

Number 30

Age, Work and Capacity Devaluation

Joseph Greenblum

Division of Disability Studies

September 1983

Social Security Administration  
Office of Policy  
Office of Research, Statistics, and  
International Policy



## Age, Work and Capacity Devaluation

by Joseph Greenblum\*

To be awarded disability insurance benefits, an individual must have an objectively determinable, severe medical condition or impairment which, according to Social Security regulations, is serious enough that it can be presumed to keep the individual from working. We know, however, that some people who have medical conditions serious enough to qualify them for disability benefits are nevertheless able to continue working while others who consider themselves unable to work do not have a serious enough impairment to qualify them for benefits. Whether or not a seriously impaired individual files for Social Security disability insurance benefits (SSDI) will depend, in part, on his own self-assessment of his ability to work, i.e., whether he considers himself to be severely disabled. This self-assessment depends upon many factors in addition to the actual severity of the individual's medical condition. These factors, therefore, become important elements in the decision to apply for SSDI benefits. This report examines how the relationship between measures of actual individual functional capacity and individual self-assessments of work capacity vary by age and other important job-related attributes.

---

\*The author wishes to acknowledge Michael Hooker for managing the data processing, Mary Brown for data calculations and preparation of tables, Kay Merrick for statistical consultation, and Miriam Kahn for preparation of the manuscript. Jesse Levy carried out the logit analysis, and guided the interpretation of the resultant data. Aaron Krute, Mordechai Lando and Barry Bye provided helpful comments on drafts of the report.

Sample surveys have repeatedly found increasing rates of self-reported disability with age. 1/ These self-assessments of disability often result in reductions in work schedules and earnings levels, and eventually to total cessation of work activity. If the actual impairment is severe enough, it may lead ultimately to dependence on disability benefits and other public income-maintenance programs; if the impairment is not severe enough, it may nevertheless lead the person's to believe that he or she is severely disabled and unable to work even though not eligible for disability benefits. These outcomes are the culmination of a process in which aging is a major catalyst. 2/

Underlying the relationship of age to self-reported work disability is the obvious physiological relationship between age and health status. However, social attitudes which link advancing age to declining work capacity may encourage impaired middle-aged and older persons to devalue (i.e., underestimate) their residual abilities regardless of their actual functional capacity. This would occur for example, if older workers think that they are no longer able to meet the normative expectations that they or others have for the work capacity that working-age persons should have. They may feel more threatened by any actual reduction in work capacity or by technological change which renders their skills obsolete. 3/ As a result, they may exaggerate the effect of actual capacity losses on their ability to work. They would then equate their capacity losses with disability (inability to work) and use them as a legitimate excuse for withdrawing from the labor force--a course of action which is socially acceptable because it is ostensibly the result of ill health.

This conceptual perspective was elaborated by Haber in a study utilizing data from the first national survey of the disabled conducted by the Social Security Administration in 1966. 4/ That study found that near-aged men consistently reported more severe disability than younger men independent of other factors affecting severity such as health status, functional limitations, education, occupation and the extent of heavy labor in the job held before the work limitation began. The present study updates the earlier one with data from the 1972 Social Security Survey of Disabled and Nondisabled Adults, utilizing more comprehensive measures of capacity loss and of exertional work requirements. The present study also extends the analysis to include women.

In reexamining the relationship between age and capacity devaluation, this analysis takes into account a variety of factors relating to pre-onset work history and work setting that have been shown by previous studies to affect the incidence of self-reported disability, particularly among older workers. The influence of work environment, particularly job modification, on the continued employment of impaired persons was shown by Nagi. 5/ Parnes found that the likelihood of retirement for health reasons was greatest among workers with low socio-economic status, where unfavorable job circumstances would tend to discourage work. 6/ Luft demonstrated that the specific physical requirements of an individual's job had an even greater impact on the probability of self-assessed work disability than did occupation, income, or education. 7/ In a small sample of arthritis cases among working-age persons, Yelin et al found that the degree of worker control of the pace of work was more important in predicting work disability than were factors relating to medical, demographic and socioeconomic status. 8/

Furthermore, unfavorable work situations may accentuate capacity devaluation and encourage withdrawal from work among older impaired workers. In a study of the decision to retire among white married men of early retirement age, Quinn found that those reporting poor health were more sensitive to the undesirable attributes of their jobs. 9/ Nelson's findings suggest that older impaired workers have a tenuous relationship to the labor market that discourages work and undermines positive feelings of work capacity. He found that near-aged workers have a complex of personal characteristics--significant impairment, less education, greater need for retraining--that present cost problems to employers and result in unfavorable management attitudes. He also found that such workers are concentrated in marginal occupations requiring few skills and offering little job security. 10/

#### Method 11/

This study examines the relationship, by age, between a more objective assessment of functional limitation and an individual's own self-assessment of ability to work. It focuses only on persons aged 20-64 who: (1) reported that they considered themselves disabled (limited in ability to work) for more than 6 months at the time of interview in 1972, and (2) who were employed when the claimed work limitation began. 12/

Cross-tabulations focus on the difference between the youngest age group (ages 20-44) and the oldest age group (ages 55-64) in the proportion of persons considering themselves severely disabled. The older group is described as "near-aged" throughout this report. Measures of actual functional capacity

and work situation are compared to self perceptions in order to assess the impact of aging. A logit analysis was also conducted and is presented in a later section of the report. Since the basic study population consists only of persons reporting some form of work limitation, the results may not necessarily be applicable to the general population.

Three measures of reduced functional capacity were considered in the 1966 study: (1) major disabling conditions reported by survey respondents; (2) sickness, as measured by reported hospitalization; and (3) functional limitations. The present study uses instead a single comprehensive measure of capacity loss: a functional capacity index previously developed from 1972 survey data items. The index combines measures of physical activity limitations, mobility restrictions and the need for help in self-care with a rating of the seriousness of all chronic conditions reported by respondents. <sup>13/</sup> Previous studies have shown that the index was more strongly and consistently related to Social Security disability status in the total survey population than was the functional limitations measure used in the earlier study. <sup>14/</sup> In essence, the index of functional capacity used in the report represents a proxy for an objective measure of the individual's actual disability status.

### Findings

Of those reporting some form of work limitation in 1972, the proportion who considered themselves severely disabled (i.e., severely limited to their ability to work) rose sharply with age. The pattern held for both men and women.

Percent of those with some limitation who consider  
themselves severely disabled

<u>Age</u>	<u>Male</u>	<u>Female</u>
<u>All ages</u>	<u>44.0</u>	<u>58.3</u>
20-44	24.1	39.5
45-54	38.0	55.0
55-64	54.4	68.9

To some extent, the figures above reflect the fact that, within the population studied, the amount of functional incapacity increased with advancing age (table 1). Nevertheless, the association between limited functional capacity and age does not completely explain the pattern in the table above. This can be seen more clearly by examining the figures in table 2. At each level of functional capacity (limitation), as measured by the index described earlier, the proportion of persons who considered that they were severely work-limited rose with age. The relationship held for both men and women. However, for reasons which cannot be explained without further research, the age-related increase in the proportion of women stating that they were severely disabled was quite small, and was, in fact, not statistically significant regardless of the level of functional incapacity.



The role of age in relation to capacity devaluation stands out with particular clarity when we examine the figures for men with minor or moderate limitations in functional capacity. Among men with minor incapacity, for example, the proportion of respondents who stated that they considered themselves to be severely disabled rose from 9.2 percent of those age 20-44 to 21.7 percent of those age 55-64.

#### Performance Requirements--Work at Onset of Disability

Blue collar jobs generally require physical labor performed in adverse environmental conditions with relatively little control of the pace and pressure of work. White collar jobs are more often sedentary and less arduous, are performed in more congenial surroundings, and permit greater flexibility in work scheduling and greater autonomy in the job. Such performance requirements of the job held at the onset of disability may be prime considerations, particularly for older persons, in forming their own assessment of their work capacity.

In the study based on 1966 data, performance requirements were measured indirectly by occupation at onset and directly by the regularity of heavy labor in the job at onset. This analysis also uses occupation. However, three additional measures which focus explicitly on several performance-related requirements of the job prior to the self-reported disability are also used. These are--

- (1) Number of physical activities. This is an index of the physical demands of the job based on the number reported by survey respondents from a list of 9 activities. 15/ The activities vary in arduousness but are not weighted in the index. The measure thus gives some indication of the range and diversity of the physical demands of the individual's past work.
- (2) Pressure and schedule demands. This is a measure of the stressfulness of the job as indicated by responses to two questions on work pressures and work pace. 16/ Such occupational stress may occur regardless of the physical demands or the working conditions of the job.
- (3) Number of adverse environmental conditions. This index measures the range and diversity of difficult working conditions rather than their degree of difficulty. The measure is based on the number reported by respondents from a list of eight conditions. 17/ Although the conditions may vary in degree of adversity, they are not weighted in the index.

The analysis examines the relationship of age and self-reported disability with occupation first, and then with each of these aspects of performance requirements. Unlike the earlier study, the analysis simultaneously controls for any effects on severity due to capacity loss. For this purpose the two-level functional capacity index is used: minor to moderate (scores 0-6)

and moderate-severe to severe (scores 7-10). The main question addressed by this analysis is whether the effects of age on self-assessed disability are greater for those whose usual type of work is more demanding and stressful.

The data reported here (table 3) provide some support for this expectation. Although the proportion of persons who considered themselves severely disabled increased with age for each occupational group studied, the differences were generally not statistically meaningful. However, statistically significant differences did occur for persons with minor or moderate functional limitations in a few occupational groups.

For men, percentage differences in perceived severity between the near-aged and the young were large and significant for semi-skilled and unskilled blue-collar workers and for farm workers (table 3). For both groups, the percent severe for the near-aged was more than four times that for the youngest group. Moreover, moderately incapacitated blue-collar men were by far the largest single occupational group in the population studied, representing almost one-third of all disabled men and about half of those with minor to moderate functional incapacity.

Among the younger men who were less incapacitated, self-reports of severe disability were less frequent among blue-collar workers than among white-collar workers. Among the near-aged, however, blue-collar workers were almost twice as likely as white-collar men to consider themselves severely disabled, 44.1 percent compared to 25.8 percent. Apparently, near-aged, blue-collar workers were more likely to be more pessimistic about their residual work abilities than their younger peers despite their minor or moderate functional incapacity.

The pattern for women was different. The only significant difference between the young and the near-aged was found among those who had minor or moderate functional limitations and had worked in white-collar jobs earlier.

These results, particularly the age effect peculiar to moderate incapacitated blue-collar men, contrast with the findings for men in the study based on 1966 data. In that study, the effects of age were significant for all occupational groups but were relatively greater among white-collar men. 18/ Whether the divergent findings are due to methodological factors, such as the lack of controls for capacity loss in the 1966 study, or to substantive changes over time cannot be ascertained with the data at hand.

Do the other performance requirements of the individual's prior work also effect the relationship between age and self-assessed severe disability? Table 4 shows that the effect of age on self-reported disability persisted for the three aspects of the individual's prior work examined here. The proportion of the near-aged who considered themselves severely disabled was significantly higher than was the case for the young for each of the specific job requirements when they were examined separately. The pattern of relationships was basically the same for both men and women. As was the case for occupation, the significant differences by age occurred primarily for persons with minor or moderate levels of functional incapacity.

The most interesting feature of the data in table 4 is that they suggest that more adverse working conditions, per se, do not significantly increase the likelihood that individuals will consider themselves severely disabled.

Indeed, the proportion of men who considered themselves severely disabled rose from 39 percent of those who reported 1-2 adverse environmental working conditions to only 49 percent of those who reported 5-6 adverse conditions and 46 percent of those reporting 7-8 adverse conditions.

#### Logit Analysis

The relationships presented so far in the cross-tabulations in this report were also analyzed by logit analysis. It is not feasible in cross-tabulations to control and present data simultaneously for more than a limited number of variables. Failure to control relevant variables may bias the results. Logit analysis is a multivariate procedure which controls a large number of relevant variables while enabling us to estimate the effect of each variable, independently of all others, on the relationship being studied. It also allows testing of the significance of each relationship. 19/

The logit analysis was carried out separately for men and women, using all of the independent variables discussed previously. The prime interest was to test whether effects of age on self-reported severe disability persisted when other possible variables associated with both age and severity were controlled. Table 5 presents the results of the logit analysis. As might be expected, the extent of functional incapacity was a significant factor that increased the probability of self-reported severe disability for both men and women. More importantly for this paper, the results also show quite clearly that older persons are more likely to consider themselves severely disabled regardless of

the extent of their functional limitations or of the type and requirements of their pre-disability job. In other words, age alone increases the likelihood that individuals will consider themselves severely disabled. This was true for both men and women. The results of the logit analysis thus confirmed, in a more rigorous way, the earlier results suggested by the data in table 2. Of the other factors examined in the logit analysis, only a work-history in a semi-skilled or unskilled blue-collar job or as a farm worker had a significant effect on the probability of persons classifying themselves as severely disabled. In addition, job pressures were significant for women only.

#### Summary and Conclusions

Analysis of Social Security survey data for 1972 concerning the effects of capacity loss and prior work situation on the relationship of age to self-assessed severity of work disability points to several conclusions. The more frequent reports of total inability to work (severe disability) by older persons, particularly men, regardless of degree of capacity loss, as measured by a comprehensive functional capacity index, supports the conclusion that near-aged persons devalue their residual capacities for work. This conclusion is reinforced by the logit analysis which found that age effects on severity occurred among both men and women independent of the effects of all other variables considered in this report, including functional capacity. These results are consistent with a hypothesis that older persons' evaluations of their work abilities are influenced by social expectations of declining capacities with age and by social attitudes permitting premature withdrawal from work for reasons of health.

The nature and circumstances of a person's prior occupation--the degree of flexibility, and the amount stress or physical demands inherent in the performance of the job--were not found to be significant factors in maximizing capacity devaluation among disabled near-aged persons, when functional capacity loss was controlled. This result conflicts with previous research cited in the introduction of this report, including the report based on the 1966 Social Security disability survey that prompted the present study. Further study is needed to explain the relationship between occupational requirements and self-assessed disability among the near-aged and the reasons for capacity devaluation among near-aged disabled women, in particular among those in white-collar occupations.

### Footnotes

1/ Joseph Greenblum, "Propositions on Social Disability," in Jack Elinson and Athilia E. Siegmann, ed., Sociomedical Health Indicators, Baywood Publishing, 1979, pp. 52-55. See also Kathryn H. Allan, "First Findings of the 1972 Survey of the Disabled: General Characteristics," Social Security Bulletin, October 1976; and Robert E. Ferguson, "General Characteristics," Report No. 1, 1974 Followup of Disabled and Nondisabled Adults, Social Security Administration, December 1979.

2/ For studies of the interactive effects of age and disability on employment and benefit status, see Lawrence D. Haber, "Age and Capacity Devaluation." Journal of Health and Social Behavior, 11, September 1970, pp. 167-182; and Lawrence D. Haber, "The Effect of Age and Disability on Access to Public Income - Maintenance Programs," Report No. 3, Social Security Survey of the Disabled: 1966, July 1968.

3/ Two Louis Harris surveys are pertinent. Only one-third of business leaders in 1978 and about one-half of persons in 1974 responsible for hiring and firing agreed that "most older people can continue to perform as well on the job as they did when they were younger." Less than three in five employees in both years appear to agree with the statement. See Elizabeth L. Meier, "Employment of Older Workers: Disincentives and Incentives," Working Papers: President's Commission on Pension Policy, April 1980, pp. 7-10.

4/ Haber, "Age and Capacity Devaluation," op. cit.

5/ Saad Z. Nagi, "An Epidemiology of Disability Among Adults in the United States," Milbank Memorial Fund Quarterly, 54 (Fall, 1976), pp. 439-467.

6/ Herbert S. Parnes et al. From the Middle to the Later Years: Longitudinal Studies of the Preretirement and Post retirement Experiences of Men, Center for Human Resource Research, Ohio State University, 1979, p. 181.

7/ Harold S. Luft, Poverty and Health: Economic Causes and Consequences of Health Problems, Ballinger, 1978, pp. 106-109.

8/ Edward Yelin, Michael Nevitt and Wallace Epstein, "Toward an Epidemiology of Work Disability," Milbank Memorial Fund Quarterly, 58 (Summer 1980), pp. 386-415.

9/ Joseph F. Quinn, "Job Characteristics and Early Retirement," Industrial Relations 17 (October 1978), pp. 315-323.



10/ Thomas C. Nelson, "The Age Structure of Occupations," in Pauline K. Ragan, ed., Work and Retirement: Policy Issues, University of Southern California Press, 1980, pp. 87-110.

11/ For the study design and definition of work disability in the 1972 survey, see Technical Note.

12/ The 6-month criterion permits comparison with the earlier study based on the 1966 sample. Exclusion of the nondisabled and of persons not employed at onset of disability was necessary because the survey questions on work situation, which are the bases of key variables used in the study, were asked only of disabled persons employed before the work limitation began and are related to the start of that period. Women limited only in housework, about 1 percent of all women, are also excluded.

13/ The development of the functional capacity index and its relationship to disability are described in Sandra D. Biscoe, "Functional Capacity Limitations and Disability, 1972-1974," 1974 Followup of Disabled and Nondisabled Adults, (Report No. 3), Office of Research and Statistics, Office of Policy, Social Security Administration, August 1980; and in Sandra Duchnok, "A Measure of Functional Capacity," (Working Paper Series, Report No. 4), Office of Research and Statistics, Office of Policy, Social Security Administration, March 1979. The original index of 11 categories was reduced to 5 in the later report and to the 4 indicated in the present report.

14/ Duchnok, op cit.

15/ The question and the physical activities: "Which of these things did you have to do on your job before your limitation began? walking; using stairs or inclines; standing for long periods; sitting for long periods; stooping, crouching or kneeling; lifting or carrying weights up to 10 pounds; lifting or carrying weights over 10 pounds; reaching; handling and fingering.

16/ The two questions are: "Was there a lot of pressure on this job or about the same as on most jobs?" "Did you have to keep up with a work schedule set by someone else?" Responses were classified as "both" ("a lot of pressure" and "keep up"), "either" or "neither."

17/ The list of 8 items follows the question: "What kinds of working conditions did you have on your job before your limitation began?" fumes, dust or smoke; hot places; cold places; damp places; noise or vibrations; confusion or disorder; working indoors; working outdoors. Other than "working indoors" these conditions are usually considered difficult.

18/ Haber, "Age and Capacity Devaluation," op. cit., p. 176.

19/ For a general description of logit estimation procedure, see Peter Schmidt and Robert Strauss, "The Prediction of Occupation Using Multiple Logit Models," International Economic Review, June 1975, pp. 484-485.

TABLE 1.--Functional capacity: percentage distribution by age among men and women considering themselves disabled in 1972 and employed at onset

Functional capacity index	Men				Women			
	Total	20-44	45-54	55-64	Total	20-44	45-54	55-64
Total number (000's).....	5,289	1,408	1,435	1,972	3,680	1,002	1,041	1,282
Total percent.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Minor incapacity (0-4) 1/.....	36.1	55.2	38.5	26.9	32.5	55.2	34.5	17.0
Moderate (5-6).....	27.8	27.4	23.2	27.4	25.6	25.0	24.3	27.3
Moderate-severe (7-8).....	28.0	12.4	30.4	35.8	29.6	13.9	29.2	37.7
Severe (9-10).....	6.8	3.3	7.0	8.7	11.4	3.8	11.4	17.6
Unknown.....	1.2	1.7	.9	1.1	1.0	2.1	.6	.5

1/ Includes none.

TABLE 2.--Proportion of persons considering themselves severely disabled by functional capacity, sex and age, 1972 1/

Functional capacity index	Men			Women				
	Total	20-44	45-54	55-64	Total	20-44	45-54	55-64
Total disabled employed at onset 2/.....	44.0	24.1	38.0	54.4*	58.3	39.5	55.0	68.9*
Minor incapacity (0-4) 3/.....	14.0	9.2	7.7	21.7*	29.1	31.1	25.5	33.4
Moderate (5-6).....	42.4	26.5	30.4	50.8*	53.4	32.6	55.7	55.9
Moderate-severe (7-8).....	71.0	60.5	69.3	70.8	80.2	74.7	72.4	80.8
Severe (9-10).....	92.2	80.5	88.9	95.4*	97.3	91.2	97.4	97.8
Minor/moderate (0-6).....	26.3	15.0	16.2	36.4*	39.8	31.6	38.0	47.3
Moderate-severe/severe (7-10).....	75.1	64.8	73.0	75.6	85.0	78.3	79.4	86.2

1/ Each proportion is based on the total number of weighted disabled cases with given combination of characteristics.

2/ Includes cases with unknown functional capacity.

3/ Includes none.

\* The difference between the 20-44 and 55-64 age groups is significant in the expected direction;  $p < .05$ .

TABLE 3.--Proportion of persons considering themselves severely disabled by occupation at onset, functional capacity, sex and age, 1972 <sup>1/</sup>

Occupation by functional capacity (FC) score <sup>2/</sup>	Men			Women				
	Total	20-44	45-54	55-64	Total	20-44	45-54	55-64
Total disabled employed at onset <sup>3/</sup> .....	44.0	24.1	38.0	54.4*	58.3	39.5	55.0	68.9*
Occupation at onset								
All Cases <sup>4/</sup>								
White collar.....	40.8	27.2	41.2	41.7	51.9	28.3	57.5	65.9*
Craftsmen and foremen.....	51.4	41.7	39.3	57.4	68.2	<u>5/</u>	94.9	75.8
Other blue collar.....	44.1	17.7	39.8	62.5*	62.1	50.6	54.9	69.0*
Farm managers and laborers..	44.8	33.5	29.7	50.6	67.4	60.5	44.6	90.0
FCO-6								
White collar.....	20.7	17.9	9.1	25.8	35.7	22.4	42.2	48.4*
Craftsmen and foremen.....	34.0	28.0	19.8	37.3	54.7	<u>5/</u>	<u>5/</u>	<u>5/</u>
Other blue collar.....	25.7	10.5	17.6	44.1*	42.0	40.7	35.3	43.7
Farm managers and laborers..	39.7	13.2	30.1	46.0*	55.3	<u>5/</u>	<u>5/</u>	85.1
FC7-10								
White collar.....	78.6	58.3	84.1	71.5	80.0	63.6	80.2	81.7
Craftsmen and foremen.....	77.4	81.0	65.6	81.0	100.0	<u>5/</u>	<u>5/</u>	<u>5/</u>
Other blue collar.....	80.3	68.4	84.5	79.4	87.1	87.0	80.8	87.9
Farm managers and laborers..	48.8	62.8	26.9	55.1	84.1	<u>5/</u>	<u>5/</u>	95.3

<sup>1/</sup> Each proportion is based on the total number of weighted disabled cases with given combination of characteristics.

<sup>2/</sup> Scores 0-6 are minor and moderate incapacity, 7-10 moderate-severe and severe incapacity.

<sup>3/</sup> Includes cases with unknown FC and unknown occupation.

<sup>4/</sup> Includes cases with unknown FC.

<sup>5/</sup> Based on fewer than 10 unweighted cases.

\* The difference between the 20-44 and 55-64 age groups is significant in the expected direction;  $p < .05$ .

TABLE 4.--Proportion of persons considering themselves severely disabled by selected requirements of work at onset, functional capacity, sex and age, 1972 <sup>1/</sup>

Work performance requirements by functional capacity (FC) score <sup>2/</sup>	Men				Women			
	Total	20-44	45-54	55-64	Total	20-44	45-54	55-64
Total disabled employed at onset <sup>3/</sup> .....	44.0	24.1	38.0	54.4*	58.3	39.5	55.0	68.9*
Number of physical activities								
<u>All Cases <sup>4/</sup></u>								
1-3.....	36.2	16.6	24.1	48.6*	56.5	25.5	45.1	69.3*
4-5.....	41.4	16.5	48.1	47.6*	61.9	49.3	58.9	69.1
6-7.....	46.8	26.9	35.6	62.7*	64.9	52.3	66.1	69.5
8-9.....	47.7	34.9	39.6	55.9*	43.0	19.9	40.8	65.3*
<u>FCO-6</u>								
1-3.....	22.1	10.6	16.1	30.3*	40.1	19.5	35.2	49.2*
4-5.....	25.1	9.8	16.8	36.3*	46.5	42.8	41.6	54.5
6-7.....	26.2	16.1	13.2	42.2*	41.0	41.7	47.6	33.7
8-9.....	31.1	24.9	19.2	36.8	25.5	11.8	13.3	54.3*
Pressure and schedule demands								
<u>All Cases <sup>4/</sup></u>								
Both.....	43.5	22.6	37.3	60.5*	63.1	45.4	65.8	71.6*
Either.....	43.2	25.2	37.7	51.8*	56.8	30.5	56.5	69.9*
Neither.....	46.4	25.6	40.5	51.0*	55.9	51.0	41.4	65.2
<u>FCO-6</u>								
Both.....	21.3	14.5	14.4	34.1*	44.8	35.0	42.5	50.9
Either.....	27.8	15.8	16.6	37.7*	37.9	28.2	41.1	49.1
Neither.....	30.6	14.8	18.4	36.4*	37.9	32.3	29.9	42.8
Number of environmental conditions								
<u>All Cases <sup>4/</sup></u>								
1-2.....	39.0	22.5	32.0	46.8*	55.8	37.5	50.9	68.3*
3-4.....	41.6	15.5	35.4	56.0*	57.6	35.3	58.2	63.5*
5-6.....	48.6	23.6	40.4	66.1*	68.1	59.0	57.4	76.2
7-8.....	45.7	46.9	42.2	43.6	59.6	43.2	60.2	93.7*
<u>FCO-6</u>								
1-2.....	25.3	15.1	11.4	34.1*	41.5	33.4	39.0	50.9
3-4.....	26.5	9.6	17.9	38.1*	39.2	26.9*	38.1	43.5
5-6.....	26.8	11.5	16.8	47.2*	38.5	38.5	36.5	37.9
7-8.....	26.3	36.6	17.2	24.4	39.2	38.8	<u>5/</u>	<u>5/</u>

<sup>1/</sup> Each proportion is based on the total number of weighted disabled cases with given combination of characteristics.

<sup>2/</sup> Scores 0-6 are minor and moderate incapacity, 7-10 moderate-severe and severe incapacity.

<sup>3/</sup> Includes cases with unknown FC and unknown work performance requirements.

<sup>4/</sup> Includes cases with unknown FC.

<sup>5/</sup> Based on fewer than 10 unweighted cases.

\* The difference between the 20-44 and 55-64 age groups is significant in the expected direction;  $p < .05$ .

TABLE 5.--Estimated logit coefficients of the probability of self-reported severe disability in 1972 among men and women employed at onset of disability

Variable	Men		Women	
	Coefficient Estimate	Standard Error	Coefficient Estimate	Standard Error
Constant.....	-1.689*	.323	-.351	.394
Functional Capacity Index 1/.....	1.931*	.095	1.698*	.131
Occupation at onset 2/				
Craftsmen/Foremen.....	.644*	.134	.462	.510
Other Blue Collar.....	.681*	.113	.433*	.130
Farm Managers and Laborers.....	.514*	.183	.697*	.356
Number of Physical Activities-				
Job at Onset.....	-.043	.023	-.004.	.029
Pressure and Schedule Demands-				
Job at Onset 3/				
Both.....	.044	.130	.338*	.169
Either.....	.066	.122	-.347*	.158
Number of Environmental				
Conditions-Job at Onset.....	.019	.024	-.049	.040
Age.....	.052*	.005	.036*	.006

1/ Reference category is 0-6 (minor and moderate incapacity).

2/ Reference category is "White Collar."

3/ Reference category is "Neither."

\* Variable significantly associated with probability of severe disability at  $\alpha = .05$ .

Technical Note\*

STUDY DESIGN

The survey 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 5-percent Census of 1970. Of these 18,000 persons, 11,700 were selected from all who indicated that they were disabled before October 1969 on the 1970 Census questionnaire. These persons make up the disabled sample. 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 to the sample of interviewed persons, 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 reasons 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 PSU's.....	650
Miscellaneous.....	240

In general, the sample was a stratified multi-stage cluster design comprised of 357 sampling areas including every county and some independent cities in the United States. The disabled persons were selected from all 357 strata; the

---

\*For a description of the purposes of the 1972 survey, the reliability of the estimates, and other technical information relating to the survey, see Appendix A in Donald T. Ferron, Disability Survey 72, Disabled and Nondisabled Adults: A monograph, Office of Research and Statistics, Office of Policy, Social Security Administration. Appendix B contains the questionnaire.

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.

#### DEFINITION OF DISABILITY

Disability is defined in this study as a limitation of more than 6 months duration in the kind or amount of work resulting from a chronic health condition or impairment. The disability classification is 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.

Persons who are occupationally disabled or who have secondary work limitations are considered to be partially disabled.