

First Findings of the 1972 Survey of the Disabled: General Characteristics

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In 1972, the Social Security Administration interviewed 18,000 disabled and nondisabled persons aged 20-64, seeking data about demographic, economic, social, and health characteristics—to describe those with a disability and contrast them with the nondisabled. It was found that 15.6 million persons in the noninstitutionalized population were disabled. These disabled persons were older, poorer, with fewer years of schooling than the nondisabled, and somewhat more likely to be black, to live in the South, and to have a rural residence, and more likely to be divorced, separated, or widowed—even at the younger ages. Musculoskeletal or cardiovascular conditions were most often reported as major disabling conditions. About four fifths of the disabled had at least one physical activity limitation. The median age at onset of disability was 41 and the median duration of disability was 5 years. Partly because they were older, the disabled were much less likely to live in a nuclear family with spouse and children. The two groups were similar in number of relatives living near them. The disabled reported getting help from relatives only slightly more often than did the nondisabled. Changes between 1966 and 1972 were minimal, but in 1972 a slightly weaker association of disability with poverty indicators was evident.

SLIGHTLY MORE THAN 1 in 7 persons in the civilian noninstitutionalized population aged 20-64 considered themselves disabled in 1972 because of a chronic health condition or impairment. Approximately 7.7 million of these adults were severely disabled. An additional 3.5 million adults were unable to engage in their usual occupation, and 4.4 million were otherwise limited in the nature or amount of work that they could perform. The figures in the adjoining column from the Social Security Administration 1972 survey of disabled persons show how many of the men and women fall in each of the disability categories.

The 1972 survey collected a wide range of information on the economic, medical, and social circumstances and consequences of work-limiting disability—including available economic resources, reliance on income-maintenance programs, use of

medical care and rehabilitation services, family relationships, work adjustments, and specified limitations in functional capacity. This article presents the first findings from the survey, including data on demographic, social, and health characteristics of the noninstitutionalized population in relation to disability status and severity. The survey methods, sample design, and estimates of sampling variability are described in the technical note, pages 33-37.

This is the second major national survey of the disabled conducted by the Social Security Administration. The first was the 1966 Survey of Disabled Adults, data from which will be included in this report where comparisons are relevant.¹

Disability status	Total		Men		Women	
	Number (in thousands)	Per cent	Number (in thousands)	Per cent	Number (in thousands)	Per cent
Total U.S. population . . .	106,268	100.0	50,414	100.0	55,854	100.0
Disabled	15,550	14.6	7,036	14.0	8,514	15.2
Severe	7,717	7.3	2,972	5.9	4,745	8.5
Occupational	3,473	3.3	1,919	3.8	1,554	2.8
Secondary work limitations	4,360	4.1	2,145	4.3	2,215	4.0
Nondisabled	90,718	85.4	43,377	86.0	47,341	84.8

The samples of the disabled and the nondisabled civilian population for the 1972 survey were selected separately from households in the 1970 Decennial Census 5-percent sample (which contained questions on work-related health conditions). Both samples were selected by area probability sampling methods to represent the noninstitutionalized civilian population aged 18-64 as of April 1970. The sample of interviewed persons in 1972 consisted of 8,633 persons who considered themselves as disabled and 9,364 who said they were nondisabled. Included among the nondisabled were 1,745 persons who had been

¹ For full presentation of the 1966 survey data, see Reports Nos. 1-24 from the Social Security Survey of the Disabled 1966, Office of Research and Statistics, 1967-74.

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disabled previously but were recovered at the time of the interview, the data for that category will be analyzed separately in another report. Since the sample of persons selected in 1970 was 2 years older in 1972, persons aged 65-66 in 1972 (about 1,200) were excluded from the analysis in order to limit the population to those of working age who were age-eligible for disability insurance benefits under the social security program.

Survey Definition of Disability

For the purposes of the disability insurance (DI) program, disability is defined in the Social Security Act as the inability to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment that can be expected to result in death or has lasted or can be expected to last for a continuous period of not less than 12 months. For purposes of the survey, disability was defined as a limitation in the kind or amount of work (or housework) resulting from a chronic health condition or impairment lasting 3 months or longer. On the basis of the nature and extent of the resulting work limitation, disability was further classified into three categories of severity: (1) *severely disabled*—unable to work altogether or unable to work regularly, (2) *occupationally disabled*—able to work regularly but unable to do the same work as before the onset of disability or unable to work full time, (3) with *secondary work limitations*—able to work full time, regularly, and at the same work, but with limitations in the kind or amount of work that can be performed. Women who have limitations in keeping house but not with respect to paid work are considered as having secondary work limitations.

It should be noted that the existence of disability and its severity was categorized on the basis of the survey respondent's self-assessed capacity for work as reported in a set of work-qualification questions. It would be possible therefore for two individuals with the same impairment to fall into different disability categories. An individual who changed jobs even long ago as a result of some medical condition would, for example, be classified as occupationally disabled, a fellow worker with the same impairment who had always worked at the same job and

knows he could not do any other work would be classified as secondarily disabled. It should also be noted that the survey definition of disability is more inclusive than that used for cash disability benefits under the social security program. The "severely disabled" group in the survey might be considered to be roughly equivalent to the group covered under the DI program.

DEMOGRAPHIC CHARACTERISTICS

Age and Sex

Somewhat more women than men considered themselves disabled in 1972—15.2 percent and 14.0 percent, respectively. A greater proportion of women (8.5 percent) than men (5.9 percent) also classified themselves as severely disabled (table 1). This finding is similar to one reported in the 1966 survey of the disabled in the population and may be explained by sex differences in health, perception of disability, work motivation, and the need for and availability of work.²

Age is clearly an important variable in explaining the prevalence of disability as well as its severity. Table 1 shows that the proportion of people who considered themselves disabled rose sharply with increasing age. Thus about 7 percent of those under age 45 reported that they were disabled, compared with 19 percent of those aged 45-54 and 29 percent of those aged 55-64.

Similarly, the relative number of severely disabled increased sharply with age. From the group aged 20-34 to the group aged 35-44, the proportion of disabled who had a severe disability more than doubled, at ages 45-54 the proportion was four times that of the youngest group and at ages 55-64 the proportion was about nine times as great. Although the proportion who had an occupational disability or secondary work limitations generally became greater with age, the increase was not steep and not all differences were statistically significant.

The data on age distribution in table 2 show that the disabled were older than the nondisabled, and the median age increased with the severity of disability. The severely disabled were, on the average, 15 years older than the nondisabled, and

² See Lawrence D. Haber, "Disability, Work and Income Maintenance," 1966 Survey of Disabled Adults, Office of Research and Statistics, Report No. 2, May 1968.

TABLE 1—Selected demographic characteristics Number and percentage distribution of noninstitutionalized population aged 20-64, by disability status, summer 1972

Characteristic	Total U S population (in thousands)	Percentage distribution					
		Total	Disabled				Non-disabled
			Total	Severe	Occupational	Secondary work limitations	
Total ¹	106,268	100 0	14 6	7 3	3 3	4 1	85 4
<i>Age</i>							
20-34.....	41,770	100 0	7 2	2 2	1 6	3 3	92 8
35-44.....	21,909	100 0	7 3	5 0	2 3	3 6	89 1
45-54.....	23,606	100 0	19 3	8 9	5 1	5 4	80 7
55-64.....	18,982	100 0	29 4	19 0	5 6	4 8	70 5
<i>Sex</i>							
Men.....	50,414	100 0	14 0	5 9	3 8	4 3	86 0
Women.....	55,854	100 0	15 2	8 5	2 8	4 0	84 8
<i>Race</i>							
White.....	94,420	100 0	14 0	6 8	3 2	4 1	86 0
Black.....	10,156	100 0	20 8	12 1	4 4	4 3	79 2
Other.....	1,178	100 0	10 4	6 8	2 1	1 4	89 6
<i>Marital status</i>							
Married.....	82,429	100 0	13 4	6 2	3 2	4 0	86 6
Widowed.....	3,597	100 0	29 6	21 5	3 8	4 3	70 4
Divorced, separated.....	6,931	100 0	23 8	12 1	5 5	6 2	76 2
Never married.....	12,934	100 0	13 2	7 4	2 3	3 5	86 8
<i>Education (years of school)</i>							
Elementary							
Less than 8.....	8,919	100 0	38 2	24 5	7 0	6 7	61 8
8.....	7,970	100 0	24 1	15 0	4 3	4 7	75 9
High school							
1-3.....	17,321	100 0	19 0	10 2	4 2	4 6	81 0
4.....	42,450	100 0	10 8	4 3	2 6	4 0	89 2
College							
1-3.....	15,297	100 0	7 9	2 4	2 6	2 9	92 1
4 or more.....	13,337	100 0	7 4	2 2	2 1	3 1	92 6
<i>Geographic location</i>							
Northeast.....	25,292	100 0	12 1	6 5	2 7	3 0	87 9
North Central.....	29,446	100 0	14 1	6 1	3 4	4 6	85 9
South.....	32,978	100 0	17 6	9 4	3 6	4 6	82 4
West.....	18,275	100 0	13 8	6 3	3 4	4 1	86 2
<i>Area and size of community</i>							
Rural.....	17,644	100 0	18 1	10 2	3 4	4 5	81 9
Urban, under 100,000.....	45,069	100 0	14 4	6 4	3 5	4 4	85 6
City, 100,000 or more.....	29,189	100 0	14 9	7 6	3 5	3 8	85 1
Suburb.....	10,028	100 0	9 8	4 8	1 9	3 1	90 2

¹ Includes unknown race, education, geographic location, and area and size of community

persons with secondary work limitations were 6 years older. Half the severely disabled were aged 55-64.

The age distributions for disabled men and women are generally similar. The greater frequency of disability among men in the 60-64 age group, however, meant a higher median age of 55 for all severely disabled men and 52 for women. No clear-cut differences between the sexes were evident in the proportions for the two groups less severely disabled. These findings are similar to those of the 1966 survey.⁸

⁸ Kathryn H. Allan and Mildred E. Cinsky, "General Characteristics of the Disabled Population," *Social Security Bulletin*, August 1972, pages 24-37.

The increases in the prevalence and severity of disability with rising ages have been noted in other surveys of the disabled, including the earlier Social Security Administration surveys. It is likely that the patterns described above reflect the relationship between increasing age and the occurrence of chronic diseases. These patterns probably also reflect the decreased likelihood of obtaining or returning to work as age increases.

Some of the relationships between age and disability may, however, reflect the work-related definition of disability. Regardless of health, many people begin to work less in their late fifties and early sixties as a mode of preparation for "retirement." Several recent studies have

shown that early retirement is a result of both health and financial considerations that are highly interactive. The availability of social security benefits reinforces the effects of ill health in encouraging retirement.⁴

The data for the 1972 and 1966 surveys are not directly comparable because the 1972 sample was aged 20-64 and that for the 1966 study was aged 18-64, but the disabled are slightly younger in 1972. The biggest difference is found for men with secondary work limitations who had a median age of 43 in 1972 compared with age 47 in the 1966 survey.

Race

Black persons were about one and one-half times more likely to be disabled than whites. Thus, 21 percent of the blacks and 14 percent of the whites reported that they were disabled to some degree in 1972 (table 1). Furthermore, blacks were twice as likely to be severely disabled. Twelve percent of the blacks, compared with 7 percent of the whites, were classified in that category.

Although only 11 percent of the United States population aged 20-64 were members of races other than white, 14 percent of disabled persons were other than white (table 2). Nearly 16 percent of the severely disabled were black. Of the total population of 106 million, 13 million were disabled whites and 2 million disabled blacks. Since the occurrence of disability has long been associated with poverty and the low-income unskilled occupations, the higher percentage of disabled who are black might be anticipated. The racial difference in the prevalence of disability may lessen in the future as the blacks move more readily into white-collar and managerial jobs.

The black disabled are a younger group. Although the largest numbers of severely disabled for both racial groups were in the oldest age group (55-64), the difference between proportions was not quite significant. For the occupationally disabled and those with secondary work limitations, the difference was more marked, with 32 percent of the white occupationally disabled in

TABLE 2—Selected demographic characteristics. Percentage distribution of noninstitutionalized population aged 20-64, by disability status and sex, summer 1972

Characteristic	Total U S population	Disabled				Nondisabled
		Total	Severe	Occupational	Secondary work limitations	
Total						
Total number (in thousands)	106,268	15,550	7,717	3,473	4,360	90,718
Age						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
20-24	14 3	6 7	3 5	4 2	13 8	15 7
25-34	24 9	12 5	8 5	14 5	18 1	27 1
35-44	20 6	15 4	14 2	14 6	18 2	21 5
45-49	11 2	14 6	12 1	20 1	14 6	10 6
50-54	11 1	14 8	15 0	14 8	14 4	10 4
55-59	9 6	16 4	19 2	16 9	11 2	8 5
60-64	8 2	19 5	27 6	13 9	9 7	6 3
Median age	40	50	53	48	44	38
Sex						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Men	47 4	45 2	38 5	55 3	49 2	47 8
Women	52 6	54 8	61 5	44 7	50 8	52 2
Race						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
White	88 9	85 2	82 8	86 3	88 7	89 5
Black	9 6	13 6	15 9	12 9	10 1	8 9
Other	1 1	8	1 0	7	4	1 2
Not reported	5	4	3	1	8	5
Education (years of school)						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Elementary						
Less than 8	8 4	21 9	28 4	17 8	13 7	6 1
1-4	2 2	6 7	10 2	4 0	2 7	1 4
5-7	5 7	13 1	15 1	13 1	9 6	4 4
8	7 5	12 3	15 5	10 0	8 6	6 7
High school						
1-3	16 3	21 2	22 9	21 0	18 2	15 5
4	39 9	29 6	23 6	31 3	38 7	41 7
College						
1-3	14 4	7 8	4 7	11 5	10 2	15 5
4 or more	12 6	6 4	3 9	8 1	9 4	13 6
Not reported	9	9	1 0	3	1 1	9
Geographic location						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Northeast	23 8	19 7	21 2	19 4	17 2	24 5
North Central	27 7	26 7	23 2	28 5	31 3	27 9
South	31 0	37 3	40 3	34 2	34 5	30 0
West	17 2	16 2	15 0	17 7	17 1	17 4
Not reported	3	2	3	1	-	3
Area and size of community						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Rural	16 6	20 5	23 2	17 4	18 2	15 9
Farm or ranch	5 1	7 2	7 3	8 2	6 3	4 7
Nonfarm	11 5	13 3	15 9	9 2	11 9	11 2
Urban	42 4	41 8	37 6	45 8	45 9	42 5
Under 25,000	26 1	26 6	24 0	30 5	28 0	26 0
25,000-100,000	16 3	15 2	13 6	15 3	17 9	16 5
City, 100,000 or more	27 5	28 0	28 8	29 6	25 4	27 4
Suburb	9 4	6 3	6 2	5 6	7 0	10 0
Not reported	4 1	3 4	4 1	1 7	3 6	4 2

⁴For a summarization of these studies, see Alice Munnell, *The Future of Social Security* (unpublished report prepared for the Brookings Institution), March 1976, chapter IV.

TABLE 2—Selected demographic characteristics Percentage distribution of noninstitutionalized population aged 20-64, by disability status and sex, summer 1972—Continued

Characteristic	Total U S population	Disabled				Nondisabled
		Total	Severe	Occupational	Secondary work limitations	
Men						
Total number (in thousands)	50 414	7,036	2,972	1 919	2,145	43,377
Age						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
20-24	13 2	8 4	3 4	7 5	16 1	14 1
25-34	25 4	11 9	6 1	12 7	19 2	27 6
35-44	21 1	14 4	13 7	13 7	16 3	22 2
45-49	11 1	15 4	12 2	22 8	13 2	10 4
50-54	11 2	12 6	13 3	13 0	11 3	10 9
55-59	9 6	16 7	17 9	18 6	13 3	8 5
60-64	8 3	20 6	33 5	11 8	10 7	6 3
Median age	40	49	55	48	45	38
Race						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
White	89 3	86 2	84 7	85 6	88 9	89 8
Black	9 2	12 8	14 1	13 1	10 7	8 7
Other	9	6	6	1 1	2	1 0
Not reported	6	4	6	2	2	6
Education (years of school)						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Elementary						
Less than 8	9 6	23 8	32 3	20 4	14 8	7 3
1-4	2 5	7 0	11 6	4 7	2 6	1 7
5-7	6 5	14 0	16 5	14 9	9 7	5 3
8	8 8	12 5	15 8	10 2	10 0	7 9
High school						
1-3	15 1	19 0	19 2	19 4	18 4	14 5
4	34 4	26 6	21 8	26 7	33 0	35 7
College						
1-3	15 5	9 8	5 9	14 6	10 9	16 4
4 or more	15 8	7 3	3 9	8 4	11 0	17 2
Not reported	1 0	1 1	1 1	3	2 0	1 0
Geographic location						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Northeast	24 0	18 4	18 8	19 3	17 0	24 9
North Central	28 0	27 5	24 1	27 1	32 6	28 1
South	30 6	37 7	42 2	35 9	33 0	29 4
West	17 1	16 3	14 7	17 6	17 4	17 3
Not reported	2	1	2	1	1	3
Area and size of community						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Rural	17 7	22 4	23 2	20 0	23 3	17 0
Farm or ranch	5 9	8 9	8 5	10 7	8 0	5 4
Nonfarm	11 8	13 4	14 7	9 4	15 3	11 6
Urban	41 3	42 6	41 6	42 9	43 6	41 2
Under 25,000	25 5	26 6	25 1	28 8	26 8	25 3
25,000-100,000	15 8	15 9	16 5	14 1	16 8	15 8
City, 100,000 or more	27 8	25 6	24 6	30 0	23 0	28 2
Suburb	9 0	5 5	4 9	5 3	6 7	9 6
Not reported	4 1	3 9	5 7	1 8	3 4	4 1
Veterans' status						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Nonveteran	50 2	55 8	56 3	46 1	63 6	49 3
Veteran	49 4	44 0	43 4	53 6	36 3	50 2
Vietnam Era	10 8	4 0	2 4	6 5	4 1	11 9
Korean Conflict	10 0	7 1	6 1	10 1	5 8	10 5
World War II	21 9	30 0	31 9	34 2	23 6	20 6
Peacetime	5 9	2 2	2 2	1 8	2 4	6 6
Service not reported	8	7	8	1 0	5	8
Not reported	4	2	3	2	1	4

TABLE 2—Selected demographic characteristics Percentage distribution of noninstitutionalized population aged 20-64, by disability status and sex, summer 1972—Continued

Characteristic	Total U S population	Disabled				Nondisabled
		Total	Severe	Occupational	Secondary work limitations	
Women						
Total number (in thousands)	55 854	8 514	4,745	1 554	2 215	47,341
Age						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
20-24	15 4	5 4	3 6	2 3	11 5	17 2
25-34	24 5	13 0	10 0	16 7	17 0	26 6
35-44	20 2	16 2	14 5	15 8	20 2	17 7
45-49	11 2	13 9	12 0	16 7	16 0	10 7
50-54	11 0	16 6	16 0	17 1	17 4	10 0
55-59	9 6	16 2	20 0	14 9	9 1	8 4
60-64	8 1	18 6	23 9	16 5	8 8	6 3
Median age	40	50	52	49	45	38
Race						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
White	88 5	84 4	81 5	87 2	88 6	89 2
Black	9 8	14 3	17 1	12 6	9 5	9 0
Other	1 3	9	1 3	2	6	1 3
Not reported	4	4	1	1 3	4	4
Education (years of school)						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Elementary						
Less than 8	7 3	20 4	25 9	14 7	12 6	4 8
1-4	1 9	6 5	9 3	3 2	2 7	1 0
5-7	5 0	12 4	14 2	10 9	9 6	3 6
8	6 5	12 2	15 4	9 7	7 3	5 5
High school						
1-3	17 4	22 9	25 2	23 0	18 0	16 4
4	45 0	32 0	24 7	36 9	44 3	47 3
College						
1-3	13 4	6 1	4 0	7 8	9 6	14 7
4 or more	9 6	5 6	3 8	7 6	7 9	10 3
Not reported	9	7	1 0	2	3	9
Geographic location						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Northeast	23 6	20 7	22 7	19 6	17 3	24 2
North Central	27 4	25 9	22 6	30 3	30 0	27 7
South	31 4	37 0	39 1	32 2	35 9	30 4
West	17 2	16 1	15 2	17 8	16 8	17 5
Not reported	3	3	4	1	--	3
Area and size of community						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Rural	15 6	19 0	23 2	14 1	13 2	15 0
Farm or ranch	4 4	5 8	6 6	5 2	4 5	4 1
Nonfarm	11 2	13 1	16 6	8 9	8 7	10 9
Urban	43 4	41 1	35 1	49 4	48 1	43 8
Under 25,000	26 6	26 5	23 3	32 5	29 2	26 6
25,000-100,000	16 7	14 5	11 8	16 8	18 9	17 1
City, 100,000 or more	27 2	30 0	31 4	29 1	27 6	26 7
Suburb	9 8	7 0	7 1	6 0	7 4	10 3
Not reported	4 1	3 0	3 1	1 6	3 7	4 3

the aged 55-64 group and 19 percent of the blacks and with 23 percent of white persons with secondary work limitations in the older group and with only 9 percent of blacks. More than half the blacks with secondary work limitations were under age 35

These figures support the general hypothesis that disability as a social phenomenon is associated with poverty, race, and age and that it therefore relates to other factors such as educational level and geographical location. The factors of unemployment and underemployment are, perhaps, even more highly associated with disability. There is evidence, also, of a relationship between unemployment and an increase in applications for cash disability benefits under the social security program.⁵

Marital Status

In general, the disabled were not as likely to be married as the nondisabled population (71 percent and 79 percent, respectively). The severely disabled were even less likely to be married, as they were older and more likely to be widowed or divorced or separated. Two-thirds of them were married, compared with about four-fifths of the nondisabled (table 3). In comparing men and women by age, the sex difference was found to be similar to those in the general population.

It can be seen that in regard to marriage, disability had more effect on men than on women. An examination of persons who had been married at any time shows, for example, that young (under age 35) nondisabled women were more likely to have married than young nondisabled men (79 percent and 73 percent, respectively), but among the disabled the proportions are 74 percent for women and 64 percent for men. The difference holds true for the group aged 35-44 but ceases to exist for the older group. This difference does not appear for the older group, undoubtedly because most older persons became disabled after marriage. The social requirements for married men to be wage-earners are most likely to account for the difference between the sexes in marrying.

An interesting fact about the disabled concerns the high proportion who were divorced or separated in all age groups except those aged 35-44. Almost 11 percent of the disabled fell in this category, compared with 6 percent of the nondisabled. The proportions were about the same for the severely and occupationally disabled, as

well as for those with secondary work limitations.

Disability may cause strains in marriage that result in divorce. The disability of one's spouse may also be a strong factor in the likelihood of widowhood, perhaps in some way not yet understood. The study shows that the disabled person's spouse is more likely to have died than the spouse of the nondisabled individual. When the disabled and nondisabled were compared in two combined age categories (under 44 and 45-64), in both groups, the disabled had a higher proportion who were widowed.

Education

Lack of education is associated with disability. A low level of educational attainment constitutes an important part of the lower socioeconomic status of the disabled, which includes greater poverty and more unemployment and underemployment than is present among the nondisabled.

The disabled, especially the severely disabled, were less educated than the nondisabled population (table 2). More than two-fifths of the former had 8 or fewer years of education but only one-eighth of the latter. Less than one-tenth of the severely disabled had some college education but only three-tenths of the nondisabled.

In part, these differences may be explained by age differences. As this survey found, the disabled were older than the nondisabled and older adults tend to have less education than younger adults. Another analysis, with controls for age, found that increased education was associated with lower levels of disability and that differences in educational attainment were a major factor in explaining racial distribution among the disabled.⁶

As the tabulation that follows shows, among those aged 60-64 whose disability began in the 4 years before the survey, 9 percent of the severely disabled had gone to college, compared with 25 percent of the occupationally disabled and 33 percent of those with secondary work limitations. Health status would have had little or no direct effect on educational attainment for this oldest group of the disabled, yet a relationship is appar-

⁵ Mordechai E. Lando, "The Effect of Unemployment on Application for Disability Insurance," *Proceedings of the American Statistical Association*, Business and Economic Statistics Section, 1974.

⁶ See Mordechai E. Lando, "The Interaction Between Health and Education," *Social Security Bulletin*, December 1975.

Age at onset	Disabled ¹			
	Total	Severe	Occupational	Secondary work limitations
Under 18	20 5	5 8	55 0	23 9
18-34	17 9	10 4	25 3	19 4
35-49	12 7	8 4	16 5	17 7
50-59	9 0	8 3	11 5	8 5
60-64	13 8	9 3	24 5	33 1

¹ For comparison purposes 29 percent of the nondisabled had some college attendance, the average age for this group is 12 years younger than the disabled

ent that is evidently part of a total employment-education-disability correlation

The nature of the major disabling condition may also explain educational differences. Mental and nervous system disorders, which affected one-tenth of the disabled (table 4), are likely to have onsets in childhood that result in intellectual impairment and minimal schooling. Musculoskeletal disorders, which accounted for more than one-third of the disabled, may also cause problems in physical ability to attend school.

A 1968 law requires schools and colleges to build and remodel their facilities to facilitate access for the disabled—by adding ramps, curbs, wider doorways, etc.⁷ For this reason, it is interesting to compare 1966 and 1972 data with respect to educational levels. Because of the presence of 18- and 19-year-olds in the 1966 survey, high school graduation figures from the 1966 and 1972 samples are not comparable. A comparison of the college attendance among the disabled with onsets in childhood, however, showed an increase from 17 percent in 1966 to 21 percent in 1972. How much, if any, of the educational increases result from physical environmental improvements and how much from other programs, such as government aid to disabled veterans or equal opportunity support, cannot be determined from the survey data.

Regional Differences

The proportions of persons reporting that they were disabled varied substantially with geographic areas of residence. Thirty-one percent of the total US population resided in the South,

⁷ Public Law 94-80, *Public Building—Handicapped Persons* (enacted August 12, 1968)

but 37 percent of the disabled lived there (table 2). Of the severely disabled, 40 percent lived in the South. In contrast, the Northeast contained 24 percent of the total population and 20 percent of the disabled. Regional distributions showed men living in the South to be overrepresented.

TABLE 3—Marital status and age. Percentage distribution of noninstitutionalized population aged 20-64, by disability status and sex, summer 1972

Age and marital status	Total US population	Disabled				Nondisabled
		Total	Severe	Occupational	Secondary work limitations	
Total						
<i>All ages</i>						
Total number (in thousands)	106 268	15,550	7,717	3,473	4,360	90 718
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Married	77 6	71 2	66 3	76 0	75 9	78 7
Widowed	3 4	6 9	10 0	4 0	3 5	2 8
Divorced	4 4	6 9	7 2	6 5	6 7	4 0
Separated	2 1	3 7	3 6	4 5	3 2	1 9
Never married	12 2	11 0	12 5	8 7	10 2	12 4
Not reported	4	4	4	2	4	4
<i>Under 35</i>						
Total number (in thousands)	41,771	2 994	923	683	1,387	38,776
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Married	70 0	57 2	46 2	58 1	64 0	71 0
Widowed	2	8	1 9	-	5	1
Divorced	3 7	5 9	5 2	6 3	6 1	3 5
Separated	1 9	5 2	2 1	9 5	5 2	1 7
Never married	23 9	30 4	43 8	25 6	23 9	23 4
Not reported	3	5	8	4	3	3
<i>35-44</i>						
Total number (in thousands)	21 909	2,398	1,095	508	795	19 511
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Married	86 2	75 7	70 5	79 1	80 8	87 4
Widowed	1 4	3 5	4 7	4	3 9	1 2
Divorced	5 0	7 2	7 6	6 9	6 9	4 7
Separated	2 0	3 1	2 7	2 0	4 2	1 9
Never married	5 0	9 9	13 4	11 4	4 0	4 4
Not reported	4	6	1 1	2	1	4
<i>45-64</i>						
Total number (in thousands)	23,606	4 566	2 089	1 211	1 266	19 040
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Married	84 0	77 5	72 0	81 9	82 3	85 6
Widowed	4 0	4 7	7 2	1 7	3 4	3 8
Divorced	5 1	7 6	7 0	8 6	7 5	4 5
Separated	2 8	4 1	4 5	5 2	2 2	2 5
Never married	3 8	6 0	9 1	2 4	4 4	3 2
Not reported	4	2	1	3	1	5
<i>55-64</i>						
Total number (in thousands)	18,982	5,591	3 010	1,070	911	13,391
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Married	76 2	71 5	66 8	79 5	80 7	78 2
Widowed	12 0	13 3	15 4	10 8	8 0	11 4
Divorced	4 4	6 8	7 7	4 2	6 3	3 4
Separated	1 9	2 9	3 8	1 8	7	1 5
Never married	5 2	5 1	6 1	3 7	3 0	5 2
Not reported	3	3	2	1	1 2	3

TABLE 3—Marital status and age Percentage distribution of noninstitutionalized population aged 20-64, by disability status and sex, summer 1972—Continued

Age and marital status	Total U S population	Disabled				Nondisabled
		Total	Severe	Occupational	Secondary work limitations	
Men						
<i>All ages</i>						
Total number (in thousands)	50 414	7,036	2,972	1,919	2 145	43 377
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Married	80 3	75 5	71 9	77 1	78 9	81 1
Widowed	1 0	2 4	4 5	1 1	5	7
Divorced	3 3	5 1	6 2	4 4	4 3	3 0
Separated	1 5	2 8	2 1	4 6	2 1	1 2
Never married	13 5	13 7	14 8	12 3	13 5	13 4
Not reported	5	6	5	4	8	4
<i>Under 35</i>						
Total number (in thousands)	19 504	1,426	281	389	757	18,077
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Married	69 0	55 4	44 2	50 1	62 3	70 1
Widowed		1	4			
Divorced	2 2	3 5	3 3	1 1	4 1	2 1
Separated	1 4	5 0	1 2	8 7	4 6	1 2
Never married	27 0	35 7	50 5	39 4	28 4	26 3
Not reported	4	6	5	8	5	4
<i>35-44</i>						
Total number (in thousands)	10,626	1,017	406	262	349	9,609
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Married	87 8	75 4	63 7	74 5	89 7	89 1
Widowed	4	3	6	3	3	4
Divorced	4 2	5 0	9 4	3 9	7	4 2
Separated	1 3	1 1	1 2	8	1 3	1 3
Never married	5 6	16 8	22 3	20 2	7 9	4 4
Not reported	7	1 3	2 9	3	3	6
<i>45-54</i>						
Total number (in thousands)	11,232	1 970	758	686	526	9 262
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Married (including spouse absent)	87 1	80 8	74 5	82 2	87 9	88 6
Widowed	1 6	1 9	4 2	4	7	1 5
Divorced	4 0	5 9	5 6	6 3	5 6	3 6
Separated	1 9	4 2	4 3	7 1	2	1 5
Never married	4 8	7 1	11 4	3 6	5 5	4 3
Not reported	5	2		4	2	6
<i>55-64</i>						
Total number (in thousands)	9 052	2 623	1,527	582	514	6,429
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Married	87 6	82 4	77 8	90 4	87 0	89 6
Widowed	2 9	4 7	6 5	3 0	1 2	2 2
Divorced	3 7	5 7	6 1	4 7	5 6	2 9
Separated	1 1	1 2	1 5	7	7	1 0
Never married	4 4	5 5	7 9	1 0	3 3	4 0
Not reported	3	5	1	2	2 1	2

among the disabled, especially the severely disabled. Again, interaction between socioeconomic factors and geographic distribution was likely, as the South has the lowest per capita income and a higher proportion of blacks.

TABLE 3—Marital status and age Percentage distribution of noninstitutionalized population aged 20-64, by disability status and sex, summer 1972—Continued

Age and marital status	Total U S population	Disabled				Nondisabled
		Total	Severe	Occupational	Secondary work limitations	
Women						
<i>All ages</i>						
Total number (in thousands)	55 854	8 514	4,745	1,554	2,215	47,841
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Married	75 0	67 6	62 8	74 7	72 9	76 4
Widowed	5 6	10 6	13 5	7 5	6 5	4 7
Divorced	5 4	8 4	7 8	9 1	9 0	4 8
Separated	2 8	4 5	4 6	4 4	4 4	2 4
Never married	11 0	8 7	11 0	4 2	7 1	11 4
Not reported	3	2	3	1	1	3
<i>Under 35</i>						
Total number (in thousands)	22 267	1,568	642	295	631	20,699
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Married	70 9	58 8	47 1	68 7	66 1	71 9
Widowed	3	1 5	2 5		1 1	2
Divorced	5 0	8 3	6 0	13 2	8 4	4 8
Separated	2 3	5 3	2 4	10 4	5 9	2 1
Never married	21 1	25 6	40 9	7 6	18 5	20 8
Not reported	3	5	1 0		2	2
<i>35-44</i>						
Total number (in thousands)	11,284	1 382	689	246	447	9 902
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Married	84 6	76 0	74 5	84 0	73 9	85 7
Widowed	2 4	5 9	7 1	6	6 9	2 0
Divorced	5 7	8 8	6 5	10 0	11 8	5 3
Separated	2 7	4 5	3 7	3 4	6 5	2 4
Never married	4 4	4 7	8 2	2 0	9	4 4
Not reported	1					2
<i>45-54</i>						
Total number (in thousands)	12 374	2 596	1 331	525	740	9,778
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Married	81 1	75 0	70 6	81 4	78 4	82 8
Widowed	6 1	6 8	8 9	3 5	5 3	6 0
Divorced	6 0	8 9	7 9	11 6	8 8	5 3
Separated	3 6	4 0	4 7	2 7	3 7	3 4
Never married	2 8	5 2	7 7	8	3 7	2 2
Not reported	3	2	2	2	1	3
<i>55-64</i>						
Total number (in thousands)	9,938	2,968	2,083	488	397	6,962
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Married	65 8	61 9	58 7	66 5	72 7	67 5
Widowed	20 2	20 9	21 9	20 0	16 8	19 9
Divorced	5 0	7 8	8 8	3 6	7 2	3 8
Separated	2 7	4 4	5 4	3 1	8	2 0
Never married	5 9	4 8	4 8	6 8	2 5	6 3
Not reported	4	2	3			5

The geographic distribution of the occupationally disabled and those with secondary work limitations was similar to that of the severely disabled except that the disabled with secondary work limitations tended to be located in the North.

Central region No differences between men and women in these two groups of less severely disabled adults were apparent

The representation of Southerners among the disabled had dropped slightly since 1966 In 1966, 46 percent of the severely disabled men lived in the South, compared with 30 percent of the total male population The comparable proportions for Southern men in 1972 were 42 percent of the severely disabled and 31 percent of the total population

Size of Community

A higher proportion of disabled persons (21 percent) than of nondisabled persons (16 percent) lived in rural areas For both these groups, about the same proportion (two-fifths) lived in towns and small cities, and one-third lived in cities and their suburbs Among the severely disabled, a higher proportion of men than of women lived in urban areas of less than 100,000 population, and more women than men lived in city areas where the population was 100,000 or more

The distribution of the disabled in 1972 by size of community was similar to that of the disabled in 1966 The distribution by severity of disability, however, showed an increase of nearly six percentage points in the proportion of the occupationally disabled located in big cities and a decline of more than 10 percentage points in the proportion of the occupationally disabled in rural areas

Veteran Status

More than two-fifths of the disabled men were veterans, compared with about half the nondisabled The largest group of disabled veterans (3 in 10) served in World War II (table 2)—a reflection of the relationship, previously discussed, between age and disability

Among men, 12 percent of the veterans and 16 percent of the nonveterans were disabled The lower prevalence of disability among veterans is probably due to the preselection of a healthy population, combined with a relatively low rate of war injuries during the preceding 17 years (1955-72) How much veteran disability is war-related is not known, however The effect of age upon disability is probably much greater than

the effect of war The relatively high proportion of World War II veterans who were disabled (19 percent) largely reflects the fact that they were the oldest men in the veteran sample In comparing the World War II veterans with all men aged 45-49 (the approximate 1972 age range of the veterans), no differences are found in the proportion disabled or the proportion severely disabled

TABLE 4—Disability characteristics Percentage distribution of noninstitutionalized population aged 20-64, by severity of disability and sex, summer 1972

Characteristic	Total disabled	Severity of disability		
		Severe	Occupational	Secondary work limitations
Total				
Total number (in thousands)	15 550	7,717	3 473	4,360
<i>Diagnostic group of major disabling conditions</i>				
Total percent	100 0	100 0	100 0	100 0
Musculoskeletal disorders --	35 9	30 4	44 6	38 6
Cardiovascular disorders --	20 8	24 8	19 6	14 7
Respiratory and related disorders	9 1	7 8	7 0	13 1
Digestive system disorders...	4 9	3 9	5 7	5 8
Mental disorders --	7 7	11 3	3 8	4 5
Nervous system disorders --	2 7	3 9	1 4	1 6
Urogenital conditions	2 0	2 0	2 3	1 8
Neoplasms --	2 2	2 8	2 4	8
Endocrine disorders	2 1	2 2	2 7	1 6
Other and unspecified conditions	7 6	6 9	7 0	9 5
Not reported	5 0	4 0	3 5	8 0
<i>Age at onset</i>				
Total percent	100 0	100 0	100 0	100 0
Under 18	7 6	6 3	1 4	14 8
18-24	11 1	5 9	14 9	17 3
25-34	10 7	13 8	20 1	15 5
35-44	21 1	20 2	26 3	18 6
45-49	12 8	13 9	13 0	10 5
50-54	12 4	15 1	11 6	8 0
55-64	15 2	21 7	11 3	6 7
Not reported	4 3	3 2	1 4	8 4
Median age	41	46	59	59
<i>Duration of disability (in years)</i>				
Total percent	100 0	100 0	100 0	100 0
Less than 1	12 2	13 8	11 5	9 8
1	3 3	4 0	3 5	1 8
2-4	35 2	33 8	39 0	34 5
5-9	19 2	19 4	19 2	18 7
10-14	10 0	10 4	10 7	8 8
15 or more	16 0	15 4	14 8	18 1
Not reported	4 2	3 1	1 3	8 3
Median years	5	5	5	6
<i>Activity limitations</i>				
Total percent	100 0	100 0	100 0	100 0
None	21 4	10 8	23 8	38 2
With limitations in one or more activities	78 6	89 2	76 2	61 8
Walking	41 2	58 3	30 5	19 6
Using stairs or inclines	42 3	59 8	31 9	19 6
Standing for long periods	50 1	66 0	43 0	27 5
Sitting for long periods...	29 7	42 8	20 7	13 7
Stooping, crouching, or kneeling	49 4	63 2	45 8	28 0
Lifting or carrying weights up to 10 lbs	33 4	49 6	20 5	14 9
Lifting or carrying weights over 10 lbs	59 2	75 2	51 3	37 2
Reaching	28 9	43 2	17 9	12 6
Handling and fingering	21 3	32 5	13 2	7 9

TABLE 4—Disability characteristics Percentage distribution of noninstitutionalized population aged 20-64, by severity of disability and sex, summer 1972—*Continued*

Characteristic	Total disabled	Severity of disability		
		Severe	Occupational	Secondary work limitations
Total—Continued				
<i>Number of activity limitations at time of interview</i>				
Total percent	100 0	100 0	100 0	100 0
None	21 4	10 8	23 8	38 2
1	12 5	5 8	15 5	21 9
2	11 7	8 9	16 0	13 2
3	10 6	10 2	12 3	10 0
4	8 0	9 6	9 3	4 1
5 or more	35 7	54 5	23 0	12 5
<i>Mobility limitations</i>				
Total percent	100 0	100 0	100 0	100 0
None	87 0	77 5	96 5	96 3
With limitations	11 8	21 0	3 1	2 4
Need help for transportation only	4 2	6 9	1 7	1 5
Need help only to get around outside home	5	9	2	1
Need help to go outside home	1 0	1 4	4	7
Confined to home	6 1	11 9	7	2
Not reported	1 2	1 5	4	1 3
<i>Extent of functional limitations</i>				
Total percent	100 0	100 0	100 0	100 0
No loss	30 1	14 7	36 1	52 5
Minor loss	23 5	19 7	31 9	23 6
Moderate loss	15 5	17 4	16 8	10 8
Severe loss	16 9	24 4	11 0	8 3
Functionally dependent	12 4	22 2	3 6	2 0
Not reported	1 6	1 5	6	2 7
Men				
Total number (in thousands)	7,036	2,972	1 919	2 145
<i>Diagnostic group of major disabling conditions</i>				
Total percent	100 0	100 0	100 0	100 0
Musculoskeletal disorders	38 0	29 0	51 3	38 4
Cardiovascular disorders	21 2	28 5	18 1	13 7
Respiratory and related disorders	10 9	8 6	9 0	15 8
Digestive system disorders	5 4	3 4	7 4	6 5
Mental disorders	6 5	10 2	7	6 4
Nervous system disorders	3 1	4 9	1 1	2 4
Urogenital conditions	4	7	2	2
Neoplasms	1 7	3 2	1 1	3
Endocrine disorders	1 5	1 4	1 9	1 2
Other and unspecified conditions	7 5	7 1	5 7	9 8
Not reported	3 8	3 0	3 4	5 2
<i>Age at onset</i>				
Total percent	100 0	100 0	100 0	100 0
Under 18	9 7	6 4	1 1	22 0
18-24	12 3	4 7	18 7	17 1
25-34	13 8	11 3	18 2	13 3
35-44	20 7	19 2	25 9	18 0
45-49	12 5	13 0	14 8	9 6
50-54	11 6	13 8	11 9	8 3
55-64	16 6	28 9	8 0	7 0
Not reported	2 9	2 6	1 3	4 6
Median age	41	47	39	31
<i>Duration of disability (in years)</i>				
Total percent	100 0	100 0	100 0	100 0
Less than 1	12 1	16 7	9 8	7 8
1	2 8	4 7	2 4	5
2-4	36 0	35 4	38 6	34 7
5-9	18 6	17 1	20 7	18 7
10-14	9 8	8 8	10 7	10 4
15 or more	17 9	14 8	16 5	23 3
Not reported	2 8	2 5	1 2	4 6
Median years	5	6	6	7

TABLE 4—Disability characteristics Percentage distribution of noninstitutionalized population aged 20-64, by severity of disability and sex, summer 1972—*Continued*

Characteristic	Total disabled	Severity of disability		
		Severe	Occupational	Secondary work limitations
Men—Continued				
<i>Activity limitations</i>				
Total percent	100 0	100 0	100 0	100 0
None	24 6	10 7	27 3	41 5
With limitations in one or more activities	75 4	89 3	72 7	58 5
Walking	42 2	62 6	34 5	20 8
Using stairs or inclines	43 2	66 3	33 2	20 1
Standing for long periods	46 2	68 7	37 1	26 1
Sitting for long periods	28 4	46 0	18 1	13 2
Stooping, crouching, or kneeling	48 7	64 5	49 1	26 4
Lifting or carrying weights up to 10 lbs	30 8	50 7	21 5	11 5
Lifting or carrying weights over 10 lbs	58 3	77 9	52 8	36 1
Reaching	26 8	43 9	17 8	11 3
Handling and fingering	21 2	35 2	14 1	8 2
<i>Number of activity limitations at time of interview</i>				
Total percent	100 0	100 0	100 0	100 0
None	24 6	10 7	27 3	41 5
1	12 1	3 7	14 0	22 1
2	9 9	7 9	13 3	9 7
3	10 4	9 5	11 6	10 6
4	7 8	10 0	9 3	3 3
5 or more	35 1	58 3	24 5	12 9
<i>Mobility limitations</i>				
Total percent	100 0	100 0	100 0	100 0
None	89 4	77 4	97 9	98 5
With limitations	10 0	21 5	1 9	1 2
Need help for transportation only	3 9	8 1	8	7
Need help only to get around outside home	5	1 2	2	
Need help to go outside home	9	1 5	7	3
Confined to home	4 6	10 6	3	2
Not reported	6	1 1	2	3
<i>Extent of functional limitations</i>				
Total percent	100 0	100 0	100 0	100 0
No loss	31 9	11 9	35 9	56 0
Minor loss	21 4	17 5	28 3	20 6
Moderate loss	16 7	18 0	20 5	11 3
Severe loss	18 0	27 8	12 7	9 0
Functionally dependent	11 0	23 5	2 4	1 5
Not reported	1 1	1 2	3	1 7
Women				
Total number (in thousands)	8 514	4 745	1,554	2,215
<i>Diagnostic group of major disabling conditions</i>				
Total percent	100 0	100 0	100 0	100 0
Musculoskeletal disorders	34 2	31 3	36 4	38 8
Cardiovascular disorders	20 5	22 4	21 3	15 6
Respiratory and related disorders	7 6	7 3	4 6	10 5
Digestive system disorders	4 4	4 3	3 7	5 1
Mental disorders	8 7	12 0	7 6	2 6
Nervous system disorders	2 4	3 4	1 7	9
Urogenital conditions	3 3	2 8	4 9	3 4
Neoplasms	2 5	2 8	3 9	1 2
Endocrine disorders	2 7	2 7	3 6	2 0
Other and unspecified conditions	7 7	6 7	8 6	9 1
Not reported	6 1	4 6	3 7	10 8
<i>Age at onset</i>				
Total percent	100 0	100 0	100 0	100 0
Under age 18	5 8	6 2	1 7	8 0
18-24	10 1	6 6	10 1	17 6
25-34	17 3	15 3	22 5	17 7
35-44	21 4	20 7	26 7	19 2
45-49	13 0	14 5	10 8	11 3
50-54	13 0	16 0	11 3	7 7
55-64	14 0	17 1	15 5	6 4
Not reported	5 4	3 6	1 5	12 1
Median age	41	44	40	35

TABLE 4—Disability characteristics Percentage distribution of noninstitutionalized population aged 20-64, by severity of disability and sex, summer 1972—*Continued*

Characteristic	Total disabled	Severity of disability		
		Severe	Occupational	Secondary work limitations
<i>Women—Continued</i>				
<i>Duration of disability (in years)</i>				
Total percent	100 0	100 0	100 0	100 0
Less than 1	12 2	12 0	13 5	11 6
1...	3 7	3 6	4 8	3 0
2-4	34 5	32 8	39 6	34 3
5-9...	19 7	20 9	17 3	18 7
10-14	10 2	11 4	10 8	7 2
15 or more	14 5	15 8	12 6	13 1
Not reported...	5 4	3 5	1 5	12 0
Median years	5	6	6	5
<i>Activity limitations</i>				
Total percent	100 0	100 0	100 0	100 0
None	18 8	10 9	19 5	35 1
With limitations in one or more activities	81 2	89 1	80 5	64 9
Walking	40 4	55 6	25 5	18 4
Using stairs or inclines	41 6	55 8	30 4	19 0
Standing for long periods...	53 3	65 6	50 4	28 9
Sitting for long periods...	30 8	40 9	23 8	14 1
Stooping, crouching or kneeling	50 0	62 4	41 6	29 5
Lifting or carrying weights up to 10 lbs	35 6	48 9	19 4	18 2
Lifting or carrying weights over 10 lbs	60 0	73 5	49 5	38 3
Reaching	30 7	42 7	17 9	13 9
Handling and fingering	21 3	30 8	12 0	7 6
<i>Number of activity limitations at time of interview</i>				
Total percent	100 0	100 0	100 0	100 0
None	18 8	10 9	19 5	35 1
1...	12 8	7 1	17 5	21 6
2...	13 2	9 6	19 3	16 6
3...	10 8	10 7	13 2	9 5
4...	8 2	9 4	9 2	4 8
5 or more	36 2	52 3	21 3	12 3
<i>Mobility limitations</i>				
Total percent	100 0	100 0	100 0	100 0
None	85 1	77 6	94 8	94 2
With limitations	13 3	20 7	4 5	3 5
Need help for transportation only	4 5	6 1	2 9	2 2
Need help only to get around outside home	4	7	1	1
Need help to go outside home	1 0	1 3	2	1 0
Confined to home	7 3	12 7	1 2	2
Not reported...	1 6	1 7	7	2 3
<i>Extent of functional limitations</i>				
Total percent	100 0	100 0	100 0	100 0
No loss	28 6	16 5	36 3	49 0
Minor loss	25 3	21 1	36 4	26 6
Moderate loss	14 4	17 0	12 3	10 5
Severe loss	16 1	22 3	9 0	7 6
Functionally dependent	13 5	21 4	5 1	2 6
Not reported	2 1	1 7	7	3 7

reader must keep in mind, therefore, that the following discussion of disabling conditions completely ignores other conditions existing at the same time that may have contributed to the individual's disability. Such data were not collected in the survey.

Among both disabled men and women, musculoskeletal disorders were the most frequently named disabling condition, occurring in about 36 percent of the disabled. Twenty-one percent named cardiovascular problems as the major cause of their disability. Respiratory, mental, and digestive disorders occurred much less frequently, together accounting for 22 percent of specified conditions. No significant differences between men and women were apparent in the proportions reporting the above conditions. Among the severely disabled, mental disorders ranked third in frequency for both men and women, with 11 percent reporting them. Twenty-nine percent of severely disabled men had cardiovascular conditions, compared with 22 percent of the women.

Among the occupationally disabled, men were far more likely to report musculoskeletal disorders than were women—51 percent compared with 36 percent. Cardiovascular disorders, with a 20-percent frequency, occurred in about the same proportion for both sexes. For men, the next most frequent were respiratory and digestive disorders, with 9 percent and 7 percent, respectively. In third place for women, however, were mental disorders (8 percent), a condition that accounted for less than 1 percent of the men.

Thirty-nine percent of the disabled with secondary work limitations reported musculoskeletal disorders, cardiovascular and respiratory disorders were reported by 15 percent and 13 percent, respectively. Men and women did not differ in the frequencies reporting any condition.

Age at Onset

The median age at onset of disability among all persons surveyed in 1972 was 41. For the severely disabled, it was age 47 for men and 44 for women. The greatest proportion of men recognized the beginning of their disability, however, between the ages 55 and 64. For women in this disability category, disability began most frequently at ages 35-44.

MEDICAL CHARACTERISTICS

Major Disabling Condition

Each disabled person surveyed was shown a list of 39 conditions and asked if any of these conditions or any other condition not shown was the main reason for any work limitations. The

The median age at onset among occupationally disabled men was 39, for women it was 40. Those with secondary limitations reported onsets at much younger ages—31 for men and 35 for women, nearly half were younger than age 34 (compared with 36 percent of the occupationally disabled and 26 percent of the severely disabled). It should be kept in mind that age affects the disability category by its impact on obtaining employment. Of two persons with similar illnesses and functional difficulties, for example, the older person would be more likely to be classified as severely disabled because his age or combination of age and disability may have prevented him from getting alternative employment.

Despite the large concentration of mentally retarded among those with onsets in childhood (under age 18), most adults (55 percent) in that category reported being only secondarily limited, as the figures that follow indicate:

Age at onset	Disabled				
	Total number (in thousands)	Percentage distribution			
		Total	Severe	Occupational	Secondary work limitations
Total . . .	15,550	100 0	49 6	22 3	28 0
Under 18.	1,179	100 0	41 1	4 0	54 9
18-34	4,163	100 0	36 4	29 2	34 4
35-44	3,280	100 0	47 4	27 8	24 8
45-54	3,907	100 0	57 4	21 9	20 7
55-64	1,538	100 0	68 0	18 3	13 7
65-69	822	100 0	76 2	13 7	10 2

This is just one example of the complex relationships among age, disability, and unemployment, which find greater proportions of the severely disabled with increasing age. Additional data on onset by age group showed few differences between men and women. Among the severely disabled, however, a higher proportion of men (29 percent) than of women (17 percent) reported onsets at age 55-64. That is, men were more likely to experience onset just before retirement age, but onset in women was more evenly spread throughout all the age groups. Among those with secondary work limitations, only one difference is notable. Men were far more likely than women to have experienced onset of their illness during childhood—22 percent compared with only 8 percent.

The proportion of disabled persons with mus-

culoskeletal conditions had increased since 1966. 36 percent of those surveyed in 1972 reported these conditions, compared with 31 percent in the 1966 survey. Changes for the severely and the less severely disabled were in the same direction and were similar in size. Cardiovascular major conditions showed a decline from 25 percent in 1966 to 21 percent in 1972. No change was shown among the severely disabled with cardiovascular conditions but the less severely disabled who specified these types of problems as the major disability dropped from 24 percent in 1966 to 17 percent in 1972.

Disability Duration

For more than one-third of the disabled of both sexes, the disability had lasted between 2 and 4 years, for nearly half, the duration was 5 years or more. Sixteen percent of the disabled reported that onset occurred more than 15 years ago. Only minor differences in duration were seen between severity groups and between men and women.

Functional Limitations

Activity limitations—The data in table 4 show that limitations in activities such as walking, using stairs, standing, stooping, and lifting weights were widespread among the disabled. About four-fifths of the disabled had limitations in one or more of these activities.

Functional limitations appeared to be closely related to degree of disability. The severely disabled were more likely to report a greater number of limitations in physical activities than were the less disabled, 9 in 10 of the former reported at least one activity limitation, compared with almost 8 in 10 of the occupationally disabled and 6 in 10 of those secondarily disabled. More than half of the severely disabled reported five or more limitations as contrasted to one-fourth of the occupationally disabled and one-eighth of those with secondary work limitations.

About three-fifths of the disabled reported a limitation in their ability to lift or carry weights heavier than 10 pounds. Two other activities reported as difficult or impossible by about half the disabled were standing for long periods and

stooping, crouching, or kneeling. Difficulty with walking and with using stairs or inclines was reported by more than two-fifths of disabled respondents.

Mobility limitations—The severely disabled were also more likely to report a limitation on their ability to go outside their home. Twenty-one percent of them reported some limitation, in this area, compared with only 3 percent of the occupationally disabled and 2 percent of those with secondary work limitations. Twelve percent of the severely disabled were confined to the home, compared with fewer than 1 percent of the two less severely disabled groups. Men and women showed almost no differences in limitations in physical activities and mobility.

Extent of functional limitations—Several activity limitations were combined in a scale ranging from no limitations to severe limitations. Limitations of mobility and personal care were added to the scale to develop the "index of functional limitations."⁸ On the basis of this index, about 30 percent of the disabled and 45 percent of the severely disabled were classified as having a severe loss or being functionally dependent. The proportion with no loss of functional limitation ranged from 14 percent of the severely disabled to 52 percent of those with secondary work limitations.

FAMILY CHARACTERISTICS

In the discussion on demographic characteristics of the disabled it was noted that the disabled had married in the same proportion and that they were more often divorced, separated, or widowed than nondisabled persons. (As the disabled are an older population, it can be assumed that most of them married before onset of disability. No data are available, however, on marriage dates of the respondents in the sample.) Being married is particularly important to disabled persons because the presence of a spouse provides greater income and extra attention to personal care needs. It also provides the social

⁸ For derivation of the functional limitation index used here, see Lawrence D. Haber, "The Epidemiology of Disability II: The Measurement of Functional Capacity Limitations," Report No. 10, 1966 Social Security Survey of the Disabled, Office of Research and Statistics, Social Security Administration, July 1970.

interaction that is often difficult for the handicapped person to get—either because of hampered physical mobility and psychological barriers or prejudice on the part of others.

Family composition—Comparison of the disabled unit nuclear families⁹ with nondisabled nuclear families indicates that the disabled, being older, are less likely to have minor children—33 percent of the disabled, compared with 52 percent of the nondisabled (table 5). About one-fourth of the severely disabled lived in nuclear families and about two-fifths of the less severely disabled.

Eight percent of disabled women and 1 percent of the disabled men lived with their minor children but without a spouse. For the occupationally disabled women, the proportion is even higher, 12 percent. Approximately 637,000 disabled women are living without spouses but with (and usually supporting) minor children.

Physical handicaps may interfere with the ability to care for or bear children. Thus, one would expect the existence of disability to negatively affect the number of small children present in the home of a disabled woman more than the number in the home of a man. The difference was slight, however. Eleven percent of the disabled women and 13 percent of the disabled men had children under age 6 (compared with 26 percent and 27 percent of nondisabled), for severely disabled women it was 6 percent, for severely disabled men 8 percent. In addition, fewer children aged 6–11 were in disabled units. Teenagers were present in almost as great numbers in disabled as in nondisabled families, however. Most disability onset occurred after age 45, when families were completed, and therefore did not greatly affect the number of older children.

Family size—As with the nondisabled, there were fewer large families (five or six persons) among the disabled in 1972 than in 1966. The disabled both in 1966 and 1972, however, lived within smaller families than the nondisabled. In 1972, 14 percent of the severely disabled lived alone (compared with 7 percent of nondisabled), and 36 percent of the severely disabled lived in 2-person units (compared with 23 percent of nondisabled). The modal (most frequent) size was two persons for both disabled and nondisabled,

⁹ The unit nuclear family consists of the sample respondent and the spouse and minor children living in the same household.

TABLE 5—Family characteristics Percentage distribution of noninstitutionalized population aged 20-64, by disability status and sex, summer 1972

Characteristic	Total U S population	Disabled				Non disabled
		Total	Severe	Occupational	Secondary work limitations	
Total						
Total number (in thousands)	106,268	15,550	7,717	3,473	4,360	90,718
<i>Composition of family unit</i>						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Respondent only	18 8	24 3	29 9	18 5	18 8	17 9
Respondent and spouse, no minor children	28 4	38 6	41 1	38 3	34 3	26 7
Respondent, spouse, and minor children	49 2	32 8	25 4	37 8	41 9	52 0
Respondent and minor children, no spouse	3 6	4 4	3 7	5 4	4 9	3 4
<i>Age of youngest child</i>						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
No children	47 4	63 0	71 0	56 8	53 1	44 7
Under 6	24 3	11 7	6 9	13 6	18 6	26 4
6-11	15 9	12 7	10 1	14 4	16 1	16 4
12-15	8 6	7 8	7 4	9 9	6 6	8 7
16-17	3 9	4 8	4 6	5 4	5 0	3 7
<i>Family size of sample persons</i>						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
1 person	7 7	11 4	13 9	9 8	8 4	7 1
2 persons	24 0	31 6	35 7	28 8	26 6	22 7
3 persons	20 2	21 7	20 3	25 3	21 5	19 9
4 persons	21 0	15 1	12 6	16 5	18 5	22 0
5 persons	13 0	8 7	6 8	9 6	11 6	13 7
6 or more persons	14 1	11 3	10 7	10 2	13 4	14 5
<i>Family life cycle stage</i>						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Dependent young adult	8 5	6 5	7 0	4 8	7 0	8 8
Dependent older adult	1 6	3 7	5 9	1 8	1 5	1 3
Married head or spouse	76 9	70 7	65 8	75 7	75 2	77 9
Young, no children	7 0	3 5	1 9	2 2	7 4	7 6
With minor children	48 7	32 7	26 4	37 7	41 8	51 5
With adult children only	6 5	9 8	9 4	12 1	8 8	5 9
Older, no children	14 6	24 6	29 1	23 6	17 3	12 9
Nonmarried head	12 3	18 6	20 9	17 4	15 6	11 2
Young, no minor child	3 9	2 8	1 9	3 2	4 1	4 1
Older, no minor child	5 4	11 7	15 7	8 9	6 9	4 3
With minor children	3 0	4 1	3 3	5 3	4 6	2 8
Dependent couple, any age	7	5	5	3	7	7
<i>Relatives outside household</i>						
Percent with—						
No relatives	1 6	1 6	1 8	9	1 8	1 6
Relatives	98 3	98 4	98 2	99 1	98 2	98 3
Parents	62 8	44 6	35 3	49 9	57 0	65 9
Father	41 9	24 9	17 6	26 0	36 9	44 8
Mother	56 3	38 5	29 0	44 2	50 8	59 4
Parents-in-law	53 2	33 7	25 4	38 6	44 4	56 6
Brothers or sisters	86 8	86 5	83 9	88 7	89 3	86 9
Own children	35 2	52 4	57 7	52 5	42 8	32 2
Under age 18	5 3	5 9	5 1	8 5	5 3	5 3
Age 18 or over	31 4	46 7	54 5	47 5	39 6	28 4
Other relative	60 0	53 1	49 7	54 8	57 8	61 1
Not reported	1					1
<i>Contact with relatives</i>						
Percent with—						
No relatives outside household	1 6	1 6	1 8	9	1 8	1 6
Relatives outside household	98 3	98 4	98 2	99 1	98 2	98 3
No relative near, no contact	12 3	12 1	13 0	11 6	10 8	12 3
Relative near, no contact	5 4	7 9	9 0	7 1	6 7	4 9
Sees relative, no help	67 0	61 4	55 6	66 7	67 4	68 0
Help from relatives	13 1	16 6	20 2	13 3	12 9	12 6
In home	11 3	13 7	15 9	11 7	11 4	10 9
Support	1 0	1 6	2 3	1 2	8	9
Both in home and support	8	1 3	2 0	5	8	7
Not reported	5	4	5	4	4	5

TABLE 5—Family characteristics Percentage distribution of noninstitutionalized population aged 20-64, by disability status and sex, summer 1972—Continued

Characteristic	Total U S population	Disabled				Non-disabled
		Total	Severe	Occupational	Secondary work limitations	
Men						
Total number (in thousands)	50,414	7,036	2,972	1,919	2,145	43,377
<i>Composition of family unit</i>						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Respondent only	18 8	23 7	27 4	22 3	19 9	18 0
Respondent and spouse, no minor children	29 0	40 1	44 3	37 6	36 7	27 2
Respondent, spouse, and minor children	51 3	35 5	27 4	39 6	42 9	53 9
Respondent and minor children, no spouse	9	7	1 0	5	5	9
<i>Age of youngest child</i>						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
No children	47 9	63 9	71 7	59 9	56 7	45 3
Under 6	23 8	12 8	7 8	13 1	19 3	25 6
6-11	15 8	11 3	8 2	11 9	15 2	16 5
12-15	8 7	7 8	8 6	9 9	4 9	8 9
16-17	3 7	4 2	3 7	5 2	3 9	3 7
<i>Family size of sample persons</i>						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
1 person	7 1	10 4	11 5	11 5	8 0	6 6
2 persons	23 7	32 0	38 4	26 6	28 1	22 4
3 persons	19 9	20 9	20 2	22 9	19 9	19 7
4 persons	22 0	15 6	12 0	16 2	20 0	23 1
5 persons	13 2	9 3	7 3	12 2	9 5	13 8
6 or more persons	14 0	11 8	10 6	10 6	14 6	14 4
<i>Family life cycle stage</i>						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Dependent young adult	9 4	9 0	8 0	8 1	11 2	9 5
Dependent older adult	1 5	3 8	6 8	2 4	9	1 1
Married head or spouse	79 3	75 0	71 4	76 9	78 3	80 1
Young, no children	7 3	3 7	1 7	1 3	8 5	7 9
With minor children	50 8	35 4	27 4	39 5	42 8	53 3
With adult children only	6 8	10 3	10 6	11 8	8 6	6 2
Older, no children	14 5	25 6	31 6	24 4	18 3	12 7
Nonmarried head	8 7	11 7	13 4	12 4	8 9	8 2
Young, no minor child	4 7	3 5	2 0	5 4	3 8	4 9
Older, no minor child	3 2	7 7	10 5	6 5	4 9	2 4
With minor children	9	6	8	4	3	9
Dependent couple, any age	1 0	5	5	2	7	1 1
<i>Relatives outside household</i>						
Percent with—						
No relatives	1 6	2 0	2 4	1 1	2 3	1 6
Relatives	98 2	98 0	97 6	98 9	97 7	98 3
Parents	62 4	41 9	31 1	45 3	53 8	65 7
Father	41 4	22 6	16 4	20 5	32 9	44 4
Mother	55 1	36 4	24 9	41 1	48 1	58 1
Parents-in-law	57 8	38 3	28 9	41 2	52 0	60 8
Brothers or sisters	86 8	86 6	83 9	90 1	87 4	86 8
Own children	34 0	49 1	55 5	49 1	40 3	31 6
Under age 18	6 5	7 3	6 4	10 0	6 2	6 3
Age 18 or over	29 4	44 3	51 1	42 8	36 4	27 0
Other relative	58 8	51 8	47 7	50 4	58 8	59 9
Not reported	1					2
<i>Contact with relatives</i>						
Percent with—						
No relatives outside household	1 6	2 0	2 4	1 1	2 3	1 6
Relatives outside household	98 2	98 0	97 6	98 9	97 7	98 3
No relative near, no contact	12 7	11 7	13 0	10 3	11 2	12 9
Relative near, no contact	5 9	8 6	8 9	9 1	7 6	5 4
Sees relative, no help	67 5	65 6	58 7	71 0	70 3	67 8
Help from relatives	11 5	11 6	16 4	7 8	8 4	11 5
In home	9 7	9 6	12 7	7 2	7 3	9 7
Support	8	7	1 0	2	8	8
Both in home and support	1 0	1 3	2 6	4	3	1 0
Not reported	6	5	5	6	3	6

TABLE 5—Family characteristics Percentage distribution of noninstitutionalized population aged 20-64, by disability status and sex, summer 1972—*Continued*

Characteristic	Total U S population	Disabled				Non disabled
		Total	Severe	Occu- pa- tional	Sec- ondary work limi- tations	
Women						
Total number (in thousands) . . .	55 854	8,514	4 745	1 554	2,215	47 341
Composition of family unit						
Total percent . . .	100 0	100 0	100 0	100 0	100 0	100 0
Respondent only	18 9	24 7	31 5	18 8	17 9	17 8
Respondent and spouse, no minor children	27 9	37 3	39 1	39 1	32 1	26 2
Respondent, spouse and minor children	47 2	30 5	24 1	35 6	40 8	50 2
Respondent and minor children, no spouse	6 0	7 5	5 3	11 5	9 2	5 7
Age of youngest child						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
No children	46 9	62 2	70 6	52 9	50 8	44 2
Under 6	24 7	10 8	6 3	14 2	18 0	27 2
6-11	16 0	13 9	11 3	17 5	17 0	16 3
12-15	8 4	7 7	6 7	9 8	8 2	8 5
16-17	4 0	5 4	5 1	5 5	6 0	3 8
Family size of sample persons						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
1 person	8 3	12 3	15 4	7 6	8 9	7 5
2 persons	24 3	31 3	34 1	31 4	25 3	23 1
3 persons	20 4	22 5	20 3	28 2	23 1	20 1
4 persons	20 1	14 7	13 0	16 8	16 9	21 1
5 persons	12 7	8 3	6 4	6 3	13 6	13 5
6 or more persons	14 1	11 0	10 8	9 8	12 2	14 6
Family life cycle stage						
Total percent	100 0	100 0	100 0	100 0	100 0	100 0
Dependent young adult	7 7	4 5	6 4	7	3 0	8 2
Dependent older adult	1 7	3 6	5 3	9	2 0	1 4
Married head or spouse	74 8	67 1	62 3	74 3	72 3	76 0
Young, no children	6 8	3 4	2 0	3 5	6 3	7 4
With minor children	46 9	30 6	24 2	35 6	40 7	49 8
With adult children only	6 2	9 4	8 6	12 5	8 9	5 6
Older, no children	14 7	23 8	27 6	22 7	16 4	13 1
Nonmarried head	15 6	24 2	25 6	23 6	22 1	14 0
Young, no minor child	3 2	2 3	1 9	4	4 5	3 4
Older, no minor child	7 4	15 0	18 9	11 9	8 8	6 0
With minor children	5 0	7 0	4 8	11 3	8 8	4 6
Dependent couple, any age	4	5	5	4	6	4
Relatives outside household						
Percent with—						
No relatives	1 5	1 3	1 4	7	1 3	1 6
Relatives	98 3	98 7	98 6	99 3	98 7	98 3
Parents	63 2	46 9	37 9	55 6	60 1	66 1
Father	42 4	26 8	18 3	32 8	40 7	45 2
Mother	57 4	40 2	31 6	48 0	53 3	60 5
Parents in law	49 1	29 0	23 2	35 4	37 0	52 7
Brothers or sisters	86 8	86 4	83 9	86 9	91 3	86 9
Own children	36 2	55 1	59 2	56 7	45 1	32 9
Under age 18	4 3	4 7	4 2	6 7	4 3	4 3
Age 18 or over	33 2	52 4	56 6	53 2	42 7	29 7
Other relative	61 1	54 2	51 0	60 2	56 9	62 3
Not reported	1	-	-	-	-	1
Contact with relatives						
Percent with—						
No relatives outside household	1 5	1 3	1 4	7	1 3	1 6
Relatives outside household	98 3	98 7	98 6	99 3	98 7	98 3
No relative near, no contact	11 9	12 4	13 0	13 1	10 5	11 8
Relative near, no contact	4 9	7 3	9 0	4 5	5 8	4 5
Sees relative, no help	66 6	57 9	53 6	61 4	64 5	68 2
Help from relatives	14 6	20 7	22 5	20 1	17 3	13 5
In home	12 8	17 0	17 8	17 1	15 3	12 0
Support	1 2	2 4	3 1	2 4	7	1 0
Both in home and support	6	1 3	1 6	6	1 2	5
Not reported	3	4	4	2	6	3

but nearly as many nondisabled lived in three- and four-person groups

Life-Cycle Stage

The traditional progression of life cycles in Western cultures is from child to dependent young adult through "married with no children," "married with young children," "married with adult children," and widowhood. Most disabled individuals progress through the same stages. The disabled are older, however, and therefore less likely to have minor children and more likely to be widowed.

The most likely life-cycle situation for both disabled and nondisabled adults was that of married head or spouse in a family with minor children. Thirty-five percent of disabled men and 31 percent of disabled women were in this situation, compared with 53 percent and 50 percent among the nondisabled. Among the severely disabled, 25 percent were at this life-cycle stage. The disabled, being older, were twice as likely as the nondisabled to be in the life-cycle stage "married head or spouse, older, no children," or with "adult children only." The pattern has changed little since 1966.

Contact With Relatives

Although the data on life cycles and on marital and parental experience indicated that most disabled persons lived within the nuclear family, 1 in 10 disabled persons lived alone. Among severely disabled older women, 22 percent lived alone.

Some disabled persons, even though married, received support—emotional and financial—from extended families (relatives). Data are provided in table 5 on the proportion with relatives outside the household. Two percent of both the disabled and nondisabled had no relatives at all. Most had brothers, sisters, or children. Differences between the nondisabled and disabled were minor in most cases, most can be accounted for by the older age of the disabled group.

More important is the question of whether disabled persons have contact with relatives. Disabled persons were no more likely to see relatives than

the nondisabled (about 80 percent in both groups) and, when they did, were no more likely to get any household or financial aid from them. Eight percent of the disabled had relatives living near them but had no contact with them, compared with 5 percent of the nondisabled. The severely disabled were somewhat more likely to get household or financial aid from relatives than were the occupationally or secondarily disabled, and women were more likely to get help than men. Eight percent of the occupationally disabled men received help from relatives but as high as 20 percent of similarly disabled women received help. Most aid was household help rather than financial support. Of the disabled who were given help, only 18 percent received financial support.

Aside from financial support and household help from relatives, emotional support and social interaction are affected by disability. The disabled were asked whether they saw their relatives less (or more, or the same) after they became disabled. Two-thirds of both the men and the women reported no change in visits from relatives. Of those reporting changes after onset of disability, the proportion of persons who said they saw their relatives less often was twice as large as the proportion who said they saw them more often. The onset of disability for these respondents, of course, may have been years before the survey.

The greatest drop in relatives' visits had occurred among severely disabled men, nearly one-fourth of whom reported a decline. Because a large proportion of occupationally disabled and of those with secondary work limitations did not report data on visits, it is difficult to compare their situation with those of the severely disabled. It appears, however, that the group that suffered the least social withdrawal was women with secondary work limitations, only 5 percent of whom reported less contact after onset. An overall finding is that the severely disabled, more than the less seriously disabled, reported a greater change in both directions in the proportion seeing relatives.

Whether onset of a disability lessens social contact because of psychological antipathy to illness or fear of an additional financial burden can not be determined from the data. Another hypothesis is that decreased mobility of the disabled hampers visits to relatives. It should be kept in mind that the subject's answer to this question consists of

perceived increase or decrease in visits. There is a possibility that the disabled person after disability onset is more sensitive to such deficits in his life.

SOCIAL SECURITY BENEFICIARIES

The disability benefit segment of the old-age, survivors, and disability insurance (OASDI) program was designed to help replace earnings loss for those unable to work. In summer 1972, 1.7 million disabled adults received disabled-worker benefits. Another 1.5 million individuals received early (age 62-64) retirement or dependents' benefits under OASDI. A substantial number of early retirement beneficiaries were disabled also, but for various reasons elected to claim retirement rather than disability benefits.

According to the survey data, 18 percent of the 7.7 million persons who were severely disabled in the summer of 1972 were being paid disabled-worker benefits under the social security program (table 6). In addition, 7 percent were early-retiree beneficiaries, and 8 percent were receiving survivor or dependents' benefits.

One-third of the severely disabled men and only 9 percent of the women were receiving benefits because of their disability. Twice as many severely disabled men as women received benefits for early retirement, and twice as many severely disabled women as men received benefits as dependents of disabled, retired, or deceased workers. Women beneficiaries were fewer than men because most of them were married to employed men and they were thus not dependent on their own income.

As expected, fewer of the less severely disabled (occupationally disabled and those with secondary work limitations) received social security benefits, and when they did, they received them as early retirees or dependents. The survey definition of disability provides a partial explanation for this difference, since these two groups were very often able to work and were limited only in the amount or kind of work they could do.

Technical Note

In carrying out its responsibility for collecting and analyzing data on the disabled, the Social Security Administration conducted a survey in

TABLE 6—OASDI beneficiary status Percentage distribution of noninstitutionalized population aged 20-64, by disability status and sex, summer 1972

Beneficiary status	Total U S population	Disabled				Non disabled
		Total	Severe	Occupational	Secondary work limitations	
Total						
Total number (in thousands)	406 268	15,550	7,717	3 473	4 360	90,718
Total percent...	100 0	100 0	100 0	100 0	100 0	100 0
OASDI beneficiaries	4 7	19 3	32 8	5 9	6 0	2 2
With disabled worker benefit	1 4	9 6	18 1	1 9	.5	
With reduced benefit for early retirement	1 4	4 5	7 0	2 3	1 7	9
With survivor or dependent's benefit	1 9	5 3	7 7	1 7	3 8	1 3
Nonbeneficiaries...	95 3	80 7	67 2	94 1	94 0	97 8
Men						
Total number (in thousands)	50 414	7,036	2,972	1 919	2 145	43 377
Total percent..	100 0	100 0	100 0	100 0	100 0	100 0
OASDI beneficiaries	3 9	22 7	46 5	5 6	4 9	9
With disabled worker benefit	2 1	15 2	33 4	3 1	9	
With reduced benefit for early retirement ..	1 4	5 8	10 4	2 5	2 3	7
With survivor or dependent's benefit	4	1 7	2 7	1	1 7	1
Nonbeneficiaries	96 1	77 3	53 5	94 4	95 1	99 1
Women						
Total number (in thousands)	55,854	8 514	4 745	1 554	2 215	47,341
Total percent..	100 0	100 0	100 0	100 0	100 0	100 0
OASDI beneficiaries	5 4	16 5	24 3	6 3	7 1	3 4
With disabled worker benefit	8	4 9	8 6	5	1	
With reduced benefit for early retirement	1 4	3 4	4 8	2 2	1 0	1 0
With survivor or dependent's benefit	3 2	8 3	10 8	3 6	5 9	2 3
Nonbeneficiaries ..	94 6	83 5	75 7	93 7	92 9	96 6

mid-1972, using the 5-percent sample from the 1970 Decennial Census to identify both disabled and nondisabled adults. The 1972 survey was designed primarily to update earlier estimates of the extent and severity of disability in the population derived from the earlier general survey of the disabled conducted by the Social Security Administration in 1966.

In addition, the survey examined factors associated with the development and duration of disability by comparing persons who were currently disabled, previously disabled, and nondisabled. The study focused on adjustments to disability and examined economic, medical, and social consequences of disability for the disabled

person and his family. The survey provides information on

—the severity and prevalence of disability by demographic, social, economic, and occupational characteristics,

—factors affecting coping mechanisms and the nature of adaptation to impairment and disability—such as work adjustments, rehabilitation, and dependency,

—factors affecting application for and receipt of wage-replacement and income-maintenance benefits from social security and other public and private programs,

—evaluation of disability program provisions and of proposals for legislative and policy changes on disability and work experience requirements.

Study Design

The data were collected and processed by the Bureau of the Census. Survey estimates are based on a sample of 18,000 interviewed persons selected from the 1970 5-percent Census sample. Of these 18,000 persons, 11,700 were selected as the disabled sample from all those persons who indicated they were disabled before October 1969 on the 1970 Census questionnaire. A mail screening in 1971 of the remaining persons resulted in two other sample groups—5,100 nondisabled persons and 1,200 recent onset cases.

In addition, there were 2,850 noninterviews. Thus the rate of "good responses" for the survey—based on 18,000 interviewed persons out of 20,850 eligible for interview—is 86 percent. The number and reason for noninterviews were as follows:

Noninterview reason	Number of persons
Total	2,850
Unable to contact	1,240
Temporarily absent	100
Refused	620
Moved outside 357 primary sampling units	650
Miscellaneous	240

In general, the sample was a stratified multi-stage cluster design comprised of 357 sampling areas that included every county and some independent cities in the United States. The disabled persons were selected from all 357 strata; the nondisabled and recently disabled groups were chosen from a special subset of 105 strata. The sample was designed to represent the noninstitutionalized civilian population of the United States aged 18-64 as of April 1970.

Match With Social Security Records

To enhance the usefulness of survey data in analyses focused on program issues, the information obtained by interviews was combined with selected data available from the master beneficiary record maintained by the Social Security Administration. Data from both the interview and benefit records were used to establish beneficiary status for tabulation purposes.

Allocations

To maximize the amount of useful information, allocations were made for missing-income and medical-cost items based on values obtained from respondents with similar economic, medical, and demographic characteristics. Examples of medical characteristics that were used are "days hospitalized" and "number of doctor visits." Economic characteristics included "income" and other types of assets. An amount was assigned from the information for another person, systematically chosen according to the order in which the records were processed, who gave a good response to the item in question.

Definition of Disability

Disability is defined in this study as a limitation in the kind or amount of work (or housework) resulting from a chronic health condition or impairment lasting 3 months or longer. The disability classification was based on the extent of the individual's capacity for work, as reported by the respondent in a set of work-qualification questions. Data on employment and on functional capacities—such as mobility, activities of daily living, personal care needs, and functional activity limitations—were also collected to evaluate further the nature and severity of disability.

The severity of disability was classified by the extent of work limitations as

Severely disabled—unable to work altogether or unable to work regularly

Occupationally disabled—able to work regularly but unable to do the same work as before the onset of disability, or unable to work full time

Secondary work limitations—able to work full time, regularly, and at the same work but with limitations

in the kind or amount of work they can perform, women with limitations in keeping house but not in paid work are included as having secondary work limitations

Reliability of Estimates

Since the estimates in this report are based on a sample, they may differ somewhat from the figure that would have been obtained if all disabled and nondisabled adults in the United States had been surveyed with the same techniques used. As in any survey, the results are subject to error of response and of reporting as well as to the sampling variability. The standard error is a measure of sampling variability and indicates the amounts by which the sample estimates may vary from the universe values that would have been obtained if all persons in the universe had been studied.

For interval estimates, the standard error is used to construct an interval with a prescribed confidence that the interval includes the universe value or the average of all possible samples drawn from the same universe. In about 68 percent of the samples from a population, the population value would be included in the interval from one standard error below the sample estimate to one standard error above it—referred to as the 68-percent confidence or one standard error interval. In about 95 percent of the samples from a population, the population value would be included in the interval from two standard errors below the sample estimates to two standard errors above it—the 95-percent confidence or two standard error interval. The 99-percent confidence interval extends approximately two and one-half standard errors above and below the sample estimate.

The standard error is also useful in testing the significance of the difference between two statistics—that is, the confidence one can have that the sample difference in means, percentages, or estimates is a real difference and not merely due to chance. To test this assumption, the standard error of the difference can be calculated from the square root of the sum of the squared standard errors of each sample estimate. If the observed difference is as large as one standard error of the difference it is statistically significant at the 68-percent confidence level; if it is as large as two standard errors it is significant at approxi-

TABLE I—Approximate standard errors of estimated number of disabled persons

Estimated number	Standard error
10,000	9 200
25 000	14,600
50 000	20,600
100 000	29 200
250 000	46,100
500 000	65,000
1 000 000	91 700
2 500 000	143 000
5 000 000	199 000
7 500 000	240 000
10,000,000	272 000
12 500,000	298 000
15 000,000	320 000
16 802 000	333,000

TABLE III—Approximate standard errors of estimated number of severely disabled persons

Estimated number	Standard error
10,000	8 900
25,000	14 100
50 000	20 000
100 000	28,200
250 000	44 600
500 000	63,000
1 000 000	88 700
2 500 000	139,000
5 000 000	192 000
7 500 000	231 000
8,720 000	246 000

TABLE II—Approximate standard errors of estimated percentage of disabled persons

Size of base (in thousands)	Estimated percentage					
	1 or 99	2 5 or 97 5	5 or 95	10 or 90	25 or 75	50
100	2 9	4 6	6 4	8 8	12 6	14 6
250	1 8	2 9	4 0	5 5	8 0	9 2
500	1 3	2 0	2 8	3 9	5 6	6 5
1,000	9	1 4	2 0	2 8	4 0	4 6
2 500	6	9	1 3	1 8	2 5	2 9
5 000	4	6	9	1 2	1 8	2 1
7 500	3	5	7	1 0	1 5	1 7
10,000	3	5	6	9	1 3	1 5
12,500	3	4	6	8	1 1	1 3
15 000	2	4	5	7	1 0	1 2
16 802	2	4	5	7	1 0	1 1

TABLE IV—Approximate standard errors of estimated percentage of severely disabled persons

Size of base (in thousands)	Estimated percentage					
	1 or 99	2 5 or 97 5	5 or 95	10 or 90	25 or 75	50
100	2 8	4 4	6 2	8 5	12 2	14 1
250	1 8	2 8	3 9	5 4	7 7	8 9
500	1 3	2 0	2 8	3 8	5 5	6 3
1 000	9	1 4	1 9	2 7	3 9	4 5
2 500	6	9	1 2	1 7	2 4	2 8
5,000	4	6	9	1 2	1 7	2 0
7 500	3	5	7	1 0	1 4	1 6
8 720	3	5	7	9	1 3	1 5

mately the 95-percent level, and if as large as two and one-half standard errors it is significant at about the 99-percent level. As a general practice in the analyses presented here, differences between estimates and between percentages are considered statistically significant if the critical ratio equals or exceeds 1.96 standard errors, the level at which a predicted difference could be expected to occur by chance less than 5 out of 100 times, or the 0.05 level of significance.

Tables I, III, V, VII, and IX give approximate standard errors for the total numbers of persons in each disability category estimated from the sample to have certain characteristics. Tables II, IV, VI, VIII, and X give standard errors for estimated percentages. Linear interpolation may be used to obtain values not specifically shown. In order to receive standard errors that are applicable to a variety of estimates, a number of assumptions and approximations were required. As a result, the tables of standard errors provide an indication of the order of magnitude rather than the precise standard error for any specific attribute. The sampling errors of some selected

TABLE V—Approximate standard errors of estimated number of persons with occupational disability or secondary work limitations

Estimated number	Standard error
10 000	11 800
25,000	18 700
50 000	26 400
100 000	37,400
250 000	59 000
500 000	83 400
1 000 000	118,000
2 500 000	184,000
5 000 000	257 000
7 500 000	311 000
8 082 000	322 000

TABLE VI—Approximate standard errors of estimated percentage of persons with occupational disability or secondary work limitations

Size of base (in thousands)	Estimated percentage					
	1 or 99	2 5 or 97 5	5 or 95	10 or 90	25 or 75	50
100	3 7	5 8	8 1	11 2	16 2	18 7
250	2 4	3 7	5 2	7 1	10 2	11 8
500	1 7	2 6	3 6	5 0	7 2	8 4
1 000	1 2	1 8	2 6	3 5	5 1	5 9
2 500	7	1 2	1 6	2 2	3 2	3 7
5 000	5	8	1 2	1 6	2 3	2 6
7,500	4	7	9	1 3	1 9	2 2
8,082	4	6	9	1 2	1 8	2 1

TABLE VII—Approximate standard errors of estimated number of nondisabled persons

Estimated number	Standard error
50,000	34 700
100 000	49 000
1 000 000	154 000
2 500 000	242 000
5 000 000	338 000
10 000 000	465 000
20,000 000	618 000
30,000 000	706 000
40 000,000	752 000
50 000 000	783 000
60 000 000	742 000
70 000 000	684 000
80 000 000	580 000
90 000 000	394 000
93 099 000	299 000

TABLE VIII—Approximate standard errors of estimated percentage of nondisabled persons

Size of base (in thousands)	Estimated percentage					
	1 or 99	2 5 or 97 5	5 or 95	10 or 90	25 or 75	50
1,000	1 5	2 4	3 4	4 7	6 7	7 8
2 500	1 0	1 5	2 1	2 9	4 2	4 9
5 000	7	1 1	1 5	2 1	3 0	3 5
10 000	5	8	1 1	1 5	2 1	2 5
20 000	3	5	8	1 0	1 5	1 7
30,000	3	4	6	8	1 2	1 4
40 000	2	4	5	7	1 1	1 2
50 000	2	3	5	7	9	1 1
60 000	2	3	4	6	9	1 0
70 000	2	3	4	6	8	9
80 000	2	3	4	5	8	9
90 000	2	3	4	5	7	8
93,099	2	3	4	5	7	8

estimates are given below to illustrate the use of these tables

The tabulation on page 18 shows that only 5.9 percent of the men in the total US population reported themselves in 1972 as severely disabled, but 8.5 percent of the women considered themselves severely disabled—a difference of 2.6 percent. The standard error of the difference between these two figures is .86. Since 2.6 is more than two and one-half times .86, a difference of this size is statistically significant at the 99-percent confidence level.

Black persons were almost twice as likely as whites to be severely disabled (table 1)—12.1 percent contrasted with 6.8 percent. The standard error of this difference of .53 is .16 (table IV), significant at the 99-percent level, likely to have

TABLE IX—Approximate standard errors of estimated number of disabled and nondisabled persons

Estimated number	Standard error
50 000	32 700
100 000	46 200
1 000 000	146,000
2 500 000	228 000
5 000 000	319 000
10 000 000	441,000
20 000 000	591 000
30 000 000	683 000
40 000 000	737 000
50 000 000	763 000
60 000 000	783,000
70 000,000	737,000
80 000 000	682 000
90 000 000	590 000
109 901,000	0

TABLE X—Approximate standard errors of estimated percentage of disabled and nondisabled persons

Size of base (in thousands)	Estimated percentage					
	1 or 99	2 5 or 97 5	5 or 95	10 or 90	25 or 75	50
1 000	1 5	2 3	3 2	4 4	6 3	7 3
2 500	9	1 4	2 0	2 8	4 0	4 6
5 000	7	1 0	1 4	2 0	2 8	3 3
10 000	5	7	1 0	1 4	2 0	2 3
20,000	3	5	7	1 0	1 4	1 6
30 000	3	4	6	8	1 2	1 3
40,000	2	4	5	7	1 0	1 2
50 000	2	3	5	6	9	1 0
60 000	2	3	4	6	8	9
70 000	2	3	4	5	8	9
80 000	2	3	4	5	7	8
90 000	2	2	3	5	7	8
109 901	1	2	3	4	6	7

occurred by chance less than once in 100 times.

According to table 2, 43.9 percent of the severely disabled had 8 or fewer years of education. The standard error of this estimate, on a population base of 7.7 million severely disabled (from table IV), is .16. At the 95-percent confidence level, the estimated percentage is within 3.2 percentage points of the true proportion. Thus, the true proportion could be anywhere between 40.7 percent and 47.1 percent.

Table 4 shows that, of the occupationally disabled, men were much more likely than women to report musculoskeletal conditions as their major disabling condition (51.3 percent compared to 36.4 percent). The standard error of this difference of .149, using linear interpolation on table VI, is .068, significant at the 95-percent level.