Effect of Rehabilitation on Employment and Earnings of the Disabled: Sociodemographic Factors

by Joseph Greenblum*

This report analyzes the importance of sociodemographic factors in the effect of rehabilitation services on the employment and earnings of disabled persons after their cases were closed by State vocational rehabilitation agencies in fiscal year 1971. The analysis is based on information about personal characteristics and on 1972 employment and earnings data for all such cases in the linked records of the Social Security Administration and the Rehabilitation Services Administration. It identifies sociodemographic factors that facilitate or hamper the effects of rehabilitation as measured primarily by employment differences between clients who completed and failed to complete a program of rehabilitation services. Rehabilitation appears to provide aid, especially to groups frequently disadvantaged in the labor market because of sex, age, ethnicity, or education. Impact was greater for men—but not for women—who were married or had larger families. These results differ significantly from conclusions based on previous studies of the disabled. Earlier studies often concluded that vocational rehabilitation was less successful for women, older persons, ethnic minorities, and persons with low socioeconomic status. Because those studies lacked information on rehabilitation status or focused only on persons who had received rehabilitation services and because they did not compare those who had completed a rehabilitation program with those who had not, they were unable to examine the effects of vocational rehabilitation completely.

A followup study of all disabled persons whose cases were closed by State vocational rehabilitation agencies in fiscal year 1971 has revealed a better short-term employment and earnings record in calendar year 1972 for rehabilitants than for other clients. The study has demonstrated that this more favorable immediate postclosure experience reflects not only known selection factors but the effect of rehabilitation per se.[1] Further study has also found wide variations in the effect of rehabilitation according to State of residence.[2]

This study builds on previous research by investigating the importance of sociodemographic factors in the impact of rehabilitation services on employment and earnings. It explores how rehabilitation effects vary according to personal and social circumstances and identifies those conditions that facilitate or hamper these effects on postclosure performance. The sociodemographic analysis focuses on the following available variables: Sex, age, ethnicity, education, major disabling condition, marital status, family size, number of dependents, and family income.

State vocational rehabilitation agencies provide services

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[1]See Joseph Greenblum, "Evaluating Vocational Rehabilitation Programs for the Disabled: National Long-Term Followup Study," **Social Security Bulletin,** October 1975, and Joseph Greenblum, **The Effects of Vocational Rehabilitation on the Earnings of Disabled Persons** (Staff Paper No. 27), Office of Research and Statistics, Social Security Administration, 1977.

[2]See Joseph Greenblum, "Effect of Vocational Rehabilitation on Employment and Earnings of the Disabled: State Variations, **"Social Security Bulletin,** December 1977.

to persons referred from a broad variety of agencies, including the Social Security Administration. To qualify for services, individuals must demonstrate to an agency counselor both a substantial vocational handicap and a potential for rehabilitation. Those who successfully complete an individual plan for guidance, restoration and training services, and a brief period of employment (1 month in fiscal year 1971) are considered "rehabilitated" when their cases are closed. The cases of unsuccessful clients who had been accepted for services are closed as "not rehabilitated," and those of all other persons referred to the agency are closed as "not accepted." For methodological reasons stated below, the analysis emphasizes comparisons of rehabilitated and not-rehabilitated cases with respect to postclosure employment.

Source and Limitations of Data

The findings presented here, as well as those in the reports cited above, are based on analyses of data in the linked records established by the Social Security Administration and the Rehabilitation Services Administration to aid in evaluating vocational rehabilitation programs for the disabled. A detailed description of the objectives and methodology of the data link and definitions of terms used in the study appear in the technical note at the end of the article.

Before the records link was established, only data on employment and earnings at the time of closure were available, and these statistics were obtained largely for rehabilitants. In the absence of more valid indicators, such data have been used as criteria to determine program success.[3] Followup studies of former clients of vocational rehabilitation agencies in which earnings data were obtained by questionnaire have also been conducted in some States.[4]

Such studies, however, have encountered severe problems in locating and eliciting information from respondents. Moreover, because these studies have involved uncoordinated efforts, it has been difficult to relate the findings in one State to those in others. The employment and earnings data in this article are based on information in social security records that is legally mandated and uniformly and routinely reported across the Nation.

Except for the data on age and sex, the information on sociodemographic characteristics analyzed here is derived from records submitted to the Rehabilitation Services Administration by State vocational rehabilitation agencies.[5] Though considerable demographic and program data are available in these records, they are subject to the usual limitations of data that are not collected for research purposes. For most characteristics, information was unknown or not reported in a significant proportion of the cases. For the sex, age, and ethnicity (including race) variables, information was unavailable in less than 5 percent of the cases. Since the missing data relate primarily to not-accepted cases, for which information is often not required to be reported, the major analyses are relatively unaffected. For most of the sociodemographic variables used in these analyses, information was lacking on no more than 5 percent of the cases. Variables with higher rates of missing data were family size (9 percent), family income (14 percent), and family poverty level (19 percent). Cases lacking data on any given variable were excluded from the particular analysis in which the variable was used.

The sociodemographic data are also limited because, except for the age variable, they describe characteristics as of the period of referral to the vocational rehabilitation agency. This information was recorded at time of referral or at the end of the referral process. The analysis, however, assumes a sociodemographic situation closer in time to the period for which employment and earnings were measured. A more appropriate time period for these purposes would be the year of closure or the period between closure and 1972. Some sociodemographic characteristics—the family variables and education in particular—may have changed since the referral period.

Methodology

Data for two measures of impact—the percentage employed in 1972 and the mean earnings of those employed in that year—are analyzed here. Both variables are indicators of vocational performance during a 1-year period beginning at least a half-year after closure by the vocational rehabilitation agency. The employment variable refers to any involvement in remunerative work during the year, regardless of the amount of earnings or the length of the work period. It therefore does not take account of the stability or continuity of employment throughout the year. The variable on mean earnings among the employed is based on actual reported earnings up to the social security maximum taxable amount (9,000 in 1972). The degree of underestimation resulting from this limit is minor because only 3 percent of the study population had earnings beyond it.

For each attribute of a sociodemographic variable—the sex variable for men and women separately, for example—rehabilitants were compared with those who were not rehabilitated and with those whose cases were not accepted by computing the difference in the percentage employed (reha-

[3] See Alex Hawryluk, "Rehabilitation Gain: A Better Indicator Needed," **Journal of Rehabilitation**, September October 1972, pages 22 25, and E. A. Hefferin and A. H. Katz, "Issues and Orientations in the Evaluation of Rehabilitation Programs: A Review Article," **Rehabilitation Literature**, March April 1971.

[4] For details on studies in Michigan, see R. D. Struthers, "MVRS Followup Studies—Questions Answered," **Journal of Rehabilitation**, July August 1976, pages 30 34. See also H. E. A. Tinsley, R. G. Warnken, D. J. Weiss, et al., **A Followup Study of Former Clients of the Minnesota Division of Vocational Rehabilitation** (Minnesota Studies in Vocational Rehabilitation, Bulletin 50), Industrial Relations Center, University of Minnesota, 1969.

[5] The data on sex and race are taken from Social Security records. Supplementary information on race was supplied from Rehabilitation Services Administration records.

bilitants minus each of the other closure types) and the mean earnings ratio (mean earnings of employed rehabilitants divided by the mean earnings of the employed among each of the other types). For both the employment and earnings variables, two comparisons are possible: (1) Rehabilitated clients with those not rehabilitated and (2) the rehabilitated with those not accepted for services.

The employment-percentage difference or the mean earnings ratio measures the gap between rehabilitants and others in subsequent vocational performance and is used as an indicator of rehabilitation effect. The difference or ratio is a more adequate measure of effect than data on employment or earnings of rehabilitants alone. Since it is possible that the latter figures could be approximated for the other types of closure, the gap between rehabilitants and others could thus be minimal, even though the employment or earnings of rehabilitants on a given attribute might be high. Conversely, a relatively low employment or earnings level for rehabilitants might result in a large gap when accompanied by extremely low levels for other types of closure. Distinctive labor-market conditions or client characteristics related to a sociodemographic attribute may affect its employment or earnings levels regardless of status at closure. Measures relating the employment or earnings of rehabilitants and of other closure types rule out such effects.

The principal analysis compares rehabilitated clients with those who were not rehabilitated, with respect to employment. This comparison is more valid as a measure of rehabilitation impact than the other three. Employment tests the success of vocational rehabilitation more directly than does the amount of earnings. It is a clearer indicator of the restoration of work capacity and the reduction or elimination of work disability—prime goals of the rehabilitation program. The amount of earnings, on the other hand, often reflects type of occupational and educational background rather than work capacity.

The comparison of rehabilitated clients with those not rehabilitated relates two groups that might be assumed to have approximately similar degrees of disability. Members of both groups were judged by vocational rehabilitation agency counselors to be substantially handicapped in work but able to benefit from services. Furthermore, members of both groups, by agreeing to the individual rehabilitation plan at the time of acceptance for services, signified at some time an interest in services. The comparison of rehabilitants with those not accepted for services, on the other hand, relates two disparate groups. The latter group contains the widest variation of severity, embracing those too severely handicapped to benefit from services as well as those with no substantial disability. Moreover, those not accepted for services involve a relatively large number of persons with consistently low motivation for utilizing services. Furthermore, comparison of this group with others also involves statistical limitations: Most of the information for this group, as noted above, is not required to be reported or is poorly reported.

The role of selected interacting variables is considered in the analysis of each sociodemographic factor. No systematic multivariate analysis of all relevant available variables is undertaken here, however. The purpose of the analysis is to explore whether and how certain factors of interest and significance to rehabilitation program planners and researchers shape rehabilitation impact rather than to determine the factors that most or least facilitate impact. The results of the analysis may suggest relationships that should be systematically tested in future studies.

Another qualification flows from the nature of the followup data. Because employment and earnings data were available only through 1972, it cannot be determined whether the patterns found in this analysis have persisted.

Findings

Sex

Although the data in table 1 indicate what appears to be a greater impact of rehabilitation on employment among men than women in 1972, this is a spurious difference. The effect on earnings is the same for both sexes: The mean earnings ratios among employed men and women are similar. The seemingly different effect on employment can be traced to the large number of women rehabilitated as homemakers and for other forms of unpaid work. Among men, 74 percent of the rehabilitated and 49 percent of those not rehabilitated were employed in 1972—a gap of 25 percentage points. Among women, 55 percent of the rehabilitants and 37 percent of those not rehabilitated were employed—a gap of only 18 percentage points. The 19-percentage-point spread between rehabilitated men and women was considerably larger than that for the nonrehabilitated. A similar pattern was found when rehabilitants were compared with those not accepted for services.

When data on women rehabilitated as homemakers and unpaid family workers were excluded from the tabulations, the proportion of women rehabilitated to remunerative work[6] who were subsequently employed in 1972 jumped to 68 percent, as the tabulation below shows. The spread

Age and sex	Number of cases	Percent employed
Total:		
Men	107,405	78.3
Women	62,473	68.1
Under 20:		
Men	9,298	88.0
Women	4,026	69.4
20–34:		
Men	51,529	85.8
Women	28,161	73.0
35–54:		
Men	32,989	74.3
Women	22,353	68.7
55 and over:		
Men	12,455	55.7
Women	7,344	51.2

[6]Renumerative work refers to the following types of work status: Competitive labor, sheltered work, self-employment, and self-employment in State agency enterprises.

Table 1.—Sex and age: Number of persons with cases closed by State vocational rehabilitation agencies in fiscal year 1971 and percent employed in 1972 and mean earnings, by type of closure

Sex and age[1]	Number of cases (in thousands)			Percent employed					Mean earnings of employed				
							Rehabilitated minus—					Ratio of rehabilitated to—	
	Rehabilitated	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted
Men	118.1	48.1	206.6	74.3	49.4	52.7	24.9	21.6	$4,188	$2,897	$3,424	1.45	1.22
Women	92.8	23.2	108.4	55.0	37.3	41.6	17.7	13.4	2,744	1,965	2,202	1.40	1.25
All cases:[2]													
Under 20	15.6	6.1	31.6	78.6	61.6	72.5	17.0	6.1	2,617	1,749	2,187	1.50	1.20
20–24	50.1	14.7	52.5	79.7	60.1	71.2	19.6	8.5	3,784	2,587	2,948	1.46	1.28
25–29	25.8	9.0	32.3	73.7	55.6	63.0	18.1	10.7	3,963	2,781	3,243	1.43	1.22
30–34	19.2	6.8	25.4	71.5	51.4	57.1	20.1	14.4	3,867	2,933	3,319	1.32	1.17
35–39	17.7	6.4	24.8	68.3	47.1	52.5	21.2	15.8	3,848	2,926	3,423	1.32	1.12
40–44	18.2	6.7	28.1	64.9	43.5	45.8	21.4	19.1	3,835	2,942	3,403	1.30	1.13
45–49	18.7	6.7	33.6	59.9	36.8	38.6	23.1	21.3	3,746	2,853	3,408	1.31	1.10
50–54	16.9	6.1	34.5	54.9	30.7	31.2	24.2	23.7	3,676	2,818	3,420	1.30	1.07
55–59	14.3	5.1	30.5	48.1	21.6	25.1	26.5	23.0	3,494	2,654	3,247	1.32	1.08
60–64	10.1	3.0	16.9	36.3	14.7	19.0	21.6	17.3	3,007	2,182	2,787	1.38	1.08
65 and over	5.0	1.2	5.4	25.0	11.4	15.6	13.6	9.4	2,029	1,840	2,112	1.10	.96
Men:													
Under 20	9.9	3.6	18.7	87.3	70.0	80.4	17.3	6.9	2,903	1,951	2,481	1.49	1.17
20–24	28.9	9.2	34.0	87.6	67.4	77.5	20.2	10.1	4,218	2,837	3,254	1.49	1.30
25–29	14.8	6.0	21.5	82.6	61.3	68.5	21.3	14.1	4,547	3,077	3,597	1.48	1.26
30–34	10.4	4.6	16.7	80.5	55.3	61.7	25.2	18.8	4,523	3,277	3,705	1.38	1.22
35–39	9.2	4.4	16.5	76.9	50.9	56.0	26.0	20.9	4,567	3,184	3,820	1.43	1.20
40–44	9.4	4.6	18.5	73.6	46.7	48.5	26.9	25.1	4,547	3,157	3,801	1.44	1.20
45–49	9.4	4.6	21.9	67.5	39.8	40.3	27.7	27.2	4,420	3,054	3,819	1.45	1.16
50–54	8.6	4.1	21.9	61.7	32.5	33.1	29.2	28.6	4,374	2,972	3,841	1.47	1.14
55–59	7.6	3.6	19.4	55.1	22.0	26.3	33.1	28.8	3,999	2,748	3,663	1.46	1.09
60–64	5.4	2.1	11.0	43.7	15.8	20.5	27.9	23.2	3,478	2,198	3,082	1.58	1.13
65 and over	2.8	.8	3.8	30.5	12.4	16.8	18.1	13.7	2,196	1,944	2,191	1.13	1.00
Women:													
Under 20	5.4	2.3	12.1	63.1	48.2	60.5	14.9	2.6	1,882	1,271	1,592	1.48	1.18
20–24	19.1	4.9	16.5	67.7	46.5	58.2	21.2	9.5	2,886	1,870	2,070	1.54	1.39
25–29	10.5	2.8	10.3	61.1	43.7	51.6	17.4	9.5	2,840	1,923	2,271	1.48	1.25
30–34	8.7	2.2	8.5	60.8	43.3	47.9	17.5	12.9	2,834	2,006	2,349	1.41	1.21
35–39	8.4	1.9	8.2	58.9	38.7	45.6	20.2	13.3	2,821	2,166	2,444	1.30	1.15
40–44	8.7	2.0	9.4	55.4	36.3	40.5	19.1	14.9	2,813	2,342	2,478	1.20	1.14
45–49	9.3	2.1	11.5	52.2	30.3	35.4	21.9	16.8	2,868	2,269	2,515	1.26	1.14
50–54	8.3	1.9	12.5	48.0	26.9	27.9	21.1	20.1	2,755	2,418	2,559	1.14	1.08
55–59	6.7	1.5	10.9	40.4	20.5	22.8	19.9	17.6	2,716	2,387	2,394	1.14	1.13
60–64	4.6	.9	5.7	27.6	12.1	16.0	15.5	11.6	2,132	2,148	2,059	.99	1.04
65 and over	2.1	.4	1.6	18.5	8.7	13.0	9.8	5.5	1,667	1,573	1,860	1.06	.90

[1] Age in 1971—year of closure.

[2] Includes cases with sex unreported.

between those in the latter group and similarly rehabilitated men was thus reduced to 10 percentage points, a figure comparable with the 12-point spread between nonrehabilitated men and women not accepted for services observable in table 1.[7] Among men and women aged 35 and older who were rehabilitated to remunerative work, the difference in the proportion employed was only five percentage points.

Age

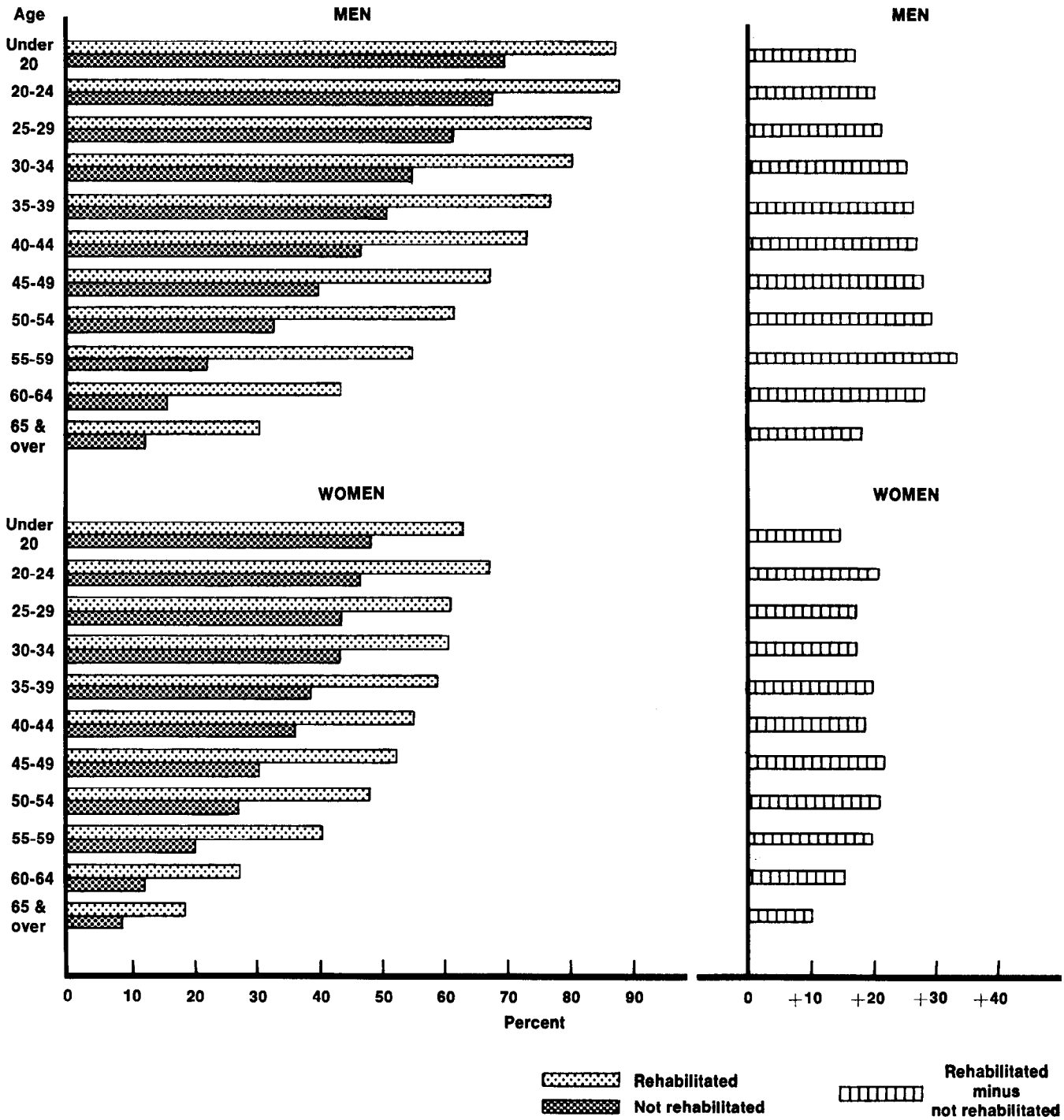
Contrary to expectations, the effect of rehabilitation on employment in 1972 increased gradually with age.[8] Table 1 shows that, despite the expected consistent decline in the employment rate, employment percentage-point differences for both sexes widen at successive 5-year intervals when rehabilitants are compared with the nonrehabilitated and those not accepted for services. Only in the older ages, particularly after age 59, does a definite narrowing of the employment percentage-point differences occur.

The figures are quite striking, especially those for men. Almost 9 out of 10 rehabilitated men under age 25 remained employed in 1972, but the nonrehabilitated and not-accepted cases in this age group also had relatively high employment rates. When the experience of the latter two groups was compared with that for rehabilitated men, employment percentage-point differences were found to be as low as 17 points and seven points, respectively. At ages

[7] Information on work status at closure was not available for nonrehabilitated cases. The comparisons were therefore made with all nonrehabilitated and all not-accepted cases.

[8] Age in year of closure (1971).

Chart 1.—Sex and age: Percent employed in 1972 among persons with cases closed by State vocational rehabilitation agencies in fiscal year 1971, by type of closure



55–59 the employment percentage gaps for the nonrehabilitated and not-accepted cases were widest (33 points and 29 points, respectively), although the rehabilitants' employment rate had fallen to 55 percent. As the rate continued to decline at older ages, the employment percentage-point differences again became small. At ages 65 and older, the figures were 18 and 14 percentage points.

The comparison between rehabilitants and nonrehabilitated cases in chart 1 demonstrates that the increased employment differences at older ages are more consistent and steeper for men than for women. The greater effect of rehabilitation in middle age can be observed, especially for men, in the fact that the drop in the employment rate of rehabilitants was not as precipitous as that of nonrehabili-

tated clients. Only at ages 60 and over was the former decline steep, a decline matched by the women.

The age-structured impact of rehabilitation on earnings in 1972 among the employed reveals a pattern that is almost a mirror image of that found for employment. The effect generally declined with age. The size of the mean earnings ratio in table 1 is inversely related to age, though this trend is erratic in the comparisons of rehabilitated and nonrehabilitated men. Among employed women, for example, the earnings of rehabilitants under age 30 were about 50 percent greater than those of the nonrehabilitated; after age 50, rehabilitants' earnings were barely as great or no greater than those of the nonrehabilitated. The overall decrease in the ratio with age occurred despite the fact that the mean earnings of rehabilitants became greater after adolescence and remained fairly stable until age 60.

It thus appears that vocational rehabilitation programs have overcome the expected constraints on the employment of middle-aged disabled persons associated with the job market and with employer predilections. At the same time, however, the diminished earnings advantage of employed middle-aged rehabilitants, especially women, may indicate that rehabilitation has a lesser impact on the continuity or stability of employment within this age group.

Race

For white and black clients, little variation was found in 1972 in the effect of rehabilitation on employment and earnings (table 2). Where variation did occur, however, it generally indicated greater impact among blacks. Though employment differences and earnings ratios between rehabilitated and other clients were sizable, these gaps were generally similar for both racial groups. Among women, the employment percentage-point difference between rehabilitated and nonrehabilitated blacks (20 percent) was slightly greater than that found for whites (17 percent).

These results are surprising. A smaller impact on employment among blacks than whites was expected because blacks tend to be somewhat younger and their minority status might have impeded opportunities for continued employment following receipt of rehabilitation services.

Since race may interact with age, the effect of rehabilitation on blacks and whites of similar ages was compared. The overall finding was generally confirmed. Chart 2 highlights the results of the comparison of rehabilitants and nonrehabilitated clients with respect to employment. For men, no racial variation in employment percentage-point differences appeared in any age group except those under age 20, where the impact was considerably greater among blacks than whites. For women, a greater effect among blacks of all ages was evident; the advantage was small but it appeared consistently in each age group.

These results may indicate that labor-market constraints on minority employment, especially those that affect black women and teenaged black males, can be overcome by State vocational rehabilitation programs. The expected post-services employment advantage of rehabilitants over those who fail to complete their rehabilitation programs was found to be just as great and sometimes greater among blacks than whites.

Chart 2 also generally confirms the finding that rehabilitation effects on employment were greater among middle-aged than among younger persons. For men and women in both racial groups, employment percentage-point differences between rehabilitated and nonrehabilitated clients widened with age. The trend was especially pronounced among white men.

Hispanic Origin

The disadvantage in employment traceable to Hispanic origin[9] does not appear to have been eliminated as successfully for that group as it has for others. The rehabilitation effect on employment and earnings of Hispanic-Americans was smaller, among both men and women, than the effect on other clients. Table 3 shows that the pattern is more marked in the comparisons of rehabilitants with nonrehabilitated clients than with those persons not accepted for services; both employment differences and mean earnings ratios were larger in the former comparisons.

Because individuals with Spanish surnames tend to be slightly younger than other clients, age was controlled. The results show that the employment disadvantage generally suffered by Hispanic-Americans apparently was overcome by younger persons of both sexes, specifically those under age 35, but persisted and was even accentuated among older persons. This pattern was reflected in the comparisons of persons with Spanish surnames and others with respect to employment percentage-point differences between rehabilitants and both those not rehabilitated and those not accepted for services. No pattern by age with respect to earnings was evident, however.

Chart 3 shows clearly the pattern of impact of rehabilitation on employment by age and ethnicity for both men and women as reflected in the employment percentage-point differences between the rehabilitated and the nonrehabilitated. For both men and women, percentage-point differences for Hispanic-Americans were about as large or larger than those of others within each age segment below age 35; among teenaged males, they were greater for those of Hispanic origin. In both the older age groups, however, the ethnic disadvantage appears: Percentage-point differences were considerably smaller among Spanish-surnamed per-

[9]Spanish surname, recorded by the vocational rehabilitation agency, is the approximate indicator of Spanish origin. This item is used in determining services provided to Hispanic-Americans. An analysis of data from the March 1971 Current Population Survey has found that a Spanish surname provides a fair indication of Spanish origin only in the Southwestern States. See E. W. Fernandez, **Comparison of Persons of Spanish Surname and Persons of Spanish Origin in the United States,** Bureau of the Census (Technical Paper No. 38), 1975.

Table 2.—Race, age, and sex: Number of persons with cases closed by State vocational rehabilitation agencies in fiscal year 1971 and percent employed in 1972 and mean earnings, by type of closure

Race, age,[1] and sex	Number of cases (in thousands)			Percent employed					Mean earnings of employed				
							Rehabilitated minus—					Ratio of rehabilitated to—	
	Rehabilitated	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted
All cases:													
White	166.1	54.2	243.6	66.2	45.8	49.0	20.4	17.2	$3,812	$2,768	$3,222	1.38	1.18
Black	42.1	15.6	66.1	64.2	43.6	47.8	20.6	16.4	3,053	2,246	2,509	1.36	1.22
Men:													
White	96.1	37.2	163.2	75.0	49.8	53.2	25.2	21.8	4,340	3,025	3,584	1.43	1.21
Black	20.5	9.8	39.7	70.8	47.0	50.0	23.8	20.8	3,483	2,439	2,781	1.43	1.25
Women:													
White	70.1	17.0	80.4	54.1	37.1	40.6	17.0	13.5	2,809	2,013	2,258	1.40	1.24
Black	21.6	5.8	26.5	57.9	37.9	44.5	20.0	13.4	2,554	1,844	2,050	1.39	1.25
All cases:													
Under 20:													
White	11.5	4.1	23.4	79.3	64.5	74.5	14.8	4.8	2,711	1,843	2,310	1.47	1.17
Black	3.5	1.6	6.7	77.5	54.9	66.6	22.6	10.9	2,305	1,470	1,760	1.57	1.31
20–34:													
White	73.3	21.8	79.5	77.0	58.0	66.8	19.0	10.2	3,989	2,844	3,264	1.40	1.22
Black	17.8	7.1	25.8	74.0	53.3	61.8	20.7	12.2	3,230	2,324	2,606	1.39	1.24
35–54:													
White	55.5	20.0	94.1	62.6	40.6	41.7	22.0	20.9	3,955	2,986	3,582	1.32	1.10
Black	14.9	5.2	24.7	60.1	35.6	38.3	24.5	21.8	3,147	2,505	2,742	1.26	1.15
55 and over:													
White	23.5	7.6	43.5	40.6	18.2	22.3	22.4	18.3	3,343	2,570	3,185	1.30	1.05
Black	5.3	1.5	8.4	38.8	16.8	21.3	22.0	17.5	2,535	1,896	2,276	1.34	1.11
Men:													
Under 20:													
White	7.5	2.5	14.4	87.9	73.9	82.4	14.0	15.5	3,013	2,063	2,616	1.46	1.15
Black	2.2	1.0	3.9	85.6	61.2	73.6	24.4	12.0	2,531	1,636	1,987	1.55	1.27
20–34:													
White	44.2	14.8	55.3	86.0	64.4	72.9	21.6	13.1	4,514	3,147	3,601	1.43	1.25
Black	9.1	4.4	15.3	79.7	57.6	65.3	22.1	14.4	3,627	2,535	2,870	1.43	1.26
35–54:													
White	29.9	14.1	62.8	70.9	43.5	44.5	27.4	26.4	4,626	3,195	3,987	1.45	1.16
Black	6.2	3.3	14.8	66.2	38.1	39.0	28.1	27.2	3,807	2,697	3,058	1.41	1.24
55 and over:													
White	13.0	5.4	28.7	47.1	18.8	23.5	28.3	23.6	3,757	2,616	3,527	1.44	1.07
Black	2.7	1.0	5.1	45.2	18.1	22.2	27.1	23.0	3,032	2,081	2,588	1.46	1.17
Women:													
Under 20:													
White	4.0	1.6	9.1	63.0	49.8	62.0	13.2	1.0	1,915	1,334	1,666	1.44	1.15
Black	1.3	.6	2.8	63.8	44.5	56.8	19.3	7.0	1,790	1,094	1,344	1.64	1.33
20–34:													
White	29.1	7.0	24.2	63.4	44.7	52.7	18.7	10.7	2,907	1,923	2,203	1.51	1.32
Black	8.7	2.7	10.4	68.0	46.3	56.8	21.7	11.2	2,742	1,893	2,159	1.45	1.27
35–54:													
White	25.5	5.9	31.3	52.9	33.6	36.1	19.3	16.8	2,898	2,345	2,578	1.24	1.12
Black	8.7	2.0	9.8	55.8	31.4	37.1	24.4	18.7	2,592	2,122	2,239	1.22	1.16
55 and over:													
White	10.5	2.2	14.8	32.6	16.7	19.8	15.9	12.8	2,608	2,445	2,399	1.07	1.09
Black	2.7	.5	3.3	32.3	14.1	19.8	18.2	12.5	1,835	1,434	1,727	1.28	1.06

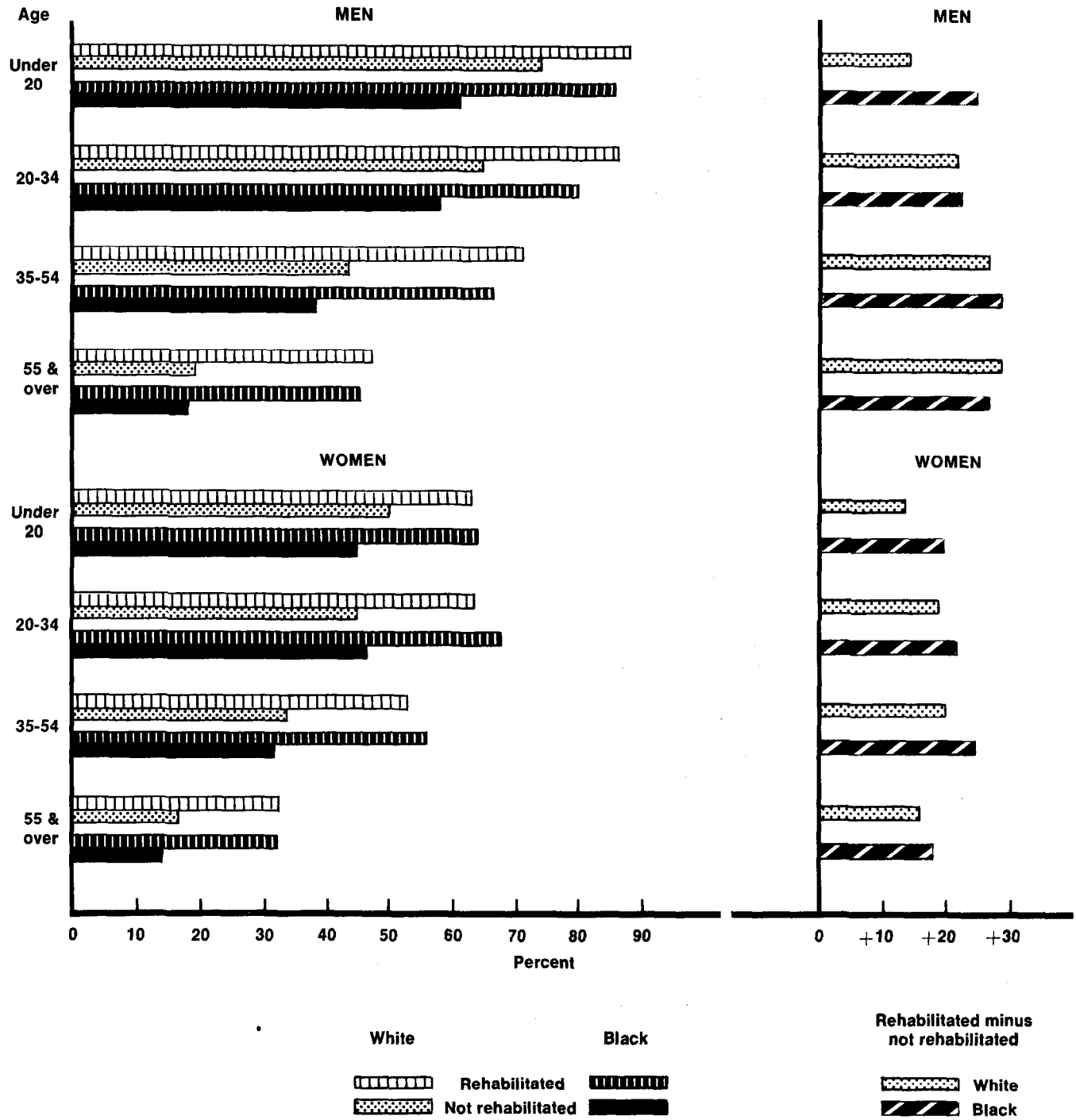
[1] Age in 1971—year of closure.

sons than among others. This shift was especially marked among women. Among Hispanic-American women aged 55 and over the disadvantage became acute, for, in this age group, rehabilitation had no impact: Rehabilitants were slightly less likely to be employed than those who had not been rehabilitated.

Underlying the ethnic disadvantage suffered by older men and women is the fact that the greater rehabilitation impact for older than for younger persons in the general population failed to occur among those of Hispanic origin. Among Hispanic-American men, employment differences among middle-aged and older persons were barely higher (21 and 23 percentage points, respectively) than they were for those in both of the younger age levels (20 percentage points). Employment differences among women were greater for those aged 20–34 than for teenagers but declined sharply and progressively for those in each of the older age intervals.

The findings seem to indicate that State vocational rehabilitation programs eliminated constraints on employment because of the minority status of Hispanic-Americans only for younger persons. Among those aged 35 or older, and especially among older women, such constraints appear to have combined with age constraints on employment in

Chart 2.—Race, age, and sex: Percent employed in 1972 among persons with cases closed by State vocational rehabilitation agencies in fiscal year 1971, by type of closure



continuing to impede the success of the rehabilitation programs. The growth in the advantage of rehabilitants over nonrehabilitants following closure with age did not develop among older persons of Hispanic origin. Among women aged 55 and over in this ethnic group, such an advantage vanished altogether.

Education

The impact of rehabilitation on employment and earnings initially appears to increase generally with educational level (table 4).[10] On further analysis, however, education

[10] Mentally retarded clients who received special education are not considered here.

Table 3.—Hispanic origin, age, and sex: Number of persons with cases closed by State vocational rehabilitation agencies in fiscal year 1971 and percent employed in 1972 and mean earnings, by type of closure

Hispanic origin, age, and sex[1]	Number of cases (in thousands)			Percent employed					Mean earnings of employed				
							Rehabilitated minus—					Ratio of rehabilitated to—	
	Rehabilitated	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted
All cases:[2]													
Spanish	11.3	5.3	21.5	63.3	49.4	50.3	13.9	13.0	$3,415	$2,756	$2,988	1.24	1.14
Not Spanish	201.5	64.8	300.0	65.5	45.0	48.5	20.5	17.0	3,670	2,634	3,069	1.39	1.20
Men:													
Spanish	6.7	3.8	14.9	73.5	54.7	54.8	18.8	18.7	3,825	2,942	3,254	1.30	1.18
Not Spanish	109.0	42.1	191.2	74.5	49.3	52.6	25.2	21.9	4,208	2,886	3,437	1.46	1.22
Women:													
Spanish	4.3	1.3	6.0	49.1	36.9	40.9	12.2	8.2	2,461	1,932	2,106	1.27	1.17
Not Spanish	87.0	20.9	102.1	55.4	37.5	41.6	17.9	13.8	2,750	1,965	2,208	1.40	1.25
All cases:[2]													
Under 20:													
Spanish	1.0	.5	1.8	74.2	55.7	63.5	18.5	10.7	2,432	1,699	1,931	1.43	1.26
Not Spanish	14.4	5.4	29.8	78.9	62.3	73.0	16.6	5.9	2,633	1,755	2,200	1.50	1.20
20–34:													
Spanish	4.6	2.4	8.4	74.5	57.5	63.0	17.0	11.5	3,522	2,818	3,021	1.25	1.17
Not Spanish	88.5	26.7	101.6	76.6	57.2	65.7	19.4	10.9	3,863	2,713	3,113	1.42	1.24
35–54:													
Spanish	3.9	1.8	8.5	61.5	47.1	44.0	14.4	17.5	3,689	3,066	3,305	1.20	1.12
Not Spanish	66.4	22.7	112.3	62.1	39.3	40.8	22.8	21.3	3,778	2,860	3,422	1.32	1.10
55 and over:													
Spanish	1.4	.5	2.3	34.6	22.1	25.5	12.5	9.1	2,813	2,141	2,748	1.31	1.02
Not Spanish	27.6	8.6	50.3	40.4	17.8	21.9	22.6	18.5	3,197	2,473	3,056	1.29	1.05
Men:													
Under 20:													
Spanish	.7	.3	1.1	82.7	63.0	74.8	19.7	7.9	2,661	1,897	2,161	1.40	1.23
Not Spanish	9.1	3.2	17.6	87.5	70.8	80.7	16.7	6.8	2,921	1,963	2,500	1.49	1.17
20–34:													
Spanish	2.9	1.8	5.9	83.0	63.5	68.5	19.5	14.5	3,966	3,009	3,286	1.32	1.21
Not Spanish	49.9	17.1	66.2	85.1	63.3	71.4	21.8	13.7	4,388	3,009	3,456	1.46	1.27
35–54:													
Spanish	2.3	1.4	6.1	71.1	50.5	46.3	20.6	24.8	4,193	3,200	3,579	1.31	1.17
Not Spanish	33.5	15.4	72.6	70.1	42.3	43.3	27.8	26.8	4,501	3,072	3,841	1.47	1.17
55 and over:													
Spanish	.8	.3	1.6	44.5	21.6	28.0	22.9	16.5	2,972	2,194	2,901	1.35	1.02
Not Spanish	14.8	5.9	32.5	47.0	18.6	23.1	28.4	23.9	3,646	2,525	3,414	1.44	1.07
Women:													
Under 20:													
Spanish	.3	.2	.7	56.7	41.8	45.9	14.9	10.8	1,779	1,167	1,350	1.52	1.32
Not Spanish	5.0	2.0	11.4	63.5	49.0	61.3	14.5	2.2	1,893	1,269	1,603	1.49	1.18
20–34:													
Spanish	1.7	.6	2.3	59.9	39.6	49.5	20.3	10.4	2,507	1,837	2,061	1.36	1.22
Not Spanish	35.9	8.9	32.9	64.7	45.6	54.1	19.1	10.6	2,874	1,918	2,195	1.50	1.31
35–54:													
Spanish	1.6	.4	2.3	47.6	35.7	37.7	11.9	9.9	2,576	2,442	2,424	1.05	1.06
Not Spanish	32.5	7.2	39.2	53.8	32.8	36.2	21.0	17.6	2,816	2,277	2,503	1.24	1.13
55 and over:													
Spanish	.6	.1	.6	22.2	24.2	20.1	-2.0	2.1	2,430	1,991	2,203	1.22	1.10
Not Spanish	12.5	2.6	17.5	33.1	16.1	19.7	17.0	13.4	2,452	2,323	2,282	1.06	1.07

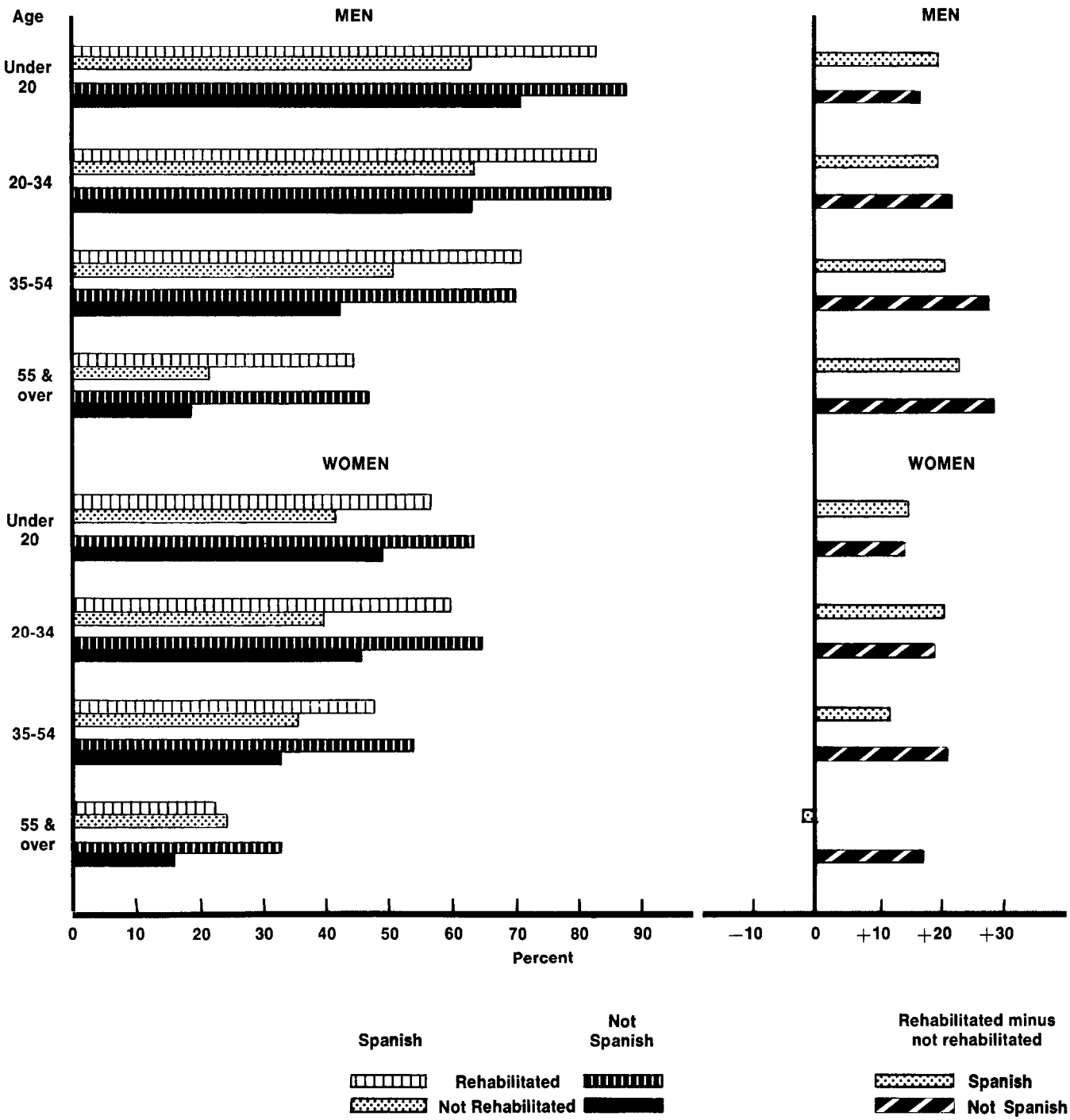
[1] Age in 1971—year of closure.

[2] Includes cases with sex unreported.

unexpectedly emerges as a rather negligible factor among men.

In the comparison of rehabilitated and nonrehabilitated men, the approximate average employment difference was 23 percentage points for those with less than a high-school education and increased to only 26 points for high-school graduates and those with some college education. When men rehabilitants were compared with those who were not accepted for services, even a small decrease according to educational level was revealed. This lack of increased impact with educational level occurred despite the marked rise in employment associated with higher education among men rehabilitants, since equally great increases in employment according to education occurred for the other types of closures. Among women, a higher educational level resulted in a steeper rise in employment among rehabilitants than among the nonrehabilitated and greater percentage-point differences for the more educated—22 points for high-school graduates and those with some college training, compared with 13 points among those with less than a high-school education. When women rehabilitants were compared with not-accepted cases, the percentage-point

Chart 3.—Hispanic origin, age, and sex: Percent employed in 1972 among persons with cases closed by State vocational rehabilitation agencies in fiscal year 1971, by type of closure



differences rose slightly as educational level increased from the elementary to the college level.

The mean earnings ratios for men rose somewhat with education. The increase was more sharply defined among women, however. Furthermore, the variation between those with less than a high-school education and those with a higher education was considerably greater among women.

This sex-related pattern of the educational factor in rehabilitation impact continued to be maintained, with few exceptions, when age and race—two factors that interact with education—were controlled (tables 5, 6, and 7). The following analysis focuses particularly on the major comparisons of rehabilitated and nonrehabilitated clients with respect to employment.

Table 4.—Years of education and sex: Number of persons with cases closed by State vocational rehabilitation agencies in fiscal year 1971 and percent employed in 1972 and mean earnings, by type of closure

Years of education and sex	Number of cases (in thousands)			Percent employed					Mean earnings of employed				
							Rehabilitated minus—					Ratio of rehabilitated to—	
	Rehabilitated	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted
All cases: [1]													
None	2.1	0.5	4.5	40.9	26.6	34.7	14.3	6.2	$2,659	$2,111	$2,655	1.26	1.00
1–7	30.8	9.2	27.4	50.4	33.4	39.1	17.0	11.3	2,989	2,441	2,543	1.22	1.18
8	23.0	7.7	19.7	57.1	40.1	47.3	17.0	9.8	3,301	2,424	2,694	1.36	1.23
9–11	54.3	21.3	55.6	67.2	48.0	58.0	19.2	9.2	3,506	2,534	2,694	1.38	1.30
12	60.5	19.2	51.7	71.4	48.8	62.3	22.6	9.1	4,240	3,086	3,309	1.37	1.28
13 or more	20.1	6.8	16.4	70.2	46.6	59.1	23.6	11.1	4,719	3,127	3,676	1.51	1.28
Special education	14.5	4.8	10.0	71.3	48.3	55.2	23.0	16.1	2,637	1,777	2,191	1.48	1.20
Men:													
None	1.2	.4	3.1	51.2	30.3	38.1	20.9	13.1	2,910	2,192	2,897	1.33	1.00
1–7	17.3	6.8	18.4	60.8	36.6	43.5	24.2	17.3	3,460	2,557	2,787	1.35	1.24
8	12.8	5.6	12.9	66.3	43.6	52.3	22.7	14.0	3,845	2,608	2,996	1.47	1.28
9–11	28.2	13.7	33.0	77.4	52.6	64.2	24.8	13.2	4,116	2,823	3,100	1.46	1.33
12	31.9	12.1	30.2	79.6	53.7	67.9	25.9	11.7	4,924	3,423	3,774	1.44	1.30
13 or more	11.6	4.5	10.4	76.1	49.6	62.5	26.5	13.6	5,140	3,335	3,980	1.54	1.29
Special education	8.6	2.8	6.0	81.5	58.1	65.3	23.4	16.2	2,996	1,971	2,421	1.52	1.24
Women:													
None	.8	.1	1.4	26.5	15.9	28.1	10.6	-1.6	1,930	1,671	1,927	1.15	1.00
1–7	13.0	2.2	8.6	37.9	24.5	30.7	13.4	7.2	1,994	1,918	1,826	1.04	1.09
8	9.8	2.0	6.5	46.3	32.0	38.5	14.3	7.8	2,293	1,716	1,886	1.34	1.22
9–11	24.7	7.0	21.2	56.8	40.5	49.7	16.3	7.1	2,546	1,805	1,893	1.41	1.34
12	26.8	6.5	20.0	62.7	40.4	54.7	22.3	8.0	3,193	2,254	2,445	1.42	1.31
13 or more	7.8	2.1	5.3	62.6	40.5	52.5	22.1	10.1	3,953	2,599	2,978	1.52	1.33
Special education	5.5	1.8	3.7	57.4	34.9	41.1	22.5	16.3	1,857	1,316	1,624	1.41	1.14

[1] Includes cases with sex unreported.

For men, little or no increase in the employment percentage-point differences according to educational level can be discerned in any age category for either whites or blacks. Black men even exhibited a slight decline in impact with greater education that was reflected, though somewhat unevenly, at each age level. Among white men, little variation occurred at any age interval except for the group under age 20, among whom the impact increased progressively with higher education. Except for the white adolescents, therefore, the rehabilitation effect on employment was at least as great for less-educated as for more-educated men at all age levels in both racial groups.

For women, employment percentage-point differences increased with education at almost all age intervals for whites and blacks. Among whites, differences increased with educational level generally at all age intervals. Among blacks, however, two contrasting patterns emerged for different age groups: a marked decline in impact with more education among adolescents and small but fairly consistent increases in impact with more education at each of the older age levels. Except for black adolescents, therefore, higher educational attainment generally resulted in greater rehabilitation impact among women of all ages in both racial groups.

These results suggest that vocational rehabilitation may have a different education-related function for men and women. Among women generally (and male white adolescents), vocational rehabilitation may simply reinforce the natural effect of education on employment derived from the demand for trained skills in the jobmarket. Rehabilitation programs may not provide less-educated women with the training and assistance required for entry into the jobmarket. For men (and female black adolescents), however, vocational rehabilitation may serve to overcome educational disadvantage in the labor market by providing, through an alternative form of education, the necessary skills and placement services for gaining access to jobs. That this function is being performed for the members of these groups appears to be reflected in the fact that rehabilitation effects on employment were as great among the less educated as among the more educated.

The data in table 5 also generally strengthen the finding with respect to the age factor in rehabilitation impact on employment. They show that, among persons with a similar education, percentage-point differences were greater among middle-aged than younger persons. This finding held true for members of both sexes at all educational levels, except that, for women with less than a high-school education, the employment gap among adolescents was as great as among those in their middle years. Moreover, the variation of employment percentage-point differences widened among the age intervals: At all educational levels for both men and women (except the less-educated women), this variation was consistently greater than in the original relationships found in table 1. Although age and education are correlated, their relationships to rehabilitation impact are

opposed. Thus, the greater effect of rehabilitation on the employment of middle-aged and often of older persons becomes more rather than less apparent among those with a similar educational background.

Table 5.—Years of education, age, and sex: Number of persons with cases closed by State vocational rehabilitation agencies in fiscal year 1971 and percent employed in 1972 and mean earnings, by type of closure

Years of education, age,[1] and sex	Number of cases (in thousands)			Percent employed					Mean earnings of employed				
							Rehabilitated minus—					Ratio of rehabilitated to—	
	Rehabilitated	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted
All cases:[2]													
Under 20:													
0–8	2.1	1.0	3.1	76.5	60.9	66.6	15.6	9.9	$2,186	$1,471	$1,691	1.49	1.29
9–11	4.6	2.2	11.5	79.8	66.2	76.3	13.6	3.5	2,794	1,858	2,199	1.50	1.27
12 or more	1.4	.5	6.2	78.2	62.4	79.2	15.8	-1.0	3,136	2,541	2,615	1.23	1.20
Special education	4.5	1.4	3.7	78.7	56.7	64.1	22.0	14.6	2,577	1,443	1,918	1.79	1.34
20–34:													
0–8	10.6	3.9	11.5	70.5	56.5	61.4	14.0	9.1	3,144	2,414	2,565	1.30	1.23
9–11	25.1	9.7	22.7	76.1	57.1	66.3	19.0	9.8	3,562	2,539	2,727	1.40	1.31
12 or more	45.2	12.5	34.6	79.4	59.7	72.2	19.7	7.2	4,456	3,152	3,459	1.41	1.29
Special education	8.2	2.7	4.8	72.0	48.3	56.4	23.7	15.6	2,707	1,885	2,392	1.44	1.13
35–54:													
0–8	25.4	8.0	23.4	57.1	36.4	41.3	20.7	15.8	3,340	2,641	2,879	1.26	1.16
9–11	18.0	7.0	15.8	63.3	40.5	46.1	22.8	17.2	3,690	2,879	3,176	1.28	1.16
12 or more	25.3	9.7	20.3	66.5	42.5	50.1	24.0	16.4	4,347	3,120	3,636	1.39	1.20
Special education	1.3	.5	1.0	59.1	35.8	34.5	23.3	24.6	2,393	2,448	2,388	.98	1.00
55 and over:													
0–8	15.8	4.1	12.2	36.7	15.0	22.9	21.7	13.8	2,827	2,372	2,524	1.19	1.12
9–11	5.6	2.1	4.7	41.8	20.9	25.5	20.9	16.3	3,297	2,466	2,954	1.34	1.12
12 or more	7.2	2.8	5.9	46.4	21.2	28.8	25.2	17.6	3,778	2,459	3,322	1.54	1.14
Special education	.3	.1	.3	40.8	20.0	25.6	20.8	15.2	2,562	2,608	2,738	.98	.94
Men:													
Under 20:													
0–8	1.5	.7	2.1	83.7	68.4	75.3	15.3	8.4	2,370	1,566	1,888	1.51	1.26
9–11	2.7	1.2	6.5	87.9	73.8	84.1	14.1	3.8	3,161	2,184	2,551	1.45	1.24
12 or more	.7	.3	3.3	84.3	67.5	86.4	16.8	-2.1	3,619	2,846	3,099	1.27	1.17
Special education	3.0	.9	2.4	88.6	66.1	75.3	22.5	13.3	2,889	1,636	2,136	1.77	1.35
20–34:													
0–8	6.5	2.9	7.8	81.0	61.2	67.9	19.8	13.1	3,593	2,607	2,813	1.38	1.28
9–11	14.1	6.4	14.2	85.9	62.5	73.3	23.4	12.6	4,096	2,820	3,114	1.45	1.32
12 or more	25.4	7.9	21.5	86.6	65.0	77.6	21.6	9.0	5,051	3,513	3,865	1.44	1.31
Special education	4.7	1.6	2.8	81.3	58.9	66.1	22.4	15.2	3,109	2,083	2,658	1.49	1.17
35–54:													
0–8	13.6	6.0	15.8	67.2	39.0	44.2	28.2	23.0	3,980	2,782	3,193	1.43	1.25
9–11	8.4	4.6	9.2	71.7	43.6	48.9	28.1	22.8	4,577	3,155	3,703	1.45	1.24
12 or more	13.2	6.4	12.0	72.9	46.4	53.6	26.5	19.3	5,055	3,349	4,063	1.51	1.24
Special education	.7	.3	.6	64.7	39.4	36.9	25.3	27.8	2,740	2,696	2,566	1.02	1.07
55 and over:													
0–8	8.7	3.0	7.9	43.9	15.6	24.8	28.3	19.1	3,198	2,414	2,790	1.32	1.15
9–11	2.8	1.4	2.8	48.6	21.2	26.3	27.4	22.3	3,934	2,514	3,322	1.56	1.18
12 or more	3.9	1.9	3.6	52.3	22.2	30.6	30.1	21.7	4,283	2,635	3,679	1.63	1.16
Special education	.2	.1	.2	46.0	23.5	24.6	22.5	21.4	2,623	2,668	3,393	.98	.77
Women:													
Under 20:													
0–8	.5	.3	.9	56.5	41.0	47.2	15.5	9.3	1,403	1,025	979	1.37	1.43
9–11	1.8	.9	4.6	67.8	55.9	65.2	11.9	2.6	2,077	1,273	1,571	1.63	1.32
12 or more	.6	.2	2.7	73.4	56.3	70.9	17.1	2.5	2,554	2,143	1,929	1.19	1.32
Special education	1.4	.5	1.3	57.9	41.0	43.8	16.9	14.1	1,564	940	1,228	1.66	1.27
20–34:													
0–8	3.9	.9	3.5	53.4	41.7	46.3	11.7	7.1	1,999	1,551	1,737	1.29	1.15
9–11	10.4	3.1	8.0	62.5	45.7	53.7	16.8	8.8	2,532	1,729	1,797	1.46	1.41
12 or more	18.3	4.1	12.0	69.3	49.5	62.4	19.8	6.9	3,407	2,246	2,552	1.52	1.34
Special education	3.3	1.1	1.9	59.0	33.5	42.6	25.5	16.4	1,958	1,419	1,801	1.38	1.09
35–54:													
0–8	11.6	1.9	7.5	45.3	28.4	35.2	16.9	10.1	2,245	2,045	2,070	1.10	1.08
9–11	9.6	2.3	6.5	56.0	34.4	42.1	21.6	13.9	2,699	2,186	2,322	1.23	1.16
12 or more	12.0	3.3	8.1	59.6	35.0	45.1	24.6	14.5	3,404	2,535	2,886	1.34	1.18
Special education	.6	.2	.4	52.8	30.4	31.6	22.4	21.2	1,924	2,044	2,158	.94	.89
55 and over:													
0–8	7.0	1.1	4.2	28.1	12.9	19.4	15.2	8.7	2,108	2,226	1,893	.95	1.11
9–11	2.8	.7	1.9	35.3	20.3	24.2	15.0	11.1	2,408	2,314	2,319	1.04	1.04
12 or more	3.3	.9	2.2	39.9	17.8	27.0	22.1	12.9	3,026	2,275	2,545	1.33	1.19
Special education	.1	(3)	.1	32.6	14.3	26.1	18.3	6.5	2,389	(4)	1,824	(4)	1.31

[1] Age in 1971—year of closure.
[2] Includes cases with sex unreported.
[3] Fewer than 50 cases.
[4] Fewer than 10 cases.

Table 6.—Years of education, race, and sex: Number of persons with cases closed by State vocational rehabilitation agencies in fiscal year 1971 and percent employed in 1972 and mean earnings, by type of closure

Years of education, race, and sex	Number of cases (in thousands)			Percent employed					Mean earnings of employed				
							Rehabilitated minus—					Ratio of rehabilitated to—	
	Rehabilitated	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted
All cases:													
White:													
0–8	41.1	12.7	36.2	53.1	38.0	43.4	15.6	10.2	$3,263	$2,502	$2,765	1.30	1.18
9–11	40.8	15.2	39.6	68.2	49.3	59.6	18.9	8.6	3,656	2,665	2,849	1.37	1.28
12 or more	66.4	21.0	54.0	71.7	48.1	61.8	23.6	9.9	4,456	3,183	3,491	1.40	1.28
Special education	9.9	3.0	6.2	71.4	47.4	54.1	24.0	17.3	2,663	1,839	2,447	1.45	1.09
Black:													
0–8	12.9	4.0	13.5	52.3	30.9	38.6	21.4	13.7	2,679	2,131	2,210	1.26	1.21
9–11	11.3	5.0	13.5	66.2	45.9	55.0	20.3	11.2	2,945	2,166	2,253	1.36	1.31
12 or more	10.9	3.9	11.1	71.1	49.7	61.8	21.4	9.3	3,758	2,678	2,560	1.40	1.47
Special education	3.9	1.5	3.3	73.9	52.4	59.8	21.5	14.1	2,603	1,713	2,143	1.52	1.21
Men:													
White:													
0–8	24.1	9.7	25.0	63.4	40.8	47.9	22.6	15.5	3,725	2,639	3,020	1.41	1.23
9–11	22.6	10.1	24.9	78.3	53.5	65.3	24.8	13.0	4,279	2,974	3,271	1.44	1.31
12 or more	38.2	14.0	34.3	79.2	52.5	66.9	26.7	12.3	5,069	3,499	3,918	1.45	1.29
Special education	6.2	1.9	4.0	81.1	57.2	64.1	23.9	17.0	3,024	2,006	2,467	1.51	1.23
Black:													
0–8	6.6	2.7	8.5	59.9	33.8	41.2	26.1	18.7	3,213	2,317	2,461	1.39	1.31
9–11	5.2	3.2	7.4	73.4	49.3	59.6	24.1	13.8	3,409	2,379	2,530	1.43	1.35
12 or more	4.8	2.3	5.8	75.3	52.9	64.4	22.4	10.9	4,296	2,862	3,308	1.50	1.30
Special education	2.2	.9	1.8	82.7	60.6	68.1	22.1	14.6	2,940	1,921	2,376	1.53	1.24
Women:													
White:													
0–8	17.0	3.0	11.2	39.8	28.9	33.4	10.9	6.4	2,220	1,877	1,946	1.18	1.14
9–11	18.2	5.0	14.7	55.8	40.8	49.8	15.0	6.0	2,576	1,849	1,914	1.39	1.35
12 or more	28.2	6.9	20.0	61.5	39.4	52.9	22.1	8.6	3,386	2,334	2,551	1.45	1.33
Special education	3.7	1.2	2.2	55.2	31.4	35.8	23.8	19.4	1,782	1,346	1,519	1.32	1.17
Black:													
0–8	6.3	1.2	4.9	44.2	24.6	34.0	19.6	10.2	1,916	1,559	1,685	1.23	1.14
9–11	6.2	1.9	6.1	60.3	40.2	49.4	20.1	10.9	2,471	1,718	1,851	1.44	1.33
12 or more	6.1	1.6	5.3	67.9	45.1	58.9	22.8	9.0	3,287	2,364	2,547	1.39	1.29
Special education	1.7	.6	1.5	62.1	41.0	49.6	21.1	12.5	2,001	1,289	1,749	1.55	1.14

This pattern of age-related, education-controlled rehabilitation impact was generally found among blacks as well as whites of both sexes (table 7). Once again, however, the employment percentage-point differences were as great or greater for adolescents than for middle-aged persons among some of the least-educated groups, particularly among black men and among women of both races with less than 9 years of schooling.

Major Disabling Condition

The effect of rehabilitation on employment and earnings varied considerably according to type of major disabling condition.[11] The extent of this variation is revealed by comparing the largest and smallest employment percentage-point differences and mean earnings ratios for the 18 types of conditions in table 8. When rehabilitated and nonrehabilitated clients were compared for example, the greatest impact on employment was found among those with extremity losses (a difference of 32 percentage points) and among those with heart conditions or speech impairments (each 31 percentage points). The smallest impact was found among those with hearing impairments other than deafness (a difference of 12 percentage points). The large impact for the first two conditions occurred despite the fact that the employment rate for rehabilitants—58 percent for those with missing extremities and 59 percent for those with heart conditions—ranked well below those for most other conditions.

It is difficult to discern a pattern in the order of impact among the conditions, however. Impact varied considerably even among the types of conditions that seem alike in the functional problems they present for rehabilitation. Conditions that may be grouped as sensory disorders (visual or auditory), as mental or behavioral disorders, or as musculoskeletal disorders (orthopedic and extremity-loss conditions) often resulted in a relatively wide range of employment differences, particularly in comparisons of rehabilitated and nonrehabilitated clients. Table 8 shows

[11] The list of conditions used in this analysis summarizes a classification developed by the rehabilitation services administration that is based on a detailed three-digit coding structure used by vocational rehabilitation counselors in coding major and secondary conditions at the end of the referral process. The most recent documented information on final diagnosis in a medical record is used. Major disabling condition refers to the physical or mental condition judged to be most significantly responsible for the client's work limitation.

Table 7.—Years of education, race, age and sex: Number of persons with cases closed by State vocational rehabilitation agencies in fiscal year 1971 and percent employed in 1972 and mean earnings, by type of closure

Years of education, race, age,[1] and sex	Number of cases			Percent employed					Mean earnings of employed				
							Rehabilitated minus—					Ratio of rehabilitated to—	
	Rehabilitated	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted
All cases:													
Under 20:													
White:													
0–8	1,641	686	2,198	77.9	65.9	68.1	12.0	9.8	$2,274	$1,511	$1,814	1.50	1.25
9–11	3,663	1,598	8,835	80.5	68.6	78.0	11.9	2.5	2,913	1,954	2,316	1.49	1.26
12 or more	1,105	420	5,145	79.2	62.9	80.0	16.3	-.8	3,220	2,629	2,664	1.22	1.21
Special education	2,993	872	2,168	78.7	57.7	64.3	21.0	14.4	2,670	1,547	2,025	1.73	1.32
Black:													
0–8	354	228	747	72.3	46.1	61.2	26.2	11.1	1,770	1,201	1,341	1.47	1.32
9–11	729	444	2,038	76.8	58.3	69.5	18.5	7.3	2,176	1,469	1,733	1.48	1.26
12 or more	192	84	796	79.2	64.3	76.5	14.9	2.7	2,724	2,285	2,341	1.19	1.16
Special education	1,307	502	1,368	78.9	55.2	65.1	23.7	13.8	2,366	1,284	1,788	1.84	1.32
20–34:													
White:													
0–8	8,027	2,934	8,098	71.4	58.1	63.4	13.3	8.0	3,225	2,513	2,669	1.28	1.21
9–11	18,598	6,454	15,040	76.9	59.6	68.4	17.3	8.5	3,727	2,694	2,924	1.38	1.27
12 or more	36,527	9,529	26,000	79.8	60.3	73.1	19.5	6.7	4,574	3,257	3,585	1.40	1.28
Special education	5,755	1,774	3,075	71.6	47.0	54.2	24.6	17.4	2,705	1,900	2,368	1.42	1.14
Black:													
0–8	2,126	733	2,823	68.0	49.7	56.4	18.3	11.6	2,819	2,047	2,257	1.38	1.25
9–11	5,448	2,707	6,682	73.1	51.5	61.2	21.6	11.9	2,939	2,157	2,265	1.36	1.30
12 or more	6,708	2,322	6,952	77.1	57.6	68.7	19.5	8.4	3,789	2,740	2,983	1.38	1.27
Special education	2,117	794	1,566	73.5	52.1	61.7	21.5	11.8	2,764	1,927	2,475	1.43	1.12
35–54:													
White:													
0–8	18,466	5,799	16,335	57.5	38.0	43.0	19.5	14.5	3,528	2,688	3,057	1.31	1.15
9–11	13,380	5,241	11,480	63.9	41.2	47.0	22.7	16.9	3,867	2,988	3,347	1.29	1.16
12 or more	21,596	8,254	17,037	66.8	42.9	50.6	23.9	16.2	4,428	3,201	3,713	1.38	1.19
Special education	922	302	680	56.7	31.1	34.9	25.6	21.8	2,306	2,663	2,589	.87	.89
Black:													
0–8	6,392	1,978	6,513	56.0	30.8	36.8	25.2	19.2	2,822	2,434	2,400	1.16	1.18
9–11	4,322	1,612	4,000	61.6	37.8	43.3	23.8	18.3	3,132	2,541	2,652	1.23	1.18
12 or more	3,355	1,292	2,900	65.1	39.4	47.3	25.7	17.8	3,832	2,560	3,182	1.50	1.20
Special education	396	156	304	65.2	44.2	35.2	21.0	30.0	2,609	2,183	2,016	1.20	1.29
55 and over:													
White:													
0–8	11,762	3,053	8,778	36.3	14.8	22.8	21.5	13.5	2,999	2,569	2,715	1.17	1.10
9–11	4,729	1,749	3,980	42.6	21.0	25.4	21.6	17.2	3,371	2,582	3,052	1.31	1.10
12 or more	6,487	2,565	5,396	47.0	20.7	29.4	26.3	17.6	3,852	2,533	3,318	1.52	1.16
Special education:	175	74	185	37.1	13.5	22.7	23.6	14.4	2,654	3,533	2,915	.75	.91
Black:													
0–8	3,758	977	3,150	38.3	14.9	22.9	23.4	15.4	2,369	1,737	1,996	1.36	1.19
9–11	778	258	683	37.9	18.2	24.9	19.7	13.0	2,840	1,539	2,239	1.85	1.27
12 or more	590	183	437	42.2	20.2	26.1	22.0	16.1	3,158	2,657	2,690	1.19	1.17
Special education	76	20	67	51.3	50.0	29.9	1.3	21.4	2,390	1,682	2,616	1.42	.91

See footnotes at end of table.

larger employment differences (21 percentage points) for blindness involving both eyes than for other visual impairments (15 points), a variation reflected primarily in the figures for men. Hearing conditions resulted in varied impact, especially among women: a 21-point difference for deafness and a 10-point difference for other hearing impairments. The variation for musculoskeletal conditions occurred primarily among men: a 30-point difference for orthopedic impairments (involving trunk, back, spine, and limb disorders other than amputations) but a difference of 38 points for extremity-loss conditions. With respect to mental and behavioral disorders, larger employment percentage-point differences occurred for psychoses/psychoneuroses than for other conditions in this group. The variation was particularly great among men: 29 percentage points for psychoses/psychoneuroses, compared with 17–19 points for alcoholism, drug addiction, and other personality disorders.

Because type of condition is frequently associated with age, which strongly influences rehabilitation impact, age level was controlled while variation in impact by condition was examined. When employment differences between rehabilitated and nonrehabilitated clients are compared, in table 9, the range of variation by condition within each age group is found to be stretched even wider than it is in table 8. In the age interval 35–54, for example, the largest percentage-point difference, occurring among those with speech impairments, was 39 points; the smallest, occuring among drug

Table 7.—Years of education, race, age, and sex: Number of persons with cases closed by State vocational rehabilitation agencies in fiscal year 1971 and percent employed in 1972 and mean earnings, by type of closure—**Continued**

Years of education, race, age,[1] and sex	Number of cases			Percent employed					Mean earnings of employed				
							Rehabilitated minus—					Ratio of rehabilitated to—	
	Rehabilitated	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted
Men:													
Under 20:													
White:													
0–8	1,226	480	1,522	85.2	75.6	77.8	9.6	7.4	$2,458	$1,630	$2,025	1.51	1.21
9–11	2,209	908	5,219	89.2	77.2	86.0	12.0	3.2	3,305	2,318	2,678	1.43	1.23
12 or more	584	231	2,875	84.2	68.4	86.6	15.8	-2.4	3,734	2,939	3,123	1.27	1.20
Special education	2,065	549	1,464	88.8	68.7	76.0	20.1	12.8	2,994	1,718	2,231	1.74	1.34
Black:													
0–8	257	171	516	77.8	50.9	66.9	26.9	10.9	1,922	1,310	1,474	1.47	1.30
9–11	403	252	1,158	81.4	63.1	75.9	18.3	5.5	2,377	1,664	2,004	1.43	1.19
12 or more	83	49	371	86.7	65.3	85.7	21.4	1.0	2,842	2,426	2,893	1.17	.98
Special education	859	314	837	88.4	62.1	74.3	26.3	14.1	2,639	1,482	2,016	1.78	1.31
20–34:													
White:													
0–8	5,091	2,243	5,769	82.3	63.0	70.1	19.3	12.2	3,672	2,703	2,919	1.36	1.26
9–11	10,901	4,388	9,986	87.8	65.9	76.1	21.9	11.7	4,299	3,008	3,328	1.43	1.29
12 or more	22,029	6,389	17,402	87.4	66.0	79.0	21.4	8.4	5,156	3,636	3,979	1.42	1.30
Special education	3,454	1,077	1,957	81.2	57.9	64.8	23.3	16.4	3,094	2,068	2,628	1.50	1.18
Black:													
0–8	1,248	513	1,800	75.8	53.6	61.8	22.2	14.0	3,250	2,267	2,478	1.43	1.31
9–11	2,917	1,798	3,854	78.9	54.6	66.2	24.3	12.7	3,305	2,340	2,528	1.41	1.31
12 or more	3,076	1,393	3,700	81.4	60.9	71.3	20.5	10.1	4,310	2,979	3,341	1.45	1.29
Special education	1,133	437	806	82.0	62.2	69.6	19.8	12.4	3,188	2,186	2,768	1.46	1.15
35–54:													
White:													
0–8	10,376	4,516	11,362	67.9	40.3	46.3	27.6	21.6	4,131	2,806	3,347	1.47	1.23
9–11	6,752	3,567	7,028	72.7	44.0	49.9	28.7	22.8	4,702	3,272	3,875	1.44	1.21
12 or more	11,663	5,531	10,402	73.5	46.8	54.4	26.7	19.1	5,124	3,439	4,159	1.49	1.23
Special education	524	190	417	62.4	35.3	37.6	27.1	24.8	2,627	2,810	2,659	.93	.99
Black:													
0–8	2,986	1,340	4,084	64.6	33.6	38.2	31.0	26.4	3,497	2,652	2,716	1.32	1.29
9–11	1,491	978	1,979	67.5	41.0	44.6	26.5	22.9	3,989	2,784	3,067	1.43	1.30
12 or more	1,350	750	1,486	67.9	42.0	48.1	25.9	19.8	4,437	2,611	3,399	1.70	1.31
Special education	187	89	137	71.1	47.2	36.5	23.9	34.6	3,034	2,341	2,324	1.30	1.31
55 and over:													
White:													
0–8	6,646	2,309	5,827	43.6	15.2	24.9	28.4	18.7	3,330	2,582	2,957	1.29	1.13
9–11	2,454	1,181	2,474	48.8	21.5	26.4	27.3	22.4	4,000	2,561	3,433	1.56	1.17
12 or more	3,568	1,744	3,382	52.7	22.0	30.7	30.7	22.0	4,317	2,638	3,715	1.64	1.16
Special education:	106	52	122	42.5	15.4	20.5	27.1	22.0	2,779	(2)	3,700	(2)	.75
Black:													
0–8	1,972	678	1,965	44.7	16.5	24.1	28.2	20.6	2,860	1,868	2,264	1.53	1.26
9–11	318	148	316	46.2	16.2	23.4	30.0	22.8	3,476	2,208	2,450	1.57	1.42
12 or more	271	109	216	48.3	25.7	27.8	22.6	20.5	3,851	2,633	3,016	1.46	1.28
Special education	55	15	42	52.7	53.3	33.3	-0.6	19.4	2,380	(2)	2,879	(2)	.83

See footnotes at end of table.

addicts, was 14 points. In the age interval 20–34, the largest and smallest figures were 33 points for blindness and 8 points for hearing impairments other than deafness. Extremity loss—the only one of the three conditions for which impact was found to be large in table 8—consistently ranked among the three conditions in each age interval with the greatest impact in table 9. Other conditions demonstrated little consistency across age groups with respect to large or small impact.

The data in table 9 also tend to corroborate the finding with respect to the age factor in rehabilitation effect on employment. For most of the 18 disabling conditions, employment percentage-point differences between rehabilitated and nonrehabilitated men and women were greater among those in at least one of the older age levels (35–54 or 55 and over) than among younger persons. The pattern emerges more clearly among men: Differences were greater for those in one or the other category of older persons than for younger persons for nearly all conditions except epilepsy (which showed only a slight decrease), blindness, and drug addiction. The table reveals that the differences were greater for women under 11 of the 18 conditions—including deafness and epilepsy, which exhibited an unusual pattern in which, among those under age 35, the impact was smaller only among those aged 20–34. Though the differences were smaller after age 34 for the other seven conditions, the decreases were not large for orthopedic impairments, drug addiction, alcoholism, and heart conditions. The age factor

Table 7.—Years of education, race, age, and sex: Number of persons with cases closed by State vocational rehabilitation agencies in fiscal year 1971 and percent employed in 1972 and mean earnings, by type of closure—**Continued**

Years of education, race, age,[1] and sex	Number of cases			Percent employed					Mean earnings of employed				
							Rehabilitated minus—					Ratio of rehabilitated to—	
	Rehabilitated	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted
Women:													
Under 20:													
White:													
0–8	415	206	676	56.6	43.2	46.3	13.4	10.3	$1,459	$1,026	$1,017	1.42	1.43
9–11	1,454	690	3,616	67.3	57.4	66.4	9.9	.9	2,122	1,308	1,639	1.62	1.29
12 or more	521	189	2,270	73.5	56.1	71.7	17.4	1.8	2,560	2,166	1,962	1.18	1.30
Special education	928	323	704	56.2	39.0	39.9	17.2	16.3	1,535	1,036	1,211	1.48	1.27
Black:													
0–8	97	57	231	57.7	31.6	48.5	26.1	9.2	1,231	675	932	1.82	1.32
9–11	326	192	880	71.2	52.1	61.1	19.1	10.1	1,892	1,160	1,289	1.63	1.47
12 or more	109	35	425	73.4	62.9	68.5	10.5	4.9	2,618	2,081	1,738	1.26	1.51
Special education	448	188	531	60.7	43.6	50.5	17.1	10.2	1,603	813	1,257	1.97	1.28
20–34:													
White:													
0–8	2,936	691	2,329	52.4	42.1	46.6	10.3	5.8	2,005	1,590	1,738	1.26	1.15
9–11	7,697	2,066	5,054	61.4	46.3	53.2	15.1	8.2	2,567	1,745	1,784	1.47	1.44
12 or more	14,498	3,140	8,598	68.3	48.8	61.2	19.5	7.1	3,440	2,217	2,556	1.55	1.35
Special education	2,301	697	1,118	57.1	30.1	35.6	27.0	21.5	1,873	1,399	1,538	1.34	1.22
Black:													
0–8	878	220	1,023	56.9	40.5	46.9	16.4	10.0	2,005	1,364	1,746	1.47	1.15
9–11	2,531	909	2,828	66.5	45.3	54.5	21.2	12.0	2,439	1,720	1,830	1.42	1.33
12 or more	3,632	929	3,252	73.5	52.6	65.8	20.9	7.7	3,300	2,325	2,542	1.42	1.30
Special education	984	357	760	63.7	39.8	53.4	23.9	10.3	2,135	1,431	2,070	1.49	1.03
35–54:													
White:													
0–8	8,090	1,283	4,973	44.1	30.0	35.5	14.1	8.6	2,338	2,127	2,195	1.10	1.07
9–11	6,628	1,674	4,452	55.0	35.1	42.3	19.9	12.7	2,741	2,231	2,365	1.23	1.16
12 or more	9,933	2,723	6,635	58.9	34.8	44.7	24.1	14.2	3,408	2,251	2,861	1.51	1.19
Special education	398	112	263	49.2	24.1	30.4	25.1	18.8	1,771	2,297	2,452	.77	.72
Black:													
0–8	3,406	638	2,429	48.5	25.1	34.5	23.4	14.0	2,033	1,820	1,812	1.12	1.12
9–11	2,831	634	2,021	58.5	33.0	42.0	25.5	16.5	2,611	2,075	2,220	1.26	1.18
12 or more	2,005	542	1,414	63.2	35.8	46.5	27.4	16.7	3,394	2,476	2,947	1.37	1.15
Special education	209	67	167	59.8	40.3	34.1	19.5	25.7	2,157	1,938	1,745	1.11	1.24
55 and over:													
White:													
0–8	5,116	744	2,951	26.9	13.4	18.7	13.5	8.2	2,304	2,521	2,083	.91	1.11
9–11	2,275	568	1,506	36.0	20.1	23.7	15.9	12.3	2,449	2,629	2,354	.93	1.04
12 or more	2,919	821	2,014	40.0	18.1	27.3	21.9	12.7	3,103	2,265	2,566	1.37	1.21
Special education	69	22	63	29.0	9.1	27.0	19.9	2.0	2,374	[2]	1,761	[2]	1.35
Black:													
0–8	1,786	299	1,185	31.2	11.4	20.9	19.8	10.3	1,594	1,306	1,483	1.22	1.07
9–11	460	110	367	32.2	20.9	26.2	11.3	6.0	2,208	841	2,075	2.63	1.06
12 or more	319	74	221	37.0	12.2	24.4	24.8	12.6	2,390	[2]	2,329	[2]	1.03
Special education	21	5	25	47.6	[2]	24.0	[2]	23.6	2,418	[2]	[2]	[2]	[2]

[1] Age in 1971—year of closure.

[2] Fewer than 10 cases.

was reversed among both men and women only for blindness: Impact was greater among men and women aged 20–34 than it was among older persons having this condition.

Family Characteristics

The role of family characteristics—marital status, family size, and number of dependents[12]—in the effect of rehabilitation varied according to sex, particularly in the comparisons of rehabilitated and nonrehabilitated clients with respect to employment (table 10). For men, the impact on employment was greater among married persons and those with larger families and more dependents. A lesser effect was found for women with these characteristics than for men.

Among men, employment percentage-point differences between rehabilitated and nonrehabilitated clients were considerably larger for married persons (28 points) than for those who were widowed (12 points), divorced (20 points),

[12] Family size refers to the number of family members in the household. Number of dependents refers to the presumed dependency obligations of clients identified as household heads. Data on family characteristics were obtained at time of referral to the vocational rehabilitation agency. No information is available on possible family changes at or after closure. Evidence from national surveys of the disabled suggests that family relationships are relatively unstable. See Kathryn H. Allan, "First Findings of the 1972 Survey of the Disabled: General Characteristics," **Social Security Bulletin,** October 1976, and Paula A. Franklin, "Impact of Disability on the Family Structure," **Social Security Bulletin,** May 1977.

and separated (22 points), but not much greater than for those who were married and among those with dependents. differences were 24 percentage points for men with either one dependent or none but increased to a peak of 29 points for those with three dependents and declined only slightly to 27–28 points for those with more dependents. This trend

Table 8.—Major disabling condition and sex: Number of persons with cases closed by State vocational rehabilitation agencies in fiscal year 1971 and percent employed in 1972 and mean earnings, by type of closure

Major disabling condition and sex	Number of cases (in thousands)			Percent employed					Mean earnings of employed				
							Rehabilitated minus—					Ratio of rehabilitated to—	
	Rehabilitated	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted
All cases:[1]													
Blindness[2]	6.0	1.4	2.3	37.7	17.2	21.7	20.5	16.0	$3,771	$2,983	$2,713	1.26	1.39
Other visual impairments	13.5	2.2	8.5	62.5	47.2	55.3	15.3	7.2	3,845	2,963	3,075	1.30	1.25
Deafness	4.5	.8	1.6	66.7	47.8	58.6	18.9	8.1	4,179	3,367	3,524	1.24	1.19
Other hearing impairments	7.2	.8	2.7	59.8	48.3	64.5	11.5	-4.7	4,213	3,357	3,491	1.25	1.21
Orthopedic Impairments[3]	38.1	14.1	36.9	65.9	41.0	51.0	24.9	14.9	4,396	3,426	3,526	1.28	1.25
Extremity loss[4]	7.6	1.6	2.4	58.1	25.7	42.3	32.4	15.8	4,809	3,283	3,723	1.46	1.29
Psychosis/psychoneurosis	23.1	10.5	18.3	63.2	39.3	46.2	23.9	17.0	3,257	2,212	2,488	1.47	1.31
Alcoholism	10.8	8.3	9.7	70.7	52.6	54.4	18.1	16.3	3,776	2,568	2,778	1.47	1.36
Drug addiction	1.3	1.2	1.7	68.5	51.6	60.6	16.9	7.9	3,401	2,523	2,268	1.35	1.50
Other personality disorders	22.2	11.6	17.5	74.6	58.6	63.7	16.0	10.9	3,270	2,337	2,441	1.40	1.34
Mental retardation	21.2	6.3	9.4	72.1	49.2	51.8	22.9	20.3	2,630	1,810	2,067	1.45	1.27
Epilepsy	3.4	1.3	3.2	70.1	42.0	47.6	28.1	22.5	3,498	2,532	2,572	1.38	1.36
Heart condition	6.0	2.7	8.0	59.1	27.9	39.4	31.2	19.7	4,367	3,340	3,350	1.31	1.30
Other circulatory	3.1	.8	2.8	56.3	36.7	42.5	19.6	13.8	3,120	2,891	2,977	1.08	1.05
Respiratory	3.4	1.6	4.4	60.1	37.3	41.6	22.8	18.5	3,924	3,113	3,118	1.26	1.26
Digestive	20.7	2.2	7.1	65.9	46.6	59.1	19.3	6.8	3,461	2,659	3,026	1.30	1.14
Genitourinary	6.3	.7	2.5	54.9	37.0	53.6	17.9	1.3	2,797	2,439	2,611	1.15	1.07
Speech impairments	1.9	.5	1.2	75.7	44.3	60.9	31.4	14.8	4,500	3,018	3,319	1.49	1.36
All other	14.8	3.9	13.9	65.5	42.2	53.6	23.3	11.9	3,773	2,915	2,880	1.29	1.31
Men:													
Blindness[2]	3.1	.9	1.4	47.3	18.6	24.3	28.7	23.0	4,103	3,302	2,949	1.24	1.39
Other visual impairments	7.0	1.4	4.9	73.3	50.5	63.1	22.8	10.2	4,442	3,287	3,508	1.35	1.27
Deafness	2.3	.4	.9	77.4	58.6	66.8	18.8	10.6	4,804	3,666	3,888	1.31	1.24
Other hearing impairments	3.8	.5	1.6	69.9	54.5	73.2	15.4	-3.3	4,938	3,924	4,023	1.26	1.23
Orthopedic impairments[3]	23.9	10.2	25.7	73.7	44.2	55.6	29.5	18.1	4,844	3,692	3,847	1.31	1.26
Extremity loss[4]	5.8	1.3	1.9	64.7	27.0	45.9	37.7	18.8	4,998	3,417	3,901	1.46	1.28
Psychosis/psychoneurosis	9.5	5.3	9.6	72.1	43.1	50.2	29.0	21.9	3,830	2,505	2,797	1.53	1.37
Alcoholism	8.7	7.0	8.0	74.8	55.7	56.8	19.1	18.0	3,912	2,608	2,840	1.50	1.38
Drug addiction	.9	.9	1.2	73.9	55.2	65.2	18.7	8.7	3,543	2,657	2,421	1.33	1.46
Other personality disorders	14.3	7.9	11.2	81.3	63.9	70.0	17.4	11.3	3,529	2,517	2,674	1.40	1.32
Mental retardation	12.4	3.5	5.6	82.1	60.4	61.8	21.7	20.3	2,985	2,026	2,310	1.47	1.29
Epilepsy	1.9	.8	2.1	79.2	45.0	52.1	34.2	27.1	3,943	2,837	2,815	1.39	1.40
Heart condition	3.7	1.9	5.4	65.1	29.3	40.8	35.8	24.3	4,901	3,603	3,743	1.36	1.31
Other circulatory	1.2	.4	1.5	65.2	36.9	46.3	28.3	18.9	3,895	3,406	3,348	1.14	1.16
Respiratory	2.1	1.2	3.2	63.5	36.8	42.4	26.7	21.1	4,311	3,269	3,342	1.32	1.29
Digestive	8.0	1.2	3.5	77.6	49.0	66.9	28.6	10.7	4,369	3,124	3,574	1.40	1.22
Genitourinary	1.2	.3	.9	70.8	35.7	58.8	35.1	12.0	4,366	3,435	3,445	1.27	1.27
Speech impairments	1.2	.4	.8	82.1	48.2	65.8	33.9	16.3	4,950	3,248	3,600	1.52	1.38
All other	6.2	2.1	7.5	77.3	46.7	58.6	30.6	18.7	4,708	3,384	3,400	1.39	1.38
Women:													
Blindess[2]	2.6	.4	.8	26.8	13.9	16.9	12.9	9.9	3,013	2,118	2,162	1.42	1.39
Other visual impairments	6.2	.8	3.4	50.8	40.9	45.4	9.9	5.4	2,815	2,146	2,217	1.31	1.27
Deafness	2.1	.3	.6	56.3	35.2	46.5	21.1	9.8	3,265	2,714	2,760	1.20	1.18
Other hearing impairments	3.3	.3	1.0	49.6	39.9	52.0	9.7	-2.4	3,044	2,193	2,376	1.39	1.28
Orthopedic impairments[3]	13.2	3.6	10.5	52.6	32.3	39.9	20.3	12.7	3,248	2,412	2,438	1.35	1.33
Extremity loss[4]	1.6	.3	.5	35.9	19.3	28.1	16.6	7.8	3,574	2,340	2,508	1.53	1.43
Psychosis/psychoneurosis	12.9	4.9	8.1	57.6	36.0	42.1	21.6	15.5	2,731	1,850	2,058	1.48	1.33
Alcoholism	2.0	1.2	1.6	55.9	39.2	45.4	16.7	10.5	2,985	2,237	2,393	1.33	1.25
Drug addiction	.3	.3	.4	58.2	44.6	50.4	13.6	7.8	2,908	1,857	1,710	1.57	1.70
Other personality disorders	7.1	3.2	5.7	65.3	49.4	54.4	15.9	10.9	2,626	1,779	1,851	1.48	1.42
Mental retardation	8.1	2.5	3.5	58.7	35.5	37.7	23.2	21.0	1,886	1,320	1,448	1.43	1.30
Epilepsy	1.3	.4	1.1	58.0	36.2	39.1	21.8	18.9	2,573	1,721	1,924	1.50	1.34
Heart condition	2.2	.7	2.4	49.2	24.6	36.4	24.6	12.8	3,143	2,498	2,356	1.26	1.33
Other circulatory	1.8	.3	1.2	50.8	37.1	37.8	13.7	13.0	2,431	2,170	2,441	1.12	1.00
Respiratory	1.2	.4	1.1	54.7	39.2	39.8	15.5	14.9	3,111	2,644	2,378	1.18	1.31
Digestive	12.3	1.0	3.4	59.1	44.4	51.7	14.7	7.4	2,683	2,037	2,287	1.32	1.17
Genitourinary	5.1	.4	1.6	51.7	38.9	51.1	12.8	.6	2,290	1,790	2,105	1.28	1.09
Speech impairments	.6	.1	.4	65.2	33.3	49.4	31.9	15.8	3,315	2,061	2,358	1.61	1.41
All other	8.1	1.7	6.1	57.1	36.1	47.8	21.0	9.3	2,767	2,126	2,117	1.30	1.31

[1] Includes cases with sex unreported.
[2] Both eyes.
[3] Includes limbs, trunk, back or spine, except amputations.
[4] Includes congenital malformations.

among men household heads was reflected in the differences for the family-size characteristic. The employment percentage-point differences between rehabilitated and not-accepted men reflected this pattern only with respect to

Table 9.—Major disabling condition, age, and sex: Number of persons with cases closed by State vocational rehabilitation agencies in fiscal year 1971 and percent employed in 1972 and mean earnings, by type of closure

Major disabling condition, age,[1] and sex	Number of cases			Percent employed					Mean earnings of employed				
							Rehabilitated minus—					Ratio of rehabilitated to—	
	Rehabilitated	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted
Blindness:[2]													
All cases:[3]													
Under 20	98	47	28	62.2	29.8	42.2	32.4	20.0	$2,566	$1,464	$1,177	1.75	2.18
20–34	1,627	379	503	63.0	30.1	43.9	32.9	19.1	3,943	3,037	2,882	1.30	1.37
35–54	1,911	438	734	40.8	15.8	21.4	25.0	19.4	3,938	3,685	3,108	1.07	1.27
55 and over	1,891	399	755	19.8	8.0	8.9	11.8	10.9	3,195	2,071	2,575	1.54	1.24
Men:													
Under 20	60	24	56	66.7	50.0	51.8	16.7	14.9	2,616	1,412	1,086	1.85	2.41
20–34	905	227	322	72.7	32.6	48.8	40.1	23.9	4,151	3,662	3,198	1.13	1.30
35–54	1,018	310	475	49.2	16.5	23.4	32.7	25.8	4,573	3,879	3,279	1.18	1.39
55 and over	978	278	464	28.8	8.6	9.9	20.2	18.9	3,402	2,118	2,657	1.61	1.28
Women:													
Under 20	35	21	65	51.4	9.5	35.4	41.9	16.0	2,554	(4)	1,382	(4)	1.85
20–34	660	136	157	48.5	22.8	31.8	25.7	16.7	3,376	1,598	1,922	2.11	1.76
35–54	882	124	251	31.2	14.5	17.5	16.7	13.7	2,782	3,134	2,729	.89	1.02
55 and over	895	118	278	10.2	6.8	7.2	3.4	3.0	2,604	(4)	2,414	(4)	1.08
Other visual impairments:													
All cases:[3]													
Under 20	572	158	1,107	74.8	65.8	73.5	9.0	1.3	2,865	2,142	2,335	1.34	1.23
20–34	5,317	936	3,191	80.2	66.8	74.6	13.4	5.6	4,312	2,982	3,353	1.45	1.29
35–54	4,082	642	2,375	62.7	39.4	48.1	23.3	14.6	3,746	3,372	3,187	1.11	1.18
55 and over	3,111	436	1,528	36.8	17.2	23.6	19.6	13.2	2,767	2,647	2,598	1.05	1.07
Men:													
Under 20	347	88	609	83.0	69.3	82.8	13.7	.2	3,197	2,556	2,659	1.25	1.20
20–34	3,182	621	2,000	88.7	71.2	82.9	17.5	5.8	4,855	3,295	3,780	1.47	1.28
35–54	1,876	414	1,283	72.5	40.8	53.1	31.7	19.4	4,506	3,771	3,671	1.19	1.23
55 and over	1,436	277	869	45.7	17.3	26.7	28.4	19.0	3,175	2,585	2,991	1.23	1.06
Women:													
Under 20	212	65	469	61.3	58.5	61.8	2.8	-.5	2,098	1,448	1,767	1.45	1.19
20–34	1,996	289	1,128	66.1	55.7	59.8	10.4	6.3	3,069	1,973	2,301	1.56	1.33
35–54	2,180	224	1,083	54.2	36.6	42.2	17.6	12.0	2,867	2,610	2,472	1.10	1.16
55 and over	1,654	157	648	29.3	17.2	19.8	12.1	9.5	2,230	2,758	1,884	.81	1.18
Deafness:													
All cases:[3]													
Under 20	155	61	188	72.9	54.1	75.0	18.8	-2.1	2,777	2,609	2,150	1.06	1.29
20–34	2,294	427	735	74.8	56.0	68.8	18.8	6.0	4,330	3,301	3,683	1.31	1.18
35–54	1,258	186	419	67.1	41.9	51.1	25.2	16.0	4,387	3,761	4,135	1.17	1.06
55 and over	674	76	202	48.5	25.0	35.1	23.5	13.4	3,540	3,903	3,272	.91	1.08
Men:													
Under 20	89	30	98	74.2	66.7	83.7	7.5	-9.5	2,973	2,856	2,571	1.04	1.16
20–34	1,231	218	460	85.5	69.3	78.7	16.2	6.8	4,887	3,505	3,987	1.39	1.23
35–54	535	109	239	80.4	50.5	57.7	29.9	22.7	5,259	4,222	4,485	1.25	1.17
55 and over	331	44	124	54.1	29.5	37.1	24.6	17.0	4,170	4,434	3,644	.94	1.14
Women:													
Under 20	62	29	80	71.0	41.4	66.3	29.6	4.7	2,575	2,295	1,638	1.12	1.57
20–34	974	198	250	61.2	39.9	50.0	21.3	11.2	3,310	2,791	2,817	1.19	1.18
35–54	714	76	175	57.4	30.3	41.7	27.1	15.7	3,493	2,658	3,533	1.31	.99
55 and over	335	32	78	43.0	18.8	32.1	24.2	10.9	2,765	(4)	2,587	(4)	1.07
Other hearing impairments:													
All cases:[3]													
Under 20	209	54	527	78.9	61.1	80.1	17.8	-1.2	3,292	2,138	2,690	1.54	1.22
20–34	2,180	308	985	78.2	69.8	78.6	8.4	.4	4,501	3,368	3,655	1.34	1.23
35–54	2,149	229	640	65.8	47.2	58.6	18.6	7.2	4,532	3,700	4,108	1.22	1.10
55 and over	2,041	175	426	46.5	18.3	36.9	28.2	9.6	3,591	3,664	3,417	.98	1.05
Men:													
Under 20	111	26	305	90.1	69.2	89.5	20.9	.6	3,608	2,613	3,130	1.38	1.15
20–34	1,222	194	623	90.1	80.9	87.5	9.2	2.6	5,169	3,773	4,109	1.37	1.26
35–54	987	136	349	78.6	47.1	65.3	31.5	13.3	5,532	4,510	4,975	1.23	1.11
55 and over	1,058	100	232	54.4	20.0	42.2	34.4	12.2	4,250	4,664	3,928	.91	1.08
Women:													
Under 20	86	26	199	67.4	53.8	65.3	13.6	2.1	2,667	1,505	1,826	1.77	1.46
20–34	900	107	328	61.9	49.5	61.3	12.4	0.6	3,151	2,197	2,394	1.43	1.32
35–54	1,157	93	287	55.0	47.3	50.5	7.7	4.5	3,305	2,522	2,757	1.31	1.20
55 and over	964	73	191	38.6	16.4	30.9	22.2	7.7	2,583	1,998	2,568	1.29	1.01

See footnotes at end of table.

the number-of-dependents characteristic. Mean earnings ratios for men, however, were generally smaller among those who were married and those who had dependents. Among women, the pattern of employment percentage-

Table 9.—Major disabling condition, age, and sex: Number of persons with cases closed by State vocational rehabilitation agencies in fiscal year 1971 and percent employed in 1972 and mean earnings, by type of closure—**Continued**

Major disabling condition, age,[1] and sex	Number of cases			Percent employed					Mean earnings of employed				
							Rehabilitated minus—					Ratio of rehabilitated to—	
	Rehabilitated	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted
Orthopedic impairments:[5]													
All cases:[3]													
Under 20	820	398	2,378	79.3	66.8	75.7	12.5	3.6	$3,073	$2,333	$2,711	1.32	1.13
20–34	17,488	5,092	12,784	79.5	58.0	68.6	21.5	10.9	4,689	3,561	3,698	1.32	1.27
35–54	14,036	6,141	15,639	60.7	35.6	44.0	25.1	16.7	4,272	3,511	3,610	1.22	1.18
55 and over	5,138	2,256	5,612	38.5	15.4	23.9	23.1	14.6	3,349	2,598	3,056	1.29	1.10
Men:													
Under 20	466	215	1,481	87.6	75.8	81.6	11.8	6.0	3,395	2,482	3,128	1.37	1.09
20–34	11,710	3,770	9,602	86.1	63.2	73.5	22.9	12.6	5,071	3,821	3,955	1.33	1.28
35–54	8,646	4,535	10,791	67.6	37.4	47.1	30.2	20.5	4,810	3,774	3,954	1.27	1.22
55 and over	2,812	1,564	3,631	43.3	15.5	25.1	27.8	18.2	3,636	2,711	3,367	1.34	1.08
Women:													
Under 20	326	164	798	67.8	56.7	64.9	11.1	2.9	2,487	2,100	1,786	1.18	1.39
20–34	5,162	1,184	2,846	64.4	42.1	51.5	22.3	12.9	3,519	2,321	2,438	1.52	1.44
35–54	5,310	1,570	4,782	49.4	30.4	37.1	19.0	12.3	3,089	2,592	2,647	1.19	1.17
55 and over	2,279	674	1,955	33.2	15.1	21.5	18.1	11.7	2,877	2,304	2,363	1.25	1.22
Extremity loss:[6]													
All cases:[3]													
Under 20	97	41	106	75.3	48.8	67.9	26.5	7.4	3,500	1,555	2,447	2.25	1.43
20–34	2,087	413	771	81.0	49.6	63.2	31.4	17.8	5,027	3,625	3,717	1.39	1.35
35–54	2,962	574	836	63.0	25.6	42.8	37.4	20.2	4,881	3,222	4,144	1.51	1.18
55 and over	2,170	507	608	35.0	6.5	15.8	28.5	19.2	4,347	2,565	3,187	1.69	1.36
Men:													
Under 20	57	30	72	86.0	50.0	73.6	36.0	12.4	3,727	1,579	2,638	2.36	1.41
20–34	1,609	339	628	86.4	52.5	66.7	33.9	19.7	5,257	3,741	3,915	1.41	1.34
35–54	2,365	468	669	69.0	26.3	46.0	42.7	23.0	5,063	3,407	4,258	1.49	1.19
55 and over	1,630	425	473	41.4	7.3	17.3	34.1	24.1	4,483	2,583	3,372	1.74	1.33
Women:													
Under 20	35	6	30	57.1	(4)	53.3	(4)	3.8	2,852	(4)	1,640	(4)	1.74
20–34	414	65	122	59.4	33.8	45.9	25.6	13.5	3,707	2,615	2,177	1.42	1.70
35–54	588	106	164	39.1	22.6	28.7	16.5	10.4	3,614	2,274	3,269	1.59	1.11
55 and over	523	81	133	15.3	2.5	9.8	12.8	5.5	3,258	(4)	2,250	1.43	1.45
Psychosis/psychoneurosis:													
All cases:[3]													
Under 20	656	371	860	77.1	59.0	68.7	18.1	8.4	2,380	1,684	1,656	1.41	1.44
20–34	10,955	4,907	8,678	72.0	49.6	56.5	22.4	15.5	3,315	2,158	2,434	1.54	1.36
35–54	9,057	4,113	6,859	58.9	32.4	37.9	26.5	21.0	3,323	2,398	2,766	1.39	1.20
55 and over	2,018	912	1,533	42.0	16.7	21.4	25.3	20.6	2,808	2,163	2,560	1.30	1.10
Men:													
Under 20	357	177	456	86.8	68.4	74.8	18.4	12.0	2,694	1,901	1,937	1.42	1.39
20–34	4,899	2,610	4,858	80.2	53.6	60.5	26.6	19.7	3,790	2,431	2,659	1.56	1.43
35–54	3,350	2,007	3,426	66.3	33.8	40.3	32.5	26.0	4,136	2,763	3,264	1.50	1.27
55 and over	807	428	793	47.8	18.2	21.4	29.6	26.4	3,364	2,445	3,090	1.38	1.09
Women:													
Under 20	273	182	375	65.2	48.9	62.1	16.3	3.1	1,854	1,378	1,246	1.35	1.49
20–34	5,694	2,129	3,556	64.9	44.6	50.9	20.3	14.0	2,812	1,778	2,080	1.58	1.35
35–54	5,651	2,081	3,393	54.7	31.2	35.7	23.5	19.0	2,740	2,015	2,194	1.36	1.25
55 and over	1,182	476	721	38.5	15.1	21.8	23.4	16.7	2,356	1,889	1,971	1.25	1.20
Alcoholism:													
All cases:[3]													
Under 20	34	28	43	70.6	42.9	60.5	27.7	10.1	2,776	1,738	1,927	1.60	1.44
20–34	1,815	1,512	1,808	82.8	67.1	71.6	15.7	11.2	3,972	2,784	2,941	1.43	1.35
35–54	6,726	5,075	5,860	73.6	56.7	57.7	16.9	15.9	3,804	2,554	2,768	1.49	1.37
55 and over	2,031	1,547	1,764	56.4	31.0	32.9	25.4	23.5	3,399	2,223	2,530	1.53	1.34
Men:													
Under 20	26	12	20	80.8	58.3	75.0	22.5	5.8	2,565	(4)	2,482	1.26	1.03
20–34	1,470	1,259	1,493	86.5	71.5	74.7	15.0	11.8	4,145	2,871	3,052	1.44	1.36
35–54	5,431	4,302	4,860	77.2	59.3	59.6	17.9	17.6	3,958	2,589	2,818	1.53	1.40
55 and over	1,661	1,330	1,501	59.4	31.6	33.7	27.8	25.7	3,437	2,173	2,539	1.58	1.35
Women:													
Under 20	7	12	22	(4)	(4)	45.5	(4)	(4)	(4)	(4)	1,121	(4)	(4)
20–34	330	234	294	65.5	45.3	55.4	20.2	10.1	3,007	2,068	2,281	1.45	1.32
35–54	1,265	756	982	58.2	41.8	48.1	16.4	10.1	2,931	2,243	2,452	1.31	1.20
55 and over	356	210	247	43.0	28.1	27.9	14.9	15.1	3,182	2,578	2,387	1.23	1.33

See footnotes at end of table.

point differences between rehabilitated and nonrehabilitated clients was almost the reverse of that found among men. The differences were considerably smaller for married persons (12 points) than for those who were widowed (18

Table 9.—Major disabling condition, age, and sex: Number of persons with cases closed by State vocational rehabilitation agencies in fiscal year 1971 and percent employed in 1972 and mean earnings, by type of closure—**Continued**

Major disabling condition, age,[1] and sex	Number of cases			Percent employed					Mean earnings of employed				
							Rehabilitated minus—					Ratio of rehabilitated to—	
	Rehabilitated	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted
Drug addiction:													
All cases:[3]													
Under 20	62	68	153	75.8	72.1	75.2	3.7	0.6	$2,458	$2,210	$1,801	1.11	1.36
20–34	876	845	1,225	74.9	55.1	62.9	19.8	12.0	3,372	2,458	2,221	1.37	1.52
35–54	301	257	248	59.5	45.1	52.8	14.4	6.7	3,766	2,942	3,003	1.28	1.25
55 and over	22	15	22	31.8	26.7	22.7	5.1	9.1	3,166	1,810	1,885	1.75	1.68
Men:													
Under 20	41	44	95	82.9	68.2	80.0	14.7	2.9	2,539	2,413	1,910	1.05	1.33
20–34	662	658	905	76.9	56.7	66.4	20.2	10.5	3,516	2,551	2,345	1.38	1.50
35–54	204	192	184	64.7	49.5	54.9	15.2	9.8	3,887	3,193	3,312	1.22	1.17
55 and over	7	6	9	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Women:													
Under 20	18	21	52	55.6	81.0	65.4	-25.4	-9.8	2,782	1,337	1,623	2.08	1.71
20–34	187	165	279	66.8	46.7	50.9	20.1	15.9	2,749	2,002	1,663	1.37	1.65
35–54	95	63	60	47.4	31.7	46.7	15.7	.7	3,409	1,625	2,055	2.10	1.66
55 and over	14	9	12	35.7	(4)	16.7	(4)	19.0	(4)	(4)	(4)	(4)	(4)
Other personality disorders:													
All cases:[3]													
Under 20	3,937	1,986	4,002	79.8	65.0	72.7	14.8	7.1	2,438	1,604	1,822	1.52	1.34
20–34	13,054	6,992	9,624	78.4	62.5	67.9	15.9	10.5	3,386	2,438	2,578	1.39	1.31
35–54	4,054	2,009	3,004	70.6	51.3	51.9	19.3	18.7	3,790	2,768	2,937	1.37	1.29
55 and over	599	295	523	45.9	27.8	33.5	18.1	12.4	3,082	3,009	3,123	1.02	.99
Men:													
Under 20	2,674	1,294	2,596	86.4	71.1	79.9	15.3	6.5	2,679	1,807	2,054	1.48	1.30
20–34	8,708	4,994	6,423	83.1	66.2	72.1	16.9	11.0	3,627	2,605	2,813	1.39	1.29
35–54	2,478	1,389	1,873	74.7	55.2	55.8	19.5	18.9	4,227	2,925	3,205	1.45	1.32
55 and over	349	183	285	53.9	27.9	35.4	26.0	18.5	3,326	3,517	3,420	.95	.97
Women:													
Under 20	1,178	662	1,332	65.0	52.6	59.0	12.4	6.0	1,682	1,065	1,206	1.58	1.39
20–34	4,047	1,824	2,988	68.3	52.4	58.5	15.9	9.8	2,760	1,884	1,955	1.46	1.41
35–54	1,554	612	1,106	64.3	42.5	45.1	21.8	19.2	2,991	2,302	2,377	1.30	1.26
55 and over	236	110	232	36.0	28.2	31.0	7.8	5.0	2,539	2,172	2,684	1.17	.95
Mental retardation:													
All cases:[3]													
Under 20	6,926	2,120	3,531	78.8	57.7	59.6	21.1	19.2	2,543	1,575	1,799	1.61	1.41
20–34	11,867	3,451	4,505	72.3	48.9	53.8	23.4	18.5	2,716	1,928	2,273	1.41	1.19
35–54	1,792	509	930	61.9	34.8	30.6	27.1	31.3	2,432	2,173	2,319	1.12	1.05
55 and over	333	119	265	42.9	16.0	21.9	26.9	21.0	2,385	3,161	2,062	.75	1.16
Men:													
Under 20	4,578	1,292	2,244	88.7	68.7	70.8	20.0	17.9	2,845	1,776	2,012	1.60	1.41
20–34	6,669	1,894	2,633	81.2	60.0	63.5	21.2	17.7	3,118	2,166	2,581	1.44	1.21
35–54	900	273	503	66.6	38.1	32.6	28.5	34.0	2,822	2,545	2,416	1.11	1.17
55 and over	192	66	163	46.9	18.2	20.2	28.7	26.7	2,511	3,008	2,465	.83	1.02
Women:													
Under 20	2,224	782	1,217	58.5	39.8	39.4	18.7	19.1	1,607	1,018	1,085	1.58	1.48
20–34	4,849	1,454	1,769	60.0	35.0	39.8	25.0	20.2	1,993	1,429	1,561	1.39	1.28
35–54	869	226	412	57.1	31.0	28.4	26.1	28.7	1,970	1,674	2,227	1.18	.88
55 and over	134	50	96	38.1	14.0	22.9	24.1	15.2	2,153	(4)	1,628	(4)	1.32
Epilepsy:													
All cases:[3]													
Under 20	209	108	332	75.1	52.8	63.9	22.3	11.2	2,793	1,619	2,099	1.73	1.33
20–34	2,397	820	1,811	76.0	49.1	56.2	26.9	19.8	3,668	2,578	2,672	1.42	1.37
35–54	617	338	881	54.9	26.6	32.2	28.3	22.7	3,000	2,889	2,639	1.04	1.14
55 and over	109	59	165	34.9	22.0	20.0	12.9	14.9	2,784	2,629	1,950	1.06	1.43
Men:													
Under 20	107	49	184	86.0	65.3	71.2	20.7	14.8	3,175	1,771	2,407	1.79	1.32
20–34	1,374	502	1,184	85.8	53.4	62.2	32.4	23.6	4,150	2,880	2,901	1.44	1.43
35–54	356	241	608	59.0	28.2	33.6	30.8	25.4	3,231	3,239	2,848	1.00	1.13
55 and over	58	39	112	39.7	23.1	23.2	16.6	16.5	3,116	(4)	2,141	(4)	1.46
Women:													
Under 20	94	50	140	64.9	40.0	52.9	24.9	12.0	2,223	1,441	1,678	1.54	1.32
20–34	914	276	583	61.5	41.7	43.1	19.8	18.4	2,628	1,735	1,950	1.51	1.35
35–54	249	93	270	49.0	22.6	29.3	26.4	19.7	2,525	1,880	2,130	1.34	1.19
55 and over	47	17	49	29.8	11.8	14.3	18.0	15.5	2,254	(4)	(4)	(4)	(4)

See footnotes at end of table.

points), divorced (23 points), separated (20 points), and never married (23 points). They were approximately the same for women with three or fewer dependents as for women with six or more dependents (17–19 points) but were

Table 9.—Major disabling condition, age, and sex: Number of persons with cases closed by State vocational rehabilitation agencies in fiscal year 1971 and percent employed in 1972 and mean earnings, by type of closure—**Continued**

Major disabling condition, age,[1] and sex	Number of cases			Percent employed					Mean earnings of employed				
							Rehabilitated minus—					Ratio of rehabilitated to—	
	Rehabilitated	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted
Heart condition:													
All cases:[3]													
Under 20	136	82	761	83.1	61.0	79.6	22.1	3.5	$3,179	$2,857	$2,545	1.11	1.25
20–34	1,968	553	1,566	78.3	53.9	70.6	24.4	7.7	4,558	3,397	3,443	1.34	1.32
35–54	2,383	1,314	3,385	56.1	24.2	30.2	31.9	25.9	4,545	3,527	3,857	1.29	1.18
55 and over	1,377	736	2,144	37.8	12.9	19.1	24.9	18.7	3,624	2,786	3,037	1.30	1.19
Men:													
Under 20	70	49	391	91.4	63.3	86.2	28.1	5.2	3,842	3,083	3,025	1.25	1.27
20–34	1,099	335	1,016	87.5	63.0	79.0	24.5	8.5	5,080	3,675	3,766	1.38	1.35
35–54	1,540	994	2,458	62.8	24.8	31.0	38.0	31.8	5,106	3,846	4,142	1.33	1.23
55 and over	909	550	1,518	41.9	14.5	20.8	27.4	21.1	4,117	2,868	3,263	1.44	1.26
Women:													
Under 20	59	29	341	72.9	58.6	72.1	14.3	0.8	2,211	2,330	1,919	.95	1.15
20–34	804	202	516	65.2	39.1	53.9	26.1	11.3	3,508	2,611	2,442	1.34	1.44
35–54	833	314	914	43.6	22.3	28.3	21.3	15.3	3,065	2,417	2,756	1.27	1.11
55 and over	458	180	617	30.1	7.8	14.9	22.3	15.2	2,283	2,478	2,150	.92	1.06
Other circulatory:													
All cases:[3]													
Under 20	24	2	97	54.2	(4)	80.4	(4)	-26.2	1,879	(4)	2,741	(4)	.69
20–34	679	143	567	73.2	60.8	68.3	12.4	4.9	3,713	3,110	3,200	1.19	1.16
35–54	1,561	385	1,326	59.4	37.1	39.7	22.3	19.7	2,999	3,069	3,069	.98	.98
55 and over	770	218	744	39.5	22.9	24.7	16.6	14.8	2,596	1,935	2,361	1.34	1.10
Men:													
Under 20	10	2	46	60.0	(4)	84.8	(4)	-24.8	(4)	(4)	3,474	(4)	(4)
20–34	325	79	336	87.4	69.6	77.4	17.8	10.0	4,490	3,689	3,561	1.22	1.26
35–54	559	207	715	67.1	37.2	42.1	29.9	25.0	3,768	3,749	3,486	1.01	1.08
55 and over	330	141	423	43.3	19.1	26.0	24.2	17.3	3,119	1,769	2,422	1.76	1.29
Women:													
Under 20	11	0	50	54.5	.....	76.0	.....	-21.5	(4)	.....	1,954	.....	(4)
20–34	343	62	221	58.9	50.0	54.3	8.9	4.6	2,597	2,009	2,480	1.29	1.05
35–54	998	175	603	55.1	37.1	36.8	18.0	18.3	2,480	2,260	2,529	1.10	.98
55 and over	436	77	312	36.2	29.9	22.8	6.3	13.4	2,125	2,131	2,358	1.00	.90
Respiratory:													
All cases:[3]													
Under 20	51	21	166	76.5	66.7	78.3	9.8	-1.8	2,800	1,877	2,417	1.49	1.16
20–34	1,143	342	977	77.4	64.3	70.5	13.1	6.9	4,194	3,458	3,365	1.21	1.25
35–54	1,489	886	2,024	58.7	36.0	38.4	22.7	20.3	3,898	2,977	3,068	1.31	1.27
55 and over	673	352	1,112	37.0	14.8	19.9	22.2	17.1	3,275	2,731	2,931	1.20	1.12
Men:													
Under 20	24	11	87	91.7	72.7	90.8	19.0	.9	3,385	(4)	2,755	(4)	1.23
20–34	618	230	648	85.3	67.0	76.2	18.3	9.1	4,748	3,935	3,662	1.21	1.30
35–54	961	683	1,514	63.4	36.2	39.4	27.2	24.0	4,227	2,970	3,252	1.42	1.30
55 and over	495	296	920	37.6	14.2	20.5	23.4	17.1	3,530	2,618	3,016	1.35	1.17
Women:													
Under 20	24	10	72	62.5	60.0	62.5	2.5	0	2,108	(4)	1,995	(4)	1.06
20–34	488	103	302	67.2	59.2	57.9	8.0	9.3	3,265	2,201	2,430	1.48	1.34
35–54	524	197	501	50.0	35.0	34.7	15.0	15.3	3,118	3,099	2,424	1.01	1.29
55 and over	172	55	184	36.6	18.2	17.4	18.4	19.2	2,524	3,208	2,430	.79	1.04
Digestive:													
All cases:[3]													
Under 20	490	80	444	77.6	66.3	75.5	11.3	2.1	2,744	2,031	2,277	1.35	1.21
20–34	7,591	867	2,873	75.5	64.5	72.4	11.0	3.1	3,527	2,819	3,071	1.25	1.15
35–54	8,659	842	2,569	66.4	42.2	54.5	24.2	11.9	3,628	2,586	3,232	1.40	1.12
55 and over	3,552	416	1,040	48.1	17.8	33.8	30.3	14.3	2,865	2,288	2,671	1.25	1.07
Men:													
Under 20	231	31	230	86.6	77.4	86.1	9.2	.5	3,279	2,469	2,732	1.33	1.20
20–34	2,860	409	1,377	90.8	75.3	83.9	15.5	6.9	4,523	3,542	3,680	1.38	1.23
35–54	3,132	453	1,302	78.4	45.3	61.1	33.1	17.3	4,688	2,825	3,745	1.66	1.25
55 and over	1,639	290	569	56.6	15.5	36.9	41.1	19.7	3,367	2,044	3,154	1.65	1.07
Women:													
Under 20	248	49	206	70.2	59.2	63.6	11.0	6.6	2,125	1,668	1,635	1.27	1.30
20–34	4,634	446	1,451	66.1	54.3	61.1	11.8	5.0	2,662	1,868	2,255	1.43	1.18
35–54	5,475	385	1,257	59.5	38.7	47.8	20.8	11.7	2,837	2,265	2,555	1.25	1.11
55 and over	1,879	124	465	41.2	22.6	30.1	18.6	11.1	2,265	2,665	1,958	.85	1.16

See footnotes at end of table.

Table 9.—Major disabling condition, age, and sex: Number of persons with cases closed by State vocational rehabilitation agencies in fiscal year 1971 and percent employed in 1972 and mean earnings, by type of closure—**Continued**

Major disabling condition, age,[1] and sex	Number of cases			Percent employed					Mean earnings of employed				
							Rehabilitated minus—					Ratio of rehabilitated to—	
	Rehabilitated	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted
Genitourinary:													
All cases:[3]													
Under 20	93	19	249	71.0	68.4	73.9	2.6	-2.9	$2,177	$2,405	$2,390	0.91	0.91
20-34	2,198	273	1,047	66.7	49.5	64.5	17.2	2.2	3,095	2,643	2,768	1.17	1.12
35-54	3,063	304	856	53.1	32.9	44.5	20.2	8.6	2,666	2,265	2,524	1.18	1.06
55 and over	915	131	302	34.9	19.1	30.5	15.8	4.4	2,247	2,135	2,245	1.05	1.00
Men:													
Under 20	42	11	97	83.3	63.6	86.6	19.7	-3.3	2,655	[4]	2,911	[4]	.91
20-34	482	107	374	85.7	52.3	73.8	33.4	11.9	4,956	3,930	3,596	1.26	1.38
35-54	369	104	237	66.4	26.0	43.0	40.4	23.4	4,491	3,302	3,676	1.36	1.22
55 and over	272	70	136	51.8	20.0	29.4	31.8	22.4	2,920	2,430	2,917	1.20	1.00
Women:													
Under 20	50	5	141	60.0	[4]	64.5	[4]	-4.5	1,670	[4]	1,926	1.11	.87
20-34	1,691	162	660	61.3	48.1	58.6	13.2	2.7	2,346	1,723	2,203	1.36	1.06
35-54	2,684	199	615	51.4	36.7	45.0	14.7	6.4	2,334	1,881	2,092	1.24	1.12
55 and over	633	60	158	28.0	18.3	32.3	9.7	-4.3	1,719	1,759	1,751	.98	.98
Speech impairments:													
All cases:[3]													
Under 20	110	41	248	83.6	70.7	78.6	12.9	5.0	2,940	1,922	2,621	1.53	1.12
20-34	1,260	237	602	85.4	65.4	73.8	20.0	11.6	4,648	2,985	3,389	1.56	1.37
35-54	304	93	199	66.1	26.9	38.2	39.2	27.9	4,600	4,728	4,267	.97	1.08
55 and over	221	121	173	39.4	9.9	23.7	29.5	15.7	4,084	2,512	4,184	1.63	.98
Men:													
Under 20	58	25	171	87.9	92.0	87.7	-4.1	.2	3,286	2,021	2,904	1.63	1.13
20-34	791	170	409	92.2	74.7	80.2	17.5	12.0	5,081	3,311	3,656	1.53	1.39
35-54	180	64	119	73.9	20.3	36.1	53.6	37.8	5,190	5,127	5,038	1.01	1.03
55 and over	161	99	136	43.5	10.1	23.5	33.4	20.0	4,344	2,811	4,355	1.55	1.00
Women:													
Under 20	51	15	71	78.4	33.3	56.3	45.1	22.1	2,464	[4]	1,667	1.68	1.48
20-34	400	62	168	72.5	38.7	56.0	33.8	16.5	3,422	1,153	2,288	2.97	1.50
35-54	122	29	79	55.7	41.4	40.5	14.3	15.2	3,445	4,296	3,137	.80	1.10
55 and over	57	22	37	29.8	9.1	24.3	20.7	5.5	3,013	[4]	[4]	[4]	[4]

[1] Age in 1971—year of closure.
[2] Includes cases with sex unreported.
[3] Fewer than 10 cases.
[4] Both eyes.
[5] Includes limbs, trunk, back or spine, except amputations.
[6] Includes congenital malformations.

smaller for those with four or five (12-13 points). They were also smaller for women in multiple-member families (two or more family members in the household) than for those living alone—about 15-16 points and 21 points, respectively. These patterns of variation also generally occurred in employment comparisons of the rehabilitated with not-accepted cases with respect to two of the family characteristics: marital status and family size. Small mean earnings ratios were found among women for the married and those reporting larger numbers of dependents, as among men.

These results suggest that sex roles in the family situation affect the long-term success of rehabilitation. Although illness and disability permit exemption from activity, sex-role norms still restrain withdrawal from prescribed activity: work for men, household obligations for women.[13]

Women with functional physical limitations withdraw more readily from work than do men and withdraw less readily from household activities. The respective sex-role responsibilities are maximized in the marital relationship. Thus, although a condition may result in less exemption from work for men than women, it permits even less withdrawal from work by married men with dependents. Moreover, disabled married women, confronted with a choice of employment or household responsibility, more likely choose the latter and, as a result, withdraw from employment more readily than do single women. Vocational rehabilitation programs, by emphasizing the goal of paid employment, give little sanction to clients' claims to incapacity for work.[14] These findings, therefore, point to the conclusion that work rehabilitation efforts among married men with dependents are facilitated by family-role norms but that such efforts have not overcome the effect of these norms for married women.

[13] Joseph Greenblum, "Propositions on Social Disability," **International Journal of Health Services,** forthcoming issue, 1979; reprinted in **Sociomedical Health Indicators,** Jack Elinson (editor), Baywood Publishing Company, 1979 (in press).

[14] Gary L. Albrecht, "Social Policy and the Management of Human Resources," in **The Sociology of Physical Disability and Rehabilitation,** Gary L. Albrecht (editor), University of Pittsburgh Press, 1976, pages 263-266.

Family Income

Does vocational rehabilitation affect the employment and earnings of clients according to their family's financial status? In particular, is the impact greater for those with the greatest financial need? The measures of family financial status available are monthly income and poverty level at the

Table 10.—Family characteristics and sex: Number of persons with cases closed by State vocational rehabilitation agencies in fiscal year 1971 and percent employed in 1972 and mean earnings, by type of closure

Family characteristics and sex	Number of cases			Percent employed					Mean earnings of employed				
							Rehabilitated minus—					Ratio of rehabilitated to—	
	Rehabilitated	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted
Marital status:[1]													
All cases:[2]													
Married	82.9	22.5	68.4	60.8	41.0	50.6	19.8	10.2	$4,140	$3,411	$3,618	1.21	1.14
Widowed	10.9	2.8	7.6	41.6	25.9	30.7	15.7	10.9	2,806	2,320	2,374	1.21	1.18
Divorced	20.7	9.9	18.9	63.9	44.0	49.4	19.9	14.5	3,268	2,409	2,559	1.36	1.28
Separated	15.8	6.7	15.8	62.3	43.0	50.0	19.3	12.3	3,070	2,375	2,512	1.29	1.22
Never married	85.8	31.0	78.6	73.6	50.6	62.9	23.0	10.7	3,515	2,333	2,591	1.51	1.36
Men:													
Married	50.1	17.2	47.8	70.8	43.3	55.2	27.5	15.6	4,775	3,676	4,005	1.30	1.19
Widowed	2.4	1.1	2.3	42.7	30.8	30.7	11.9	12.0	3,772	2,478	2,784	1.52	1.35
Divorced	8.3	5.9	9.4	68.2	48.2	50.7	20.0	17.5	3,650	2,533	2,805	1.44	1.30
Separated	5.5	3.5	6.9	69.5	47.4	53.8	22.1	15.7	3,686	2,825	2,991	1.30	1.23
Never married	51.3	20.2	50.0	80.7	56.2	68.4	24.5	12.3	3,816	2,504	2,823	1.52	1.35
Women:													
Married	31.4	4.9	19.5	46.1	33.7	40.1	12.4	6.0	2,584	2,219	2,317	1.16	1.12
Widowed	8.3	1.7	5.1	41.9	23.5	31.2	18.4	10.7	2,527	2,195	2,195	1.15	1.15
Divorced	12.1	3.8	9.3	62.0	38.8	48.8	23.2	13.2	2,975	2,169	2,301	1.37	1.29
Separated	10.0	3.1	8.6	59.1	39.1	47.8	20.0	11.3	2,675	1,761	2,087	1.52	1.28
Never married	30.6	9.5	25.6	63.6	40.5	54.1	23.1	9.5	2,833	1,821	2,011	1.56	1.41
Family size:[1 3]													
All cases:[2]													
1	41.9	21.9	46.5	61.4	43.3	48.5	18.1	12.9	3,193	2,274	2,586	1.40	1.23
2–3	72.6	20.8	63.9	61.8	42.5	52.1	19.3	9.7	3,692	2,806	3,030	1.32	1.22
4–5	54.1	14.1	43.8	69.9	49.8	61.4	20.1	8.5	3,931	2,860	3,103	1.37	1.27
6 or more	31.3	8.1	25.4	69.7	50.8	61.6	18.9	8.1	3,692	2,781	2,892	1.33	1.28
Men:													
1	23.5	14.9	30.0	68.0	48.5	53.2	19.5	14.8	3,481	2,362	2,714	1.47	1.28
2–3	38.0	12.9	36.9	71.0	46.3	57.4	24.7	13.6	4,273	3,164	3,486	1.35	1.23
4–5	30.0	9.2	27.0	79.7	53.7	66.8	26.0	12.9	4,553	3,226	3,559	1.41	1.28
6 or more	17.4	5.5	16.1	80.1	54.9	66.9	25.2	13.2	4,273	3,094	3,277	1.38	1.30
Women:													
1	17.3	6.4	15.2	54.2	32.9	40.6	21.3	13.6	2,704	1,976	2,242	1.37	1.21
2–3	32.8	7.3	25.3	52.1	36.4	45.0	15.7	7.1	2,765	1,998	2,180	1.38	1.27
4–5	22.8	4.5	15.6	58.1	43.2	52.9	14.9	5.2	2,810	1,940	2,134	1.45	1.32
6 or more	13.1	2.4	8.6	57.4	42.8	53.0	14.6	4.4	2,600	1,861	1,984	1.40	1.31
Number of dependents:[1 4]													
All cases:[2]													
None	127.7	43.4	113.3	64.4	45.8	55.0	18.6	9.4	3,339	2,336	2,573	1.43	1.30
1	29.3	9.9	25.8	62.3	41.1	50.5	21.2	11.8	3,736	2,790	3,125	1.34	1.20
2	18.4	6.0	16.5	67.6	45.8	56.7	21.8	10.9	4,117	3,190	3,408	1.29	1.21
3	14.9	4.7	12.4	70.3	45.4	58.9	24.9	11.4	4,416	3,331	3,672	1.33	1.20
4	9.9	3.2	8.4	70.1	47.8	55.9	22.3	14.2	4,402	3,381	3,710	1.30	1.19
5	6.5	2.2	5.6	70.0	46.3	55.0	23.7	15.0	4,381	3,511	3,598	1.25	1.22
6 or more	8.5	2.7	7.3	67.1	43.1	53.1	24.0	14.0	4,198	3,300	3,403	1.27	1.23
Men:													
None	60.6	26.3	63.4	77.0	52.8	62.7	24.2	14.3	3,789	2,494	2,833	1.52	1.34
1	17.6	6.7	16.5	66.0	42.5	52.1	23.5	13.9	4,220	3,165	3,553	1.33	1.19
2	11.4	4.1	10.9	73.0	47.4	59.4	25.6	13.6	4,696	3,596	3,915	1.31	1.20
3	10.0	3.6	9.0	75.6	46.5	61.4	29.1	14.2	4,954	3,634	4,103	1.36	1.21
4	6.8	2.5	6.3	74.8	47.6	58.0	27.2	16.8	4,963	3,722	4,109	1.33	1.21
5	4.6	1.8	4.3	74.5	46.5	57.0	28.0	17.5	4,872	3,765	3,944	1.29	1.24
6 or more	6.1	2.3	5.8	71.4	44.2	54.2	27.2	17.2	4,635	3,474	3,632	1.33	1.28
Women:													
None	62.7	15.6	46.3	53.1	35.4	45.4	17.7	7.7	2,675	1,930	2,076	1.39	1.29
1	11.1	3.0	8.8	57.7	38.9	48.1	18.8	9.6	2,860	1,857	2,234	1.54	1.28
2	6.7	1.7	5.2	60.0	43.3	52.4	16.7	7.6	2,914	2,100	2,195	1.39	1.33
3	4.7	1.0	3.3	60.5	42.5	53.1	18.0	7.4	2,982	2,216	2,319	1.35	1.29
4	3.0	.6	2.0	60.5	48.9	51.3	11.6	9.2	2,824	2,043	2,339	1.38	1.21
5	1.8	.4	1.2	59.8	46.9	49.4	12.9	10.4	2,807	2,261	2,197	1.24	1.28
6 or more	2.3	.4	1.4	56.9	39.2	49.9	17.7	7.0	2,697	2,279	2,356	1.18	1.14

[1] At time of referral.
[2] Includes cases with sex unreported.
[3] Living in household.
[4] Dependents of the client.

Table 11.—Family income and sex: Number of persons with cases closed by State vocational rehabilitation agencies in fiscal year 1971 and percent employed in 1972 and mean earnings, by type of closure

Family income and sex	Number of cases (in thousands)			Percent employed					Mean earnings of employed				
							Rehabilitated minus—					Ratio of rehabilitated to—	
	Rehabilitated	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted	Rehabilitated	Not rehabilitated	Not accepted	Not rehabilitated	Not accepted
Monthly family income:[1]													
All cases:[2]													
0–$149	66.0	29.1	58.3	59.3	43.0	47.6	16.3	11.7	$3,088	$2,301	$2,495	1.34	1.24
150–299	49.4	13.3	35.0	62.7	42.7	52.6	20.0	10.1	3,407	2,705	2,816	1.26	1.21
300–449	37.2	8.5	23.2	68.7	46.8	59.5	21.9	9.2	4,023	3,006	3,250	1.34	1.24
450–599	17.3	3.6	10.7	72.0	49.4	63.5	22.6	8.5	4,322	3,225	3,440	1.34	1.26
600 or more	19.4	4.6	14.6	74.7	55.6	68.7	19.1	6.0	4,483	3,331	3,436	1.35	1.30
Men:													
0–$149	35.9	19.5	35.7	68.6	47.9	52.7	20.7	15.9	3,495	2,449	2,761	1.43	1.27
150–299	24.2	8.5	20.5	71.1	45.0	56.3	26.1	14.8	4,001	3,069	3,211	1.30	1.25
300–449	20.3	5.6	14.2	78.0	50.2	64.5	27.8	13.5	4,629	3,326	3,684	1.39	1.26
450–599	9.9	2.3	6.6	81.0	55.8	69.1	25.2	11.9	4,937	3,591	3,914	1.37	1.26
600 or more	11.5	3.0	9.1	83.0	60.9	74.5	22.1	8.5	5,041	3,709	3,896	1.36	1.29
Women:													
0–$149	28.4	8.8	21.2	49.3	34.0	40.2	15.3	9.1	2,369	1,846	1,906	1.28	1.24
150–299	24.3	4.6	13.8	55.1	39.1	48.1	16.0	7.0	2,638	1,937	2,128	1.36	1.24
300–449	16.0	2.7	8.5	58.0	40.4	51.9	17.6	6.1	2,987	2,162	2,358	1.38	1.27
450–599	6.9	1.2	3.8	59.9	37.8	54.8	22.1	5.1	3,134	2,177	2,415	1.44	1.30
600 or more	7.0	1.3	4.9	62.2	45.9	58.6	16.3	3.6	3,303	2,238	2,428	1.48	1.36
Family poverty line:[1]													
All cases:[2]													
Above	76.4	17.8	51.8	69.1	47.4	60.4	21.7	8.7	4,149	3,117	3,354	1.33	1.24
Below	102.7	38.2	81.5	61.3	43.7	50.3	17.6	11.0	3,249	2,414	2,605	1.35	1.25
Men:													
Above	42.2	11.4	31.6	77.4	51.8	65.4	25.6	12.0	4,747	3,487	3,800	1.36	1.25
Below	54.0	25.4	49.1	70.9	47.9	55.3	23.0	15.6	3,751	2,615	2,921	1.43	1.28
Women:													
Above	32.0	5.8	18.7	59.1	39.6	52.8	19.5	6.3	3,114	2,173	2,450	1.43	1.27
Below	46.3	11.9	30.6	51.4	36.2	43.3	15.2	8.1	2,439	1,856	1,943	1.31	1.26

[1] At time of referral.

[2] Includes cases with sex unreported.

time of referral to the vocational rehabilitation agency.[15] Monthly family-income data reflect both public and private sources and are grouped in intervals ranging from $0–$149 to $600 or more. The latter figure provided only a modest income even around 1970, when most of the clients were referred to an agency.

With some minor exceptions, the impact of rehabilitation on employment and earnings was generally found to be no greater for clients in the neediest families. In the major comparisons of rehabilitated and nonrehabilitated clients, effects on employment, as indicated by the employment percentage-point differences, were smaller for families at the lower end of the income scale and below the poverty line (table 11). This pattern was observed for both men and women. The differences widened as family income increased but were narrowed for those at the highest end of the scale. The narrowing occurred even though the employment rate of rehabilitants consistently rose with income. In the comparisons of men and women rehabilitants with those not accepted for services, however, employment percentage-point differences consistently declined as the income level rose and were smaller above the poverty line. This effect occurred because the rate of employment rose more markedly with family income for the not-accepted clients than it did for rehabilitants.

The effect on earnings of the employed was also generally smaller or no greater in low-income families or those in poverty than in other families. The effect appears to be reversed when rehabilitated and nonrehabilitated men are compared. This reversal is ambiguous, however, because the ratios did not consistently decrease with higher income and were almost as great in the higher-income families.

[15] No information is available on financial status at the time of closure. The family poverty-level measure uses data on both monthly family income and family size and is based on one developed by the Social Security Administration to establish annual national poverty thresholds for each family size. See **Social Security Bulletin, Annual Statistical Supplement, 1972,** table 7, page 34. The family-income categories for various family sizes of the disabled population were matched as closely as possible to Social Security Administration averages calculated for the years in which most persons in the study group were referred to a vocational rehabilitation agency.

Summary and Conclusions

Several major findings emerge from the analysis of the importance of sociodemographic factors in the short-term impact of rehabilitation among disabled persons whose cases were closed by vocational rehabilitation agencies in fiscal year 1971. Based largely on an impact measure that compared the employment rates in 1972 of rehabilitated

and nonrehabilitated clients, these findings often diverge from the results obtained from an examination of rehabilitants alone. Virtually no difference in impact appeared to exist between men and women, but the effect was almost uniformly greater among middle-aged than younger persons, regardless of sex, race, education, and type of disabling condition.

Rehabilitation effects also varied for different minority ethnic groups. They were just as great among blacks as white, even of the same age and sex. Among men and women of Hispanic origin, particularly those who were middle-aged and older, they were smaller. The role of education in rehabilitation impact was largely differentiated by sex. Among women, rehabilitation services resulted in a greater impact for those with more education. Among men, the impact was generally at least as great among the educationally disadvantaged. This sex-linked pattern was generally found among persons of similar age in either racial group.

These results vary from conclusions based on previous studies of the disabled. Because these studies found that return to work occurred less often among groups frequently disadvantaged in the labor market—women, older persons, ethnic minorities, and those at low educational and other socioeconomic levels—it appeared that the members of these groups were less often rehabilitated. The conclusion often drawn is that vocational rehabilitation is less successful for those in such groups.[16] The data obtained from the study population examined here generally agree with the findings of the previous studies. Regardless of rehabilitation status at closure—that is, with the type of closure controlled—employment rates in 1972 were indeed smaller among women, older persons, the less educated, blacks (for men only), and those of Hispanic origin (for younger persons only). Previous studies, however, generally lacked information on rehabilitation status or focused only on persons who had received rehabilitation services. Because they did not contrast those who had completed a rehabilitation program with those who had not, such studies were unable to examine adequately vocational rehabilitation effects among disadvantaged and other populations.

This analysis has identified specific types of disabled persons to whom rehabilitation services provide greater aid and who would otherwise be especially disadvantaged in obtaining and maintaining employment. These persons are middle-aged men and women generally; blacks in contrast to whites, but particularly black women of all ages and teenaged black males; men and women under age 35 of Hispanic origin, compared with others of similar age; educationally disadvantaged female black adolescents and men of both races and all ages; and—an exception to the general finding on age variation—teenaged blacks without any high-school education. For the members of these groups, vocational rehabilitation seems to be a relatively successful vehicle for implanting the skills, providing the placement services, and inculcating the work values and motivation necessary for job access and work participation.

The analysis also reveals, however, that rehabilitation services have failed to overcome the disadvantageous situation of middle-aged and older persons of Hispanic origin, especially women, and, except for black adolescents, have been relatively ineffective in aiding black or white women with little formal education.

Analysis of the data on family situation suggests that the family-role obligation rather than economic need is a prime factor in the effect of rehabilitation on long-term employment. Impact was greater among men—but not among women—who were married and who had larger families to support. Rehabilitation goals may be facilitated among such men by greater social constraints on withdrawal from work because of disability but may be inhibited among women with these characteristics. The impact was smaller rather than larger among clients in families with incomes that were low or below the poverty line, perhaps reflecting the fact that persons in dire financial straits do not receive sufficient incentive for remaining at work following successful rehabilitation. A related reason may be that disabling conditions more readily recur or worsen among clients in such families[17] and thus curtail continued employment.

Technical Note

The Social Security Administration and the Rehabilitation Services Administration both have programs whose broad goals are to restore disabled persons to productive, remunerative work and to reduce economic dependence. To aid in evaluating these programs, a linkage of their record data was established that provides a long-term followup system on all disabled persons whose cases were closed by State vocational rehabilitation agencies in fiscal year 1971. The major objectives of the data link are to investigate the impact of rehabilitation services on (1) subsequent employment and earnings and (2) subsequent receipt of social security disability insurance benefits.

Definitions

State vocational rehabilitation agencies provide services to persons referred from various sources, including the Social Security Administration who have been evaluated by counselors as having both a substantial employment handicap and "rehabilitation potential"—that is, a likelihood that rehabilitation services will render them fit for gainful employment.

Individuals whose cases are closed as "rehabilitated" have successfully completed a plan formulated with a counselor

[16]See, for example, Constantina Safilios-Rothschild, **The Sociology and Social Psychology of Disability and Rehabilitation,** Random House, 1970, pages 230–234.

[17]See **Poverty and Health: A Sociological Analysis,** John Kosa and Irving K. Zola (editors), revised edition, Harvard University Press, 1975.

for guidance, restoration, and training services and have been employed for at least 30 days.[18]

Disabled beneficiaries under the social security program have severe long-term employment handicaps. "Disability" is defined under the Social Security Act as inability to engage in substantial gainful activity and is based on medical evidence of a physical or mental impairment that can be expected to result in death or to last for at least 12 months. "Recovery" is defined as the termination of disability benefits because of restored work capacity as demonstrated by medical evidence or by a 9-month period of employment at a substantial level of earnings.

Sources of Data Link

Three sets of records are used for the data link. Two sets are from the Social Security Administration, and one is from the Rehabilitation Services Administration.

Case Service Report (RSA-300). This statistical record of clients identified under the reporting system of the Rehabilitation Services Administration is completed in State vocational rehabilitation agencies for each referred person whose case is closed during the year. It includes information on the referral and its outcome, the services provided, and the personal background and disabling condition of the client.

Earnings Summary Record (ESR). This record provides a continuous history of wages and self-employment income reported to the Social Security Administration. Earnings of more than 9 out of 10 employed persons in the United States are covered. Excluded are workers covered by the Federal civil service system, some State and local government workers, some employees of nonprofit organizations, and persons in some occupations such as household or farm work who do not meet certain conditions defined in the Social Security Act. Earnings beyond the maximum taxable limit are not reported.

Master Beneficiary Record (MBR). This benefit-payment record of the Social Security Administration contains information for each beneficiary on monthly cash benefits under the old-age, survivors, and disability insurance program. Three categories of disability benefits are distinguished: (1) Disabled insured workers under age 65, (2) adults disabled since childhood who are dependent children of insured workers, and (3) disabled widows or widowers, aged 50 or over, of insured workers.

Study Design

Two types of information corresponding to the study objectives are followed up in the longitudinal design developed to utilize the linked data. These types of data are analyzed separately in two series of reports.

The study design for employment and earnings data focuses on all persons with cases closed by the vocational rehabilitation agencies. Their employment and earnings are followed to calendar year 1972 (the year following closure) and to subsequent years.

The followup plan for benefit-status information focuses on persons who had been disabled-worker beneficiaries. Primary interest centers on the proportion of those whose benefits were terminated for recovery in the years following closure. Data on employment and earnings after closure are also tabulated by benefit status.

Employment, earnings, and benefit-status data are cross-tabulated by closure status, and comparisons between rehabilitated clients and each of the other two types of closed cases are made. These comparisons constitute the basic element of the analytic plan. Comparisons involving additional variables in these cross-tabulations may be restricted to "rehabilitated" and "not rehabilitated" cases because information for some variables on "not accepted" cases is not available or not required to be reported.

Comparisons with data for persons who had not been accepted for services must take into account the fact that this category includes probably the widest variations in severity of disability: persons whose handicaps are too severe for them to benefit from services, at one extreme, to those who exhibit no substantial vocational handicaps, at the other. Uncooperative clients and persons uninterested in agency services are also found frequently in this closure category. Thus, clients accepted for services, whether rehabilitated or not, exhibit an optimum degree of severity and a relatively high degree of motivation to use services.

In computing various measures of earnings, such as the mean, it was decided not to estimate beyond the maximum taxable limit under the social security program. The proportions of persons with earnings beyond the limit, as shown by the earnings distributions for the respective years, proved to be very small—3 percent in both the prereferral year and in 1972 and 4 percent in 1971. By closure type, the figures varied by only one or two percentage points. Furthermore, the assumption underlying such estimations—continued work and earnings—is questionable in a population that became disabled at some time before referral for rehabilitation services and thereafter was continually subject to a relatively high risk of recidivism.

Study Population

The study population is made up of the total number of closures with available case records matchable to social security records. The degree to which the total universe of closures was attained depends largely on the number of case records received by the Rehabilitation Services Administration from State agencies and the completeness of reporting the social security number in these records.

[18] This period has since been lengthened to 60 days. Accepted cases are closed as "not rehabilitated" if the individual is not able to meet one or more of these criteria. Individuals whose cases are closed as "not accepted" have been found ineligible for or have refused services, or have dropped out before eligibility was determined.

Table I.— Percentage distribution of persons with cases closed by State vocational rehabilitation agencies in fiscal year 1971, by type of closure and record status

Type of closure	Total reported [1]	With case records			
		Total [2]	Matched [3]	Not matched	
				No social security number	Invalid social security number
Total number	824,699	756,716	636,900	107,434	12,382
Total percent	100.0	100.0	100.0	100.0	100.0
Rehabilitated	35.3	29.8	34.0	.....	69.3
Not rehabilitated	11.7	9.8	11.5	.....	9.2
Not accepted	53.0	45.5	50.6	18.5	20.4
Unknown	.....	14.9	3.9	81.5	1.1

[1] Cases reported by State vocational rehabilitation agencies to the Rehabilitation Services Administration. Data derived from **Caseload Statistics, State Vocational Rehabilitation Agencies, 1972,** table 7, Rehabilitation Services Administration.

[2] RSA-300 case records submitted to RSA by State vocational rehabilitation agencies.

[3] RSA-300 case records matched to the Earnings Summary Record.

In fiscal year 1971, State agencies reported 824,699 closures. Of these, 756,716 case records, or 92 percent of the total reported, were received by the Rehabilitation Services Administration. Some of the records received (15 percent of the total cases) lacked a valid social security number and therefore were not matchable. About 77 percent of all closures were linked, making 636,900 cases available for analysis. Because the basic analytic plan excluded cases with unknown closure status, which constitute about 4 percent of the total number matched, the study population was reduced to 612,228.

The success of the linking effort is estimated more precisely by relating the number of cases matched to the number of records received. Of the total records, 84 percent were matched, 14 percent lacked a social security number, and 2 percent had invalid numbers.

Table I indicates that distribution by type of closure among matched cases is essentially similar to that among total reported closures. It is also similar to the distribution for all closures with case records when the cases with unknown closure status are apportioned among the known closure types. The relatively large proportion of persons with unknown type of closure (15 percent) among all closures with case records results from the fact that closure status could not be ascertained for more than 4 in 5 of the unmatched records without a social security number. Type of closure was unknown for 4 percent of the matched records. All of the remaining unmatched records without a number are for persons not accepted for services—the major difference in closure type when these records are compared with the matched records.

Table II.—Percentage distribution of persons with cases closed by State vocational rehabilitation agencies in fiscal year 1971, by selected characteristics and record status

Characteristic	Case record	
	Matched [1]	Not matched, no social security number
Total number	636,900	107,434
Total percent	100.0	100.0
Sex:		
Men	60.9	54.1
Women	36.6	45.7
Unknown	2.5	.2
Age at referral:		
Under 20	18.6	38.9
20–29	24.9	20.3
30–39	16.6	12.2
40–49	18.8	12.6
50–59	16.2	10.7
60–64	3.3	2.7
65 and over	1.3	2.0
Unknown	.2	.6
Source of referral:		
Educational institutions	10.7	21.7
Mental hospitals	6.8	8.8
Other hospitals	5.6	6.1
Health organizations, agencies	4.6	5.7
Public welfare agencies	10.7	13.9
Social Security Administration:		
Disability Determination Unit	15.5	3.6
District Office	.8	.4
Workmen's compensation	1.3	1.5
State Employment Service	5.0	2.4
Correctional institutions	5.4	8.6
Private organizations, agencies	2.0	1.4
Self-referred	10.4	6.6
Physician	6.6	6.0
Other individual	9.2	8.0
Other	4.2	3.5
Unknown	1.2	1.6

[1] Matched to social security earnings records.

Table II, which presents selected characteristics of matched cases and unmatched cases that lacked social security numbers, indicates that a greater proportion of persons in the latter category were women and under age 20 at the time of referral to vocational rehabilitation agencies. Such persons were also more frequently referred from educational institutions, public welfare agencies, and correctional institutions, and much less often from Social Security Administration offices.