

Minnesota Studies in Vocational Rehabilitation:

II. A Study of Referral Information

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Preface

This Bulletin (No. 22) is the second report stemming from special research on the employment problems of the physically handicapped. It deals with the communication problem arising from the referral by vocational rehabilitation counselors of physically handicapped persons who have completed training to employment specialists whose task is to place such persons in suitable jobs. Out of this study has come information that could lead to the preparation of an improved standardized referral form that is mutually acceptable to both groups of workers. Presumably, if this next step is taken by practitioners in the field more effective work in behalf of the physically handicapped will be done in the years to come.

As is true with much research in the field of employment policies and practices, the findings reflect the peculiarities of the locale where the study is made. In this case, the findings apply only to the situation in Minnesota in 1958 and should prove to be of especial value to those dealing with the vocational problems of the physically handicapped in Minnesota. For this reason, it is hoped that the methods described in this Bulletin will be utilized by research workers in a number of other states to determine the degree to which the results would be found to be the same. There is reason to believe that the results would not be the same in other states simply because many other states have not had a 30-year history of research and training in the general area of personnel psychology, personnel administration and industrial relations.

DONALD G. PATERSON

A Study of Referral Information

Summary and Conclusions

This study investigated the preferences of counselors and placement personnel for types of information to be included in an inter-agency referral of a physically handicapped person, and the form in which this information should best be transmitted. The study is a part of a major research project¹ on the effectiveness of job placement procedures used with the physically handicapped.

A questionnaire designed to reflect referral information preferences was completed by counselors who worked with the handicapped and by placement interviewers from the Minnesota State Employment Service.

Results of this study indicate:

1. Counselors and placement interviewers show a high degree of agreement concerning the types of information which should be included in the referral of a handicapped person for employment. Information about vocational plan, handicap, education, work experience, and test results are generally considered important. Information on social history is generally considered to be less important. Both counselors and placement interviewers consider some items in each area to be more important than others.

The items considered by at least three-fourths of each group as most important to include in a referral form are (in order of importance):

- physical capacities
- working conditions to be avoided
- work history for past five years
- kind of educational specialization
- total number of years of education
- vocational plan
- aptitude-test results
- experience with tools and equipment
- degrees or certificates obtained
- expected medical outcome

2. Both counselors and placement interviewers indicate a high degree of preference for referral information to be expressed as interpreted state-

¹ This project is being supported, in part, by a research Special Project grant from the Office of Vocational Rehabilitation, Department of Health, Education, and Welfare.

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ments, as opposed to either technical or general statements. For example, instead of the statement that the referred individual had an "Ohio Psychological (Form 22) total standard score of 66 for University of Minnesota freshmen" (specific and technical), or that he "had a high score on the Ohio Psychological Test (Form 22) compared with University of Minnesota freshmen" (general), both groups preferred the statement, "(The referred individual's) score on the Ohio Psychological Test (Form 22) is better than 95% of University of Minnesota freshmen." (specific and interpreted).

It would be interesting and possibly of real importance to have comparable data from counselors and placement personnel in other states. There are reasons for believing that the agreements would prevail but the percentages might be drastically different, especially in states where counseling and placement work have not been professionalized to a high degree during the past few years.

3. The present study would suggest that many referral problems experienced by counselors and placement personnel result not from different values being attached to certain kinds of information but from the failure to communicate the information which both groups consider important to successful placement of the physically handicapped. A standardized form for communication of information preferred by both groups should aid in making the referral process more effective.

4. A further implication of the present study is that formal and in-service training in both counseling and placement interviewing should include information about the agreement between counselors and placement interviewers on the kinds of referral information considered important. Training should also be included on ways of expressing and using interpreted data pertaining to handicapped individuals. It is to be presumed that when this has been accomplished in a thoroughgoing manner the coordinated services of counselors and placement personnel should be far more effective than has been true in the past.

Introduction

Several legal amendments and administrative agreements have been made within recent years which have affected the procedures involved in the referral and placement of physically handicapped persons in search of employment. Prior to these changes, no distinction between handicapped and non-handicapped was made by the State Employment Service (ES) in the placement services it offered, although an informal agreement existed between ES and the State Division of Vocational Rehabilitation (DVR) for the latter to refer to ES those handicapped persons who were ready for job placement.

The major change in referral and placement procedures was occasioned by Public Law 565. Specifically, the new law required the ES to provide employment counseling services as well as placement services for the physically handicapped. The ES was also required to designate at least one person in each of the local offices to provide these services.²

Since the new policy went into effect, problems have arisen in the referral process (as is likely to happen when a policy fails to specify the methods by which it is to be effected.) One of these problems was the lack of standardization in transmitting referral information from one agency to the other, from counselor to placement interviewer. Moreover, counselors and placement personnel seemed to disagree over the kinds of referral information which were important for effective placement as well as the form in which the information should be expressed.

The Industrial Relations Center has started a cooperative study with DVR and ES of referral and placement procedures for physically handicapped individuals. An experimental study is planned³ to determine which of these procedures contribute most to the successful placement of the physically handicapped. One procedure to be investigated is the use of a standardized referral form. The referral form is to be designed to reflect the kinds and forms of referral information which counselors and placement personnel consider important to the effective placement of physically handicapped individuals. The present publication reports a survey conducted to determine counselor and placement personnel preferences about referral information.

² Vocational Rehabilitation Amendments of 1954, Public Law 565, 46 Stat. 114, Sec. 6.

³ See: *Minnesota Studies in Vocational Rehabilitation: I. Research Plan and Bibliography*. IRC Bulletin 21, June 1958.

Construction of the Survey Questionnaire⁴

The questionnaire used in the survey was divided into three sections (see Appendix A):

- a. personal data on the individual completing the questionnaire;
- b. referral content section: a check-list to determine the kinds of information which counselors and placement personnel believe would be most useful in the placement of the physically handicapped;
- c. referral form section: a "forced-choice" check-list to obtain preferences of counselors and placement personnel on how referral information should be expressed: as technical statements (specific, but not interpreted), interpreted statements (specific and interpreted), or general statements.

The material in the sections on *content* and *form* were planned to cover five areas of referral information: test results, handicap information, work history, education, and social history. These areas were chosen for their coverage of information likely to appear in a referral form.

Items on kinds of referral information in each of the five areas were written for the referral *content* section. Five items were selected from each area pool as representative of that area. The selected items for all areas were randomly arranged in a check-list in which one could indicate how often he believed an item should be included in all referrals of physically handicapped individuals.

Items of specific information about a handicapped individual were also written in the five areas for the referral *form* section. Five items were selected as representative of each area. Each item was rewritten in three forms: technical, interpreted, and general. An effort was made to hold the informational content of each item constant among forms so that differences in form would not be influenced by content.

Pre-Test of the Questionnaire

The questionnaire was pretested on a group of eleven Veterans Administration Hospital Vocational Counselors. These were persons with approximately one to eleven years of experience in counseling with the handicapped. They were familiar with the techniques of counseling and were completing advanced graduate training in counseling psychology.

The purposes of the pre-test were to evaluate the reliability of the questionnaire (test-retest) and to obtain reactions to its form and content.

⁴ Robert Walker, Vocational Counselor, Rehabilitation Center, U. of Minnesota Hospitals, participated in the construction of the questionnaire.

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Although the number of participants was too small to make computation of a reliability coefficient worthwhile, it was found that there was 73% agreement between test and retest for the *content* section, 82% for the *form* section, and 78% for the two sections combined. ("Per cent agreement" refers to the proportion of responses which were identical for both test and retest situations.) These results indicated the questionnaire could be used without drastic revision.

Discussion of the questionnaire with this pre-test group and with ES research personnel indicated the need for several changes. The instructions for the *content* section did not make clear whether responses were to be made on the basis of an item's importance when it appeared or on the frequency of appearance of the particular item in the total number of cases seen by the counselor or placement interviewer. For example, of the many persons with whom a counselor or placement interviewer works, only a few have police records. On the basis of frequency of appearance, this item would have to be checked "Seldom." On the other hand, when it does appear, it might be considered important, and, therefore, should be checked "Often." Consequently, the instructions for the *content* section were revised to make clear that responses should be made on the basis of the frequency with which the item would be important in all referrals of handicapped individuals.

Several items in the section on *form* were also revised to clarify the distinctions between the technical, interpreted, and general forms.

Finally, the area of vocational plan was added. It was originally assumed that the vocational plan of the referred individual would always be considered important and, therefore, need not be included in the questionnaire. Both VA counselors and ES research personnel felt, however, that this could not be assumed. In their experience, many referrals had been made in which this area had been left out altogether.

In the *content* section, the single item of "vocational plan" was added. It was felt unnecessary to formulate more items of information for this area. For the *form* section, however, five items about vocational plan were added, each worded in the three forms.

Administration of the Questionnaire

A mailing list of ES personnel involved in the placement of handicapped job applicants was compiled. A second list of DVR counselors and counselors in other agencies, public and private, concerned with the vocational rehabilitation of the handicapped was also compiled. The latter group included counselors from such agencies as the State Services for the Blind, Veterans Administration, and the Jewish Vocational Office.

Questionnaires were sent to both groups under a covering letter from a Professor of Psychology who is a Staff Member of the IRC. Material sent to placement personnel included a letter from the Director of the State Employment Service soliciting their cooperation. A similar letter from the Assistant Commissioner for Special Education and Rehabilitation went to the DVR counselors. Respondents were asked not to sign their names, but each questionnaire was numbered to facilitate follow-up of those persons who failed to reply.

Eleven days after the first mailing of the questionnaire, replies had been received from 59% of the counselors and 67% of the placement personnel. A follow-up letter was sent at this time to those who had not yet replied. A week following the mailing of the first follow-up letter, replies had been secured from 79% of the counselors and 90% of the placement personnel. Another follow-up letter was sent out at this time to non-respondents, with a second copy of the questionnaire included. The total response to the questionnaire was 95% ($N = 72$) for the counselors and 95% ($N = 122$) for the placement personnel.

Characteristics of the Samples

Table 1 summarizes the personal history data for the counselor and placement personnel groups.

The personal history sheets filled out by the two groups were not identical in all particulars. It was, therefore, not possible to make a direct comparison of the groups on all items. For example, the counselors were asked to indicate the number of months which they had spent in counseling with the physically handicapped, whereas the corresponding question for the placement personnel was concerned with the number of months spent in the placement of the handicapped. While these two questions are not strictly comparable, inspection of the data shows that generally the placement personnel had been employed in their kind of work longer than the counselors had been in theirs. On the other hand, it would appear that placement personnel spend less time per week working with the handicapped than do the counselors.

The proportion of the sexes in the two groups was similar: in both there were roughly four times as many men as women.

There was no statistically significant difference between the ages of the two groups. Although the mean age of the counselors was 36.3 years as compared to 44.9 years for the placement personnel, the variability within each group was large.

There also was no statistically significant difference between the groups in amount of education when number of years of schooling was used as

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Table 1

Personal History Data of Counselors (N = 72) and Placement Personnel (N = 122)

	Counselors	Placement Personnel
1. Age in Years		
Median	33	45
Q	5.3	7.5
Range	22-64	24-69
2. Number of Months Employed		
Median	34	120
Q	41.5	57
Range	1-360	0-491
3. Total Number of Completed Cases or Closures ^a		
Median	100	
Q	247	
Range	0-5000	
4. Number of Completed Cases, 1956-1957 ^a		
Median	38	
Q	46	
Range	0-600	
5. Number of Referrals to ES ^a		
Median	11	
Q	11.5	
Range	0-500	
6. Number of Months Placing Handicapped ^b		
Median		90
Q		75
Range		0-491
7. Number of Hours/Week Placing Handicapped ^b		
Median		3
Q		2.5
Range		0-40
8. Year Graduated from College		
Median	1950	1935
Q	3.5	10
Range	1912-1957	1916-1955

^a Not included in questionnaires sent to placement personnel.

^b Not included in questionnaires sent to counselors.

the measure. The counselors averaged 16.7 years, and placement personnel averaged 14.2 years. But again, the amount of variability within each group was large. Significantly more counselors, however, held B.A. and M.A. degrees. For other degrees, the two groups were about equivalent.

Significantly more counselors than placement interviewers had specialized in psychology or educational psychology. For the other fields of specialization included in the questionnaire (social work, sociology, and education), there were no significant differences between groups.

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Job titles varied greatly. Placement personnel referred to their jobs by 22 different titles, and counselors referred to theirs by 36. A larger number of counselors than placement personnel worked exclusively with the physically handicapped. Only a small number of the placement personnel group devoted more than a few hours a week to working with the handicapped. Some persons in both groups had functions consisting mainly of either teaching and training or supervisory duties. These persons generally continue some of the functions of counselors or placement interviewers or else have had extensive experience in one of these areas.

Results

1. Referral Content

The counselor and placement personnel groups agreed quite closely on the importance of the areas which should be included most frequently in a referral form. The only area which showed a statistically significant difference between the groups was that of *Handicap Information*. Table 2 summarizes by area the data on referral content.

Table 2
Referral Content Preferences of Counselors (N = 72) and
Placement Personnel (N = 122)

Area	Group	Per Cent *			Chi-Square
		Often	Sometimes	Seldom	
1. Education	C	64	23	13	1.75
	P	65	25	11	
2. Work History	C	65	23	11	3.99
	P	71	20	9	
3. Handicap Information	C	74	17	8	10.00**
	P	80	16	4	
4. Social History	C	20	42	38	3.74
	P	26	37	37	
5. Test Results	C	62	26	12	5.73
	P	63	30	7	
6. Vocational Plan	C	86	14	0	0.03
	P	85	15	0	

* Rounded to nearest whole number; totals do not always equal 100%.

** Significant at the .01 level.

The data show 86% of the counselors and 85% of the placement personnel wanted the *Vocational Plan* area included in a referral "Often." Information on *Handicap* would be included "Often" by 74% of the counselors and 80% of the placement workers. *Work History* items would be included "Often" by 65% of the counselors and by 71% of the placement

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group. Information on *Education* was wanted "Often" by 64% of the counselors and 65% of the placement personnel. Inclusion of *Test Results* in a referral form "Often" was favored by 62% of the counselors and 63% of the placement workers. The least important area was that of *Social History*. Only 20% of the counselors and 26% of the placement personnel checked "Often" for *Social History* items.

There was a high degree of agreement between groups on the rank order of importance of individual items. (See Table 3.) The Spearman *r*ho correlation between rankings by the two groups was +.96. The ten highest ranking items were chosen for inclusion "Often" by more than 75% of the members of each group. And the nine lowest ranking items were chosen for inclusion "Often" by less than 50%.

Only six of the 26 items showed statistically significant differences between the groups. These items were: (a) work history for past five years;

Table 3
Referral Content: Item Preferences by Counselors (N = 72) and
Placement Personnel (N = 122)

Items	Rank Order of Preference		
	Counselors	Placement Personnel	Total Group
1. Physical capacities	1	1	1
2. Working conditions to be avoided	2	3	2
3. Work history for past five years	6	2	3
4. Kind of educational specialization	4	4	4
5. Total number of years of education	3	5	5
6. Vocational plan	5	6	6
7. Aptitude-test results	7	7	7
8. Experience with tools and equipment	9	8	8
9. Degrees or certificates obtained	8	9	9
10. Expected medical outcome	10	10	10
11. Interest-test results	11	12	11
12. Intelligence-tests results	12	14	12
13. Medical information	14	13	13
14. Description of duties of last job held	16	11	14
15. Trade-test results	13	15.5	15
16. Additional medical treatment needed	18	15.5	16
17. Employer evaluation of quality and quantity of work	15	17	17
18. Unemployment history	17	18	18
19. Scholastic record in school	19	20	19
20. Marital and family information	20	21	20
21. Police record	24	19	21
22. Drinking history	21	22	22
23. Personality-test results	22	23	23
24. Reason for leaving school	23	24	24
25. Type and amount of current welfare aid	25	26	25
26. History with welfare agencies	26	25	26

(b) description of duties of last job held; (c) additional medical treatment needed; (d) type and amount of current welfare aid; (e) police record; and (f) personality test results. With the exception of "type and amount of current welfare aid," significantly more placement personnel than counselors preferred inclusion of these items "Often." For this one item, significantly more placement personnel preferred inclusion "Seldom."

Differences on these six items, together with the tendency for placement interviewers to favor more information than counselors, might reflect the more extensive contact that placement interviewers have with the day-to-day realities of the job market. For example: (a) placement interviewers must maintain and cultivate employer contacts (i.e., satisfy employer-clients); and (b) the number of job openings available at any given time for a group of job applicants is limited. Either of these considerations may account for the observed tendency of placement interviewers to desire more information in a referral.

In summary, there was marked agreement between counselors and placement personnel concerning the information which should be included in a referral. There was also a slight tendency for placement interviewers to favor more information (especially relating to work history).

2. Referral Form

This section of the questionnaire showed somewhat less agreement between the counselor and placement personnel groups than did the section on referral content. There was, however, substantial agreement. In general, members of both groups showed a marked preference for the interpreted type of statement in all areas. Where the interpreted statement was not preferred, significantly more counselors than placement personnel chose technical statements; significantly more placement personnel preferred general statements. These tendencies were apparent in four areas: Social History, Handicap Information, Test Results, and Vocational Plan. Differences between the groups in these areas were statistically significant. Table 4 summarizes the data on referral form preferences.

Eleven of the 30 items showed statistically significant differences between the groups. Of these, four were in Social History, three in Handicap Information, and one each in the remaining areas. The tendencies noted in the previous paragraph account for these statistical differences. Both groups, however, markedly preferred the interpreted statement on most items. On only three items for the counselors and one for the placement personnel did preferences for technical or general statements outweigh preference for interpreted statements.

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Table 4

Referral Form Preferences of Counselors (N = 72) and Placement Personnel (N = 122)

Area	Per Cent *		Chi-Square
	Counselors	Placement Personnel	
1. Education:			
a. technical	20	16	4.96
b. interpreted	72	73	
c. general	8	11	
2. Work History:			
a. technical	21	17	2.89
b. interpreted	73	76	
c. general	7	8	
3. Handicap Information:			
a. technical	7	2	23.69**
b. interpreted	89	89	
c. general	4	9	
4. Social History:			
a. technical	26	14	20.68**
b. interpreted	60	68	
c. general	14	18	
5. Test Results:			
a. technical	9	6	6.31*
b. interpreted	69	66	
c. general	22	28	
6. Vocational Plan:			
a. technical	12	7	7.68*
b. interpreted	82	85	
c. general	6	8	

* Rounded to nearest whole number; totals do not always equal 100%.

* Significant at the .05 level.

** Significant at the .01 level.

3. Comparison of DVR Counselors and ES Placement Interviewers

Counselors employed by the State Division of Vocational Rehabilitation (N = 37) were separated from the total group of counselors and their responses compared with the placement interviewers'. This comparison was undertaken because these are the two groups which will participate in an experimental study of referral-placement procedures.⁵ It was felt necessary to determine specific differences between DVR counselors and ES placement personnel for the purpose of developing standardized referral forms for the experimental study.

⁵ See: *Minnesota Studies in Vocational Rehabilitation: I. Research Plan and Bibliography*, IRC Bulletin 21, June 1958.

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In general, DVR counselors differed from ES placement personnel in much the same way as did the total counselor group. Only six of the 26 items in the referral content section showed statistical differences between the DVR and ES groups. These were: (a) work history for past five years; (b) personality-test results; (c) police record; (d) additional medical treatment needed; (e) medical information; and (f) drinking history.⁹ On all six items, significantly more placement interviewers preferred inclusion of these items "Often." In the referral form section, both groups showed a marked preference for interpreted statements. Where this preference was not pronounced, DVR counselors tended to prefer technical statements while ES placement personnel tended to prefer general statements.

From these results, it may be inferred that the DVR counselor group did not differ significantly from the total counselor group in terms of its response to the questionnaire. Consequently, the observations and conclusions drawn concerning total counselor-placement personnel comparisons would appear to be applicable to this comparison (DVR-ES).

4. Additional Comparisons

"High" and "low" sub-groups were isolated in both the counselor and placement personnel groups in terms of education and experience, and other sub-groups in terms of area in which the respondent's education had been concentrated. Differences between sub-groups were so few and so widely scattered that interpretation was difficult. It would appear that the differences found in these comparisons have neither statistical nor practical significance.

⁹The total counselor group also differed significantly from the placement interviewers on the first four items listed. Cf. pp. 9-10.

Appendix A

The Survey Questionnaire

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Personal History Data
(Counselors)

1. Sex _____
2. Age _____
3. Job Title _____
4. Number of months employed as a vocational counselor _____
5. Estimated total number of completed cases or closures as a vocational counselor _____
6. Number of completed cases during the last fiscal year (1956-57) _____
7. Number of counselees referred to the Employment Service during the last fiscal year (1956-57) _____
8. Duties other than counseling _____

9. Circle the highest number of years of education completed
8 9 10 11 12 13 14 15 16 17 18 19 20
10. Year graduated from college _____
11. Check degree ____ B.A. ____ B.S. ____ M.A. ____ M.S. ____ Ed.D.
____ Ph.D. ____ Other
12. Check field of specialization ____ Psychology ____ Educational Psychology
____ Social Work ____ Sociology ____ Education
Other (specify) _____

Personal History Data
(Placement Personnel)

1. Sex _____
2. Age _____
3. Job Title _____
4. Number of months employed doing placement work _____
5. Number of months doing placement of handicapped applicants _____
6. Number of hours per week devoted to placement of the handicapped

7. Duties other than placement _____

8. Circle highest number of years of education completed
8 9 10 11 12 13 14 15 16 17 18 19 20
9. Year graduated from college _____
10. Check degree ____ B.A. ____ B.S. ____ M.A. ____ M.S. ____ Ed.D.
____ Ph.D. ____ Other
11. Check field of specialization ____ Psychology ____ Educational Psychology
____ Social Work ____ Sociology ____ Education
Other (specify) _____

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The following is a list of items likely to be included in a referral of a handicapped individual for placement. To help us determine what information vocational counselors should send placement personnel, check in the "Often" column if you feel that the item should be included in two-thirds ($\frac{2}{3}$) or more of *all referrals of handicapped individuals* you make (receive); check in the "Seldom" column if you feel that the item should be included in only a third ($\frac{1}{3}$) or less of *all referrals*; check in the "Sometimes" column if you think that the item falls between "Often" and "Seldom."

Often $\frac{2}{3}$ or more	Sometimes	Seldom $\frac{1}{3}$ or less	
1. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. Work history for past five years
2. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. Type and amount of current welfare aid
3. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. Expected medical outcome
4. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4. Kind of educational specialization
5. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5. Personality-test results
6. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6. Reason for leaving school
7. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7. Working conditions to be avoided
8. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8. Police record
9. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9. Additional medical treatment needed
10. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10. Trade-test results
11. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11. Unemployment history
12. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12. Total number of years of education
13. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13. History with welfare agencies
14. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14. Intelligence-test results
15. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15. Medical information
16. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16. Employer evaluation of quality & quantity of work
17. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17. Scholastic record in school
18. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18. Experience with tools and equipment
19. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19. Aptitude-test results
20. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20. Marital and family information
21. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	21. Interest-test results
22. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	22. Degrees or certificates obtained
23. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	23. Description of duties of last job held
24. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	24. Physical capacities
25. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	25. Drinking history
26. <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	26. Vocational plan

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Listed below are 30 items of information which may be included in a referral of a handicapped individual to the State Employment Service for placement. Each item is expressed in three different ways. Each of the three statements is correct. Choose the one which you feel would be most useful in the successful placement of the handicapped.

1. Has no use of left arm but can walk with cane and short leg brace.
 Left arm and leg are paralyzed.
 Has left hemiplegia.
2. Wishes to work selling notions and other inexpensive merchandise on a house-to-house basis.
 Wishes to work as Salesman, D. O. T. 1-55.10.
 Wishes to work as a salesman.
3. Completed three years in the Institute of Technology at University of Minnesota as a Mechanical Engineer.
 Was in engineering school for three years at University of Minnesota.
 Completed three years in I.T. as M.E. at University of Minnesota.
4. High score on the Ohio Psychological Test (Form 22) compared with University of Minnesota freshmen.
 Ohio Psychological (Form 22) total standard score of 66 for University of Minnesota freshmen.
 Score on the Ohio Psychological Test (Form 22) is better than 95% of University of Minnesota freshmen.
5. Has spreading cancer in chest area.
 Has cancer of the lung which has spread to the lower portion of the spine.
 Has primary Ca of the lung with metastasis to lumbar spine.
6. Worked as a gardener for a three year period.
 Planted trees, shrubs, and flowers and maintained private residential home gardens for three years.
 Worked three years as a Gardener, D.O.T. 3-40.01.
7. Place on entry clerical job.
 Place on entry clerical job with light typing and limited knowledge of bookkeeping procedures.
 Place on D.O.T. 1-X4.
8. County will pay hospital bills.
 Medical county papers have been approved.
 County will pay for all medical services in a state or county hospital.
9. Place on light factory work.
 Place on D.O.T. 6-X4 manipulative work.
 Place on sedentary bench assembly work.

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10. Completed two years of four years of Minnesota apprenticeship in watchmaking.
 Has had partial Minnesota apprenticeship in watchmaking.
 Completed 4000 hours in Minnesota watchmaking apprenticeship.
11. Exceeds 12 per cent of employed clerical workers on numbers section of the Minnesota Clerical Test.
 Below average aptitude for employed clerical workers on the Minnesota Clerical Test's numbers section.
 Has percentile of 12 on numbers section of the Minnesota Clerical Test based on employed clerical workers.
12. Had above average grades at University of Minnesota.
 Had HPR of 2.5 at University of Minnesota.
 Had a B plus average at the University of Minnesota.
13. Has assisted with medical tests in a laboratory.
 Has worked in a laboratory assisting with BMR and EKG tests.
 Has done laboratory work assisting with basal metabolism and electrocardiogram tests.
14. Wants income limited so he will not lose pension.
 Desires to limit future earnings according to Part III V.A. Pension.
 As totally disabled vet, can earn only \$1400 per year in addition to receiving \$66.15 pension per month.
15. Interests are in scientific area on the Strong Test.
 Has measured interests similar to those employed as physician, engineer, and chemist on Strong Test.
 Has A's concentration in Group 2 on SVIB.
16. Can work making common medical laboratory tests (blood, urine, etc.); making blood counts and smears, typing blood, preparing vaccines, and assisting at medical research.
 Can work in a medical laboratory.
 Can work as a Medical Technician, D.O.T. 0-50.01.
17. Is not eligible for welfare aid.
 County Welfare Board will not subsidize any aid or services.
 Eligibility requirements for CWB assistance not met by client.
18. Has mild involvement of the central nervous system.
 Has slight multiple sclerosis with mild involvement.
 Has multiple sclerosis causing slight muscle weakness in legs and numbness in right hand.
19. Completed three years of Arts college.
 Completed three years SLA in pre-med.
 Has completed three years in Science, Literature, & the Arts College in pre-medical school curriculum with course work in physiology, anatomy, physics, chemistry, etc.

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20. Can operate an off-set press.
 Has limited printing experience on some printing presses.
 Has operated multilith 1250.
21. Has notified Social Security Office that he is permanently disabled.
 Has applied for Social Security benefits.
 Social Security disability freeze has been applied for.
22. Is a non-ambulatory T-5 lesion paraplegic.
 Is paralyzed from the waist down.
 Is paraplegic and is independent in a wheel chair but cannot walk.
23. Wants job as Chauffeur, D.O.T. 7-36.050.
 Wants to work as driver and general handyman for private employer.
 Wants job driving an automobile.
24. Does better than 82 per cent of shop work applicants according to Minnesota Paper Form Board.
 Has high average ability for shop work applicants on Minnesota Paper Form Board.
 Has T score of 59 on MPFB for shop work applicants.
25. For the past four years has operated all types of IBM tab equipment.
 Worked in a tabulating unit for four years.
 Worked four years as a Tabulating Machine Operator, D.O.T. 1-25.64.
26. Social Service Index clearance indicates history of A.D.C.
 According to reports client has received welfare aid.
 Client's family has received Aid to Dependent Children according to Social Service Index.
27. Has HSPR of 83.
 Was a superior student in high school.
 Exceeded 83 per cent of high school graduating class.
28. Has mild seizures causing brief lapses of consciousness.
 Has seizures.
 Has petit mal seizures.
29. Has prime nine profile on MMPI.
 Has essentially normal scores on Minnesota Multiphasic Personality Inventory.
 Minnesota Multiphasic responses indicate normal profile with a tendency towards being an over-active and energetic individual.
30. Last job as a Punch-Press Operator, D.O.T. 6-88.622.
 Worked as a punch-press operator.
 Operated a multiple punch-press.

Appendix B

- Table 5: Referral Content Preferences of Counselors and Placement Personnel**
- Table 6: Referral Form Preferences of Counselors and Placement Personnel**
- Table 7: Referral Content Preferences of DVR Counselors and Placement Personnel**
- Table 8: Referral Form Preferences of DVR Counselors and Placement Personnel**

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Table 5

Referral Content Preferences of Counselors (N = 72) and Placement Personnel (N = 122)

Item	Group	Per Cent *			Chi-Square
		Often	Sometimes	Seldom	
I. Education					
1. Kind of educational specialization	C	90	7	3	0.30
	P	91	7	2	
2. Reason for leaving school	C	21	38	41	4.94
	P	29	45	26	
3. Total number of years of education	C	92	4	4	0.54
	P	88	7	5	
4. Scholastic record in school	C	35	51	14	0.07
	P	36	49	15	
5. Degrees or certificates obtained	C	82	14	4	0.34
	P	78	16	6	
II. Work History					
6. Work history for past five years	C	86	7	7	7.69*
	P	97	2	2	
7. Unemployment history	C	51	30	20	0.46
	P	48	28	24	
8. Employer evaluation of quality and quantity of work	C	55	34	11	0.09
	P	55	35	10	
9. Experience with tools and equipment	C	81	14	4	0.13
	P	82	15	3	
10. Description of duties of last job held	C	53	32	14	10.32**
	P	74	21	5	
III. Handicap Information					
11. Expected medical outcome	C	77	15	7	0.67
	P	75	19	5	
12. Working conditions to be avoided	C	93	6	1	1.96
	P	96	4	0	
13. Additional medical treatment needed	C	46	31	23	6.68*
	P	61	29	10	
14. Medical information	C	59	30	11	3.56
	P	72	23	4	
15. Physical capacities	C	96	4	0	0.11
	P	97	3	0	
IV. Social History					
16. Type and amount of current welfare aid	C	17	37	46	9.13*
	P	6	29	65	
17. Police record	C	20	39	41	12.58**
	P	43	35	22	
18. History with welfare agencies	C	12	35	54	0.92
	P	7	37	55	
19. Marital and family information	C	31	44	25	1.85
	P	36	46	17	
20. Drinking history	C	23	54	24	4.69
	P	35	39	27	

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V. Test Results					
21. Personality test results	C	23	44	34	11.37**
	P	31	55	13	
22. Trade test results	C	65	23	13	1.36
	P	61	29	10	
23. Intelligence test results	C	68	25	7	0.19
	P	66	27	6	
24. Aptitude test results	C	84	13	3	0.22
	P	83	12	4	
25. Interest test results	C	72	25	3	0.25
	P	72	24	4	
VI. Vocational Plan					
26. Vocational plan	C	86	14	0	0.03
	P	84	15	0	

* Rounded to nearest whole number; totals do not always equal 100%.

* Significant at the .05 level.

** Significant at the .01 level.

Table 6

Referral Form Preferences of Counselors (N = 72) and Placement Personnel (N = 122)
(a = technical, b = interpreted, and c = general)

Item	Per Cent *		Chi-Square
	Counselors	Placement Personnel	
I. Education			
1. a. Completed three years in I.T. as M.E. at University of Minnesota	18	13	1.28
b. Completed three years in the Institute of Technology at the University of Minnesota as a Mechanical Engineer	79	82	
c. Was in engineering school for three years at University of Minnesota	3	5	
2. a. Completed 4000 hours in Minnesota watchmaking apprenticeship	35	34	0.15
b. Completed two years of four years of Minnesota apprenticeship in watchmaking	64	65	
c. Has had partial Minnesota apprenticeship in watchmaking	1	1	
3. a. Had IIPR of 2.5 at University of Minnesota	22	12	8.22*
b. Had a B plus average at University of Minnesota	69	67	
c. Had above average grades at University of Minnesota	7	20	

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4. a. Completed three years of SLA in pre-med	17	15	0.30
b. Has completed three years in Science, Literature, & the Arts College in pre-medical school curriculum with course work in physiology, anatomy, physics, chemistry, etc.	82	85	
c. Completed three years of Arts college	1	1	
5. a. Had HSPR of 83	10	5	1.79
b. Exceeded 83 per cent of high school graduating class	62	68	
c. Was a superior student in high school	25	26	
II. Work History			
6. a. Worked three years as a Gardener, D.O.T. 3-40.01	12	5	4.33
b. Planted trees, shrubs, and flowers and maintained private residential home gardens for three years	85	89	
c. Worked as a gardener for a three year period	3	6	
7. a. Has worked in a laboratory assisting with BMR and EKG tests	11	8	0.07
b. Has done laboratory work assisting with basal metabolism and electrocardiogram tests	83	86	
c. Has assisted with medical tests in a laboratory	6	6	
8. a. Has operated multilith 1250	28	34	1.11
b. Can operate an off-set press	56	48	
c. Has limited printing experience on some printing presses	17	18	
9. a. Worked four years as a Tabulating Machine Operator, D.O.T. 1-25.64	17	11	1.46
b. For the past four years has operated all types of IBM tab equipment	82	88	
c. Worked in a tabulating unit for four years	1	2	
10. a. Last job as a Punch-Press Operator, D.O.T. 6-88.622	36	25	2.53
b. Operated a multiple punch-press	57	67	
c. Worked as a punch-press operator	7	7	
III. Handicap Information			
11. a. Has left hemiplegia	4	0	5.34
b. Has no use of left arm but can walk with cane and short leg brace	96	96	
c. Left arm and leg paralyzed	0	4	
12. a. Has primary Ca of the lung with metastasis to lumbar spine	8	2	9.31**
b. Has cancer of the lung which has	83	77	

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spread to the lower portion of the spine

c. Has spreading cancer in chest area 8 20

13. a. Has slight multiple sclerosis with mild involvement 1 0 4.07

b. Has multiple sclerosis causing slight muscle weakness in legs and numbness in right hand 93 98

c. Has mild involvement of the central nervous system 6 2

14. a. Is a non-ambulatory T-5 lesion paraplegic 0 0 6.48*

b. Is paraplegic and is independent in a wheel chair but cannot walk 96 84

c. Is paralyzed from the waist down 4 16

15. a. Has petit mal seizures 21 8 7.32*

b. Has mild seizures causing brief lapses of consciousness 79 89

c. Has seizures 0 2

IV. Social History

16. a. Medical county papers have been approved 8 1 12.48**

b. County will pay for all medical services in a state or county hospital 86 81

c. County will pay hospital bills 6 18

17. a. Desires to limit future earnings according to Part III V.A. Pension 3 1 2.20

b. As totally disabled vet, can earn only \$1400 per year in addition to receiving \$66.15 pension per month 96 94

c. Wants income limited so he will not lose pension 1 4

18. a. Eligibility requirement for CWB assistance not met by client 24 7 13.07**

b. County Welfare Board will not subsidize any aid or service 28 47

c. Is not eligible for welfare aid 49 47

19. a. Social Security disability freeze has been applied for 71 51 7.64*

b. Has notified Social Security Office that he is permanently disabled 21 38

c. Has applied for Social Security benefits 8 10

20. a. Social Service Index clearance indicates history of A.D.C. 22 10 6.14*

b. Client's family has received Aid to Dependent Children according to Social Service Index 68 76

c. According to reports client has received welfare aid 8 13

V. Test Results

21. a. Ohio Psychological (Form 22) total standard score of 66 for University of Minnesota freshmen 0 3 2.46

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	b. Score on the Ohio Psychological Test (Form 22) is better than 95 per cent of University of Minnesota freshmen	86	82	
	c. High score on the Ohio Psychological Test (Form 22) compared with University of Minnesota freshmen	12	13	
22.	a. Has percentile of 12 on numbers section of the Minnesota Clerical Test based on employed clerical workers	35	16	11.14**
	b. Exceeds 12 per cent of employed clerical workers on numbers section of the Minnesota Clerical Test	31	29	
	c. Below average aptitude for employed clerical workers on numbers section of Minnesota Clerical Test	33	55	
23.	a. Has A's concentration in Group 2 on SVIB	3	1	1.20
	b. Has measured interests similar to those employed as physician, engineer, and chemist on Strong Interest Test	75	67	
	c. Interests are in scientific areas on Strong Test	22	31	
24.	a. Has T score of 59 on MPFB for shop work applicants	4	7	1.16
	b. Does better than 82 per cent of shop work applicants according to the Minnesota Paper Form Board	69	62	
	c. Has high average ability for shop work applicants on Minnesota Paper Form Board	26	31	
25.	a. Has prime nine profile on MMPI	1	1	2.13
	b. Minnesota Multiphasic responses indicate normal profile with a tendency toward being an overactive and energetic individual	82	89	
	c. Has essentially normal scores on Minnesota Multiphasic Personality Inventory	17	10	

VI. Vocational Plan

26.	a. Wishes to work as a Salesman, D.O.T. 1-55.10	8	4	1.68
	b. Wishes to work selling notions and other inexpensive merchandise on a house-to-house basis	83	84	
	c. Wishes to work as a salesman	8	11	
27.	a. Place on D.O.T. 1-X4	6	4	1.34
	b. Place on entry clerical job with light typing and limited knowledge of bookkeeping procedures	90	88	
	c. Place on entry clerical job	4	8	

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28. a. Place on D.O.T. 6-X4 manipulative work	14	12	1.05
b. Place on sedentary bench assembly work	76	73	
c. Place on light factory work	10	15	
29. a. Can work as Medical Technician, D.O.T. 0-50.01	17	9	2.90
b. Can work making common medical laboratory tests (blood, urine, etc.); making blood tests and smears, typing blood, preparing vaccines, and assisting at medical research	81	86	
c. Can work in a medical laboratory	3	5	
30. a. Wants job as Chauffeur, D.O.T. 7-36.050	14	4	8.87*
b. Wants to work as driver and general handyman for private employer	79	93	
c. Wants job driving an automobile	7	2	

* Rounded to nearest whole number; totals do not always equal 100%.

* Significant at the .05 level.

** Significant at the .01 level.

Table 7
Referral Content Preferences of DVR Counselors (N = 37) and
Placement Personnel (N = 122)

Area	Group	Per Cent *			Chi-Square
		Often	Sometimes	Seldom	
1. Education	C	63	25	11	0.13
	P	65	25	11	
2. Work History	C	63	27	10	5.02
	P	71	20	9	
3. Handicap Information	C	65	24	10	21.07**
	P	80	16	4	
4. Social History	C	12	44	43	10.83**
	P	26	37	37	
5. Test Results	C	57	30	12	4.82
	P	63	30	7	
6. Vocational Plan	C	80	20	0	0.32
	P	85	15	0	

* Rounded to nearest whole number; totals do not always equal 100%.

** Significant at the .01 level.

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Table 8
Referral Form Preferences of DVR Counselors (N = 37) and
Placement Personnel (N = 122)

Area	Per Cent ^a		Chi-Square
	Counselors	Placement Personnel	
1. Education:			
a. technical	22	16	4.67
b. interpreted	71	73	
c. general	7	11	
2. Work History:			
a. technical	24	17	5.85
b. interpreted	67	76	
c. general	9	8	
3. Handicap Information:			
a. technical	9	2	28.99**
b. interpreted	87	89	
c. general	4	9	
4. Social History:			
a. technical	30	14	23.40**
b. interpreted	53	68	
c. general	17	18	
5. Test Results:			
a. technical	12	6	20.45**
b. interpreted	74	66	
c. general	14	28	
6. Vocational Plans:			
a. technical	16	7	16.50**
b. interpreted	78	85	
c. general	5	8	

^a Rounded to nearest whole number; totals do not always equal 100%.

** Significant at the .01 level.