Minnesota Studies in Vocational Rehabilitation:

III. A Follow-up Study of Placement Success

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with the assistance of

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A Follow-up Study of Placement Success¹

Summary

A follow-up survey of Division of Vocational Rehabilitation (DVR) rehabilitants and Employment Service (ES) applicants was made to determine their present level of vocational adjustment. Data obtained by interviewers included present and previous employment status, rehabilitation services received, and other personal history information. Interview questionnaires were completed for 91 individuals.

Of these 91 individuals, 60 were employed full-time, 7 were employed part-time, 19 were unemployed, and 5 were no longer in the labor force. Unemployment was considerably higher (22%) than in the labor force as a whole (8.9%) for the same time period.

The 60 individuals who were employed full-time worked an average of 42.4 hours per week and earned an average of \$75.00 per week. More than two-thirds of this group held jobs which were at the same level or higher than their usual jobs.

About one fifth of the handicapped persons interviewed did not like their jobs. The most frequently mentioned reason for either liking or disliking a job was the type of work involved. The findings suggest the need for giving additional attention to such matters as counselee participation and job satisfaction in placement of the physically handicapped.

The major difficulties of physically handicapped individuals in finding and holding jobs, as perceived by interviewees, were employer resistance and the physical limitations imposed by the disability, in that order. The greatest number of suggestions concerned the need for improvements in placement procedures. It was felt that intelligent modification of placement procedures would effect a great change in reported employer resistance.

Ways in which employment information may be used as indices of placement success were also suggested.

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Introduction

Two major projects are currently being undertaken by the Industrial Relations Center in its program of vocational rehabilitation research.² A state-wide survey is being conducted to determine the size, characteristics, employment, and success of placement of the physically handicapped population. An experimental study on the effectiveness of job placement procedures used with physically handicapped persons also is in progress.

A series of studies 3 was conducted in preparation for these projects. One important research question concerned the evaluation of placement success for physically handicapped individuals. The success or failure of placement may be evaluated by using a number of measures or indicators such as present employment status, job satisfaction, and comparison of present employment with previous employment. Data pertaining to placement success constitute the major portion of the information being sought in the "follow-up" phase of the state-wide survey. These same kinds of information will be used as criteria of the effectiveness of placement procedures in the experimental study. It was, therefore, important to determine how best to obtain information on measures of placement success.

This report presents "follow-up" data on a group of 91 physically handicapped individuals who had received services from the State Division of Vocational Rehabilitation (DVR) and the State Employment Service (ES). The personal interview method was used in this survey to obtain information on placement success with these individuals. In addition to its contribution to methodology, the information obtained in the survey provides data on the present status of a group of DVR rehabilitants and ES applicants.

The Survey Questionnaire

The interview questionnaire used consisted of two parts. The first part, the *identification* section, was designed to determine if any member of a household was physically handicapped. After determination of the number of persons between the ages of 14 and 64 living in the household, the interviewer asked, "Have any of these persons ever had an illness, physical condition, or emotional problem of any sort which limits the *kind* of work they can do, or the *amount* of work they can do?" No further explanations or additional questions were used other than a repetition of this question. If

³ These projects are described in detail in Minnesota Studies in Vocational Rehabilitation: I. Research Plan and Bibliography, IRC Bulletin 21, June 1958.

³ These studies are being reported in the current series, Minnesota Studies in Vocational Rehabilitation.

^{*}The development of the questionnaire will be reported in a later bulletin of the Minnesota Studies in Vocational Rehabilitation series.

the answer was "Yes", the interviewer proceeded to the second part, the follow-up section. Otherwise, the interview was terminated.

In the follow-up interview, the interviewee was asked for information such as the following:

- 1. nature of the disability and when it occurred;
- rehabilitation services received:
- 3. iob description, duration, wages, and placement data on jobs held before and after disablement, present job, and usual employment;
- 4. age, sex, education, military service, marital status, sources of income or support; and
- 5. interviewee's opinions on: (a) what makes it difficult for physically handicapped persons to find and hold jobs; (b) how public agencies can improve placement service for handicapped persons.

A copy of the interview questionnaire is included in the Appendix.

Administration of the Survey

Names and addresses of 200 physically handicapped persons were randomly selected from a larger pool of cases on file at IRC.5 Of these, 120 were from Minneapolis and 80 from St. Paul; 100 were rehabilitants of the DVR and 100 were applicants of the ES.6

The interviews were conducted by five female professional interviewers under the supervision of a member of the research staff. These interviewers had experience on other surveys conducted by various public opinion survey agencies. Training for this study consisted of about two hours on survey procedures and utilization of the survey questionnaire, specifically on the kind and form of information desired. Another hour was spent for questions and assignments.

Interviewers were instructed to adhere strictly to the interview questionnaire, and to proceed with the follow-up interview only when the interviewee answered the identification question affirmatively. They also were instructed to obtain follow-up information on all members of the household between 14 and 64 years who were identified as physically handicapped, and to attempt to obtain this information from the handicapped persons themselves.

*For convenience, the DVR rehabilitants will be referred to as the "DVR group" and the ES applicants as the "ES group."

⁶ This "larger pool of cases" included Closed Case Report data on 1,637 former DVR rehabilitants representing all cases closed in the Minneapolis-St. Paul area from January 1, 1953 to December 30, 1957. It also included application card data on 607 cases randomly drawn from the "active" and "inactive" files of the State Employment Service. The "active" files consist of job applications filed at the ES in the preceding 2-month period while the "inactive" files are those applications filed in the previous 2 years (but not including the 2-month "active" period).

Each interviewer was assigned 40 specific addresses. Names were not given, except for multiple dwellings. In such cases, names of the heads of households were used to designate the specific households assigned.

The interviewing was done between May 16 and June 2, 1958. Each interviewer worked an average of 42.3 hours (including training time, travel time, and actual interviewing time), and traveled an average of 241 miles. They submitted daily reports of hours worked, miles driven, and interviews completed, so that it was possible at all times to ascertain how the survey was progressing.

Interviews were completed at 184 of the 200 households assigned; no contact was made at 12 addresses; and 4 households refused to be interviewed.

Physically handicapped individuals were no longer staying in 47 of the 184 households which were interviewed. Handicapped individuals were identified in 91 households and were not identified in 46 households. Of the 91 interviews, 39 were given by the handicapped persons themselves and the rest by adult relatives of the handicapped persons. The composition of this group of 91 physically handicapped persons did not differ from the original group of 200 in age, sex, education, or disability.

Results

Characteristics of the Sample

The median age of the group was 34.5 years. There were 48 persons in the DVR group, 34 males and 14 females, and their median age was 31 years. There were 43 persons in the ES group, 31 males and 12 females, with a median age of 40.6 years. The detailed distribution by age and sex for the two groups is shown in Table 1. The DVR group was younger than

Table 1
Age and sex of follow-up sample

A	D,	VR Gro	up	E	S Grou	p	Total Group		
Age in years	Male Female Total			Male Female Total			Male Female Total		
Under 25	8	7	15	3	1	4	11	8	19
25-34	13	2	15	12	1	13	25	3	28
35-44	6	3	9	7	1	8	13	4	17
45-54	6	1	7	3	6	9	9	7	16
55 and over	1	1	2	6	3	9	7	4	11
Total	34	14	48	31	12	43	65	26	91
Median age	31.9	25.0	31.0	35.7	50.0	40.6	33.6	40.0	34.5

the ES group. The DVR females were the youngest, and the ES females the oldest, of the four sub-groups.

The total group had completed a median of 11.3 years of schooling at the time of the survey. This compares with a median of 11.1 years for the Minneapolis-St. Paul general population.⁷ The median educational level of the DVR group was 11.8 years. The median grade level of the ES group was 10.6. Table 2 shows the distribution for years of education completed.

Table 2
Years of education completed by follow-up sample

V		D۱	/R Gro	up		ES Gre	oup	To	otal Gro	up
Years of education		Male Female Total		Male Female Total			Male Female Tota			
Grade Sche	ool(0-6)	0	0	0	2	0	2	2	0	2
Junior Hig	gh (7–9)	7	2	9	11	5	16	18	7	25
High School	ol (10-12)	19	6	25	14	5	19	33	11	44
College	(13-16)	8 (5	13	3	2	5	11	7	18
Graduate	(17-up)	0	1	1	1	0	1	1	1	2
	Total	34	14	48	31	12	43	65	26	91
Median yea of educatio		11.6	12.5	11.8	10.5	10.6	10.6	11.1	11.6	11.3

Of the 91 persons, 56 were married, 28 were single, and 7 had been widowed, divorced, or separated. Other details on marital status are presented in Table 3.

Table 3
Marital status of follow-up sample

3.5 24 3 4 4 4	DVR Group			E	S Grou	ıp	Total Group		
Marital status	Male	Female	Total	Male	Female	Total	Male	Female	Total
Married	22	6	28	24	4	28	46	10	56
Single	11	7	18	7	3	10	18	10	28
Other (widowed, divorced, separated)	1	1	2	0	5	5	1	6	7
Total	34	14	48	31	12	43	65	26	91

A listing of disabilities for the whole group is shown in Table 4.

Only 73 individuals replied to the question on total yearly income from all sources. However, these individuals reported a median yearly income of \$3,500. This compares with a median income of \$2,245 for the Minneapolis-St. Paul population.*

Seventy individuals earned wages in the past year; 29 received some

⁷ Bureau of the Census, U. S. Department of Commerce. United States census of population: 1950. Vol. II, Part 23, Chapter C. Detailed characteristics Minnesota. p. 166.

⁸ Op. cit., p. 248.

Table 4
Disabilities of follow-up sample

Disability	DVR Group	ES Group	Total Group
Amputation or congenital absence of upper extremities	. 1	3	4
Amputation or congenital absence of lower extremities	. 4	3	7
Impairment of upper extremities	. 2	1	3
Impairment of one lower extremity	. 5	1	6
Impairment of both lower extremities	. 2	3	5
Paraplegia		0	3
Multiple impairment of extremities	. 2	0	2
Deformities or injuries to back or spine		8	13
Deaf or hard-of-hearing		3	8
Arthritis	. 1	2	3
Cardiac	. 4	1	5
Diahetes	. 2	3	5
Tuberculosis	. 3	2	5
Diseases of central nervous system	. 3	2	5
Psychosis or psychoneurosis	. 3	2	5
Epilepsy		0	1
Mental retardation		0	1
Blindness or defects of eye	. 0	1	1
Other (allergies, ulcers, hernias, etc.)		. 8	9
Total	. 48	43	91

Table 5
Yearly income of follow-up sample

	1	DVR Group			E	S Grou	ıp	Total Group		
	Mal	e Fer	nal	e Total	Male	Female	Total	Male	Female	Total
Number reporting income data	30		9	39	23	11	34	53	20	73
Median yearly income (all sources)	\$3,650	\$3,2	50	\$3,500	\$4,500	\$2,350	\$3,500	\$4,000	\$2,400	\$3,500

support from their families; and 17 persons, 15 of them ES applicants, received a veterans pension. Only 4 individuals reported that they received unemployment compensation within the past year, and only 6 reported having received public agency assistance. Other sources of income such as rent, savings, alimony, and social security benefits, were mentioned by 9 individuals. Table 6 shows the detailed distribution of sources of income.

The average number of dependents supported by the handicapped subjects, excluding themselves, was 1.9.9 Only two females had dependents

This compares roughly with a median family size of 2.7 for the Minneapolis-St. Paul area. United States Census of population: 1950. Vol. IV, Part 2, Chapter A. Special reports. General characteristics of families. p. 162.

Table 6
Present sources of income for follow-up sample

	D'	VR Gro	up	E	S Grou	р	To	otal Gro	oup
Sources of Income*	Male	Female	Total	Male	Female	Total	Male	Female	Total
Wage earnings	27	11	38	24	8	32	51	19	70
Family	9	8	17	8	4	12	17	12	29
Veterans pension	1	1	2	15	0	15	16	1	17
Unemployment compensation	0	1	1	3	0	3	3	1	4
Workmen's compensation	1	0	1	0	0	0	1	0	1
Private insurance pension	1	0	1	0	1	1	1	1	2
Public agency assistance	. 0	3	3	2	1	3	2	4	6
Private agency assistance	0	0	0	0	0	0	0	0	0
Other	1	i	2	3	4	7	4	5	9
Total	40	25	65	55	18	73	95	43	138

^{*} More than one source may be mentioned; totals refer to number of sources mentioned.

other than themselves. DVR males averaged 2.3 dependents other than self, and ES males averaged 2.9 dependents other than self.

Employment information relating to placement success

The questions concerning employment of the physically handicapped individuals were designed so that an evaluation of placement success in terms of employment could be made. Placement success is one important measure of how successful rehabilitation has been.

The first and most obvious measure of placement success is whether the individuals are employed or unemployed. These figures are shown in Table 7. There is no statistically significant difference (.05 level) in employment status (employed-unemployed) between the DVR and ES groups. However, the proportion of unemployed in the total group (22%) compares unfavorably with the 8.9% of the state's labor force who were unemployed in April, 1958.¹⁰

The distribution of number of years of formal education completed by employed and unemployed individuals is shown in Table 8. The data show that level of education is not related to employment status (defined as employment versus unemployment). The chi square obtained in a test of the hypothesis is not significant at the .05 level.

¹⁰ Minnesota Department of Employment Security. Employment trends, May, 1958.

Table 7
Present employment status of follow-up sample

Present employment	DVR Group			ES	GRO	JP	Т	Total Group			
status	Male	Female	Total	Male	Female	Total	Male	Female	Total		
Employed	29	9	38	22	7	29	51	16	67		
Unemployed	5	2	7	7	5	12	12	7	19		
Not in labor force	0	3	3	2	0	2	2	3	5		
Total	34	14	48	31	12	43	65	26	91		

Table 8
Education of employed and unemployed groups

Years of educa	tion	E	mploye	ed .	Un	emplo	yed	m . 1
completed		DVR	ES	Total	DVR	ES	Total	Total
Grade School	(0- 6)	0	1	1		1	1	2
Junior High	(7-9)	7	9	16	2	6	8	24
High School	(10-12)	20	15	35	3	4	7	42
College	(13-16)	10	3	13	2	1	3	16
Graduate	(17 +)	1	1	2	0	0	0	2
	Total	38	29	67	7	12	19	86*
Median years o	of							
education com		11.8	10.9	11.4	11.5	9.5	10.2	11.2

^{*}Does not include individuals who are not in the labor force.

Table 9 shows the distribution of the group's usual jobs as classified according to the seven major occupational categories given in the *Dictionary* of *Occupational Titles*. "Usual job" is defined as that job which the individual claims is his usual line of work. Differences in employment and unemployment would be expected between major occupational categories. The data show less unemployment in the professional and clerical occupations and more unemployment in the other occupational groups. A chisquare of 20.68, which is significant at the .01 level, bears out the hypothesis.

The types of assistance received from various agencies are shown in Table 10. No significant relationship was found between present employment status (employed-unemployed) and receiving or not receiving assistance.

Responses to the question on whether or not the handicapped person had done job planning with a counselor are summarized in Table 11. The chi square test showed no significant relationship between employment status and response to this item. It is interesting to note that *no* job planning was reported for over half of the total DVR group.

Table 9

Classification of usual job of employed and unemployed groups

•	D.O.T.	E	mploy	ed	Une	Total		
Classification	Code	DVR	ES	Total	DVR	ES	Total	
Professional and Manage	erial 0-	15	1	16	1	0	1	17
Clerical and Sales	1	14	11	25	0	2	2	27
Service Occupations	2	2	4	6	1	3	4	10
Agricultural and Kindred	3-	0	0	0	0	1	1	1
Skilled Occupations Semi-Skilled	4- & 5-	1	5	6	4	. 1	5	11
Occupations	6-&7-	4	5	9	0	4	4	13
Unskilled Occupations	8- & 9-	2	3	5	1	1	2	7
•	Total	38	29	67	7	12	19	86°

^{*} Does not include individuals who are not in the labor force.

Table 10

Types of agency assistance received by employed and unemployed groups

Types of agency assistance	Employed			Une	emplo		Chi	
received*	DVR	ES	Total	DVR	ES	Total	Total	Square ^b
Medical, surgical, hospital	11	15	26	3	5	8	34	.07
Counseling and guidance	10	9	19	2	2	4	23	.40
Training for a job	16	6	22	5	3	8	30	.56
Assistance in finding a job	14	8	22	2	3	5	27	.29
Other	12	9	21	2	2	4	25	.76

^{*} More than one type of assistance may be mentioned; totals refer to number of times mentioned.

Table 11

Job planning with a counselor among employed and unemployed in DVR and ES groups

	E	ed	Un	Total			
Job planning with a counselor	DVR	ES	Total	DVR	ES	Total	
Job planning	15	12	27	3	4	7	34
No job planning	23	16	39	4	8	12	51
Don't know	0	1	1	0	0	0	1
Total	38	29	67	7	12	19	86

^bObtained on employed/unemployed by received/did not receive assistance.

Another measure of placement success is full-time versus part-time employment. Of the 67 persons found to be employed at the time of the survey, 7 were working only part-time. Their employment consisted of such jobs as caretaker, day work, simonizing cars, home craft work, director of arts and crafts for a church, and practical nursing. The number of hours worked per week ranged from 7 to 24.

Those employed full time averaged 42.4 hours per week, with a range of 35 to 75 hours (for a self-employed caterer). This compares with an average of 38.9 hours employment per week for all non-agricultural workers in the state.11

Group comparisons were not attempted due to the small number of the part-time employed.

An additional measure of placement success consists of differences in level of function among: (a) present job, (b) usual job (usual line of work), (c) first job held after disablement, and (d) last job held before disablement. Following Roe's classification system,12 level of function for any given job is determined by the degree of responsibility, capacity, and skill involved in the job in comparison with other jobs in the same occupational group. Occupations are grouped on the basis of primary activity.

The comparisons most pertinent to placement success are: (a) present job versus usual job, (b) present job versus first job held after disablement, (c) present job versus last job held before disablement, (d) usual job versus last job held before disablement, and (e) first job held after disablement versus last job held before disablement. Comparing present job with usual job reflects present vocational adjustment, and therefore placement success to some extent. The individual's ability to maintain a certain level of work might be inferred from a comparison of present job with first job held after disablement. Comparing present job, usual job, and first job held after disablement with last job held before disablement might indicate the extent to which the rehabilitation process restores the individual to his preinjury status.

Four judges, using identical information,13 independently determined whether the first job was in the "same level" (of function), a "higher level", or a "lower level" than the second job for each of the five comparisons outlined above. The combined results of this procedure are shown in Tables 12 and 13. Each judge undertook 196 comparisons. Agreement among judges (i.e., proportion of identical evaluations) was 84%. It should be noted that

Noe, Anne. The psychology of occupations. New York: Wiley, 1956.
 Information consisted of job title and D.O.T. 3-digit code number. Judges referred to D.O.T. job descriptions on occasion as an aid in making the comparisons.

all five comparisons were not possible for all employed individuals. For example, comparison of present job, usual job, and first job after disablement with last job held before disablement would not be possible for an individual who never worked before disablement. Tables 12 and 13 include only those cases in which information was available to allow a comparison to be made.

Table 12

Comparison of present job, usual job, first job after disablement, and last job before disablement for DVR employed group*

	Present job is			Usual job is			Job after disablement is		
	Same level	Higher level			Higher level	Lower level			Lower level
Usual job Job after	21	2	5						
disablement Job before	17	8	3						
disablement	6	9	2	7	9	1	8	7	2

^{*} Includes only those individuals on whom information is available.

Table 13

Comparison of present job, usual job, first job after disablement, and last job before disablement for ES employed group*

	Present job is			ι	Usual job is		Job after disablement is		
	Same level	Higher level	Lower level		Higher level	Lower	Same level	Higher level	Lower level
Usual job Job after	17	2	5						
disablement Job before	12	3	6						
disablement	6	6	3	9	5	1	8	5	1

^{*}Includes only those individuals on whom information is available.

Placement success, in terms of these comparisons, may be measured as the proportion of the group in the "same level" or "higher level" categories. For those groups of individuals on whom information was available, placement success ranged from 71% (present job versus first job held after disablement for ES individuals) to 89% (present job versus first job after disablement for DVR individuals). These figures might be interpreted to mean that, measured in these terms, there has been a high degree of placement success with this group of physically handicapped individuals.

However, these figures (71% to 89% success) do not take into account those individuals who have had previous employment experience and were

unemployed at the time of the survey. Table 14 shows the percentages of placement success ("same level" or "higher level") for the various job comparisons when both employed and unemployed are included in the reference group. For example: present job is in the "same level" or "higher" than usual job for 23 of 28 employed DVR individuals. This is 82% placement success. This figure, however, drops to 66% when 7 unemployed individuals are added to the DVR reference group.

Table 14
Placement success based on job comparisons

	D	VR Group	ES Group		
Job comparisons	N*	% success b	Nª	% success b	
Present vs. usual	35	66	35	54	
Present vs. after disablement	33	76	26	58	
Present vs. before disablement	23	65	23	52	
Usual vs. before disablement	23	70	23	61	
After vs. before disablement	22	68	19	68	

^{*}Includes employed and unemployed individuals on whom information is available.

Table 15 presents the data on job comparisons in a manner that reflects the degree of placement success in the individual case. Individuals whose present jobs are at the "same level" or "higher" than all three other jobs may be considered as the most successfully placed group; those whose present jobs are at the "same level" or "higher" than two of the three other jobs are the next most successfully placed group, etc. Individuals whose present jobs are at a "lower level" than all three other jobs, therefore, may be considered as the least successfully placed group, in fact, as having the highest degree of placement failure. By this criterion, there is evidence of placement success in 24 DVR and 18 ES handicapped persons, and placement failure in 4 DVR and 6 ES individuals. (It should be noted that comparison of present job with all three other jobs or even with two other jobs was not possible in all cases. This was due to the fact that some individuals were not in the labor force before disablement and others did not provide the information.)

As another measure of the placement success of DVR rehabilitants, present job was compared with job at closure as determined from DVR records. Of the 48 DVR counselees, 29 were employed on the same level as their job at closure; 6 were working at better jobs; 3 were working at jobs at a lower level, 7 were unemployed, and 3 were not in the labor force.

Per cent of group in "same level" or "higher level" categories.

Table 15

Comparison of present job with usual job, first job held after disablement, and last job held before disablement for employed individuals.*

	DVR Group (N=28)	(N=24) ES Group	(N=52) Total Group
Present job at same/higher level than:			
a. usual job, job after disablement, and job be-			
fore disablement	13	8	21
b. usual job and job after disablement	10	6	16
c. usual job and job before disablement	0	2	2
d. job before and after disablement	1	0	1
e. usual job	0	2	2
f. job after disablement	0	0	0
g. job before disablement	0	0	0
Present job at lower level than:			
a. usual job, job after disablement, and job			
before disablement	0	1	1
b. usual job and job after disablement	3	3	6
c. usual job and job before disablement	1	1	2
d. job before and after disablement	0	1	1
e. usual job	0	0	0
f. job after disablement	0	0	0
g. job before disablement	0	0	0

^{*}Includes only those individuals on whom information is available.

Another objective measure of placement success is the wage received by the worker. Of the 60 full-time workers surveyed, 57 were willing to answer the question on present weekly wages. The mean weekly wage reported was \$75.00. This compares with the mean weekly wage for the total Minnesota non-agricultural labor force of \$81.17 for April, 1958.¹⁴

As a further measure of placement success, the present weekly wage of the handicapped individual was compared with the highest weekly wage he had ever earned. Sixty-five persons had previous full-time employment and provided this information. Of the 35 in the DVR group, 11 were earning as much, 7 were earning more, and 17 were earning less than the highest wage they had ever received. Table 16 shows the distribution of present wages and highest wages ever earned for the DVR group.

For the 30 persons in the ES group, 11 were earning as much, 6 were earning more, and 13 were earning less than the highest wage they had ever received. Details are given in Table 17.

No statistically significant difference (.05 level) was found between DVR and ES groups in terms of the proportions whose present wages were the same, higher, and lower than highest wage ever received.

¹⁴ Computed from data in Employment trends, May, 1958.

Table 16

Comparison of present weekly wages with highest weekly wages ever earned:

DVR Group (N=35)*

Highest weekly				Pres	ent weel	kly wage	s	
wages ever earned	Unemployed	\$25- 44	\$45- 64	\$65- 84	\$85- 104	\$105- 124	\$125- 144	\$145- 164
\$25-44	1	1	2			.,		
\$45-64		2	1					
\$65-84	4		2	6	2	2		
\$85-104					3			
\$105-124				2	1			1
\$125-144	2			1	1	1		

^{*}Includes only those individuals on whom information is available.

Table 17

Comparison of present weekly wages with highest weekly wages ever carned:

ES Group (N=30)⁴

Highest weekly		Present weekly wages				
wages ever earned	Unemployed	\$45- 64	\$65- 84	\$85- 104	\$105- 124	
\$25-44	1	1	1			
\$45-64	3	2		1		
\$65-84	1	1	2	2	1	
\$85-104	i		3	4		
\$105-124					3	
\$125-144	2		1			

^{*}Includes only those individuals on whom information is available.

Job satisfaction

The assessment of placement success should take some account of the feelings of the worker himself. Unless the worker himself is satisfied with his job, placement can not be considered successful.

To explore these feelings, the question, "Do (did) you like your job?" was asked about the handicapped person's present job (if he was employed) or the last job he held (if he was unemployed). Then he was asked why he liked or disliked his job.

The replies given by persons other than the handicapped persons themselves are not considered here. Of the 39 handicapped individuals interviewed personally, 33 said they liked their jobs, 3 said they did not like their jobs, and 2 did not answer. Table 18 lists the reasons given for liking or disliking jobs.

Table 18
Reasons for liking or disliking jobs

		Reasons for liking	Reasons for disliking
1.	Type of work	13	3
2.	Physical demands	7	1
	"It's a job"	5	
4.	Job security and benefits	4	
5.	Wages	4	
6.	Company policy	3	
7.	Working conditions	2	
8.	Co-workers	2	
9.	Chance for advancement	1	
10.	Can use own ideas and authority	1	
11.	Hours	1	

It is interesting to contrast the reasons given by this group of handicapped individuals with reasons given by non-handicapped workers. Super 15 reports type of work as the most frequently mentioned reason, with economic reasons ranking second, and managerial policies third.

In the present study, five persons who said they liked their jobs gave essentially negative reasons for liking their jobs. For example: "When you're handicapped, you have to take anything," "It's a job; one has to work," "I gotta do something." These reasons might be taken as indicative of job dissatisfaction rather than satisfaction.

Adding these five individuals to the three who said they disliked their jobs, 21% of the group of 39 handicapped persons who were actually interviewed were dissatisfied with their jobs. This compares with a median of 13% in 343 studies of job satisfaction reported during a 21-year period.¹⁶

Interviewee opinions

The final phase of the follow-up interview was designed to explore how the physically handicapped viewed their vocational difficulties and what suggestions they might have for public agencies which assist the handicapped in job placement. Two questions were asked.

The first question was, "What do you think makes it difficult for physically handicapped persons to find and hold jobs?" Table 19 quantifies the answers on the basis of the number of times a difficulty was mentioned by interviewees.

¹⁶ Super, D. E. Occupational level and job satisfaction. J. appl. Psychol. 1939, 23, 547-564.
¹⁸ Robinson, H. A. Job satisfaction research of 1955. Personnel & Guidance J. 1955-56, 34, 555-568.

Of the 39 handicapped persons who were interviewed, a third placed the main difficulty on employer reluctance to hire the handicapped and a size-able number mentioned employer insurance problems specifically as the reason for employer resistance. Several persons spoke of problems stemming directly from the disability, such as limited physical mobility, or of personal limitations in education or training and work experience. In addition to the data presented in Table 19, about a fourth of the group mentioned no difficulties relative to employers, and about the same number mentioned no difficulties relative to self. These figures should not be construed to mean that these handicapped individuals experienced no difficulties; rather, they simply did not mention any difficulties.

Table 19
Reasons for difficulty in finding and holding jobs*

	Frequency of mention			
B		Handicapped Persons	By 52 Adult Relatives	Total
1. General employer resistance		13	22	35
2. Physical limitations		10	13	23
3. Attitudes of the handicapped person			-	
(lack of self-confidence)		9	8	17
4. Lack of training and education		8	9	17
5. Insurance risks of employers		. 9	6	15
6. Attitudes of non-handicapped persons	s	5	6	11
7. Age		5	4	9
8. Transportation and mobility		1	4	5
9. Poor employment history		2	1	3
10. Inadequate agency service			1	3
11. Lack of employment opportunities			1	2

^{*} Responses to Question: What do you think makes it difficult for physically handicapped persons to find and hold jobs?

The manner in which other adult relatives living in the same household perceived the placement problems of the handicapped person is also meaningful. Of the 52 adult relatives interviewed, more than a third said the handicapped persons had not had any difficulties with employers. It may seem, on the basis of these figures, that the handicapped persons saw themselves as having had more difficulties than their relatives saw them as having. However, 47% of the handicapped persons interviewed were either unemployed or employed only part-time, while only 15% of the group of handicapped persons about whom information was obtained from relatives were unemployed or employed part-time. It would seem that the group of

handicapped interviewees actually had experienced more difficulty in finding and maintaining employment.

The high degree of agreement in the responses to this question between the handicapped-person group and the adult-relative group should be noted. The Spearman rank order correlation between placement difficulties advanced by the handicapped-person group and those mentioned by the adult-relative group is +.89, which is significant at the .01 level.

The last question asked of the interviewee was, "From your experience, what would you suggest so that public agencies (such as the State Employment Service, State Vocational Rehabilitation) can be of more help to physically handicapped persons in finding jobs for them?" Table 20 summarizes the responses to this question.

The question as phrased may be said to invite criticism of the agencies. However, regardless of their bases in fact, these suggestions and criticisms provide some indication of how the physically handicapped and their relatives view the agencies and the services they render. It should also be noted

Table 20
Improvements desired in public agencies*

	Frequency of mention			
Suggestions	By 39 Handicap Persons	ped By 52 Adult Relatives	Total	
1. Publicize the services available to t	he			
physically handicapped	4	5	9	
2. Improve vocational diagnosis prior	to			
placement	4	4	8	
3. Improve the attitude of agency personne	1 3	4	7	
4. Improve selection and training of agen	c y			
personnel	3	1	4	
5. Increase job finding through intensified en				
ployer contact		3	4	
6. Improve placement interview procedure	s. 4	0	4	
7. Increase training and educational oppo	or-			
tunities for handicapped	0	4	4	
8. Improve referral and follow-up procedur	res 3	0	3	
9. Advertise the economic soundness of h	ir-			
ing the handicapped	1	1	2	
No suggestions offered	11	12	23	
No suggestions to offer, the agencies				
are doing fine	3	6	9	
Suggestions do not pertain to the				
agencies	6	17	23	

^{*}Responses to Question: From your experience, what would you suggest so that public agencies (such as the State Employment Service, State Vocational Rehabilitation) can be of more help to physically handicapped persons in finding jobs for them?

that nine interviewees, three of them handicapped, offered no suggestions because "the agencies are doing fine." In addition, 23 interviewees made no suggestions at all, while 23 others offered suggestions which did not pertain to the agencies.

Suggestions pertaining to the agencies seemed to revolve around placement difficulties personally experienced by the handicapped individuals. Placement procedures were the most frequently criticized. Being sent out on a job only to find it was closed to a handicapped person was a sample complaint. "They should take the time to tell the company you're handicapped and not send you out on a wild goose chase," was the way one person stated it. Another said, "They offered me a job I had just been fired from." A need for agency personnel to understand the different limitations as well as the different possibilities of persons with differing disabilities was also voiced. Some complained of being sent to jobs they could not handle. Others complained that their disabilities were considered rather than their abilities. A need for agencies to acquire more knowledge about the business world was also mentioned. It was generally felt that placement procedures should be improved in order to offset employer resistance.

Suggestions concerning agency personnel were usually related to the lack of self confidence that many handicapped persons felt. A need for sympathetic understanding seemed to underlie most criticisms. "They don't seem to try hard enough," "They don't realize how discouraging they sound to a handicapped person," "You feel like you're getting a run-around," were examples of their remarks. Another stated it this way, "They never seem to think about you until three months or more passes. You have confidence that a person will help you and then he doesn't. And then the handicapped person starts losing confidence in himself."

Another needed improvement mentioned was in the area of publicity. Many felt that the general public was not informed about the services and benefits available to physically handicapped persons and therefore did not take advantage of them.

About half of those interviewed either had no suggestions to make or else made suggestions which did not pertain to the agencies themselves. These suggestions generally concerned the need for more job openings for physically handicapped workers. Suggestions were made that new industries employing handicapped workers be created, that the State assume responsibility for providing jobs for the handicapped, that more parttime jobs be made available to the handicapped, and that working wives be laid off and handicapped persons hired instead. Other suggestions, not

pertaining to the agencies directly, concerned the need for educating employers and insurance companies on the economic soundness of hiring handicapped persons. One person suggested that handicapped persons be given preferential status in civil service ratings such as is given to veterans. By and large, these suggestions seemed to reflect the desire to correct or compensate for the most frequently mentioned difficulty in the placement of the physically handicapped: employer resistance.

Minnesota Studies in Vocational Rehabilitation

- I. Research Plan and Bibliography.
- II. A Study of Referral Information.
- III. A Follow-up Study of Placement Success.
- IV. A Study of 1,637 DVR Counselees.
- V. Methodological Problems in Rehabilitation Research.
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- XXIX. Occupational Reinforcer Patterns (Second Volume).
- XXX. Applications of the Theory of Work Adjustment to Rehabilitation and Counseling.

New Publications:

The Minnesota Occupational Classification System
The Counseling Use of the Minnesota Importance Questionnaire

For ordering information contact:

Vocational Psychology Research/Department of Psychology

APPENDIX

University of Minnesota Industrial Relations Center

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		oje	

No	_ Address:		
Date:	Time started:	Time ended:	
Interviewee: Sex M	F Approx. AgePosi	tion in household	
Interviewer:	<u> </u>		
Identification Interv	iew		Notes
I'm (name) from t	he University of Minnesota.		
Are you the lady (or man) of the house?		
	y on employment problems or injury. I'd like your an- stions.		
stand these prob			
Be sure to include	live in this household? e every one who rooms in iving temporarily with you, nt yourself too.		
How many of these	persons are under 14?		
How many are over	64?	 	
How many are emp	loyed or looking for work?		
physical condition, e	persons ever had an illness, or emotional problem of any e kind of work they can do, ork they can do?	YesNo	
Yes: What is this po	erson's relationship to you?		
Is he/she home?		YesNo	
Could I talk to hi	im/her?	YesNo	
	like to ask some questions that will take just a few		
No: One last question living at this addr	on. How long have you been ress?		

University of Industrial RoOVR Project	elations Center	Confidential
	ould you describe this injury or illness that I or the amount of work you can do?	imits the kind of work you
2. How of	d were you when this happened?y	ears.
	of the following helped you get ready for a red? What kind of assistance did you receive?	
	eational Rehabilitation (DVR)	Kind of assistance ** . 2. 3. 4. 5. 6.
	ployment Service	· — — — — —
c. Veterans	•	
	Administration (other than hospital)	
-	blic or private agencies	
3. T 4. A 5. O S _i 6. N 4. Have y	ounseling and guidance raining for a job ssistance in finding a job ther (such as providing artificial limbs, tools, left) o assistance from this agency. Four done any job planning with a counselor?	YesNo
5. Were y	ou employed at the time you were injured/b	ecame sick?YesNo
a. Nan	ne of job held hefore injury/illness	
b. Hov	long did you hold this job?	(mos.)
c. Hov	long was it before you returned to work?	(mos.)
d. Nan	ne of first job held after injury/illness	
	widd you get this job? (1) through the State Vocational Rehabilita (2) through the State Employment Service (3) through a vocational counselor (4) through friends or relatives (5) I got the job myself (6) I am self-employed (7) Some other way (Specify:	
6. Do you	have a job now?YesNo	
Nan	do you do on your present job? (Or on last just of Job:	
	ribe duties:Hour	
Date	e job started:Date job	ended:
	you like your present job (or last job if now)	

	Money carned a week on this job?
	_a. Less than \$20f. \$60 to \$69k. \$110 to \$119
	b. \$20 to \$29g. \$70 to \$791. \$120 to \$129
	h. \$80 to \$89
	d. \$40 to \$49i. \$90 to \$99n. \$140 to \$149
8.	Not counting your present job, on the average, what was the most you ever earned per week on a full-time job?
	a. Less than \$20f. \$60 to \$69k. \$110 to \$119
	b. \$20 to \$29g. \$70 to \$79l. \$120 to \$129
	h. \$80 to \$89m. \$130 to \$139
	d. \$40 to \$49i. \$90 to \$99n. \$140 to \$149
	e. \$50 to \$59j. \$100 to \$109o. \$150 or more
	Name of employer:
	Date job started:Date job ended:
9.	During the past 12 months, how many months have you been employed full time?months; part time?months; unemployed?months
••	
10.	What is your usual line of work? How long did you work at this?
11.	Circle the highest grade in school that you have finished:
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 Grade School High School College Graduate
12.	Age on your last birthday?years
13.	Sex:MaleFemale
14.	Military service:VeteranNon-veteranDate of Service
	Marital status:SingleMarriedOther
16.	If you are married, is your wife (or husband) employed now? Yes No
	How many persons do you support other than yourself?(Count your wife or husband if you support her/him.)
18.	What are your present sources of income or support? Check as many as apply
	to you.
	a. Wage earningsf. Private insurance or pension
	b. Familyg. Public agency assistance
	c. Veterans pensionh. Private agency assistance
	d. Unemployment compensationi. Other (specify below)
	e. Workmen's compensation
	What is your total yearly income from all sources?
19.	What do you think makes it difficult for physically handicapped persons to find and hold jobs?

Closing Interview

★ Is there anyone else in this household who has ever had an injury, illness, or emotional problem that limits the amount or the kind of work they can do? (If Yes, fill out another interview schedule, pages 2, 3, and 4 for this person.)

20. From your experience, what would you suggest so that public agencies (such as the State Employment Service, State Vocational Rehabilitation) can be of more help to physically handicapped persons in finding jobs for them?

- ★ One last question. How long have you been living at this address?
- * Thank you very much for your cooperation.