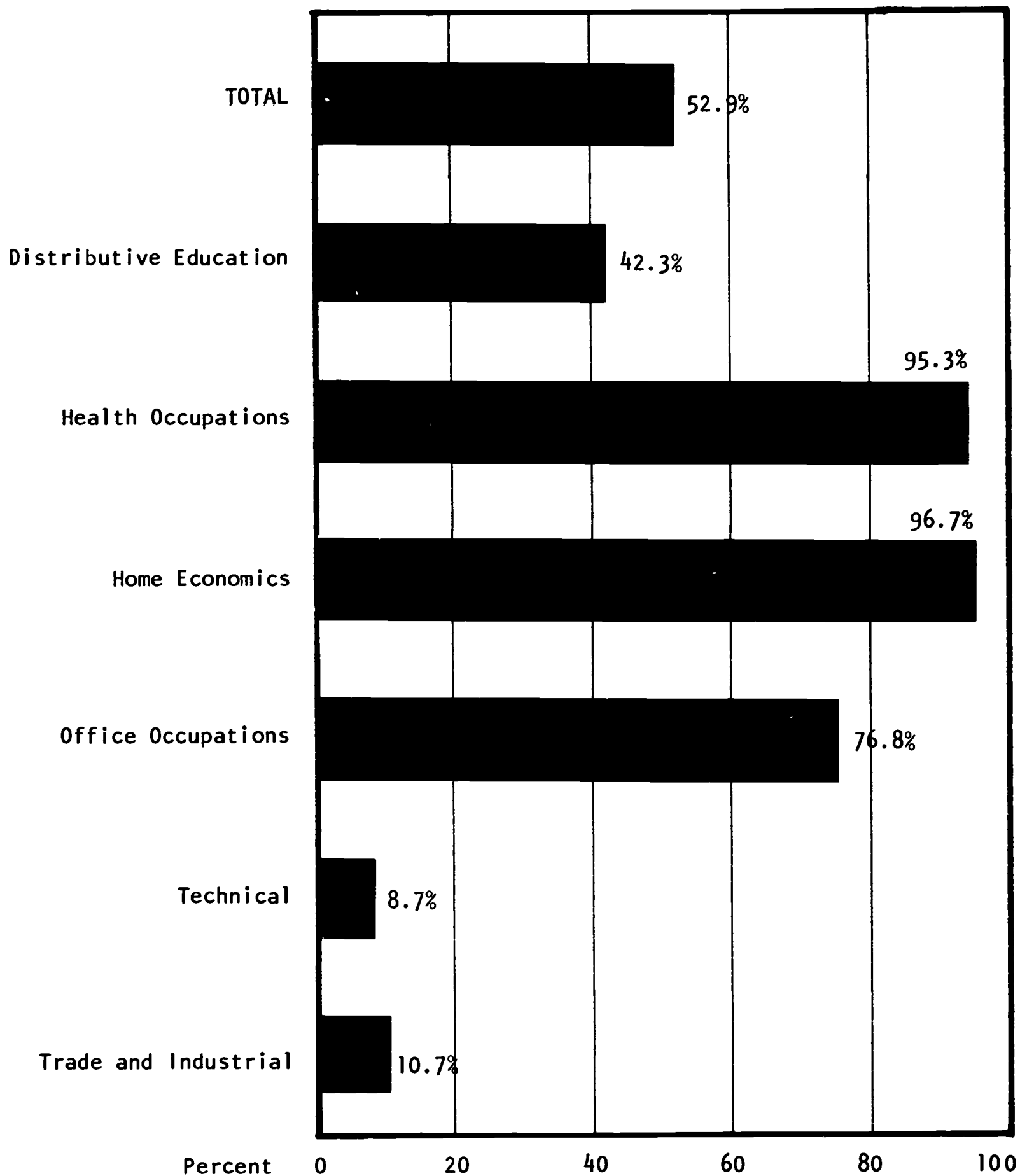


Source: Bureau of Census, CURRENT POPULATION REPORTS, "Consumer Income," (Series p-60, No. 48; April 25, 1966), p. 3.



Figure 41

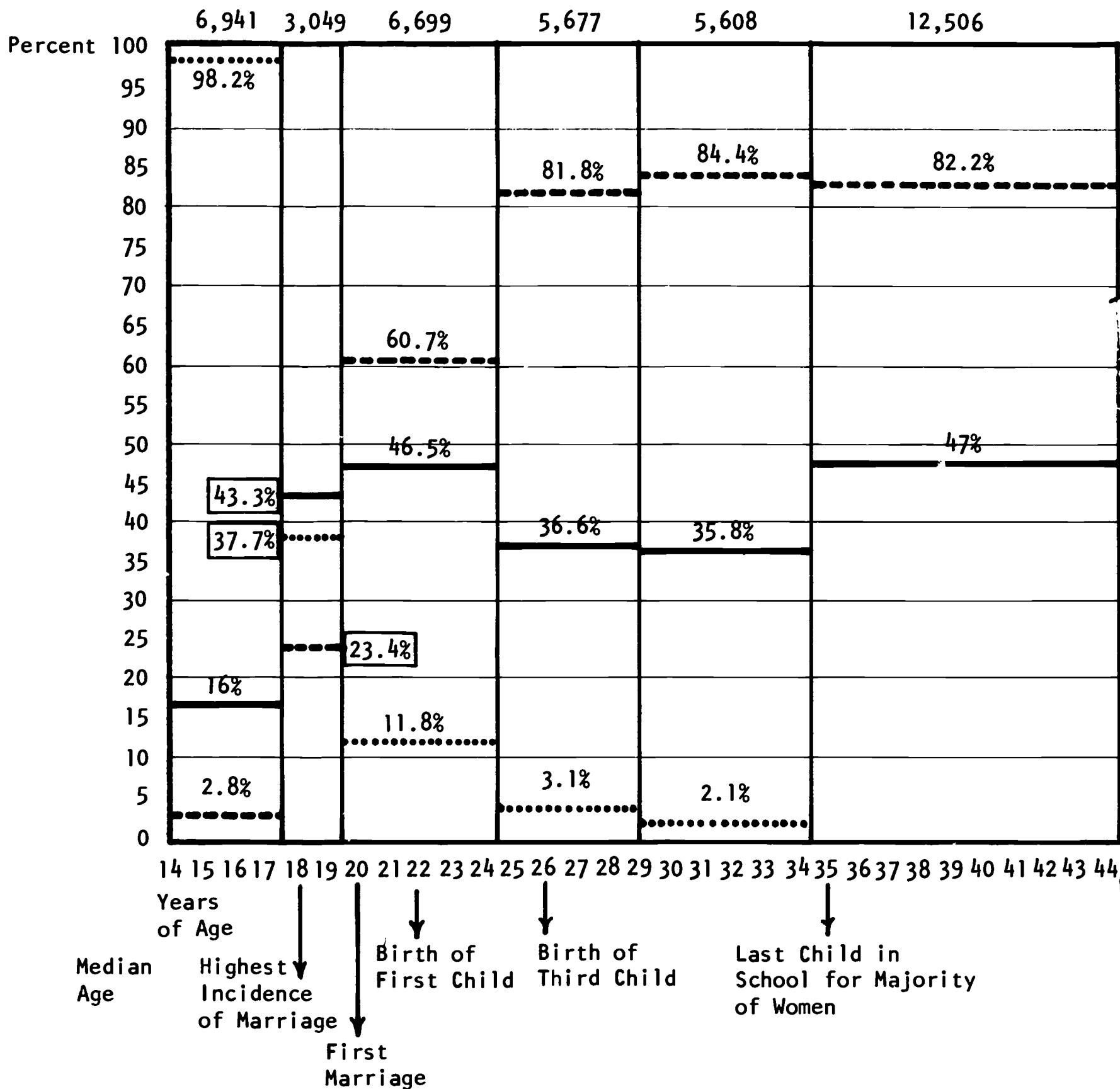
Women, as Percent of Total Enrollees, Enrolled in Public Vocational Courses, 1965-1966



Source: U. S. Office of Education.  
Preliminary Report on Fiscal 1966 Enrollment Figures.

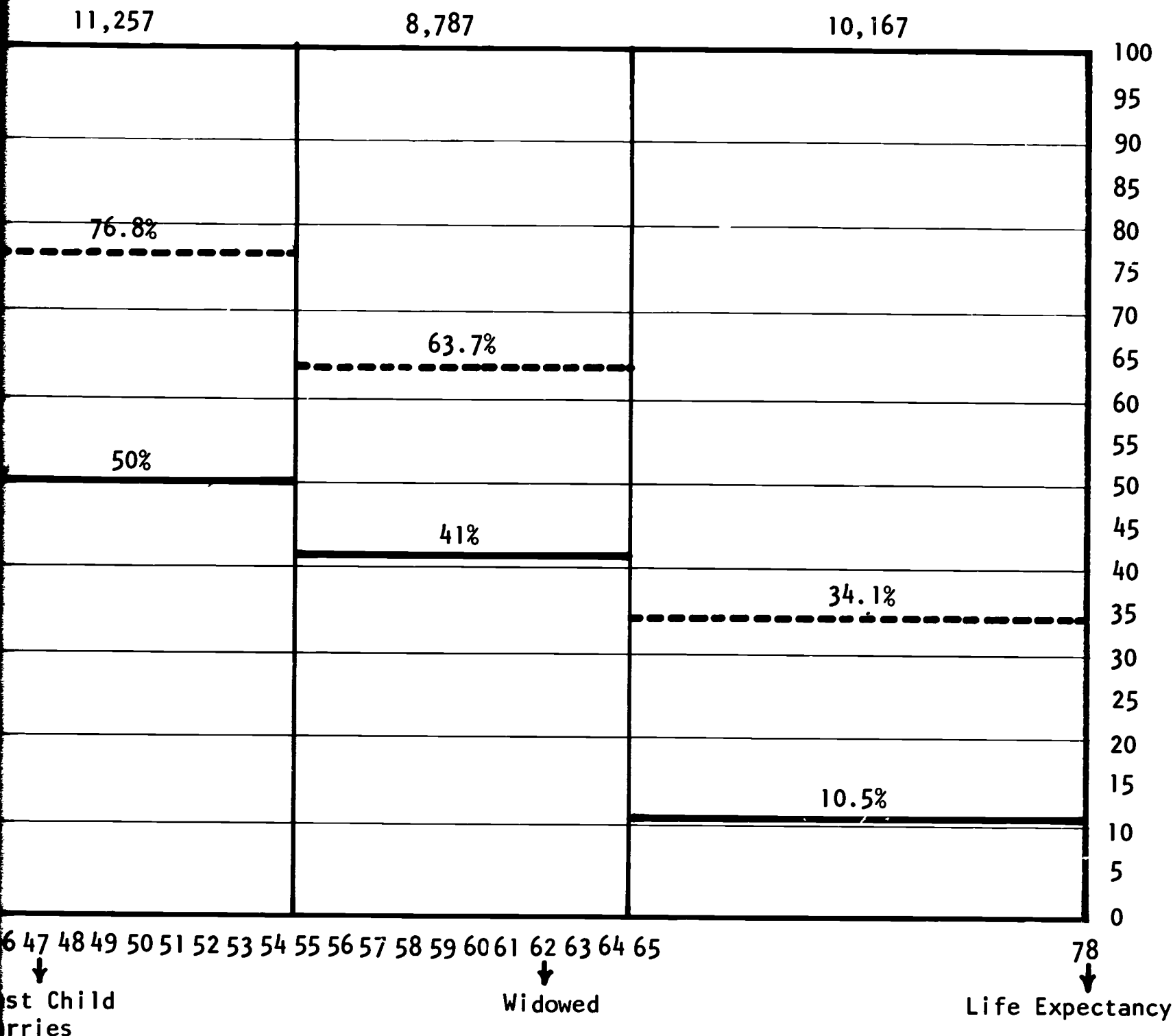
Rates of Labor Force Participation, School Enrollment, and Marriage:

(Thousands of Women in Total Population)



- Labor Force Participation Rate
- - - - - Married (Husband Present)
- ..... In School

Cyclical Changes During Life Span of Women



Sources:

U. S. Bureau of the Census. STATISTICAL ABSTRACTS OF THE UNITED STATES 1966. School enrollment data as of October 1965. p. 109.

U. S. Department of Labor, Women's Bureau. 1965 HANDBOOK ON WOMEN WORKERS. Labor force participation rates as of April 1965. p. 15.

U. S. Department of Health, Education and Welfare. VITAL STATISTICS OF THE UNITED STATES 1964, Volume 1, 1966, Median age data. pp. 1-13.

U. S. Department of Labor, Bureau of Labor Statistics. MARITAL AND FAMILY CHARACTERISTICS OF WORKERS, MARCH 1965 (Special Labor Force Report No. 64), p. A-8.

U. S. Department of Labor, Bureau of Labor Statistics. LABOR FORCE AND EMPLOYMENT IN 1965 (Special Labor Force Report No. 69). Computed from data on thousands of persons, Table C-1, "Employed Persons, by Age and Sex, 1962-65." p. A-15.

## 2

## IMPLICATIONS FOR VOCATIONAL AND TECHNICAL EDUCATION

### IMAGES AND ATTITUDES

This chapter summarizes the questions raised, implications drawn and recommendations for action and further research which were proposed by discussion composed of representatives of several service areas.

#### Roles of Women

What are the roles of women? Are there discrepancies between what they are and what they should be? In learning about the choices women make, does it have to be a choice between marriage or a career? Could it be a combination of the two? Has the planning of educational programs provided for a variety of roles? Have we educated for choice? What is the balance among family responsibilities, other types of responsibilities and employment? Have we taught that many roles may be incorporated into one lifetime? It was felt that women should be prepared for a number of roles, among them the homemaker role and the provider or employee role. The importance to girls of having adult models for each of these roles was emphasized.

In view of the number of women entering or reentering the labor force in their 30's and 40's, can we make it socially *expectable* for a woman to go back to school to learn skills or update those learned previously? Could we emphasize less sex differentiation where work roles are concerned? Many occupations are not open to women, while by contrast some occupations are thought of as the exclusive domain of women. How many job qualifications really relate to the sex of the employee? Is the high rate of unemployment for women due to the lack of preparation for available jobs or to unrealistic sex restrictions?

Does equality mean sameness? Differentiation in role expectations for the sex was recognized as significant. For example, for many women who do work, the job is not an essential part of their personality; apparently, although they are at work, they are still emotionally in the home. Competition with women is not taught to young males in our society, or vice versa. Men do not know how to compete with women; furthermore, many of them do not want to compete with women. Women are even less likely to learn to compete in the way men do, yet many work situations present competitive situations and when women on the job do not behave in the traditional competitive way, this may create problems. The traditional point of view, of men in the leadership role, is culturally determined. Many social changes will have to take place before men will accept the idea that women's roles in the labor force are as important as their own and that a homemaking role is appropriate for men. Perhaps this situation is analogous to the homemaker-at-work situation mentioned earlier. Although most men do participate in home and family life, they are still emotionally on the job. Montagu's<sup>7</sup> suggestion that fathers should work fewer hours per day in order to be afforded greater opportunities to be with their children to participate in their growth and development, especially during the early crucial years of their development as human beings, seems pertinent here. It probably is not a question of whether there are multiple roles, but whether the roles are recognized by the people.

Social implications of such role changes are by and large unknown. There is some evidence that children in families with unclear sex roles are more troubled than in families with clear sex roles. However, this does not seem to be linked with whether or not the mother works. Most research on working mothers has pointed out that the mother's employment is not the crucial variable in the development of the family. Other variables, such as the personality, attitudes and values of both parents, are more important. Much more research will be needed in this area before definitive statements can be made.

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<sup>7</sup> Ashley Montagu, "To Restore Humanity to Man," *American Vocational Journal*, 42 (February, 1967), 15.

## Image of Work

A major problem in the image of work for women is that the language used is largely borrowed from discussions of men's work patterns. We are in the middle of a shift from women not working outside the home to increased employment of women. For example, should the discussion be of *career* orientation or of *job* orientation? A career pattern that is interrupted will terminate at a lower level than a continuous career pattern. Does this mean there is no point in setting goals or planning? Are persons in leadership positions perpetuating tradition in "acceptable" occupations for women and men?

There is a need to examine some of the standard stereotypes of the working woman. For example, are women more suited to artistic roles, non-competitive jobs? Do they really want non-competitive jobs? Is it true that women tend to work in "women's work," where competition is less; operate as a minority group in a self-fulfilling effort? As soon as a job pays a higher salary, do men come in to compete for the better paying jobs and supervisory positions? Reference was made to a report given at an Utilization of Womanpower Conference sponsored by Cornell University, where it was reported that it is harder to integrate women into the work force than it is to integrate Negroes.<sup>8</sup> Do women prefer to work for men? Do women have more absenteeism? There are laws "protecting" women. Are they needed? Are they outdated? Do they discriminate against men? Are they helping or hindering women? Are women being prepared for appropriate levels of employment? What of the many women who are employed below the level of their ability and education?

What of the image of work in specific occupational groups? For example, in an attempt to upgrade the status of secretarial occupations, the CPS (Certified Public Secretary) program was established. How can people be recruited for health, food service, and other service occupations? Creating a higher status for such positions would be of great help. Pay increases plus fringe benefits would also encourage more people to enter the area of service occupations. Yet, money alone is not the answer; for example, while retailing positions typically do not pay any more than service positions, there is little difficulty in recruiting sales workers. The National Committee on Household Employment was established to coordinate the efforts of all groups with a mutual interest in the problems of private household employment, such as status and pay.<sup>9</sup> A possible suggestion for improving working conditions would be the training of homemakers in the use of assistants.

Building and rebuilding the image of women at work outside the home as well as in the home seems to be in order. Children's image of work, and images of people in specific occupations, is largely being structured by their families, the influence of commercial media, and, at the elementary level, by teachers and textbooks. Changes which include developing a healthy attitude toward work (each person must prepare for a useful life) in the early grades for both boys and girls were suggested. More opportunities should be provided for girls to prepare themselves for jobs that are appropriate to their abilities and interests as well as to prepare for a greater variety of jobs. Those concerned need to be well informed as to the range of attitudes held by girls and others in conjunction with encouraging girls to seek employment. Such a range of attitudes would follow a continuum from "woman's place is in the home" to "all girls should be employed."

For the homemaker who is thinking of going to work, but is reluctant to try a job and afraid of the self-discipline and daily routine required by returning to school, the image that can be projected is one of success. Hopefully, it can become socially acceptable for women to prepare for one level of employment, to work for a time, then return for further education. In summary, the image of work for women needs to be changed until it is socially acceptable and socially expectable for women to be employed.

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8 Beatrice Worthy, "Barriers to Upward Mobility." (paper presented at Cornell University Conference on Utilization of Womanpower: Management Policies and Procedures, Hotel Roosevelt, New York City, April 7, 1967), p. 15 (Mimeographed.)

9 Interested persons may contact the committee at 1346 Connecticut Ave., N. W., Washington, D.C. 20036.

### **Attitudes Toward Work**

The attitudes of women toward work are important in determining their life time decisions and activities. However, the attitudes of men in general, men in business and industry, and school personnel toward women's labor force participation are just as important. Young women's attitudes are significantly influenced by the attitudes of their parents, peer group, and boyfriends. After marriage, women go where their husbands go, so that the attitudes of the community where they live become important. The woman whose husband may favor her working may have to contend with unfavorable attitudes in the community. Employers' attitudes toward female employees vary, but could not be said to be uniformly positive. Often the attitudes expressed by school personnel are quite influential in the maturing girl's choices for her future. Her attitude toward continuing education is affected by the attitudes expressed by her parents and her teachers during her elementary and secondary school days. The attitudes of the girl's school counselors are also quite influential. If they see it as a waste of time for her to plan for her work career, the girl will probably see it that way, too. If the counselors share current information and are aware of all the possibilities open, then the girl may be more realistic in her planning and in her attitudes toward work.

## **THE EDUCATIONAL SYSTEM**

### **Existing Programs**

Are there problems with existing vocational and technical education programs? Is there flexibility in the programs? Are the hours when programs are offered convenient for post-high school women students with other responsibilities? Are there conditions within the community which cause women to be fearful (both teachers and students) of being "out" at night which deters enrollment in evening classes? Do girls really know what and where their opportunities are? What are we doing to help people find themselves and set goals? What are the status problems associated with vocational education?

At present a considerable amount of attention is being given to the evaluation of vocational and technical education on a strictly economic basis. Is this practice defensible or even realistic? If, a year or two after graduation, the employment rate of girls prepared in vocational programs is less than that of boys prepared in vocational programs, does it mean that vocational education for girls is less effective? Can we evaluate programs for high school girls and immediate post-high school girls without looking at typical patterns of marriage and child bearing? Will girls make use of their preparation for employment at a later date? If so, how can this be built into evaluation models?

Is present education realistic in terms of current labor force participation of women? How closely is the labor force participation of women related to their education? Should the education of women be considered separately from that of men? Can we expect that increased emphasis on vocational guidance will be increasingly realistic in terms of what is known of women's lives? Will education continue to differentiate in terms of what are appropriate occupations for men and what are appropriate for women? Will programs accommodate the female dropout as fully as the male dropout?

### **New Possibilities**

After taking a look at the vocational education program as it exists, it becomes apparent that we need a good model to be used as a guide in developing a program of education for girls and women. Criteria must be defined for developing programs of occupational preparation. Administration and organization of programs are so closely related to the program outcomes that they must be taken into account in planning evaluative procedures. A comprehensive evaluation would seem to include instructional objectives as well as social and economic objectives, and would require the development of more adequate and appropriate measures. Where program outcomes

are seen as being limited by the systems of organization, efforts to alleviate the problem are in order.

In view of the broad goals of vocational education, varying proposals emerged. Programs available to girls and women at every age and ability level would contribute to more successful adjustment in a variety of roles. Programs structured for elevating employed women from where they are now to occupations more commensurate with their interests and abilities are worthy of attention. Programs available at appropriate times (during the day, during the year) so that various age groups can attend are likely to be conducive to greater enrollments.

It is recommended that vocational education at the high school level be aimed at preparation for areas of employment as opposed to specific jobs. This would facilitate the preparation of once-trained or partially trained women for a wider range of job opportunities in a minimum length of time. The concept of "keeping up" rather than "catching up" should guide program planning. Preparation for employment should include helping women to adjust to the work role, as well as to gain job competence. The anticipation of interruptions in the educational process should be taken into account both in program planning and course content as well as in the guidance and counseling of girls and women. A multifaceted approach is needed in the area of vocational preparation. Close coordination among the members within a local school system, as well as among local school personnel and state level personnel is recognized as vital.

Suggestions were made for each level of education, but the idea of BALANCE was continually stressed. It should not be a case of vocational education at *either* high or post high, but rather a balanced curriculum from kindergarten on which includes general information about the world of work and courses for vocational preparation.

The image of the world of work can be brought closer to reality for the elementary youngster by activities such as the following: emphasize what people do through the use of films, television and trips to industry and business; introduce role modeling experiences with nursing kits, secretarial kits, kits for waitresses, scientists, and other occupationally oriented toys; search out and use books (or encourage development of texts) which include women in multiple roles.

It was suggested that a bibliography of occupational information with grade related annotations could be developed. Fifth and sixth grade teachers can point out a wide range of jobs within an occupation and clusters of occupations. However, it was emphasized that occupational materials must be stimulating, inviting and interesting to young students, and ideally, communicate the appeal of work. Industry might give support for preparation of such materials.

Effective communication among vocational educators, elementary teachers, and guidance workers is essential. Occupational specialists may be effectively utilized in the classroom. With close cooperation between teacher and counselor and with effective materials, the image of work can be brought home to elementary students. Elementary teacher education curricula might well include a course for teachers encompassing occupational concepts.

Since decision making and the world of work are interrelated for junior high students, every student ought to have a course in occupations to help develop skill in the use of the elements of decision making with particular attention to occupational choice. This basic course in occupations could be either a separate course taught by a counselor, or a part of a course required of all students such as a separate unit in social studies, or a part of an exploratory program which incorporates home economics, industrial arts, practical arts, art or other combinations. The need to involve parents in the program of occupational education was stressed. PTA programs and brochures were suggested as means of establishing communication among students, parents, and school personnel. A library of tapes, films, and all existing materials could be collected and made available to all.

While general information and information about clusters of occupations are still important, at the high school level information more specific to types of jobs becomes increasingly important.

If a course or unit on occupations was not included in the students' curricula in junior high, this should be remedied in their first year in high school. Again, parental involvement is desirable.

Should high school programs for girls be predominantly skill oriented since most girls get a job after completing high school, or should the program be aimed at preparation for general employment? More specific figures are needed to plan local programs. (However, if the results found by *Kaufman, et al.*,<sup>10</sup> are generalizable to other communities, it apparently does not affect the girl's first job to any great degree whether she was in a general or a specific program.) What the long range results of specific or general employment education would be is not known at present; more research is needed. The educational system needs to adapt and develop programs at the secondary level to provide for the needs of *all* students. It was recommended that a program be organized to keep potential dropouts in school and an "open door" policy was recommended to encourage dropouts to return to school.

Following are specific suggestions for the post-high school level. Flexibility was seen as the keystone. The time schedule must fit in with the needs of full-time students, those with part-time jobs, those with transportation problems, those with babysitter problems. Consideration should be given to holding classes in some environment other than the public school building in order to combat negative feelings which may be attached to school. Selection and assignment of teachers should take into account the teachers' ability to teach and work with the students, of the socio-economic and ability level, who will be receiving the instruction. Flexible instructional methods, suitable for the age level, the ability level, and the type of occupational preparation, should be emphasized. Simulated experience (work sample) training should be considered. Improved articulation between public school, junior college, and university programs is a must.

Vocational and technical education for women age 30 and older is needed as much as for 18 year olds, both for entry and orientation, and for retraining. New decisions must be made by mothers now that there are more factors favoring their entry into the labor force. Are women entering at the "second spurt" aware of new positions which are available? Perhaps a pre-occupational training program (career orientation) and a basic education program (career guidance) should be available preceding specific occupational training. Attempts should be made to help women get into some of the new areas rather than those traditionally assigned to women. More adequate dissemination of information, perhaps by means of mass media (television, newspapers, magazine), on sources available for guidance of women is essential. Again, this is an area in which much research is needed. There is no assurance that women in the 30+ age category are any more aware of the variety of positions they might now fill than junior high students are aware of future potential positions.

#### **Articulation with Industry**

A closer tie-in with industry than ever before is absolutely necessary. Industries must help educational institutions keep informed about industries' needs and what they feel constitutes up-to-date training. Personnel directors need to be more knowledgeable about various training programs within occupations. Vocational educators should try to help the employer assess whether employment standards are in keeping with the requirements of the positions the employer is filling.

#### **Articulation with Professional Organizations**

In considering the articulation between education and professional organizations, continuous effort is necessary to maintain channels of communication and to open new channels. Professional and vocational groups, through concerted effort, can upgrade status, gain recognition, and provide channels of communication with the public, employers and potential members. (The Association of Licensed Practical Nurses is a good example of this.) Professional organizations and other organized groups can be encouraged to provide information on career-oriented occupations for use by counselors. Effective use of paraprofessionals must be examined by the professional organi-

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10 Kaufman, *Role of Secondary Schools*, pp. 10-1 to 10-13.



zations and educators. More effective communication with union officials is necessary to work out membership requirements which are more realistic for women.

### **Education of Public (Mass Media)**

The mass media can be used for interpreting the "working woman." The public can be educated as to the various skills and levels in each vocation. Effective use of public relations can inform people of job characteristics, abilities needed to perform in the jobs, and the fringe benefits available. Information about vocational programs and services, such as counseling, can be publicized more adequately.

## **RELATED SERVICES**

### **Guidance and Counseling**

Counseling for girls and women must be oriented toward lifetime careers. Students must be counseled to plan for interruptions of education and training. Consideration of full time vs. intermittent careers should be stressed. Counseling for boys and men should stress information about the probable future employment patterns and work roles of their spouses, as well as about the relationship of work patterns of both husbands and wives to male roles of husband and fathers.

The role of guidance and counseling needs broader interpretation, understanding, and acceptance by counselor educators. Counselors need more information on occupations which are career-oriented. (Professional organizations and other organized groups have a responsibility to provide information.) The tendency to neglect vocational aspects of counseling must be overcome. Counselors who are not willing or not able to consider women's needs objectively should not work with girls and women. Those counselors who are only interested in the college bound group should not be given responsibility for vocational counseling. Counselor educators need to evaluate the curricula of training programs to reemphasize the need for objective counseling.

How can counseling at the junior and senior high school level help students gain insight into their needs for a useful life during their mature years? Utilization of the community as a laboratory is one of the techniques suggested. The need for counseling at the elementary level must be recognized and dealt with. Counselors in training should be exposed to a greater variety of occupations in which they see the worker in action.

Although the function of guidance should be to encourage sustained education rather than discontinuous education, what are some of the special techniques which need to be considered for the generation of women which is now reaching the reentry phase? Awareness of new positions available is necessary. Opportunities for pre-occupational counseling (career orientation) may be utilized. Consideration must be given to the strong possibility that decisions made at this point will have effects reaching over 25 years or more.

Regular and frequent institutes for vocational educators and vocational counselors were suggested as a possible method for updating concepts and for dissemination of information regarding women's labor force participation.

Individuals in service areas must work with counselors and counselors must work with vocational educators.

### **Needed Research**

Many general and specific recommendations for needed research were made. The development of a theory of vocational choice broad enough to encompass the realities of women's lives is essential. The development of criteria for evaluation of curricula for occupations was given high priority. What are the elements of such a model for the evaluation of goals? What instruments are needed to evaluate programs?

Vocational educators need to know more about INPUT (the people we have) in vocational programs. What are the characteristics of secondary students? What are programs for each type? How can students be motivated so that they will keep up skills and knowledge? What are the aspirations of students for various income levels?

What happens to girls and women after preparation for employment? There is need for longitudinal examination of patterns of work (full-time, part-time) for women in relation to patterns of education programs, such as the study now being conducted by Parnes for the U. S. Department of Labor, Office of Manpower Policy, Evaluation, and Research.<sup>11</sup> The possibility of utilizing social security numbers for follow-up studies was mentioned.

Suggested research on attitudes included studies of male attitudes toward women working; attitudes of employers toward women working; attitudes of women toward working women; and women's attitudes toward their own employment.

Research should supply answers to problems cited in the area of employment and preparation for employment in the work force. How can women be educated to prepare themselves for opportunities for entering or reentering the work force and for advancement? Who is responsible for providing information on new jobs? What kind of services might the homemaker need in order to enter work, i.e., child care facilities? Are women in the age group 45-55 entering the labor force for the first time or are they reentering? What kind of training do they need? Will we face the same kind of problem(s) in the future? Who is responsible (agency-level-funds) for training or retraining women in age group 35-45? Is there any one agency that could handle this? Are there already existing agencies? Is the adult educational program always a part of the public school?

Identification of the many and varied vocations at all levels of academic education (for example, health occupations ranging from nurse aide to physician) was suggested as a possible area of research. What are the characteristics of girls and women who aspire to positions in specific occupational areas such as food service, cosmetology, and office occupations? What are the characteristics needed for successful performance in these areas? Women have tended to work in "women's areas"; there is a need to explore other fields.

Another problem area mentioned was underemployment. Should girls and women who are employed below their ability level be encouraged to move up the occupational ladder or seek employment at their ability level? Will changing the educational program modify the problem of the underemployment of women?

Are we preparing people effectively in the time we have and the time they have? What are the values other than money gained from vocational education? Research is needed to help solve these problems. Both the weaknesses and the strengths of vocational education for girls and women must be studied if appropriate steps are to be taken to strengthen programs.

#### **Dissemination and Interpretation of Existing Research Information**

It was suggested that information on what is being done in pilot and/or experimental programs at the elementary, secondary, and post-high school levels be collected and disseminated to provide guidelines to motivate educators to innovate, to give them the courage to move into new areas and new programs. In conclusion, it was suggested that an attempt should be made to identify all the research that has been done in the area of the implications of women's work patterns for vocational and technical education; catalogue it; identify grade level for which it would be useful; and disseminate appropriate materials to all who are working in vocational education.

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<sup>11</sup> Persons who are interested in information about this study may contact Dr. Herbert S. Parnes, Department of Economics, Ohio State University, Columbus, Ohio 43210.

### CHAPTER SUMMARY

The three common threads which seem to run through all the foregoing information are these: the need for better and faster communication; the need for research on which predictions can be based; and the need for resources, such as guidance workers, specialists to be used as resource persons, curriculum guides and prepared educational media materials. With these thoughts in mind, work toward a more realistic educational program for girls and women can proceed.

# 3

## IMPLICATIONS FOR VOCATIONAL SERVICE AREAS

This chapter presents a summary of the questions raised, implications drawn, and recommendations made for action and further research by conference participants meeting by service areas. In two cases (distributive education and business and office education and technical education and trade and industrial education) participants representing two service areas met together for discussion purposes because of the small numbers of people involved.

### BUSINESS AND OFFICE EDUCATION AND DISTRIBUTIVE EDUCATION

#### Relevant Labor Force Information

From the accompanying figures used as work materials by seminar participants, a dramatic contrast may be observed between the percentage of women employed in clerical and kindred occupations and those employed in health occupations. Of all employed women over 14 years of age, the highest percentage was working in clerical and kindred occupations in 1965, whether they were married, single or once-married, regardless of the age or presence of children. The major group of employed single women consisted of 39.7 percent engaged in clerical occupations (Figure 34, page 25). Of employed married women, 30.2 percent (Figure 35, page 26) of the total group, and of the once-married group, 24.6 percent were clerical workers in 1965. Employed married clerical workers with children under 6 years of age represented 28.2 percent (Figure 43, page 56); employed married clerical workers with children between 6 and 17, 29.6 percent (Figure 44, page 57); and employed married clerical workers with no children under 18 years represented 31.5 percent of the respective groups (Figure 45, page 58).

The same figures also show the comparatively steady rate of women's participation in the labor force as sales workers. The range does not extend beyond 5.3 percent at the lower rate, or 8.6 percent at the higher rate of sales worker participation, regardless of marital status, or number or presence of children (Figures 34-36, pages 25, 26, and 27 and Figures 43-45, pages 56-58).

When clerical workers and/or sales workers in 1965 were ranked by number of years of education, the percentages for both groups with 12 years of education far out-distanced other educational status categories—a high 65.4 percent (Figure 46, page 59) for clerical and kindred workers, and 46.9 percent for sales workers. Comparisons with other levels of educational attainment may be made by referring to Figures 46 and 47, pages 59 and 60.

#### Implications

Conference participants representing the vocational services of distributive education and business and office education were asked to meet together in the within-service-area session in anticipation of commonalities and similarities of issues or problems. The three areas of focus which evolved from implications of the materials presented for the consideration of the participants were: criteria for program development; criteria for teacher education; and recommendations for research.

In the area of criteria for program development, the concerns of those participating in this session were related to coordination of efforts across vocational service lines aiming at providing the best educational programs possible. Topics relative to program development which were discussed included: the utilization of what is known about the characteristics of employed women; job opportunities being opened to women; utilization of all possible sources in determining the most effective ways to curb the dropout problem; and the re-evaluation of existing programs leading to more program flexibility. The appropriateness of these concerns is reflected by the proportion of females involved in educational programs for distributive and office occupations.

Of the total number of people enrolled in preparatory programs for office occupations in fiscal year 1966, women made up 76.8 percent of the group. Teachers in distributive education programs are dealing with a group of which 42.3 percent are females (Figure 41, page 31).

Indications for the preparation of teachers follow in line with those for program development. The major concern was the need for teachers oriented toward flexible programming, toward sensitivity to the capacities and inhibitions of individual students, and toward a broad outlook on vocational education.

Standards for occupational performance and employability were cited as areas to be researched. It was recommended that there be experimentation in occupational areas in which women are not frequently employed, such as higher level positions, as well as positions currently being opened to women, such as the mail carrier.

More specifically the implications for educational and research planning are:

- I. Program Development Criteria
  - A. Extension of coordinated services
  - B. Use of what is known of characteristics of women by age groups; occupations entered and being opened to them, basis for choice, family status by occupations, and similar data
  - C. Exploration of occupational education found effective by groups or agencies in drop-out reduction
  - D. Provision of greater flexibility in offerings, length of courses, varieties of course types for varying ability levels, services including placement service for evening schools
  - E. Re-evaluation of existing programs beginning with junior high level
  - F. Provision of programs for more mature, previously trained women
  - G. Establishment of standards of performance
- II. Teacher Education
  - A. Preparation to handle social and learning capacity problems of individual students
  - B. Preparation to teach at various levels of vocational skills
  - C. Orientation toward flexibility in the use of their preparation as well as in developing and teaching within flexible programs
  - D. Orientation toward a broader view of vocational education (as opposed to major emphasis on skill perfection)
- III. Research Recommendations
  - A. Accumulation and dissemination of information on experimentation done outside of vocational education, applicable to worker satisfaction and adjustment in jobs other than those now commonly held by women
  - B. Implementation of the development of performance and employability standards
  - C. Identification of jobs now becoming available to women

### HEALTH OCCUPATIONS

The demand for health services is being substantially increased by recent legislation such as the Medicare program and provisions for community health centers. Trends in medical theory and practice, such as the advocacy of at-home care for the mentally ill will require an additional supply of trained health service personnel to provide periodic visits. The emergence of nursing homes and homes for the aged open up another sphere of job opportunities for people prepared for health occupations. Furthermore, the quality of health services which can be extended to both those who can and those who cannot afford to pay will depend upon the availability of trained personnel, and again upon the competence of the workers at the several levels of occupational certification.<sup>12</sup>

<sup>12</sup> Robert Morris. "Governmental Health Programs Affecting the American Family: Some New Dimensions for Governmental Action." *Journal of Marriage and the Family*, 29. (February, 1967). 64-70.

## **Relevant Labor Force Information**

In the midst of the increasing inclination of women to enter or re-enter the labor force, a glance at Figures 34, 35, and 36, pages 25, 26, and 27, reveals the comparatively low percentage of employed married women who are engaged in medical or health service work, whether or not they have children. While 5.7 percent of all employed married women were engaged in medical and other health services in March of 1965 (Figure 35, page 26), only 3.7 percent of the employed married women with children between the ages of 6 and 17 were working in health occupations. Strangely enough, only 2.7 percent of the employed married women with no children under 18 years of age were working in medical or other health occupations. It should be pointed out that women workers counted in the medical or health service category have positions as technicians or higher.

The practical nurse, nurse aide and hospital attendant positions fall in the Service Worker category. It should be kept in mind that this category also includes a variety of other service occupations but does not include private household workers. Reference to Figures 34 through 36, pages 25 through 27, shows that 10.6 percent of employed single women; 15.5 percent of employed married women, and 19.3 percent of the employed once married women are service workers. Figure 48, page 61, shows the years of school completed by those women employed as service workers.

## **Implications**

The salient concerns of the group which was asked to weigh problems and priorities for immediate and subsequent action in the field of health services were criteria for program development, standards for certification for various occupational levels, and areas of needed research.

The discussion of criteria for program development may be further subdivided into program development aimed at pre-vocational education, secondary education, and post-high school education.

The "career ladder" concept was envisioned as a useful approach in re-examining certification standards. The evaluation of applicants for admission to training programs for different levels of occupations in the pursuit of the next higher certification level in the "career ladder" was discussed.

As the statistical data on working women are interpreted with reference to the realities of health occupations, research priorities may be categorized as: the development of "core" or "cluster" programs for health occupations which may include the "spin-off" by level of preparation concept; the development of resources and dissemination services for instructional materials useful to teachers of elementary students; the collection of more detailed information on women's employment by occupational groups, and other personal, social and educational characteristics, as well as the development of a model for utilization of available data for program planning guidelines for local and regional use; a re-evaluation of knowledges, understandings and requirements (including direct occupational experience) needed by instructional personnel in programs of occupational education; and the improvement of joint programs.

The implications for education in health occupations evolved by the group in session may be more specifically stated in the following manner:

### **I. Criteria for Program Development**

#### **A. Prevocational Education**

1. Exploration of health occupations
2. Introduction to health occupations
3. Development of criteria for screening applicants for entry into more organized or formal programs, probably at the post-high school level

- B. Cooperative Education
  - 1. Preparation for nurse aide
  - 2. Preparation for health agency dietary aide in conjunction with other services
  - 3. Preparation for health agency housekeeping aide in conjunction with other services
- C. Post-high Education
  - 1. Preparation for practical nursing certification
  - 2. Scheduling flexibility to permit both full- and part-time enrollment
- II. Standards for Certification
  - A. Development of criteria for the evaluation of previous work experience and education of once-trained, or partially trained, women seeking re-entry in health services
  - B. Provisions for accrediting competence gained through work experience in the application for and attainment of the next higher certification level
- III. Recommendations for Research
  - A. Development of procedures and standards for implementing the "career ladder" approach to upward mobility in health occupations
  - B. Development of curricula and instructional materials through experimental and pilot programs for health occupations "core" or "cluster" programs which may include the "spin-off" by level of preparation concept, i.e., length of preparation determined by level of competence achieved by the learner as opposed to a fixed course or curriculum length
  - C. Development of materials for teacher education programs for the health field
  - D. Development of a resource and dissemination service for materials to be used at the elementary level for orientation to health occupations
  - E. Development of more detailed information on women's employment by occupational groups and other personal, social, and educational characteristics, such as attitudes by occupational groups. Subsequent development of a model for the use of the findings in program development with guidelines for local and regional use
  - F. Investigation entailing the re-evaluation of knowledges, understandings and requirements (including direct occupational experience and/or contact), necessary for instructional personnel in programs of occupational preparation
  - G. Investigation and improvement of programs coordinated, or jointly undertaken, across service areas

## HOME ECONOMICS

### Relevant Labor Force Information

Reference to Figures 34-36, pages 25-27, affords the opportunity to compare groups of women by occupations in which they engage. The category of service workers may be useful as an indicator of the proportion of women who are employed in occupations using the knowledge and skills common to home economics. It should be recognized that occupations which are counted in the service workers group include a wide variety of positions, some of which fall in employment areas using skills and knowledges not related to home economics. At the same time, the combination of percentages given on Figures 34 through 36, pages 25-27, for (1) private household workers and (2) service workers, except private household, provide a basis for comparison with percentages of women employed in sales work, for example. According to figures for March of 1965 (Figure 34, page 25), the percentage of the combined force of employed single women in private household jobs and services other than those in private households is 24.8 percent, or nearly five times the proportion of women engaged in sales (5.3 percent) jobs. These two groups combined

rank second from the largest group composed of clerical and kindred workers (39.7 percent).

Of employed married women, 20.6 percent (Figure 35, page 26) were at jobs in either private households or services. Employed married household or service workers, as well as single workers, comprise the second largest group within the sphere of major occupational groups.

For once-married women (widowed, divorced, or married with husband absent), those in household and service jobs make up the largest group of all, 32.2 percent. This is almost one-third of the total number (5,044,000) of employed once-married women (Figure 36, page 27).

When service workers are considered separately with regard to the proportion of married women with children under 6 years old in March of 1965, the size of the group is second only to the proportion of clerical workers with 18.3 percent in services and 28.2 percent in clerical jobs (Figure 43, page 56). Mothers with children under 6 are less likely to be in private household work. As Figure 43, page 56, indicates, 5.1 percent of such mothers were in private household jobs in 1965.

It appears that mothers with children between the ages of 6 and 17 are even less likely to work in private households as Figure 44, page 57, indicates since it shows that only 4.3 percent of these mothers were working in private households in 1965. Figure 45, page 58, shows that even for women with no children under 18 in 1965, the participation rate in private household work for these employed married women is third lowest (5.7 percent) of all seven occupational groups.

The level of educational attainment of various occupational groups of women is not to be overlooked. Figure 48, page 61 shows the number of years of school completed by women employed as service workers. Over 90 percent (92.7 percent) of the women employed as service workers had completed 12 years of education or less, with 56.1 percent of the total group of service workers having completed 11 years of schooling or less.

The kinds of problems associated with developing courses for women preparing for jobs as private household workers are implied by statistics on years of schooling completed (Figure 49, page 62. While 97.3 percent of the private household workers had completed 12 years of schooling or less, over half of the total group of these women (52.5 percent) had completed 8 years of schooling or less.

### Implications

The total number of individuals enrolled in occupational home economics programs was 41,846 in 1966. As the exact percentage of girls and women in this aggregate is unobtainable at this time, the proportion of females making up the total enrollment of all vocational home economics programs (96.7 percent) may be useful as an approximation of the total number of females enrolled in occupational home economics programs (See Figure 41, page 31). How enrollment figures for home economics wage earning programs are used may depend upon an assessment of the numbers of women seeking employment more to their liking, more challenging, more lucrative, or more socially acceptable.

### Junior High Level

It can be assumed that most girls will be employed much of their lives. Encouraging girls to identify a vocational area would be an innovation in curriculum planning for girls. Work patterns of women should be emphasized at all levels, from the elementary level on. There is a need for statistics on women's work patterns within local communities to make this realistic for the 7th grade level.

Information about women's work patterns should be called to the attention of junior high school home economics teachers. Those in leadership positions in vocational and technical education have the responsibility of helping local teachers and administrators understand the effect current trends in employment are likely to have on girls and help them consider ways in which the educational program might help junior high girls to begin to consider the patterns a woman's



life is likely to follow. A series of position papers could be written by experts in the field for the educator, the teacher, the counselor, and the lay person in the "language" of the intended audience. Local statistics on women in the labor force could support or elaborate on state and/or national statistics. All those involved with the education of women within a particular community should be aware of the occupational opportunities available within that community in light of what is available for women on a national scale. With today's ever increasing mobility, it is important to have an overview of women's work patterns nationally in comparison to the narrower view of women's work patterns within one's own community.

At the junior high level, a great deal needs to be done to change attitudes about the woman's place in the world of work. There are also implications for the type of educational programs that girls are advised to undertake. Home economics on the junior high level might well emphasize the development of personality, employability, and getting along in the world of work, rather than limiting the emphasis to family orientation. Employers have indicated that industry feels these aspects of personal development are important; some businesses and industrial firms are already offering courses to young girls in these areas. Home economics at the junior high level can accept the challenge to broaden its curriculum to include introducing girls to the world of work, opening their eyes to the realities of life as they concern the probable work pattern for the majority of girls now at the junior high level, and giving these students a firm foundation of basic home economics education with later development of skills when these students are at the developmental stage when these tasks will be more meaningful and easier to accomplish.

Whenever home economics teachers work with a class, be it elementary, junior high or high school level, these students must be met at their ability level. An orientation to homemaking and an introduction to occupations must be presented in a fashion readily understandable according to the students' ability to receive the information. Focus can be on the particular types of students, their thresholds of ability, and the statistics that support the predictions about what the work pattern for these individuals is likely to be. Counselors and home economists can work closely together to help girls develop an awareness of various occupations in which they might be interested which would serve to help them think more seriously about this added dimension of their life styles.

An area of home economics which needs more emphasis is that of management. Girls need to know more about making decisions about time, energy and money, both for their homemaking role and for their employee role.

#### *Suggested Methods of Implementation*

1. Work with counselors to get girls to express an interest in a vocational area and become associated with a young person involved in this particular vocation - develop a type of partnership to find out about the occupation; fringe benefits, income 5-10 years after starting; some the duties of the occupation.
2. Encourage the girls to investigate what is going on in the community in a historical perspective. What were the work patterns of their grandparents, mothers and fathers? Then, in the light of their findings, predict what their own work patterns will be.
3. Have an orientation program in the school to expose the girls to the world of work and give them information about occupations. (If possible, it would be important to try and have some kind of measure of the attitudes of the girls before and after experiences described in 2 and 3.)
4. Try to get *Co-ed* magazine to focus on orientation to the world of work as most of the girls in this age bracket are exposed to this teenage publication.
5. Modular scheduling at the junior high level would facilitate various types of programs available for large or small groups, special groups, and joint courses with other vocational areas.
6. Obtain local statistics in order to make this type of information realistic to the 7th grader. To get this information it will be necessary for teachers to enlist the aid of the administrators of

the school and prominent people in the community who are interested in education. Administrators are the change agents and teachers should go to the administration with a concrete plan plus a sales pitch!

#### Secondary and Post-High School Level

The need for orientation to the world of work is again emphasized. Girls should think more about the added dimension of their lives, that of employment. Experimental programs to implement this need to be developed. Joint programs with distributive education and/or trade and industrial education are possibilities. An experimental program is underway in Chicago now to test the possibility of joint programs.<sup>13</sup> Keeping youngsters in school is only part of the answer; there also must be a worthwhile program to fit their needs.

Home economics can provide pre-vocational courses for other wage-earning programs, for example, nutrition courses for nursing. If the people representing these programs, i.e., nursing, could be encouraged to indicate this is appropriate, principals might be more willing to accept such courses.

There is a great need for emphasis on management with a stress on realistic use of resources. Emphasis on the importance of continuing education and meeting the emergencies which often occur during a lifetime is suggested. Close working relationships with the vocational counselors may aid in getting girls to make realistic plans.

With the increasing purchasing power of many two- or three-earner families, and the increasing demand for help with household tasks, a question arises as to the reason for the comparatively low participation rate of mothers whose children are in school in private household work. Is it a lack of the confidence needed to seek and apply for work? Since housework should come naturally as a salable skill for women who do these kinds of tasks at home, one might expect a much larger participation rate in household jobs for mothers with children in school. Is it the low wage scale? Is it altogether a question of status? If it is a question of status, what can be done to reduce or eliminate the reluctance of women to earn through household work. One might legitimately ask why these household tasks have fallen to the low regard assigned them in our present society. What can be done to change prevailing attitudes? Who might justifiably take the initial steps toward changing whatever factors can be identified as causes for the low percentage of women in private household jobs? What effect would substantial changes in the status of household workers have on family income?

The development of courses to prepare women with educational limitations for jobs as private household workers would seem to require course content concerning job application and adjustments, as well as legal aspects of employment along with task performance kinds of instruction.

Married women who are mothers would seem to have certain understandings because of their backgrounds that would cause them to seek jobs as helpers in day care centers and nurseries. Are the reasons for their reluctance to do so related to employability aspects of work? Again, the tasks of food preparation in the home directly relate to tasks required in food service jobs so that more women with no children under 18 might be expected to seek work in food services. What are the key variables and how do they operate with regard to the participation rates of service workers with no children under 18?

#### *Suggested Methods of Implementation*

1. Plan a course for seniors who are going to work or going to college, with management and understanding the decision process stressed.
2. Use pre-professional courses, such as the Pittsburgh program in interior design which tends

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<sup>13</sup> For more information about this experimental program, contact Mrs. Helen J. Evans, Director, Bureau of Vocational and Practical Arts Education and Special Programs, Chicago Board of Education, 228 North LaSalle Street, Room 634, Chicago, Illinois 60601.

to emphasize the professional and progressional aspects of the field.

3. Use any of the suggestions made for the junior high level which would be appropriate for the class that is being taught.

#### Teacher Education

At this level there is a need to re-orient the thinking of college students to the fact that most women will be assuming many roles, among them the roles of homemaker and wage-earner. In this regard, the attitudes of the teachers are important. Subject matter teachers must be aware of these role changes. The attitudes of women toward working women must be changed. If the concept of women's contribution and industry's acceptance of her potential output is improved, this will do much to improve the total concept of the working woman.

The experience of living in the home management house can be made more realistic for the potential home economics teacher to foster the perception that one will be able to manage realistically the many roles that will be part of one's life style.

Teacher educators should be aware of the projection that by the year 2000 there will be 300 million people in the United States and that 1/3 of these people will be in 10 large urban areas. In this setting, a sub-culture often develops and it is very difficult for the typical middle-class teacher to communicate with this group. Therefore, there should be some emphasis in the undergraduate education program whereby students are made aware of social class differences. Students should be familiar with every agency in the city. Pennsylvania State University is carrying out a project where the students live with lower income group families for 10 weeks. The families with whom the students live are selected by the social welfare agency and the girls' welfare is closely watched.<sup>14</sup> This is one example of how the need for a broad orientation to people of all backgrounds could be implemented in a teacher education program.

Additional information that is needed in order to develop courses to provide information and give direction to home economics teachers is: the typical individual patterns for women who work (such as the studies being carried out by Bickel & Tomlinson);<sup>15</sup> realistic information to identify jobs at all levels and determine thresholds of ability for these levels; the real attitudes of significant subgroups in society relevant to the world of work; the present industrial patterns and positions related to special needs of women such as maternity and family related leaves.

Other means of implementing emerging information about the changing roles of women is through joint educational efforts. Reopen ventures with other vocational areas. Develop more interaction between teachers, teacher educators, and home economists in business. Convince counselors of the importance of getting girls to consider multiple roles for their adult lives.

#### Needed Research

1. Development of attitude inventories for all educational levels to test change in attitudes toward work
2. Development and testing of orientation courses for the world of work for the junior and senior high school levels
3. Development of materials to be used at the junior high and high school levels on women's work patterns

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<sup>14</sup> For more information about this project, contact Dr. Marjorie East, Head, Home Economics Education, Pennsylvania State University, University Park, Pennsylvania 16802.

<sup>15</sup> For information about the cross-sectional study of the work patterns of several thousand New York State women, contact Miss Helen E. Bickel, Bureau of Occupational Education Research, The State Education Department, Albany, New York 12224. For information about the study of the work patterns of practical nurses in Illinois and Iowa, contact Dr. Robert M. Tomlinson, Chairman, Industrial Education Division, Department of Vocational Technical Education, University of Illinois, 350 Education Building, Urbana, Illinois 61801.

4. Studies of the attitudes of prospective teachers toward working with the disadvantaged sub-culture
5. Studies of practices which exist to accommodate women for various reasons in certain jobs
6. Collection of information about the productivity of women aged 35 and over

#### Summary

The discussion in the home economics group session concerning the implications of women's work patterns seemed to progress along a continuum with the levels of education as the cohesive thread. Homemaking teachers must organize and develop their courses around the core idea that most of their students will work. Classroom materials must be developed based upon more information (norms, aspirations, occupational choices, and other factors relating to occupational areas). The teacher can then incorporate the approach, "girls like you are more likely to follow these patterns of employment ---", as opposed to "most women will work," thereby giving a more realistic picture to students of the emerging roles of women.

An awareness of "thresholds of ability" takes into account low levels of skill and opens the door for the development of courses for occupational preparation at the appropriate level. The advantage of modular scheduling in the secondary schools should be considered in planning flexible and joint programs. For example, Chicago recommends an extended day for vocational training.

Position papers about women's work patterns were suggested as a means whereby home economics teachers, counselors, school administrators, and lay people could be made aware of the emerging trends in this area. The aid of school administrators is needed and a closer working relationship among home economics teachers, state supervisors and administrators was recommended. Closer contact with Home Economists in Business (HEIB) would help to keep the home economics teacher aware of trends in the business world.

Family life education should be extended to include the world of work as well as a broad orientation to the feelings and attitudes of people in various sub-cultures and economic groups. Hopefully, this type of education extended to the college level would encourage some home economics education students to plan to teach in low income areas, both rural and metropolitan.

Increased emphasis on management in senior high home economics courses is recommended with stress being placed on the process of decision making. Home management courses at the college level must reflect the changes in women's work patterns in order to help potential teachers plan and teach more realistic courses.

It was felt that there is an increasing need for more guidance and counseling, especially for the older woman returning to work or entering the work force for the first time. Adult classes are an ideal place to provide counseling and placement services. The possibility of setting up community centers for continuing education, counseling, and placement was also mentioned.

## TRADE AND INDUSTRIAL EDUCATION AND TECHNICAL EDUCATION

### Relevant Labor Force Information

A number of reasons have been brought out in the account of earlier sessions of the conference as to why comparatively few women have traditionally sought to prepare for trade and industrial or technical occupations. The 1966 figures substantiate this observation as women make up only 8.7 percent of the total enrollment in technical programs (253,839 total enrollment) and only 10.7 percent of the trade and industrial enrollment (1,269,051 total) for job preparation education (Figure 41, page 31).

A number of indicators suggest that the attitudes of those who consider certain occupations inappropriate for women will undergo changes toward allowing or encouraging women inclined toward technical competence to enter the trade and industrial and/or technical work arena. If changes in attitudes, legislation, technical skill levels of women and/or other factors do take

effect, the proportion of women enrolled in this type of educational program can be expected to increase.

The percentage of employed single women engaged in professional, technical and kindred occupations in 1965 was 16.7 percent (Figure 34, page 25); of employed married women, 14.7 percent (Figure 35, page 26); and of once-married women, only 9.6 percent (Figure 36, page 27).

Figures 34 through 36, pages 25-27, indicate that employed single women were half as likely to be engaged in operative and kindred jobs (8.6 percent) as either married (17.5 percent) or once married (16.4 percent) women in 1965. Oddly enough, data on Figures 43 through 45, pages 56-58, indicate that a few more women with children under 6 (18.3 percent) worked as operatives than women with children between 6 and 17 (18.1 percent), or once-married (16.8 percent) women. This contrast is contrary to the overall female work force participation rates where mothers with children under 6 are less likely to be employed, or employed full-time, than mothers with children between the ages of 6 and 17 years.

Figures 50 and 51, pages 63 and 64, show levels of educational attainment for women in technical and operative occupations. Some significance may be attached to the data on educational levels of women engaged in technical and operative occupations. For example, 91.9 percent of the women employed in professional, technical or kindred occupations have completed 12 years or more of education. While one-fourth (25.9 percent) of these women have at least a bachelor's degree, and almost another fourth (23.7 percent) have completed 17 or more years of education, the actual number of women in these groups is comparatively small and can be determined from a base of 1,038,000 (Figure 50, page 63).

The major proportion of women employed in operative occupations in 1965 is located on the opposite side of the 12 years-of-completed-schooling benchmark. While 58.7 percent of these employed women completed from one to four years of high school, 38.9 percent completed eight years of school or less making a total of 97.6 percent of the group with 12 years or less of schooling (Figure 51, page 64).

### **Implications**

Trade and industrial educators and technical educators were asked to meet together in the within-service-area session in anticipation of commonalities and similarities of issues or problems.

There are comparatively few women presently enrolled in programs of technical education although there are many employers who are willing to employ women. There is a great need to acquaint women, as well as men, with the opportunities available in trade and industrial and technical occupations. Aspects of recruitment might well be handled from several angles, i.e., from the national level, through local recruiting programs, and through responsibility that can be assumed by industry. Public relations and job rewards might be examples of methods whereby recruitment information reaches school audiences.

There is a need for realistic job descriptions as well as for innovative ways to present this information. Video tapes or the use of dial-an-occupation recorded information related to careers could be used. Instructional materials for recruitment and orientation to trade and industrial and technical occupations must be developed, taking into account cultural differences, rural-urban differences, projected factors related to employment and the intellectual level of the audiences who will receive these materials.

### **Needed Research**

There is the possibility of new technical occupations for all, including women. How will women fit into the new program of technical education and the world of work? Will they be aware of the opportunities? Will they be prepared to take their places beside men in the same types of jobs for equal pay and benefits? Answers to these questions will be based upon the opportunities for women to prepare themselves for these emerging occupations at various levels in trade and industrial and technical occupations. Will program planners in business and industry be willing

to make provisions for scheduling flexibility and opportunities for women to keep abreast of current developments in their fields in up-dating or retraining courses? Will women trained for technical occupations who drop out of the labor force for a few years because of family responsibilities keep up-to-date so they can re-enter with little or no additional training?

Additional information needed regarding women in relation to trade, industrial and technical education includes: criteria for the development of educational programs for women; women's aptitude for technical education; factors affecting adjustment and satisfactions derived from employment in technical occupations; the number of women in technical occupations; the number of women in technical education programs; the employment practices related to the selection and enrollment of women in technical education; and the various job criteria, qualifications, and opportunities.

Recommended research for the whole field of vocational education includes: the development of new instruments to measure girls' interests; replication of Super's longitudinal study of boys with girls; study of parental attitudes toward work; and research relating to work attitudes in various subcultures.

### **Recommendations**

1. More original thinking is necessary in getting information about programs to girls and women. They must know about the needs for trained people for marine jobs, aerospace jobs, technical secretaries, and technical writers, to name a few.
2. A national drive to recruit people for technical jobs is needed. Large industry could be responsible for the funding.
3. Broad exploratory programs should be available at the high school level without discrimination by sexes.
4. Job analyses which would provide information about commonalities across technical jobs are necessary in order to make it possible to plan educational programs which would give a general technical background before specific skills are taught.
5. For women returning to the labor force, refresher courses are not enough. Joint technical, counseling, and social education courses need to be planned.
6. More flexible work hours are a necessity.
7. The attitudes of significant persons must be known in order to maximize program effectiveness.

### **GUIDANCE AND COUNSELING**

In response to the question of what things can be done *now* in the area of guidance for girls and women, the suggestions fell into the following groupings: (1) the use of a guidance approach (the combination approach) which involves both orientation to employment, including information about specific jobs, and consideration of the various roles of women, including personal adjustment to these roles; (2) the identification and use of role models; (3) the involvement of business and industry; (4) the development and use of courses or units within courses by counselors and teachers working together; (5) the provision of guidance for the post-high school group; and (6) the inclusion of more occupational information in counselor preparation. Suggestions for research were also made.

In considering the combination guidance approach, the necessity for an early start in helping girls to establish tentative goals was stressed. Girls often talk about marriage plans *and* employment plans, but fail to bring the two into focus; hence, usually go the marriage route, and then later find it necessary to explore employment. A realistic role model, which does not compartmentalize girls' view of life goals, is necessary. Emphasis must be placed on the fact that life patterns of women are discontinuous. There are occupational differences and regional differences in patterns of moving in and out of jobs. Perhaps thinking in terms of *decision points* in a girl's life (at high school entrance, at high school graduation, at marriage, at the time she wished to return to, or enter, employment) might do a great deal to help girls establish short range goals

and long range goals. Perhaps as a starting point, interest inventories might be used to help indicate which girls may be most adapted to become successful homemakers and wage earners.

There is a need to use innovative ideas to stimulate girls to consider a wider range of occupations. A starting point might be to compile a list of occupations in which girls and women are now working or could work.

There is a strong need for models of women who are successful role combiners. Beginning in junior high, and perhaps developing through family living courses, women should be presented in various roles – in person, in books, in films, on television, and through teenage magazines.

Realistic contact with business and industry is a definite necessity. Work-study programs for girls can help accomplish this. Other possibilities are field trips and “career days” when companies and industrial representatives visit schools.

Courses, for example a homemaking course, could well include a unit where a guidance counselor would be called in to discuss the wide range of employment opportunities for women. Other possible activities for a course might include having a “day on the job”, listing the occupations where girls are employed and *can be* employed in your locale, presenting taped interviews with workers, using books and movies that show the role combination approach, inviting successful home-and-work role combiners in to talk to the class, and employing the decision-points approach.

Counseling opportunities and tools must be provided for women at the various post-high school decision points. One major problem is that of getting the women and the facilities together; another is the lack of resources for post-high school help. Junior colleges, area technical schools, the state employment services, and the Job Corps are possible sources of counseling. Publicity is needed so that women (particularly school dropouts and unemployed) are aware of the existence of these facilities. With sufficient resources, a follow-up of all high school graduates of 10 to 15 years ago would provide information for the counselor and also provide help to the graduates who might need counseling. An example of a possible program is the project inaugurated and conducted by Dr. Lillian Van Loan, Division of Continuing Education, Corvallis, Oregon, where a series of meetings for mature women was held to call attention to educational and employment opportunities. Aptitude testing and counseling were included in the project. The community college, junior college, and area vocational and technical school present a relatively new opportunity for women high school graduates and high school dropouts for post-high school education and preparation for a wide range of employment opportunities.

In relation to counselor education, it was suggested that counselors needed more familiarity with the world of work. More contact with industry was suggested. Perhaps the National Vocational Guidance Association could be asked to work with publishing companies to include information in guidance publications to show how women combine homemaking responsibilities and outside employment. For counselors who are presently in the field, institutes to inform and sensitize them to the need for more and better occupational information and vocational counseling for girls and women was suggested.

#### **Needed Research**

Many areas were suggested where additional information for counselors would be very helpful. The inclusion of vocational concepts in elementary guidance programs needs to be explored. Realistic job descriptions and job requirements for women were cited as high on the list of needed information. Innovations in more effective use of occupational information, such as San Diego's project, “View of Jobs,” recently reported in the APGA Journal, and video tapes of employees' work and comments on the job in business and industry, including close-ups of actual tasks being performed, as in an exploratory project by the Lane County Intermediate Education Office in Oregon, are needed. There is a need to know what proportion of women would really like to work outside the home, also how many feel they need to work outside the home. When women change jobs, do they move horizontally or vertically on the occupational scale? Why do they move? What

is the pattern? Counselors are in great need of tests and inventories which would be appropriate for working with girls and women. Most of all, longitudinal research is needed; on the self-perception of members of sub-cultures, on perceptions of work; on the potential social impacts of continued increases in female employment; and to show when, why and how women reenter the labor force.

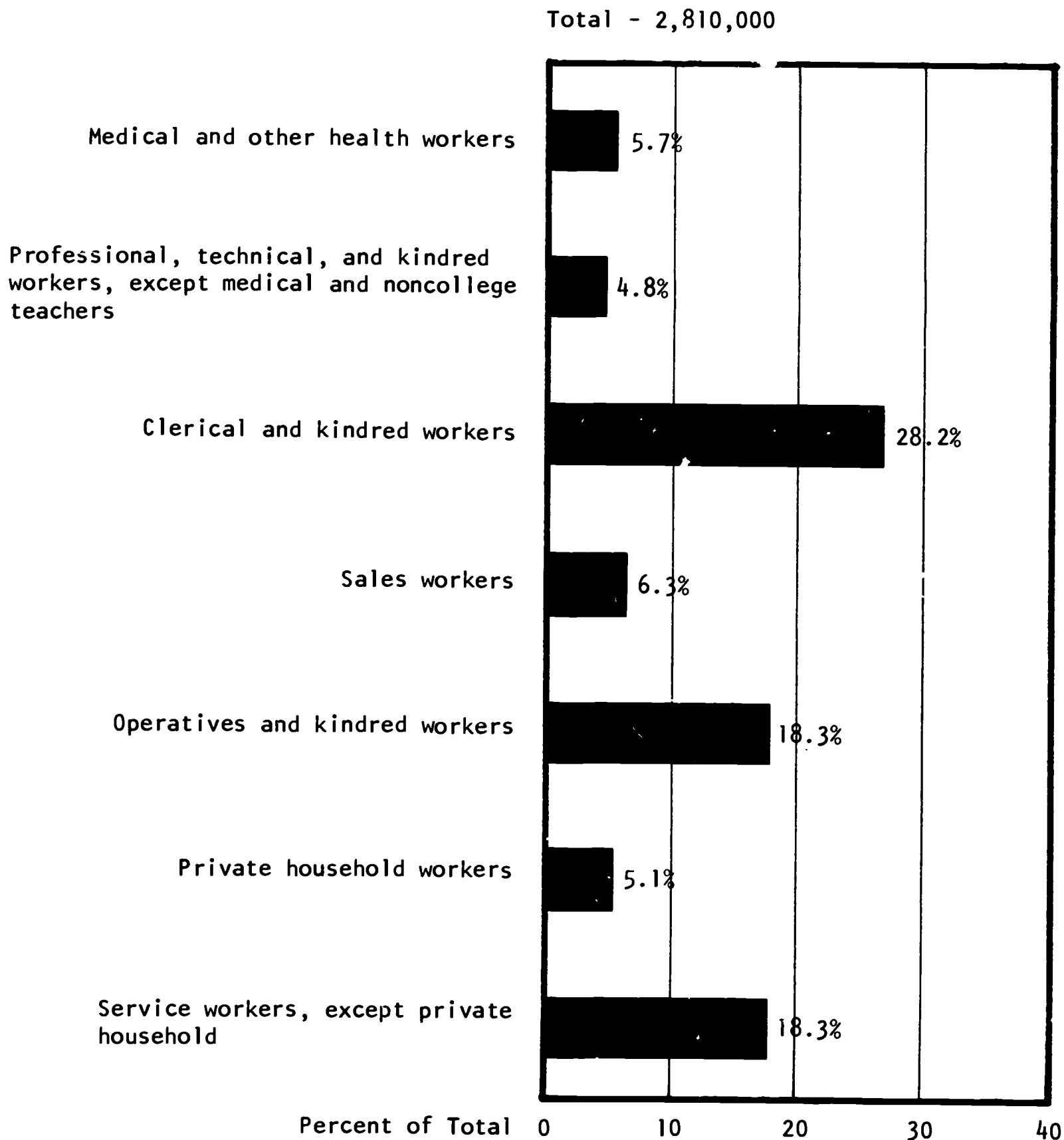
### **Summary**

In counseling with girls and women it is important to keep in mind two dimensions: the development of self concepts and of a realistic view of the world of work. It is important to identify women who are successfully combining multiple roles in order to help girls acquire realistic role models. Counselors need to become involved in the preparation of instructional materials which attempt to present women in more realistic roles. Maintaining realistic contacts with business and industry is necessary. Above all, it is important to encourage and do research in the area of women's work patterns.



Figure 43

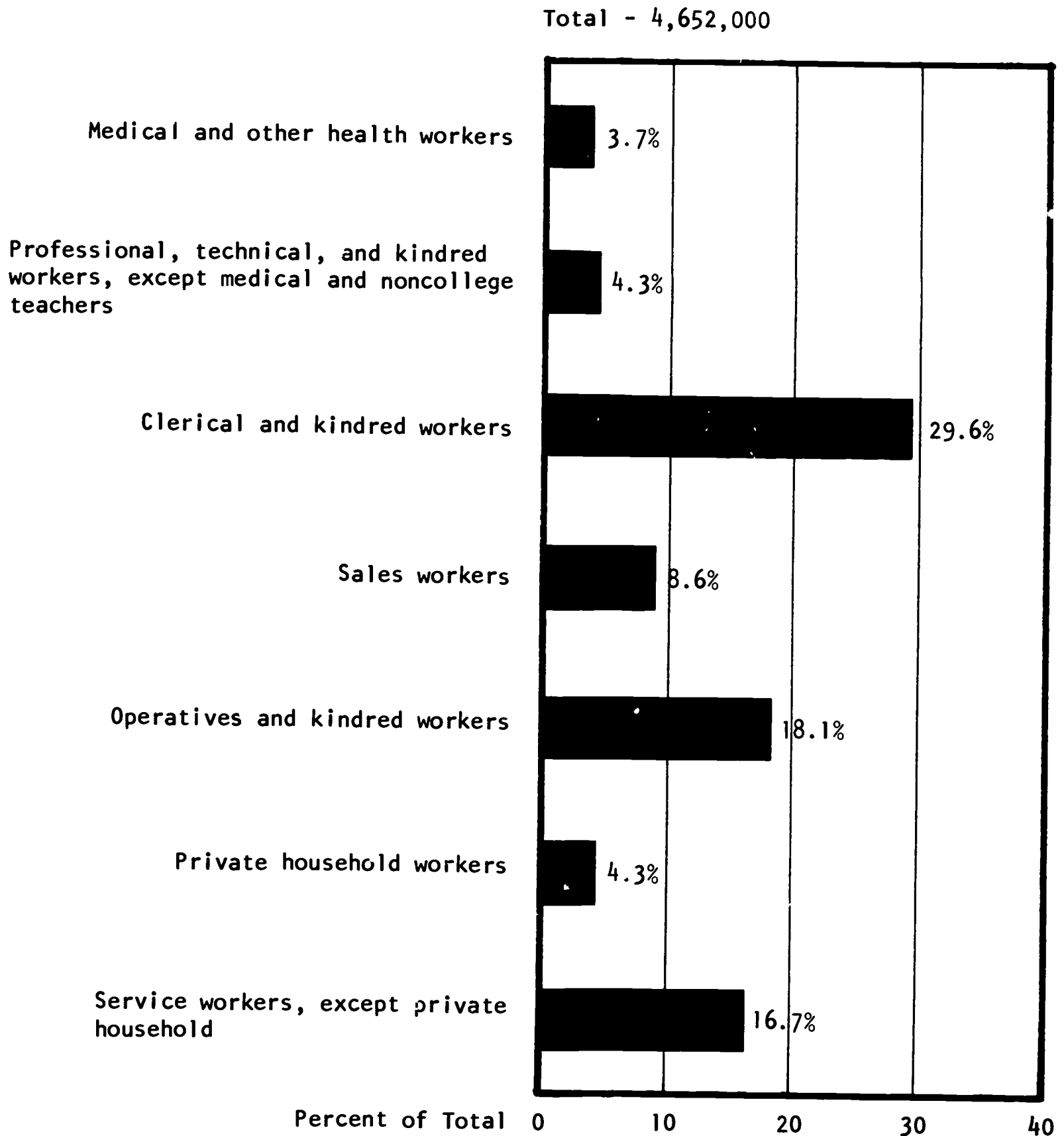
Occupation Group of Employed Married Women (Husband Present)  
With Children Under 6 Years Old, March 1965



Source: U. S. Department of Labor, Bureau of Labor Statistics,  
MARITAL AND FAMILY CHARACTERISTICS OF WORKERS, MARCH 1965  
(Special Labor Force Report No. 64), Table R, p. A-22.

Figure 44

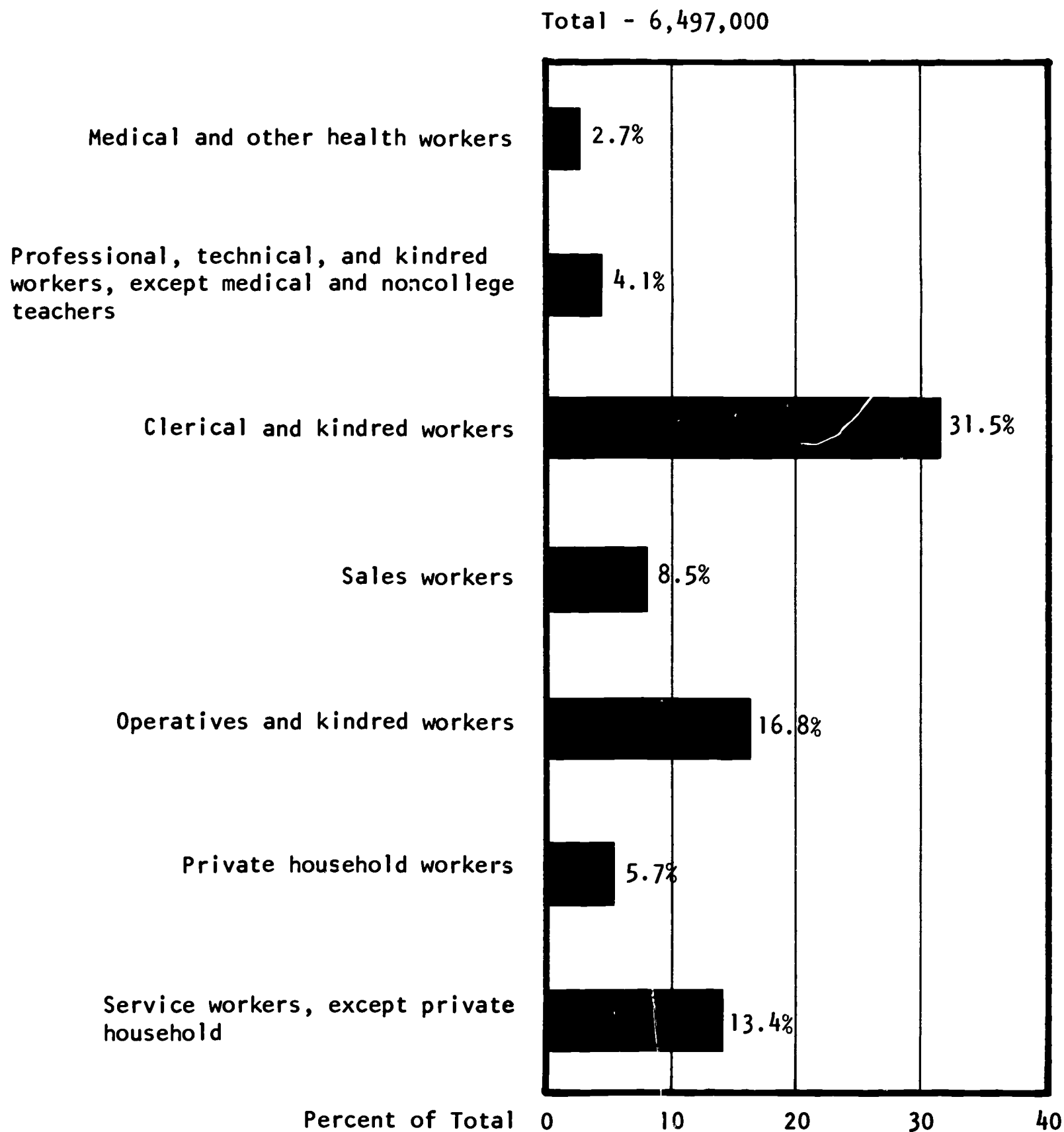
Occupation Group of Employed Married Women (Husband Present)  
With Children Between 6-17 Years Old Only, March 1965



Source: U. S. Department of Labor, Bureau of Labor Statistics,  
MARITAL AND FAMILY CHARACTERISTICS OF WORKERS, MARCH 1965  
(Special Labor Force Report No. 64), Table R, p. A-22.

Figure 45

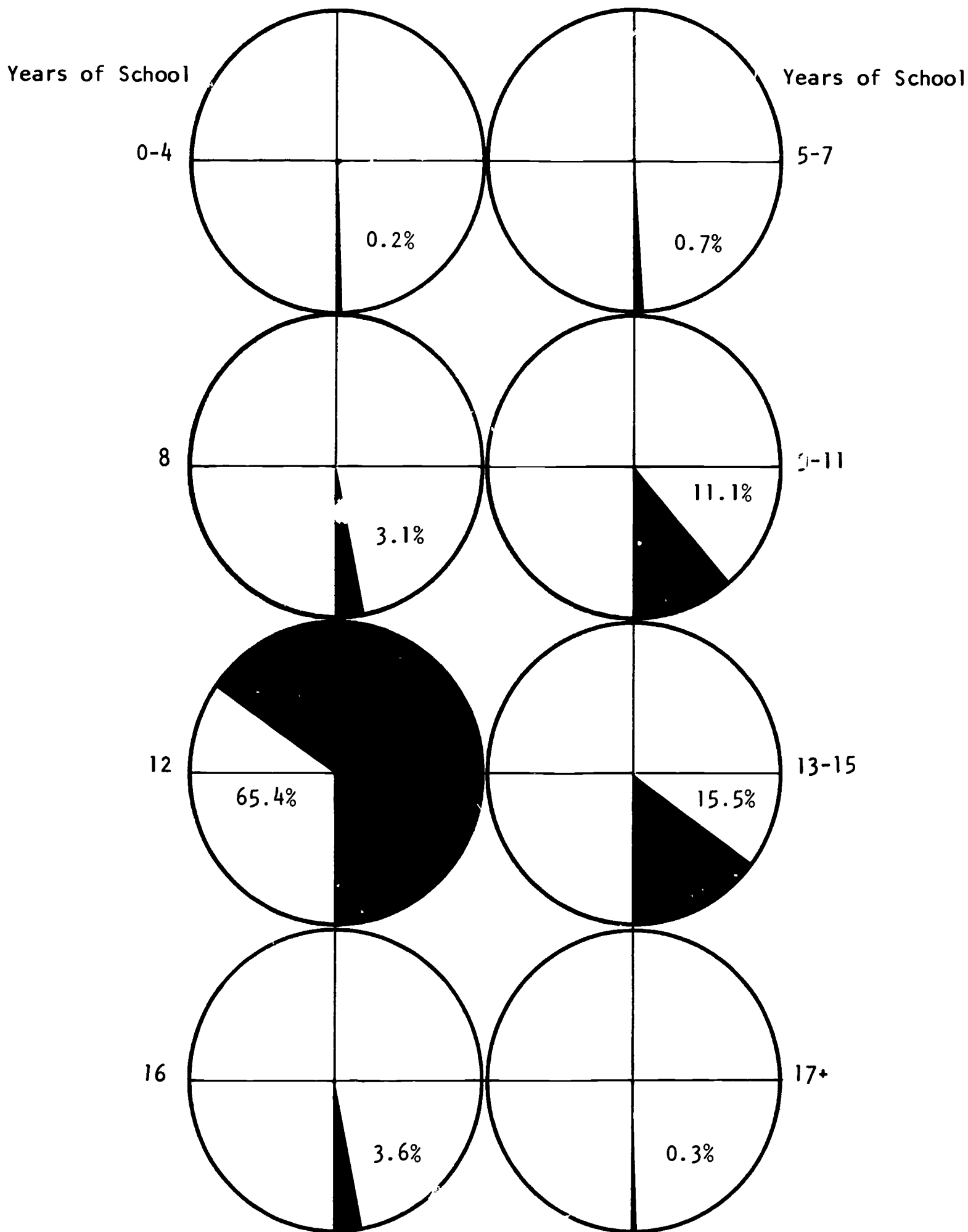
Occupation Group of Employed Married Women (Husband Present)  
With No Children Under 18 Years, March 1965



Source: U. S. Department of Labor, Bureau of Labor Statistics,  
MARITAL AND FAMILY CHARACTERISTICS OF WORKERS, MARCH 1965  
(Special Labor Force Report No. 64), Table R, p. A-22.

Figure 46

Women Employed as Clerical and Kindred Workers, By Years of School Completed, March 1965

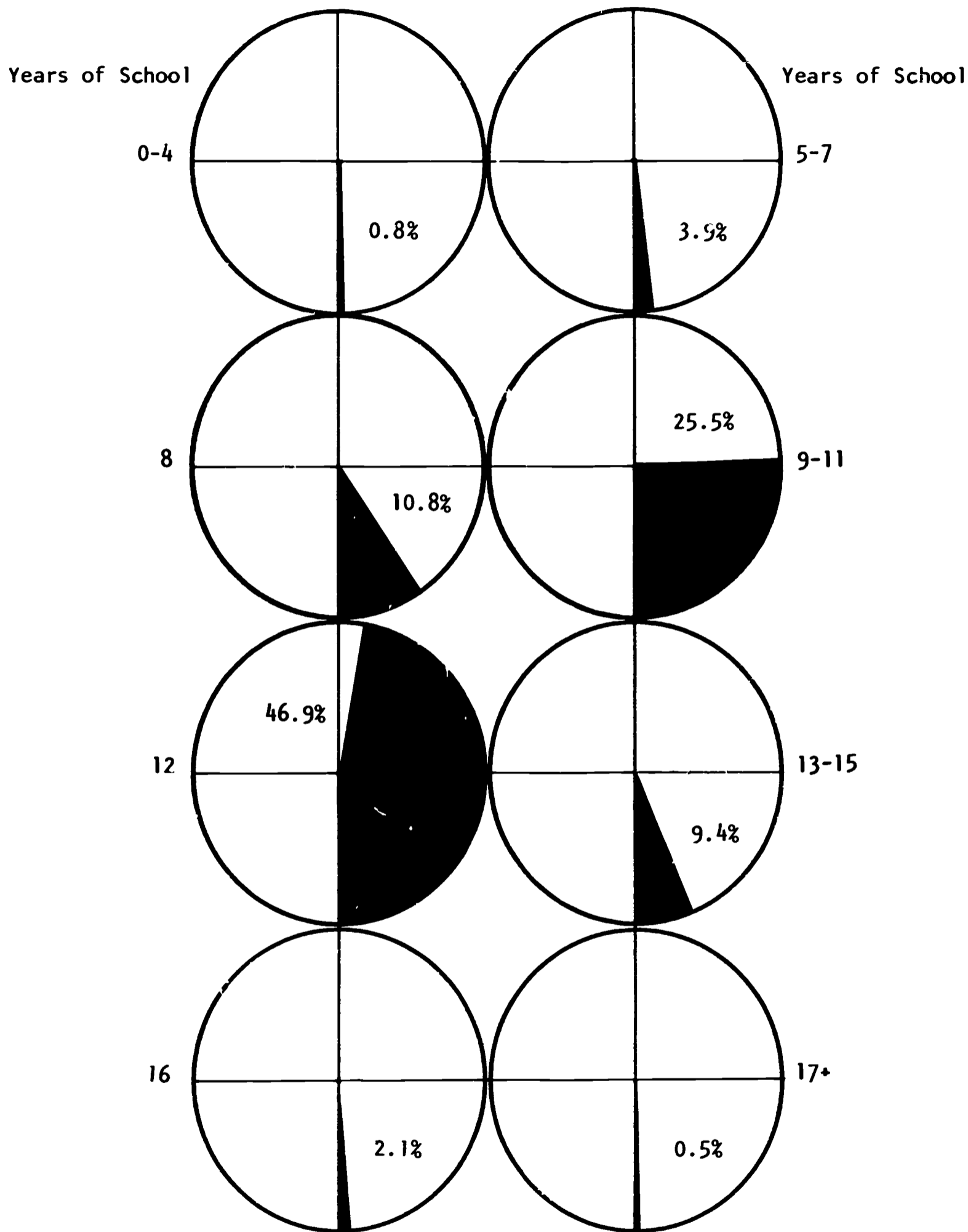


Total number of women working as clerical and kindred workers - 7,486,000

Source: U. S. Department of Labor, Bureau of Labor Statistics, Educational Attainment of Workers, (Special Labor Force Report No. 65), Table i, page A-13.

Figure 47

Women Employed as Sales Workers, By Years of School Completed, March 1965

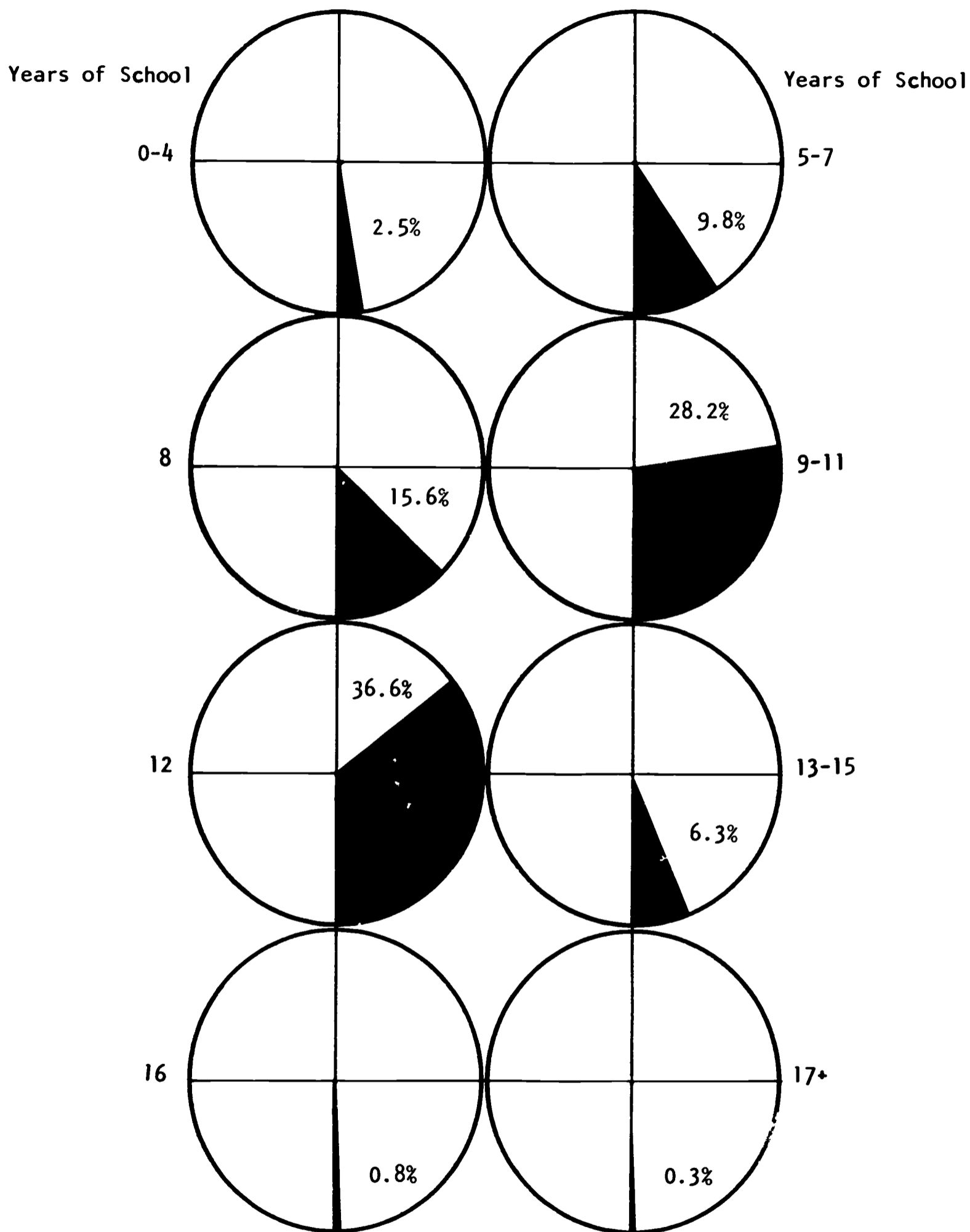


Total number of women working as sales workers - 1,707,000.

Source: U. S. Department of Labor, Bureau of Labor Statistics, EDUCATIONAL ATTAINMENT OF WORKERS, (Special Labor Force Report No. 65), Table 1, page A-13.

Figure 48

Women Employed as Service Workers, Except Private Household,  
By Years of School Completed, March 1965

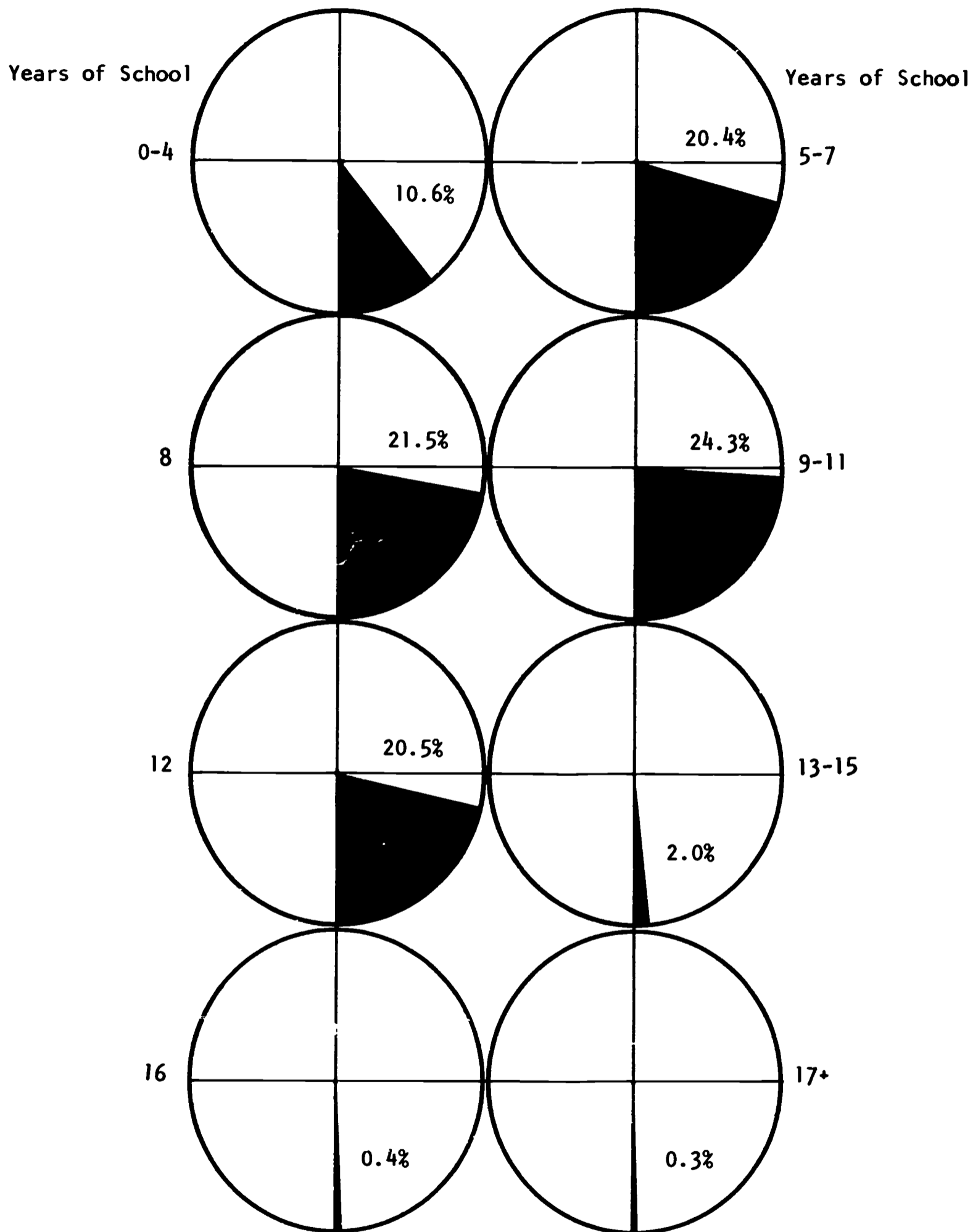


Total number of women working as service workers,  
except private household - 3,590,000.

Source: U. S. Department of Labor, Bureau of Labor Statistics,  
Educational Attainment of Workers, (Special Labor Force Report No. 65)  
Table I, page A-13.

Figure 49

Women Employed as Private Household Workers, By Years of School Completed, March 1965

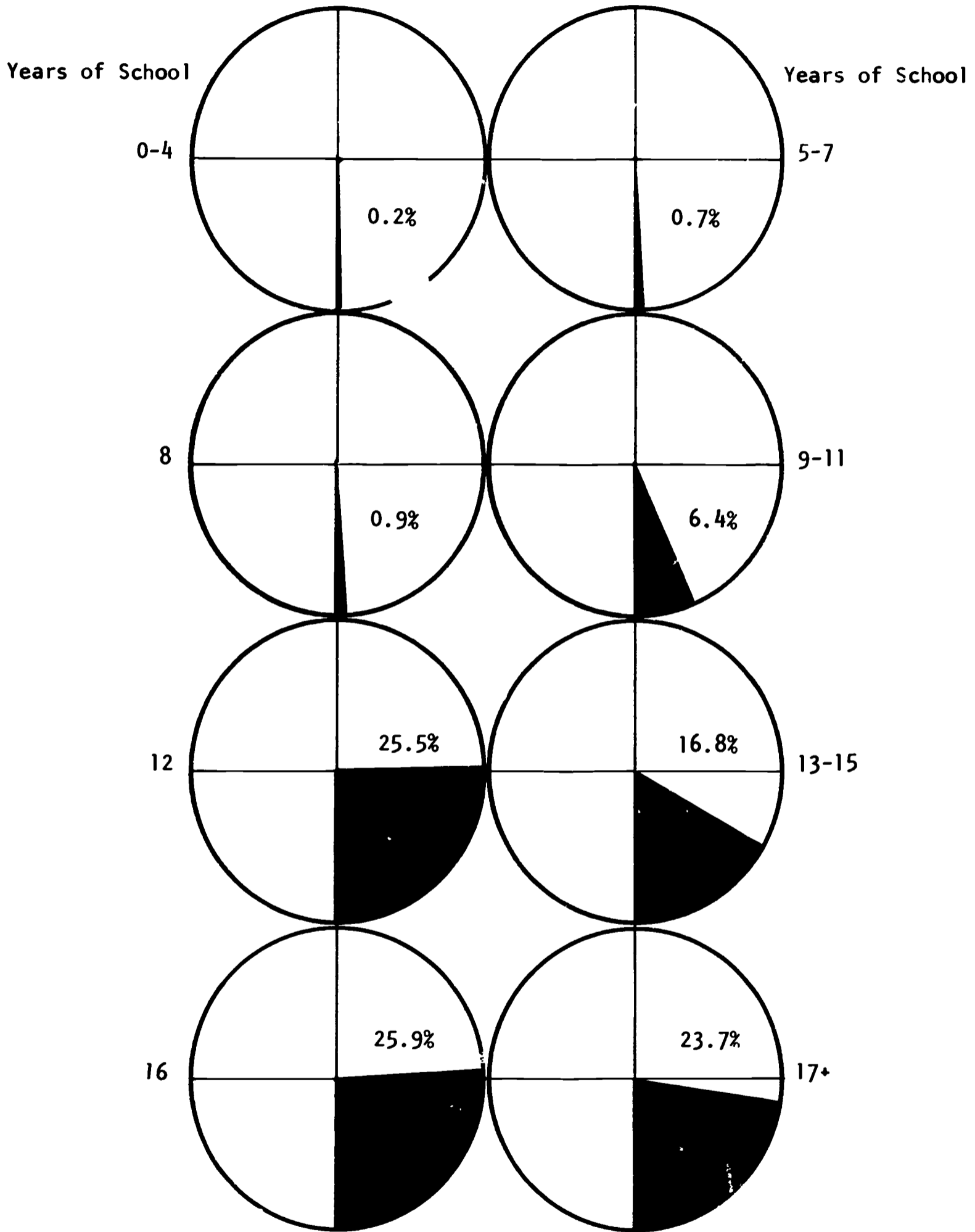


Total number of women working as private household workers - 1,626,000.

Source: U. S. Department of Labor, Bureau of Labor Statistics, Educational Attainment of Workers, (Special Labor Force Report No. 65), Table 1, page A-13.

Figure 50

Women Employed as Professional, Technical, and Kindred Workers, Other than Medical and Non-college Teachers, By Years of School Completed, March 1965



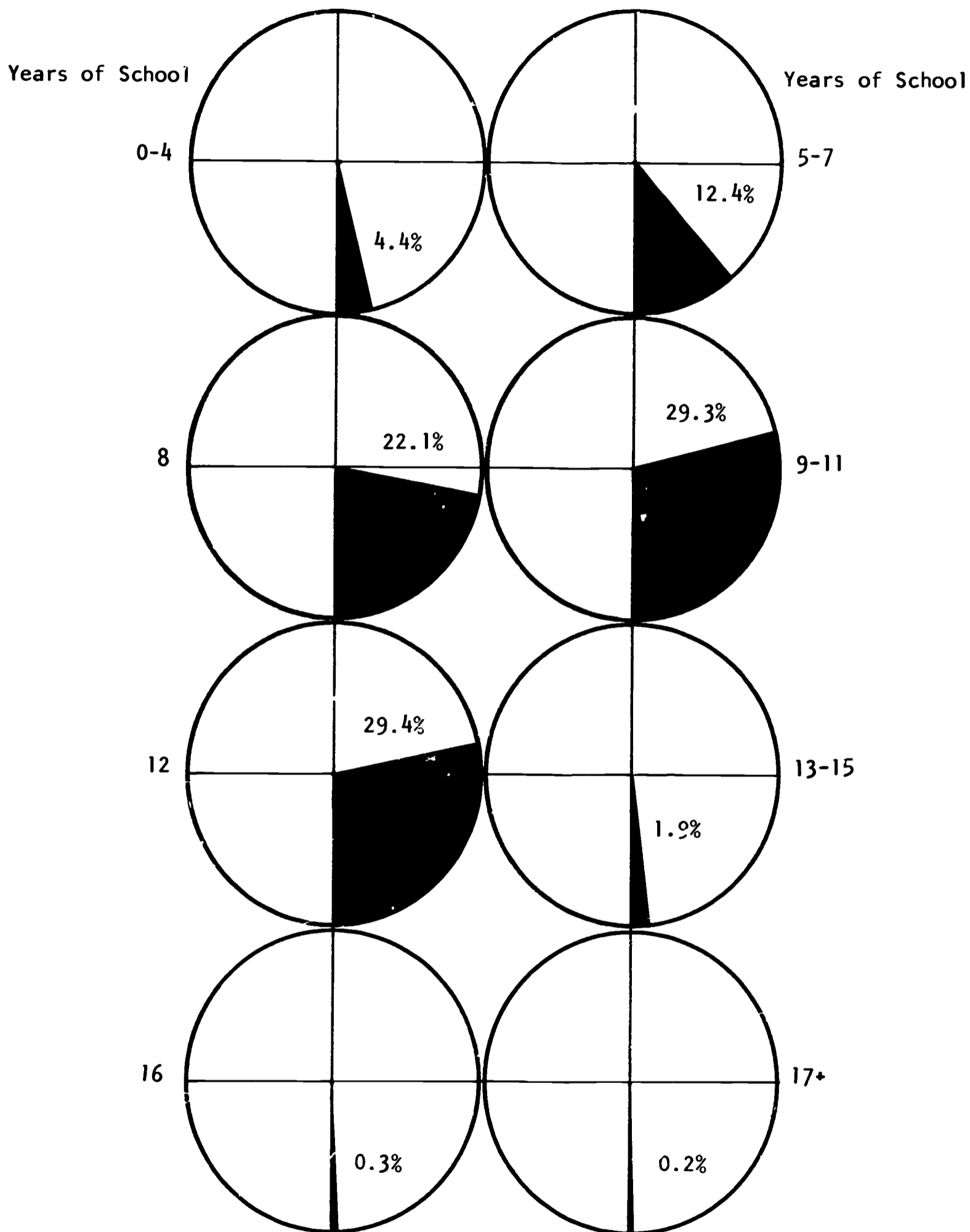
Total number of women working as professional, technical, and kindred workers, other than medical and non-college teachers - 1,038,000.

Source: U. S. Department of Labor, Bureau of Labor Statistics, EDUCATIONAL ATTAINMENT OF WORKERS, (Special Labor Force Report No. 65), Table 1, page A-13.



Figure 51

Women Employed as Operatives and Kindred Workers, By Years of School Completed, March 1965

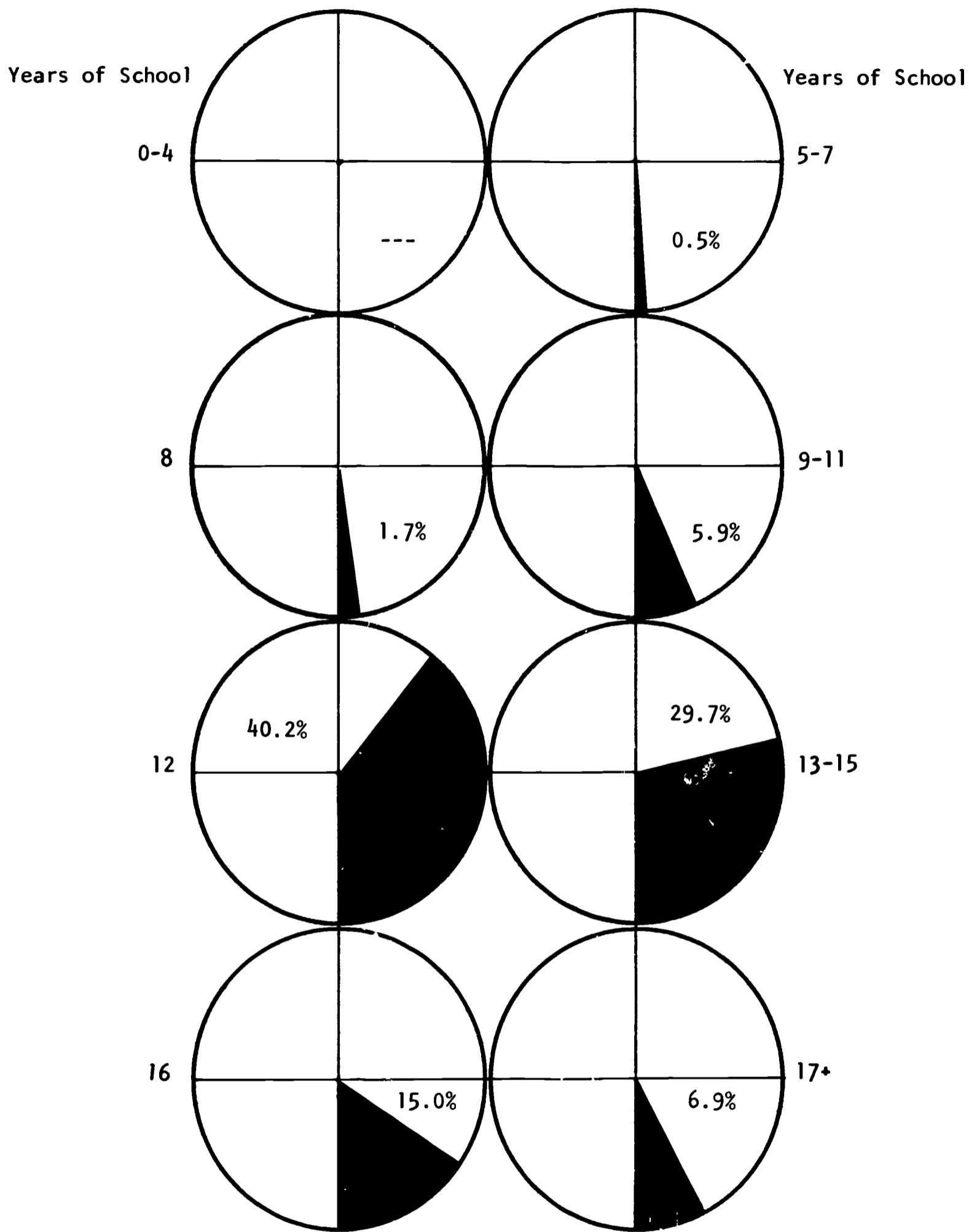


Total number of women working as operatives and kindred workers - 3,709,000.

Source: U. S. Department of Labor, Bureau of Labor Statistics, Educational Attainment of Workers, (Special Labor Force Report No. 65), Table I, page A-13.

Figure 52

Women Employed as Medical and Other Health Workers, By Years of School Completed, March 1965



Total number of women working as medical and other health workers - 927,000.

Source: U. S. Department of Labor, Bureau of Labor Statistics, EDUCATIONAL ATTAINMENT OF WORKERS, (Special Labor Force Report No. 65), Table 1, page A-13.

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## APPENDIX

### Participants in the Work Conference "Implications of Women's Work Patterns for Vocational and Technical Education"

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