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REHABILITATION COUNSELOR'S CASELOAD DIFFICULTY

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AN OBJECTIVE INDEX FOR MEASURING THE VOCATIONAL
REHABILITATION COUNSELOR'S CASELOAD DIFFICULTY

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AN OBJECTIVE INDEX FOR MEASURING THE VOCATIONAL
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CHAPTER I

INTRODUCTION

Vocational Rehabilitation

Vocational rehabilitation refers to a state-federal program which provides services essential to the rehabilitation of physically and mentally handicapped persons. The National Council on Rehabilitation in 1942 (p. 6) issued a definition of rehabilitation which is still widely quoted as "the process of restoring the handicapped to the fullest physical, mental, social, vocational and economic usefulness of which they are capable."

The vocational rehabilitation program is based on two fundamental assumptions:

1. That every member of a democratic society has an inherent right to the opportunity to earn a living and make his contribution to society.
2. That society has the obligation to equalize, by providing special services, the disabled person's opportunity to earn a living equal to the opportunity possessed by the nondisabled members of society.

The vocational rehabilitation program consists of two major components: counseling and services. The counseling aspect may be described

as the process by which the counselor interacts in a dyadic relationship with the disabled individual in an endeavor to help him understand his problems of adjustment. By this means it is hoped that alternatives are presented that will in the end provide the individual with the desired vocational and social adjustment. In addition to counseling, vocational rehabilitation provides the following range of services to render the individual fit to engage in a remunerative occupation: (a) full evaluation, including medical diagnosis, to learn the degree of disability and to help evaluate the individual's work capacities; (b) medical, surgical, psychological, and hospital care and related therapy to reduce or remove the disability; (c) artificial limbs and other prosthetic and orthotic devices needed to increase work ability; (d) training, including vocational, academic and remedial education, and prevocational and personal adjustment training; (e) service in comprehensive or specialized rehabilitation facilities, including workshops and adjustment centers; (f) maintenance and transportation during rehabilitation; (g) tools, equipment and licenses for work on a job or in establishing a small business; and (h) placement in a job suited to the individual's physical and mental capacities and post-placement follow-up to make sure that the placement is satisfactory to the employee and the employer.

General medical and medical specialist examinations, individual counseling and guidance, training tuition, books and training materials, occupational and business licenses, reader services for the blind, interpreter services for the deaf, attendant services as required, and job placement are available to all individuals accepted for services. Physical restoration services, prosthetic appliances, room, board and trans-

portation (other than for diagnostic purposes), tools, equipment, and supplies are provided on an individual basis according to the economic needs of the eligible person. Individual states have the prerogative to use an economic needs test.

The rehabilitation process commences when the individual is referred to the agency. An initial interview with a counselor is arranged in order that pertinent information concerning the applicant is obtained. This usually consists of medical, psychological, vocational and social evaluation of the applicant. On the basis of this information, the applicant is judged to be eligible or ineligible for vocational rehabilitation services by the counselor.

Eligibility for vocational rehabilitation services is based upon the following three criteria: (a) the presence of a mental or physical disability and the resulting functional limitation or limitations in activities; (b) the existence of a substantial handicap to employment caused by the limitations resulting from such a disability; and (c) a reasonable expectation that vocational rehabilitation services may render the individual fit to engage in a gainful occupation.

The first two criteria involve the evaluation of the current status of the individual. The third criterion requires the counselor to determine the potential employability of the individual. In this case the counselor evaluates the effectiveness of the services that can be offered and the probability that the applicant will gain enough from receiving the services to be placed in a gainful occupation. If the applicant is judged to be eligible, he and the counselor together develop a mutually acceptable plan for rehabilitation. A very important aspect of the plan

is the vocation agreed upon and the services provided--both training and medical/psychological--to attain the desired end result. The counselor coordinates the provision of services, provides counseling and guidance, and supervises the client's program which hopefully will culminate in a successful vocational adjustment.

Purpose of the Study

One of the major problems in rehabilitation is the absence of an acceptable criterion for evaluating the rehabilitation counselor's performance. As in other areas, personnel evaluation is highly important for it is basic to the administrative policies of the agency for determining the present performance and future advancements of the counseling staff.

The evaluation of counselors has been a concern to investigators in counseling settings other than rehabilitation, but has received relatively little empirical investigation from rehabilitation personnel. However, substantial research by Carlson, Dawis, England, and Lofquist (1962, 1963) at the University of Minnesota has been directed toward the establishment of the client's satisfaction and the employer's satisfaction regarding the client's work.

Noting the paucity of research in the area of rehabilitation counselor evaluation, Muthard and Miller (1966) attempted to develop and test a structured case review procedure which would enable supervisors to use case records for systematic evaluation of their counselors. As a sub-part of the study, they also reported on the evaluation policies and practices of 86 vocational rehabilitation agencies--both agencies serving only the blind and combined agencies, serving both the blind and persons with other disabilities.

Questionnaires containing eight general multiple-choice questions and

and 29 specific multiple-choice questions were sent to the directors of 89 agencies. The questionnaires yielded the following information: (a) the general features of current evaluation procedures; (b) the extent to which various counselor characteristics were considered or required in evaluation, (c) how important the characteristics were thought to be; and (d) the methods or approaches currently used in evaluating counselors.

The 29 specific items of the questionnaire covered three categories concerning the characteristics of a "good" counselor or his performance. Five judges sorted the specific questions into the three categories of: (a) personal traits or personality-type features; (b) task or job performance qualities; and (c) ability-knowledge type characteristics.

In responding to the questionnaire, the director or a respondent designated by the director also indicated the principal method used in assessing each of the 29 evaluation characteristics. The respondent had a choice of five responses in terms of methods used: (a) case review; (b) supervisor impressions; (c) supervisor rating blank; (d) some sort of device, such as a standardized test; and (e) other method not given. The case review, supervisor impressions, and supervisor rating blank accounted for practically all the methods used. Supervisor impressions were the most frequently used procedure for assessing 23 out of the 29 evaluations.

The task or job performance qualities of the counselor were assessed 51 per cent of the time by the supervisor's impressions method, 37 per cent by case review method, and 5 per cent of the time by a supervisor's rating blank in the 86 agencies that responded.

Overall, their findings indicated that the general evaluation practices of these agencies usually resided in supervisory impressions or

ratings and that almost half of the agencies lacked a standard counselor evaluation form.

Summing up their findings, Muthard and Miller (1966) report:

Our study strongly suggests that state agency administrators need to carefully examine their present personnel evaluation practices. This opinion is buttressed by the fact that more than one-third of the agencies surveyed reported they had not changed their evaluative procedures within the past five years, and only one-third had made changes in the year preceding the survey. With the continuing growth and development of rehabilitation programs and the introduction of more trained personnel into the field, evaluative practices need to be regularly reassessed. That less than ten per cent of the traits listed on the Personnel Evaluation Questionnaire were judged through standardized supervisory ratings or test approaches suggest that agencies rely unduly on unsystematic approaches to assessing counselor performance. Although we cannot point to specific rating or other measurement techniques which have proven useful in evaluating counselors, we believe there is a strong, logical argument for using systematic and explicit evaluative measures. Performance evaluation can be improved only through the use and systematic validation of explicit, agency-wide concepts [p. 53].

As mentioned previously, an important part of the Muthard and Miller study was the examination of a procedure for using written case records as a criterion for evaluating rehabilitation counselor performance. Based upon earlier work by Jaques (1959) describing critical requirements in rehabilitation counseling, Muthard and Miller selected nine dimensions to form their Structured Case Review Blank. The nine dimensions placed together in three logical groups were as follows:

Group I (Interacting)

- a. Creation of a therapeutic climate
- b. Working with other agencies or professional associates
- c. Creating a learning situation for client or significant others

Group II (Evaluating)

- d. Getting information from others as well as client
- e. Giving information to client about vocations and/or rehabilitation facilities
- f. Doing a careful, extended evaluation

Group III (Structuring)

- g. Arranging for the client
- h. Giving sufficient time to a case
- i. Orienting the client to services

The nine case service variables required paired judgments of (a) need and (b) amount of services provided in particular cases. These were indicated on a seven-step scale with the two end-points marked "low" and "high" respectively, and the mid-point "average." An individual definition of each variable was presented to supervisors of the counselors, both in small group discussions and a training manual. The authors suggested the kinds of case record data upon which the amount of need and the amount of case service provided could be rated for each dimension.

Muthard and Miller assumed that by taking the discrepancy between scores for the amount of need and the amount of provision, a "performance index" could be derived. In a minus difference, need was judged greater than amount of services provided, indicating a deficient provision. A plus difference indicated amount of services was judged greater than need, indicating an over-concern. A difference of zero between (a) need and (b) counselor provision ratings indicated "perfect" performance.

Twenty-six supervisors from six separate state agencies rated no more than three counselors each for performance. The supervisors randomly selected nine cases from each assigned counselor's caseload. The counselor's case review score, for any dimension of the Blank, was taken as the absolute sum of discrepancy scores across all nine cases. Scores on all variables, except two, were converted to standard scores within each state to eliminate inter-state differences and make all converted counselor scores on any variable comparable.

The case review scores on the total of 56 counselors rated were then

correlated with each of the nine dimensions of the Blank and an additional nine criteria, using the Pearson product-moment correlation. The nine additional criteria were: (a) co-worker ratings; (b) supervisor ratings; (c) present state ratings; (d) a measure of job satisfaction; (e) size of caseload; (f) caseload velocity--a measure of rapidity with which the counselor develops plans with the client; (g) number of clients rehabilitated; (h) number of clients to whom services were given but who were not judged rehabilitated; and (i) number of clients who were accepted for services but were interrupted before substantial services were given and/or the client became employable.

Due to the high intercorrelations within the Blank, dimension ratings did not cluster into the three groups of three dimensions each that Muthard and Miller used in constructing the Case Review Blank; i.e., ratings within a group did not appear to correlate higher with each other than with other ratings or groups. Apparently, supervisor impressions of how well the counselor collected and gave information formed a basis for halo effect to operate on other ratings of his written case record. Thirteen of the 19 significantly higher correlations (computed on differences from reliability correlations on five cases, with identifying information disguised, used as the hypothesized values) were found on the two dimensions of "...getting information from others as well as client" and "giving information to client about vocations and/or rehabilitation facilities" (Muthard & Miller, 1966, p. 22-23).

As a result of the rather uniformly high intercorrelations within the Structured Case Review Blank (the correlation range extended from .56 to .88 with a median intercorrelation of .75) neither cluster nor factor

analysis was feasible. Data examination revealed that the overall case review rating did not correlate with the nine other criteria listed. Only one dimension of the Case Review Blank, that of "orienting the client to services" correlated significantly with "supervisor ratings."

Thus, such high intercorrelations among the dimensions of the Structured Case Review Blank required the rejection of it for the differential rating of counselor performance.

Concept of Closure as Criterion

The term "closure" in the Vocational Rehabilitation Administration refers to that point in the rehabilitation process where a client has completed his planned program or been provided services from the agency and successfully placed in employment or terminated either before or after a rehabilitation plan is initiated. The success of the agency, as well as the counselor's performance, is often based upon the number of successful closures reported at the end of each fiscal year. By this means state agencies are compared nationwide in terms of total successful closures and/or successful closures per \bar{x} number of applicants or population.

Today, attitudes toward rehabilitation closures as the major criterion for rehabilitation success range from complete rejection to realistic acceptance. From a realistic viewpoint, continued support for an expansion of rehabilitation services, both at the State and Federal level, is contingent upon rehabilitating more and more clients. In discussing this aspect, Lenard (1963) states:

To the administrator of a state agency, the closure exists as the only meaningful criterion by which he can advance the services of this program. By the position he assumes, he must be a financial realist. It is his responsibility to prepare reports for the state legislators show-

ing monies spent and numbers of individuals who, because of this expenditure, are now producing optimally. The state directors, in order to show continued growth, have utilized reinforcement techniques to insure progress. Thus, we have seen "counselor of the year" awards, trips to National Rehabilitation Association conferences, and, in some cases, yearly salary increases being dependent upon a high closure record [p. 13] .

Goldin (1964) interviewed counselors within a state agency in an attempt to determine what constituted "quality" of rehabilitation counseling. Of the 36 counselors interviewed, ten stated that counseling which resulted in successful vocational placement (closed rehabilitated) was by definition good quality counseling. Eighteen of the counselors felt that there was an inverse relationship between quantity and good quality rehabilitation counseling. They were convinced that if a counselor aimed for high numbers of successfully placed clients, he would not allocate the time required to carry on rehabilitation counseling of high quality. Eight of the counselors took the position that productivity in rehabilitation counseling was a compromise which involved rehabilitating a sufficient number of clients who required a lesser amount of time and counseling (to satisfy the requirements of quantitative productivity) so that they could spend time on some of the more difficult cases which required greater counseling skill.

Within the agency studied, 70 per cent of the counselors felt that there was a tendency to judge the counselor's performance by the number of cases he closed in employment. Eighty-four percent of the counselors expressed the view that the quality of a rehabilitation counselor's performance could not begin to be evaluated on this basis. The counselors stated that the use of this performance criterion would imply that the caseloads of counselors were comparable in difficulty, complexity, and

starting point of cases; which, of course, is not a valid representation of the situation.

The procedures, philosophy, and goals of Vocational Rehabilitation are discussed in this chapter, followed by an introduction to the problem of evaluating the rehabilitation counselor's performance. An attempt to develop and test a structured case review procedure to enable supervisors to evaluate counselors is described, in addition to a discussion of the value of "closures" as a criterion of counselor performance.

CHAPTER II

STATEMENT OF THE PROBLEM

The purpose of this study is to describe a method of utilizing routinely collected demographic data and biographical information in determining an objective index of caseload difficulty of a Vocational Rehabilitation counselor. By measuring the difficulty of the counselor's caseload, one can obtain a partial measurement of the counselor's performance. The Oklahoma Division of Vocational Rehabilitation (DVR) has traditionally measured the counselor's case work performance on the basis of the total number of clients successfully rehabilitated (closed rehabilitated) each fiscal year, as have all other state agencies. Viaille (1966) contends that this method is inadequate for the following reasons: (a) it tends to emphasize number rather than the quality of services; (b) it may tend to emphasize relatively non-complex cases requiring little counselor time; (c) it may encourage closing a client's case before it is ready to close, in order to meet a quota; (d) it may encourage keeping a client on the caseload longer than should be, in order to assure meeting next year's quota; (e) it makes it difficult to obtain an even flow of work throughout the year; (f) it is a difficult procedure to apply in areas of specialized counselors; and (g) it does not allow credit to the counselor for the amount of work expended on cases closed non-rehabilitated.

Another method tried by the DVR was for the counselor's supervisor at the time of a closure to rate each case in order to determine the amount of credit the counselor should receive. Viaille (1968) reports by personal communication that although some success was experienced, the methods developed were either too cumbersome and time consuming or lacked a sufficient degree of validity.

Other attempts of measuring the counselor's performance have been simply to count the number of services provided to a client during the rehabilitation process. This consisted of enumerating all services provided such as medical examination, work evaluation, counseling, artificial appliance, training, etc., and summing for all of the counselor's clients. However, this procedure appeared to lack the degree of relevance needed to meet the problem.

Also attempted, but no longer utilized, as a measure of the counselor's performance was to obtain ratings of his work by the other counselors who were his co-workers. Viaille (1968) reports that this procedure was discontinued for the same reasons listed above regarding the use of supervisor's ratings in evaluating the counselor's performance.

Recently, another method tried by the DVR to evaluate counselor performance has been to obtain a measure during the process of the client's rehabilitation instead of at the time of closure. The approach to this method was through the development of a "movement schedule." This schedule is obtained by dividing the total number of status changes by the size (number) of the counselor's caseload. The process of rehabilitation is divided into sixteen different status classifications (from 00-referral to 30-closed not rehabilitated) as a means of delineating the different

stages of the process (See Appendix A for the different status numbers and their definition). The schedule is plotted as a graph for the last fiscal year. On the graph the schedule numbers are arranged along the ordinate and the months along the abscissa. Each area supervisor receives a graph for the entire state, one for the area which he supervises, and one for each of the counselors within his area. The appropriate schedule numbers are provided each supervisor each month of the current fiscal year. The schedule numbers are then plotted on the graphs of the last fiscal year for comparison of the two years.

The movement schedule appears to provide some advantages over such measurements of counselor performance as the supervisor ratings or impressions of the case review. The movement schedule is a routine measurement which is less subject to monthly variations than supervisors' ratings and is an objective measure which is easily obtained. In addition, the movement schedule provides credit to the counselor at appropriate times throughout the case work process and for all of his case work procedures from acceptance of referral to closure.

However, the movement schedule is inadequate in providing the kind of over-all measurement that is needed in the vocational rehabilitation program. The major inadequacy appears to be the inability of the movement schedule to consider the various factors which have to do with the ease or difficulty of rehabilitating different clients. No consideration is given to the type of disability, the vocational objective of the client, the educational and socio-economic background of the client, or other factors that are quite commonly agreed upon as highly relevant to the ease or difficulty of effecting the rehabilitation of the individual.

Therefore, the primary objective of the present investigation is to develop an index of caseload difficulty which will give an indication of counselor performance, subject to several secondary objectives which are also essential. These secondary objectives are: (a) to select from among all the data collected on each client, those factors that are most indicative of difficulty for the counselor to successfully rehabilitate the client; (b) to minimize the number of factors necessary to form an index of difficulty; and (c) to determine the appropriate weights that should be assigned the selected factors so that the index of difficulty will be maximally correlated with the counselor's performance.

It is apparent that no measure of index of difficulty will of necessity represent the "true picture" of counselor performance in every case. The case to case variability is too large. Nevertheless, if certain procedures are followed, it may reasonably be assumed that the average of several of these indices obtained from the same counselor over several months will be highly indicative of his overall performance..

CHAPTER III

METHOD

Several problems must be dealt with to achieve the objectives of this study. If variables such as type of disability, location of home, race, source of support, etc., which are essentially nominal measurements, are to be utilized as predictors; a means must be provided to assign each of the categories within these variables some numerical value that is an ordinal measurement with respect to the criterion. The proposed solution of this problem is to determine the average time required by all counselors to "close" all individuals in a specific category of a given classificatory variable. This average time computed in months from the client's time of acceptance to closure can then be considered as an index of the difficulty that may be encountered by a counselor in effecting the rehabilitation of a given individual in a particular category. Thus, for each individual the mean time for each specific category was assigned for those nominal variables that were transformed into an ordinal scale.

C. Miller (1965) in a preliminary inquiry in this area contends that the objectives can best be attained through a stepwise multiple linear regression analysis outlined by Efroymson (1960). Another example of this technique appears in Salzman (1968). In general, multiple regression analysis is a technique used to approximate a functional relationship

from empirical observations of the corresponding values of dependent and independent variables over given ranges. First, an anticipated relationship is set up and the criteria of "least squares" applied. This results in a system of equations, one per variable, to be solved simultaneously for the coefficients of each term. The coefficients in the simultaneous equations are formed from the observed data, either original or transformed to linear terms, with input consisting of sets of data each containing one observation on all variables.

In stepwise multiple regression analysis, coefficients are calculated for all terms which appear significant at a prescribed level. C. Miller (1965) stated that the method does not guarantee that the total explained variance attained for a particular subset of the independent variables is the largest attainable for any subset of the same size. However, Miller (1965) relates that the method has been used satisfactorily as a feasible substitute for the much longer procedure of computing the total explained variance for every possible subset.

The computer programs for the index of difficulty were developed by members of the biostatistical unit at the University of Oklahoma Medical Center and run on an IBM 1800 computer.

Variables

Figure 1 contains a reproduction of the data card of the Oklahoma Vocational Rehabilitation Agency on file for every individual that is currently a client or has been a client within recent years. A detailed listing and description of the information contained on the card is given in Appendixes B-F.

A number of variables were selected for investigation as to their potential value in developing a measure of caseload difficulty from this information. This initial selection was based on two criteria: (a) the variables were considered as potentially useful predictors by the investigator and by Dr. H. Viaille, who was Director of Program Development for the DVR at that time, and (b) since part of the objective of the investigation was to determine exactly which variables are relevant, all variables whose contribution was questionable were included in the analysis. The 16 variables that were selected and their code are presented in Table 1.

Thus, these 16 variables were utilized as the independent variables in the stepwise multiple regression analysis. The criterion to be predicted is the category of closure (status 26, closed rehabilitated; and status 28, closed not rehabilitated after rehabilitation plan initiated) transformed to a time period in terms of months from acceptance date to closure.

Subjects

Data analyzed consisted of the Oklahoma Vocational Rehabilitation clients who were closed during the first eleven months of fiscal year 1968. There were 3,584 clients who were closed rehabilitated (status 26) and 380 clients closed not rehabilitated (status 28) for a total sample size of 3,964 clients. The number of status 26 clients represented 94 per cent of the total rehabilitated for the fiscal year.

TABLE 1

Independent Variables Selected as Predictors

Variable Number	Variable	Code	Number of Categories
01	Referral Source	Appendix B	12
02	County	Appendix C	84
03	Counselor	Appendix C	98
04	Major Disability	Appendix D	36
05	Source of Support	Appendix E	12
06	Vocational Objective	Appendix F	64
07	Age	XX*	
08	Sex	1 - Male 2 - Female	2
09	Race	1 - White 2 - Negro 3 - Indian 4 - Other	4
10	Marital Status	1 - Married 2 - Widowed 3 - Divorced 4 - Separated 5 - Single	5
11	Number of Dependents	XX*	
12	Time from Acceptance to Closure (mo's.)	XX*	
13	Number of Times Refer- red to DVR Agency	XX*	
14	Social Security Disability Insurance	1 - Not an Applicant 2 - Applicant Allowed 3 - Applicant Denied 4 - Applicant Pending	4
15	Education (Years Completed)	XX*	
16	Time from Acceptance to Plan Initiated (mo's.)	XX*	

* Arabic numerals

CHAPTER IV

RESULTS AND DISCUSSION

The results obtained from the stepwise multiple linear regression analysis are presented in this chapter with additional secondary statistical analyses on the available data.

The mean, standard deviation, correlation coefficient between the independent and dependent variable, the regression coefficient and its standard error, in addition to the computed t-value for each of the 16 independent variables are presented in Table 2.

The mean of the dependent or criterion variable was 19.72 months with a standard deviation of 1.15 months. The point of interception was 21.43. Including all 16 independent variables, the multiple correlation coefficient (R) for predicting the criterion was .17 with a standard error of estimate of 1.14. The upper-half of the correlation matrix of the independent variables is presented in Table 3.

Although the multiple correlation coefficient of .17 is quite small for the overall prediction of the criterion, the analysis of variance indicated that the linear regression of the 16 independent variables was significantly different from zero. Appearing in Table 4 is a summary of the analysis of variance for the stepwise multiple linear regression.

TABLE 2

Statistical Summary of the 16 Independent Variables
and Correlation with Dependent Variable

Variable	Mean ^a	Standard Deviation	Correlation Ind. & Dep. Var.	Regression Coefficient	Std. Error of Reg. Coef.	t Value of Reg. Coef.
Referral Source	19.72	6.98	-.03	-.016	.004	-4.57**
County	19.72	5.71	.01	-.001	.005	- .24
Counselor	19.72	6.48	.02	.005	.004	1.13
Major Disability	19.72	7.02	.04	.001	.003	.42
Source of Support	19.72	5.23	-.05	-.014	.004	-3.45**
Vocational Objective	19.72	8.68	.06	.007	.003	2.50*
Age	31.64	13.77	-.01	-.002	.002	- .90
Sex	19.72	3.15	.11	.029	.006	4.63**
Race	19.72	.90	-.01	.013	.020	- .62
Marital Status	19.72	6.90	.05	.006	.004	1.68
Number of Dependents	1.11	1.87	-.03	-.023	.011	-2.09*
Time from Acceptance to Closure (Mo's)	19.72	17.78	.06	.003	.001	1.88
Number Times Referred	.16	.51	.00	-.019	.037	- .52

TABLE 2 (cont.)

Variable	Mean ^a	Standard Deviation	Correlation Ind. & Dep. Var.	Regression Coefficient	Std. Error of Reg. Coef.	t Value of Reg. Coef.
Social Security Disability Insurance	19.72	.44	-.04	-.080	.043	-1.87
Education (Years)	10.18	2.72	-.02	-.020	.007	-2.64**
Time from Acceptance to Plan Initiated (Mo's)	3.36	7.25	.05	.005	.003	1.70

^a Each of the independent variables that were transformed from a nominal scale to ordinal measurement reflect the identical mean value of 19.72 months.

* $p < .05$ $df = \infty$

** $p < .01$ $df = \infty$

Upper Triangular Correlation Matrix of 16 Predictor Variables

[illegible]

TABLE 4

Analysis of Variance for the Regression

Source of Variation	Degrees of Freedom	Sum of Squares	Mean Squares	F Value
Attributable to linear regression	16	148.14	9.26	7.16**
Deviation from Regression	<u>3947</u>	<u>5104.42</u>	1.29	
Total	3963	5252.56		

** $p < .01(16, \infty) = 1.99$

A number of the independent variables were indicated by an F ratio in the stepwise linear regression analysis to be a significant source of variation. The following variables were found to be significant beyond the .01 level: (a) referral source, (b) source of support, (c) vocational objective, (d) sex, (e) marital status, (f) number of dependents, (g) time from acceptance to closure, (h) social security disability insurance, (i) education, and (j) time from acceptance to plan initiated. The counselor variable was significant at the .05 level, in addition to the above-mentioned variables. County, major disability, age, race, and number of times referred to the Vocational Rehabilitation Agency were found to be non-significant sources of variation.

The results of the stepwise multiple regression analysis are presented in Table 5 to portray the order in which the variables entered the stepwise process at the .05 level of significance.

A t-test computed on the average time period between the status 26 (closed rehabilitated) and status 28 clients (closed not rehabilitated after plan initiated) resulted in a value of 3.93, which was significant

beyond the .001 level. Table 6 indicates that the status 28 clients were served nearly four months longer than the clients who were closed rehabilitated.

TABLE 5
Stepwise Linear Regression
F @ .05 Level

17 Variables
3964.0000 Weighted Degrees of Freedom

F Level to Enter Variable = 1.6650

F Level to Remove Variable = 1.6650

Standard Error of Y 1.151

Step No. 1

Variable Entering 8 Sex
F Level 44.51
Standard Error of Y 1.145
Constant 18.96

Variable	Coefficient	Std. Error of Coef.
X (8)	.039	.006

Step No. 2

Variable Entering 1 Referral Source
F Level 9.59
Standard Error of Y 1.144
Constant 19.07

Variable	Coefficient	Std. Error of Coef.
X (1)	-.008	.003
X (8)	.041	.006

Step No. 3

Variable Entering 12 Time from Acceptance to Closure
F Level 19.91
Standard Error of Y 1.141
Constant 19.32

Variable	Coefficient	Std. Error of Coef.
X (1)	-.013	.003
X (8)	.038	.006
X (12)	.005	.001

Step No. 4

Variable Entering 5 Source of Support
 F Level 7.25
 Standard Error of Y 1.140
 Constant 19.32

Variable	Coefficient	Std. Error of Coef.
X (1)	-.001	.003
X (5)	-.010	.004
X (3)	.036	.006
X (12)	.006	.001

Step No. 5

Variable Entering 10 Marital Status
 F Level 8.93
 Standard Error of Y 1.139
 Constant 19.30

Variable	Coefficient	Std. Error of Coef.
X (1)	-.014	.003
X (5)	-.012	.004
X (8)	.033	.006
X (10)	.010	.003
X (12)	.005	.001

Step No. 6

Variable Entering 14 Social Security Disability Insurance
 F Level 3.81
 Standard Error of Y 1.139
 Constant 20.92

Variable	Coefficient	Std. Error of Coef.
X (1)	-.013	.003
X (5)	-.012	.004
X (8)	.032	.006
X (10)	.010	.003
X (12)	.005	.001
X (14)	-.082	.042

Step No. 7

Variable Entering 15 Education (Years Completed)

F Level 3.36

Standard Error of Y 1.133

Constant 20.97

Variable	Coefficient	Std. Error of Coef.
X (1)	-.013	.003
X (5)	-.012	.004
X (8)	.031	.006
X (10)	.011	.003
X (12)	.005	.001
X (14)	-.078	.042
X (15)	-.013	.007

Step No. 8

Variable Entering 6 Vocational Objective

F Level 5.92

Standard Error of Y 1.138

Constant 20.98

Variable	Coefficient	Std. Error of Coef.
X (1)	-.014	.003
X (5)	-.012	.004
X (6)	.006	.003
X (8)	.029	.006
X (10)	.011	.003
X (12)	.004	.001
X (14)	-.078	.042
X (15)	-.018	.007

Step No. 9

Variable Entering 11 Number of Dependents

F Level 3.73

Standard Error of Y 1.137

Constant 21.05

Variable	Coefficient	Std. Error of Coef.
X (1)	-.014	.003
X (5)	-.013	.004
X (6)	.006	.003
X (8)	.030	.006
X (10)	.008	.004
X (11)	-.021	.011
X (12)	.004	.001
X (14)	-.078	.042
X (15)	-.019	.007

Step No. 10

Variable Entering 16 Time from Acceptance to Plan Initiated
 F Level 2.76
 Standard Error of Y 1.137
 Constant 20.99

Variable	Coefficient	Std. Error of Coef.
X (1)	-.014	.003
X (5)	-.013	.004
X (6)	.007	.003
X (8)	.030	.006
X (10)	.008	.004
X (11)	-.021	.011
X (12)	.003	.001
X (14)	-.075	.042
X (15)	-.019	.007
X (16)	.005	.003

Step No. 11

Variable Entering 3 Counselor
 F Level 1.88
 Standard Error of Y 1.137
 Constant 20.88

Variable	Coefficient	Std. Error of Coef.
X (1)	-.015	.003
X (3)	.005	.003
X (5)	-.013	.004
X (6)	.007	.003
X (8)	.030	.006
X (10)	.008	.004
X (11)	.022	.011
X (12)	.003	.001
X (14)	-.072	.042
X (15)	-.018	.007
X (16)	.005	.003

Diagonal Elements

Variable	Value	Variable	Value
1	1.77	9	.96
2	.42	10	1.79
3	1.40	11	1.26
4	.65	12	1.82
5	1.30	13	.95
6	1.53	14	1.04
7	.50	15	1.17
8	1.16	16	1.21

TABLE 6

Sample Size, Mean and Standard Deviation of
Time Served of Status 26 and 28 Clients

Client Code	N	Mean Time Served (Mo's)	S.D.
Status 26	3584	19.35	17.66
Status 28	<u>380</u>	23.26	18.51
Total	3964		

$t = 3.93$ $p < .001$, $df = \infty$

Sex was the first variable to enter in the stepwise multiple regression analysis. The t-test indicated that the males were served a significantly ($p < .001$) longer time period from acceptance to closure than the females (Table 7). One possible explanation for this might be that males select a vocational objective that takes a longer training period than female clients. A large percentage of the female clients are closed as homemakers. For instance, twenty-one per cent of the 3815 clients rehabilitated (status 26) were closed as homemakers during fiscal year 1968.

TABLE 7

Sample Size, Mean and Standard Deviation
of Time Served by Sex

Sex	N	Mean Time Served	S.D.
Males	2146	22.62	19.03
Females	<u>1818</u>	16.30	15.50
Total	3964		

$t = 11.53$ $p < .001$, $df = \infty$

Referral source of the clients was the second variable to enter the stepwise regression analysis. The referrals from the State Workmen's

Compensation Board and educational institutions were served the longest time period, while those from physicians together with hospitals and other health agencies were closed within the shortest time period. The mean time to closure, together with the standard deviations and number of clients by referral source are presented in Table 8. It is logical to expect that a majority of clients referred from educational institutions would be pursuing a vocational objective that required a longer time period, perhaps even four years of college, which could account for the 11-month time period differential between the referrals from educational institutions and the next highest rank from the state employment service. In addition, a large number of educational institutions referrals include many clients with the major disability of mental retardation. Many of the mentally retarded clients are accepted for services by the Vocational Rehabilitation Agency during their freshmen year in high school.

TABLE 8
Referral Source of Clients Ranked
by Average Time to Closure

Referral Source	N	Mean Time Served (Mo's)	S.D.
State Workmen's Compensation	5	36.60	22.77
Educational Institutions	790	32.52	20.59
State Employment Service	73	21.92	18.37
Correctional Institutions	189	20.91	10.87
Self-Referred	470	18.88	16.90
Individual, except Client	659	18.78	16.93
Social Security Administration	53	17.58	19.87

TABLE 8 (cont.)

Referral Source	N	Mean Time Served (Mo's)	S.D.
Welfare Agencies	494	16.90	14.78
Artificial Appliance Co.	20	16.45	14.46
Other Source	157	15.97	12.85
Physicians, (n.e.c.)	313	15.05	14.56
Hospitals and other Health Agencies	<u>741</u>	11.72	13.22
Total	3964		

As seen from Table 9, clients whose chief source of support was the category of family and friends had the greatest mean time period from acceptance to closure with an average time of 24.72 months. This time period is nearly twice as great compared to clients whose source of support was from their current earnings. Clients receiving public assistance ranked fourth highest in the average time period served.

TABLE 9

Client's Chief Source of Support Ranked
by Average Time to Closure

Source	N	Mean Time Served (Mo's)	S.D.
Family and Friends	1780	24.72	20.05
Disability or Sickness Benefits	42	21.76	14.90
Workmen's Compensation	26	21.27	14.78
Public Assistance	540	20.74	18.70
Other Disability Benefits and Unemployment Ins.	94	18.91	18.88

TABLE 9(cont.)

Source	N	Mean Time Served (Mo's)	S.D.
Private Relief Agency	5	18.80	14.81
Public Inst. - Tax Supported	625	13.69	11.45
Current Earnings	674	13.57	12.14
Soc. Sec. Disability Ins.	114	12.56	9.55
Annuity Ins. Benefits	3	11.00	4.36
Not Reported	8	8.50	5.58
Public Asst. - W/O Fed. Funds	<u>53</u>	7.66	3.24
Total	3964		

Single clients required vocational rehabilitation services about twice as long a time period before they are closed compared to the other four categories of marital status. A plausible explanation for this may be that single clients would be more likely to pursue a vocational objective that entails receiving 2 or more years of higher education than clients in other marital status categories. Married clients may select a vocational objective that requires a shorter training period to allow their return to work sooner because of financial responsibilities associated with a family. The client's marital status categories ranked according to average time served are presented in Table 10.

The Social Security Insurance variable was the sixth to enter the stepwise multiple regression analysis. A t-test computed on the average time period to closure between clients who were not an applicant compared to clients whose application was allowed resulted in an insignificant value of .93. The sample size, mean time from acceptance to closure and

standard deviation by sub-category of this variable are presented by rank order in Table 11.

TABLE 10
Client's Marital Status Ranked by
Average Time Provided Services

Marital Status	N	Mean Time Served (Mo's)	S.D.
Single	1515	28.37	20.30
Divorced	664	15.64	13.92
Married	1434	14.64	13.80
Widowed	195	11.36	10.59
Separated	<u>156</u>	10.33	10.42
Total	3964		

TABLE 11
Sample Size, Mean Time to Closure and Standard Deviation
by Social Security Disability Insurance Classification

Soc. Sec. Dis. Ins. Classification	N	Mean Time Served (Mo's)	S.D.
1. Applicant Pending	42	20.57	16.63
2. Not an Applicant	3612	19.84	17.80
3. Applicant Allowed	201	18.64	17.84
4. Applicant Denied	<u>109</u>	17.69	17.29
Total	3964		

t-test 2 vs 3 = .93 N.S. @ .05 level, df = ∞

The vocational objective of the clients classified according to the first digit from the third edition of the Dictionary of Occupational

Titles, (D.O.T.), Volume 1--in addition to four occupations not duplicated in the D.O.T.--are displayed in Table 12 by rank order of average time from acceptance to closure. A Spearman Rank Correlation Coefficient was computed on ten of the vocational objective codes and average time to closure to ascertain the relationship existing between vocation level and average time to closure. The vocational objective codes of unpaid family worker, sheltered workshop operator, and vending stand operator were not included in the computation because of their small sample size--each being one per cent or less of the total sample. The vocational codes of 40 and 50 were combined to increase this category's sample size. The vocational objective codings received a reverse ranking in the computation; e.g., miscellaneous vocational objective code of 90 received the rank of one, vocational objective code 80 - two, and code 00, the rank of ten. This transformation was completed because the higher occupation levels would require a longer training period or educational process to complete. A correlation coefficient (r_s) of .48 was obtained between vocation level and average time from acceptance to closure. Testing the significance of this correlation coefficient against the null hypothesis by reference to Table P in Siegel (1956) resulted in the decision that the association existing between vocational objective level and average time to closure was not significant ($p @ .05 \geq .564$, 10 df, 1-tail).

The counselor variable was the last significant variable to enter in the stepwise regression analysis. To test if the number of clients closed by a counselor was associated with the average time period required from acceptance to closure a 2 X 2 chi-square contingency test corrected for continuity was computed. The median number of clients closed by the 98 counselors was 39.9 with a median time to closure of 19.7 months. The chi-

TABLE 12

Clients' Vocational Objective Ranked
by Average Time to Closure

Vocational Objective	Code	N	Per Cent of Total Closures	Mean Time Served (Mo's)
Professional, Technical and	00's	545	.14	35.30
Managerial Occup.	10's	231	.06	31.08
Unpaid Family Worker	79	27	.01	30.96
Bench Work	70's	206	.05	23.60
Sheltered Workshop Operator	69	30	.01	23.50
Machine Trade	60's	242	.06	19.83
Clerical and Sales	20's	487	.12	18.38
Structural Work	80's	298	.08	17.26
Services	30's	1,096	.28	15.67
Farming, Forestry and Related Occup.	40's	92	.02	15.41
Processing	50's	75	.02	14.95
Miscellaneous	90's	139	.04	14.74
Vending Stand Operator	99	19	---	11.05
Homemaker (Own Home)	59	<u>477</u>	.12	9.45
Total		3,964		

square computed from the counselor's data arranged according to its appropriate placement above or below the median on the two variables in Table 13 resulted in an insignificant value of .037. Thus, it may be concluded, relative to the medians on the two variables, that the number of clients closed is independent of the time involved from acceptance to closure for this group of 98 counselors.

TABLE 13

Counselors Caseload Closure Size and Time from Acceptance
to Closure Relative to the Medians
(Med. Time = 19.7 Mo., Med. Caseload Closure Size = 39.9)

	Counselors Above Median Time	Counselors Below Median Time	
Counselors Below Median Caseload Closure Size	23	24	47
Counselors Above Median Caseload Closure Size	25	26	51
	48	50	98

$\chi^2 = .037$, N.S. @ .05, df = 1

The disability categories are presented in Table 14 by rank order on time elapsed from acceptance to closure. This variable was not significant in the regression analysis. The category of speech impairments involved the greatest time period, while the clients with disorders of the digestive system and conditions of the genito-urinary system were closed in the least amount of time. Clients with an orthopedic deformity or functional impairments comprised 19 per cent of the total number of closures, followed by 16 per cent with disorders of the digestive system.

TABLE 14

Number of Clients by Major Disability Category
Ranked by Average Time to Closure

<u>Disability Category</u>	<u>N</u>	<u>Per Cent of Total Closures</u>	<u>Mean Time Served (Mo's)</u>
Speech Impairments	48	.01	32.46
Orthopedic Deformity or Functional Impairments	744	.19	28.00
Allergic, Endocrine System, Metabolic and Nutritional Diseases	162	.04	25.72
Diseases of the Blood	8	*	25.62
Mental Retardation	327	.08	25.41
Other Specified Disorders of Nervous System	66	.02	24.77
Visual Impairments	302	.08	24.44
Cardiac and Circulatory Conditions	92	.02	23.04
Other Disabling Diseases and Conditions (N.E.C.)	91	.02	19.92
Respiratory Diseases	72	.02	19.54
Other Conditions from Neoplasms	8	*	18.50
Other Mental Disorders	520	.13	18.20
Hearing Impairments	124	.03	17.99
Absence or Amputation of Members	144	.04	17.68
Psychoneurotic Disorders	218	.05	16.21
Psychotic Disorders	333	.08	12.08

TABLE 14 (cont.)

Disability Category	N	Per Cent of Total Closures	Mean Time Served (Mo's)
Disorders of Digestive System	650	.16	9.69
Conditions of Genito- Urinary System	<u>54</u>	.01	9.39
Total	3964		

* Less than 1 per cent

Similarly, the variable of race was not significant in the regression analysis. However, a t-test computed on the average time served from the combined mean of the white and Negro clients compared to the Indian and "other" group classification resulted in a value of 2.39, significant beyond the .02 level. The white and Negro clients were served an average of 4.11 months longer than the Indian and "other" clients. The number of clients closed by race, in addition to the mean and standard deviations of time served are presented in Table 15.

TABLE 15

Number of Clients Closed by Race Group with Mean
and Standard Deviation of Time Served

Race	Number Closed	Per Cent of Total Closures	Mean Time Served (Mo's)	S.D.
1. White	3351	85	19.97	17.97
2. Negro	417	11	19.59	16.80
3. Indian	167	4	15.81	15.84
4. Other	<u>29</u>	1	15.86	17.31
Total	3964			

t-test 1 and 2 vs 3 and 4 = 2.39, $p < .02$, $df = \infty$

As previously mentioned, the multiple correlation coefficient obtained in this study of .17 is quite small, although it is twice as large as that obtained by C. Miller (1965) in his preliminary inquiry. Thus, only a small per cent of the total variance was accounted for by the linear regression of the dependent variable on the 16 selected independent variables. This may have occurred as a result of one or more phenomena. First, the predictor variables selected that are readily available on each client may be independent of the criterion. However, 11 of the 16 independent variables were indicated to be a significant source of variation. Furthermore, it should be noted that the standard deviation of the criterion, Y, was rather stable throughout the stepwise multiple regression analysis. Second, the relative magnitude of the mean and variance of the independent and dependent variables may have been so large that a linear regression model was not appropriate. Perhaps some of these variables should possibly enter the regression model in a quadratic form. Recall, however, that the significance of a number of the regression coefficients indicates that there is some merit to a linear multiple regression equation for prediction. Third, the influence of random errors in the measurement of the independent variables will reduce the multiple correlation coefficient.

Relation to Other Research

Although not concerned with the same research problem but somewhat related in statistical methodology is the work of Eber (1966). Eber factor analyzed 61 client variables, of which 51 were obtained from the client's files and 10 obtained in a follow-up study after the client was closed, on a sample of 502 clients who had completed vocational rehabili-

tation services in Alabama. In separate analyses, he also factor analyzed 18 variables concerned with characteristics of the counselor and 69 sociological variables concerned with all the counties.

Ten factors were extracted from the analysis of the client variables. In an attempt to predict rehabilitation outcome, factor scores were calculated from the client, counselor, and sociological factors for each of the 502 clients using two of the resulting client factors (vocational adequacy at closure and vocational adequacy at follow-up) as the criteria. An extremely large number of combinations and permutations of the 72 ensuing variables was possible so investigation was focused upon those combinations available at certain stages in the rehabilitation process. Eight selected variables were combined in a linear composite which correlated .355 and .406 respectively with the two criteria at the "referral" stage. At the "acceptance" stage of the process, ten selected variables were combined which correlated .488 and .426 respectively with the two criteria.

An attempt to predict rehabilitation client's success by the use of Minnesota Multiphasic Personality Inventory (MMPI) scores and selected demographic variables was reported by Ayer, Thoreson, and Butler (1966). A sample of 79 clients, including 45 with a diagnosis of emotional illness and 34 with physical disabilities, were selected from the Wisconsin Vocational Rehabilitation Division. The MMPI scores from the 14 standard scales and 11 demographic variables were utilized as predictor variables in a multiple regression equation to predict three dependent variables of closure status, occupational level, and upward mobility. Closure status referred to the clients who were either successfully employed or unemployed at the time the case was closed. Occupational level was dichotomized

into two categories. The first level included professional-clerical occupations, as defined by the Dictionary of Occupational Titles, and the second level included all other occupations. Upward mobility was determined by three criteria: (a) further schooling under the Vocational Rehabilitation Division; (b) an increase in salary, measured between the salary at the time of application or on the last job before becoming a client and the salary received upon placement after receiving services; and (c) an increase in occupational level, measured between the job held previously to application and the job in which the client was placed at closure. The clients were rated with a plus or minus in each category; plus signs in any two of the three categories were accepted as indicative of upward mobility.

The multiple correlation coefficients for each of the three regression equations approached .67 (the .05 level of significance). The coefficient for closure status was .65; for occupational level, .66; and for upward mobility, .66.

The independent variables significantly correlated with the three dependent variables were: a negative correlation for age at time of application with closure status; type of disability and education with occupational level; and a negative correlations for age at time of application and age at onset with upward mobility. Not any of the MMPI scales correlated significantly with the three dependent variables.

There were several significant beta weights in the regression equations. In the equation for closure status negative beta weights for IQ, Pd (Psychopathic deviate) scale, and the K (Correction) scale were significant at the .05 level. In the equation for upward mobility, age at

time of application and the Mf (Masculine-feminine) scale had significant beta weights. Ayer, et al. (1966) suggest that the potential importance of the Pd scale might be its use as an indicator of energy or drive. "In this sample it might be that such an energy drive could be used to successfully manipulate the environment, resulting in successful vocational training and placement" [p. 636]. The negative beta weight for IQ with no correlation with the dependent variable was difficult for the authors to explain. Ayer, et al. offered the suggestion that since IQ was significantly correlated with the Paranoia, Hysteria, Lie, and Hypochondriasis scales that these personality characteristics may outweigh the benefits of IQ to the extent of prohibiting or prolonging rehabilitation. The authors suggested that the relationship between the Masculine-feminine, Correction, Psychopathic deviate scale, and the significant demographic variables be further explored for their utility in predicting rehabilitation success.

CHAPTER V

SUMMARY AND CONCLUSIONS

The research reported in this study was concerned with the development of an index of the Vocational Rehabilitation counselor's case-load difficulty by a method of utilizing routinely-collected demographic and biographical data. Secondary objectives essential to the problem were: (a) to select from among all the data collected on each client that is readily available, those factors that are most indicative of difficulty for the counselor to successfully rehabilitate the client; (b) to minimize the number of factors necessary to form an index of difficulty; and (c) to determine the appropriate weights that should be assigned the selected factors in order that the index of difficulty will be maximally correlated with the counselor's performance.

The statistical method utilized was a stepwise multiple linear regression analysis. Several of the 16 independent variables and the dependent variable or criterion were converted from a nominal to an ordinal measurement. This transformation was executed by determining the average time required by all 98 counselors to close all individuals in a specific category of a given classificatory variable. The average time--computed in months from the client's time of acceptance to closure--was then considered as an index of the difficulty that may be encountered in effecting the rehabilitation of a given individual in a particular category.

The criterion to be predicted was the category of closure (status 26-closed rehabilitated and status 28-closed not rehabilitated) transformed to the above-mentioned time period. Data analyzed consisted of 3964 clients closed by the Oklahoma Division of Vocational Rehabilitation during the 1968 fiscal year.

A multiple correlation coefficient (R) for predicting the criterion of .17 with a standard error of estimate of 1.14 was obtained by including all 16 independent variables. However, the analysis of variance indicated that the linear regression of the independent variables was significant.

The following variables--listed by the order in which they entered in the stepwise regression analysis--were found to be significant ($p < .05$) sources of variation: (a) sex, (b) referral source, (c) time from acceptance to closure, (d) source of support, (e) marital status, (f) social security disability insurance, (g) education, (h) vocational objective, (i) number of dependents, (j) time from acceptance to plan initiated, and (k) counselor. Other statistical analyses were performed on the available data.

Three suggestions were offered as an explanation for the small percent of the total variance accounted for by the linear regression of the dependent or criterion variable on the 16 predictor variables. First, the predictor variables selected that are readily available on each client may be independent of the criterion. Second, the relative magnitude of the mean and variance of the independent and dependent variables may have been so large that a linear regression model was not appropriate. Some of the variables should possibly enter the regression model in a

quadratic form. Third, the influence of random errors in the measurement of the independent variables will reduce the multiple correlation coefficient.

The results of this investigation indicate that a measure similar to the caseload difficulty index may be a reasonable measure of the counselor's performance. However, the routinely-collected data utilized in this study accounted for such a small amount of the criterion variance that it may not be practical in future research endeavors to include all or a part of these variables. It is suggested that further research be conducted to discover additional variables. These might include psychological data on the client involving some measure of personality traits or a measure of client motivation. A main concern would be to discover some variables that could be readily attainable and quantified without involving the counselor's or supervisor's time in judging caseload difficulty.

In addition, the problem of defining the criteria of caseload difficulty may best be met through the use of a combination of criterion.

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APPENDIXES

APPENDIX A

VOCATIONAL REHABILITATION STATUSES

There are 16 status classifications under the revised VRA status coding structure. The statuses are coded in even numbers beginning with 00 and ending with 30. The odd numbers, 01, 03, etc., have been deliberately left out of the Federal coding structure to permit their use by those agencies desiring to record additional detail in case progress recording. The statuses are:

- 00 Referral (former status 0)
- 02 Applicant (former status 0)
- 04 Six-month Extended Evaluation (new)
- 06 Eighteen-month Extended Evaluation (new)
- 08 Closed After Evaluation--from statuses 00, 02, 04, or 06 (new)
- 10 Plan Development (former status 1)
- 12 Plan Completed (former status 2)
- 14 Counseling and Guidance Only (new)
- 16 Physical Restoration (former status 4)
- 18 Training (former status 5)
- 20 Ready for Employment (former status 6)
- 22 In Employment (former status 7)
- 24 Service Interrupted (former status 8)
- 26 Closed Rehabilitated (former status 12)
- 28 Closed Not Rehabilitated AFTER Rehabilitation Plan Initiated (former status 13)
- 30 Closed Not Rehabilitated BEFORE Rehabilitation Plan Initiated (former status 15)

Definition, Classification, and Processing of Referrals

Definition of a Referral. A referral is defined as any individual who has applied, by personal contact with any VR employee, by telephone, or by letter; or who has been referred to any VR employee by letter, by telephone, by direct contact, or by any other means; and for whom the following minimum information has been furnished: (1) name and address, (2) disability, (3) age and sex, (4) date of referral, and (5) source of referral.

All such individuals are classified as referrals and must be recorded and reported as referrals for Form R-200 and Form R-300 purposes as

soon as the above basic, minimum information is available. Recognition of this basic principle by all counselors and all state VR agencies is essential.

Classification of Referrals. In conformance with the requirements of the new legislation, some new classifications of referrals have been established and given status designations.

Status 00. Referral. This status represents entrance into the VR process for any individual who meets the above definition of a referral. All such individuals will be recorded and reported on Form R-300, Part 1, even though the counselor may close out the referral almost immediately as being deemed inappropriate, or for other reasons. Each state agency will recognize that although an occasional error of omission in recording and reporting a referral may occur, a deliberate policy on the part of any counselor, or agency, of recording and reporting only those referrals surviving a screening process will defeat the intent and purpose of this classification and yield non-comparable data.

Status 02. Applicant. Referrals (status 00) should be placed in this status as soon as the counselor has a document signed by the individual requesting vocational rehabilitation services. Generally, the document will be an agency application form, but a letter signed by an individual who provides the minimum basic information and requests service should also be considered as a basis for placing the individual in this status. This is important, since the amended state plan and regulations require that the applicant must be notified in writing that his request for VR services has been denied, and the only certain basis for determining that the individual has knowledge of having been referred is by the existence of a document signed by the individual.

While the individual is in this status, sufficient information is developed to make a determination of eligibility or ineligibility for vocational rehabilitation services, or a decision to put the individual into one of the extended evaluation statuses prior to making such determination.

Status 04. Six-month Evaluation. An individual should be placed in this status when the counselor has written a certification that the severity of the individual's disability is such that an extended period of time is required to evaluate his rehabilitation potential prior to making a certification of eligibility for vocational rehabilitation services. Clients with one of the selected disabilities designated by the Secretary as eligible for eighteen-month extended evaluation should not be placed in this status. Individuals placed in this status may not remain in the status beyond six months, but may be moved from this status at any time prior to the expiration of the six-month period if it is determined that either (a) there is a reasonable expectation that the individual can be rendered fit to engage in a gainful occupation, or (b) there is no reasonable likelihood that he can be rendered fit to engage in a gainful occupation.

Status 06. Eighteen-Month Evaluation. An individual should be placed in this status when the counselor has written a certification that the individual has one of the selected disabilities designated by the Secretary as eligible for eighteen-month extended evaluation; and that the severity of the disability is such that an extended period of time is required to evaluate his rehabilitation potential prior to making a certification of eligibility for vocational rehabilitation services. Individuals placed in this status may not remain in the status longer than eighteen months but may be moved from this status at any time prior to the expiration of the eighteen-month period if it is determined that, either (a) there is a reasonable expectation that the individual can be rendered fit to engage in a gainful occupation, or (b) that there is no reasonable likelihood that he can be rendered fit to engage in a gainful occupation.

Status 08. Closed after Evaluation. This status has been provided to furnish a convenient means for identifying all persons not accepted for VR services, whether closed from referral (status 00) or applicant status (02), or from one of the extended evaluation statuses (04 or 06). All persons processed through referral and/or extended evaluation and not accepted into the active caseload for vocational rehabilitation services will be closed in this status. At this time, for closures from statuses 00 or 02, items A through F of the Form R-300, Part 2, will be completed; and for closures from an extended evaluation status (04 or 06) items A through R of the Form R-300, Part 2, will be completed. The form will be dated and signed by the counselor, and forwarded to the appropriate office. At this same time the certificate of ineligibility will be completed, signed, and filed.

Processing and Classification of Active Cases

Definition of an active case. An individual who has been certified as meeting the basic eligibility requirements should be accepted for vocational rehabilitation services, designated as an active case, and placed in status 10.

Section 401.20(c) (1) of the Regulations states in part: "The State Plan shall provide that, prior to or simultaneously with acceptance of the handicapped individual for vocational rehabilitation services, there will be a certification that the individual has met the three basic eligibility requirements."

Processing of active cases. After an individual has been accepted and his case placed in the active caseload, the case study is completed, a plan for his vocational rehabilitation is developed, and the appropriate services are provided, including following-up to insure the suitability of employment.

The following statuses are designed to provide counselors, district supervisors, and state agency management personnel with a convenient and

uniform method for recording individual case progress, and caseload management information. It may be noted that no provision has been made for applying these statuses to cases in extended evaluation, on the premise that such data would not be particularly meaningful for the extended evaluation cases, and the long-term evaluation cases would be of insufficient volume to justify the additional recording for national reporting purposes. However, any large-volume agency desiring to establish case progress identification for their long-term evaluation cases can easily do so by prefixing the following statuses with an "8" to signify that the individual is undergoing status changes while in long-term extended evaluation.

The Pre-Service Statuses. (Statuses 10 and 12). Separate statuses for plan development and plan completion have been maintained at the request of many state agencies who felt that they had separate and distinct uses in caseload management. Federal reporting, however, combines the two, both on the individual Form R-300, and in summary reporting.

Status 10. Plan Development. While an individual is in this status the case study and diagnosis is completed to provide a basis for the formulation of the individual's plan of vocational rehabilitation. A comprehensive case study is basic to determining the nature and scope of services to be provided in order to accomplish the vocational rehabilitation objective of the individual. The counselor and client formulate and plan the rehabilitation services necessary to the solution of the client's problems, and those services are clearly outlined to him (Section 401.24(a) (3) of the Regulations). See Chapter 16 of the Vocational Rehabilitation Manual for requirements and basic principles relating to case study and diagnosis. Arrangements are made with the agencies to supply the necessary services and the individual remains in this status until his plan is written and approved by the proper personnel.

Status 12. Plan Completed. A case is placed in this status when the plan has been written and approved. The case remains in this status until services actually begin.

The In-Service Statuses (Statuses 14 through 24). These service statuses are provided for case progress designations to indicate the kind or kinds of services given to the client to prepare him for employment. Although status 24, "Service Interrupted" is not a "service" status, it most properly belongs in this grouping since it represents a case progress condition during the period from plan initiation to "ready for employment."

Status 14. Counseling and Guidance Only. This is a new status classification established to recognize a definite need in the caseload aspects of agency operation. It is intended that this status should be used only for those cases having an approved plan which outlines counseling, guidance and placement as the only services required to prepare the client for employment. It is not to be used to reflect the counseling and guidance which takes place during the course of plan development, or for the same service provided by the counselor during the progress of training, physical restoration, or other purchased services. However, within the

context of the meaning and intent above, in those instances where there has been a breakdown in the case progress after other services have been provided, and it has been determined by the counselor that substantial counseling and guidance is essential to the successful placement and rehabilitation of the individual, the client may be entered in this status, provided that a plan amendment has been written and approved, and that this is the only service required to prepare the client for employment.

Status 16. Physical Restoration. A client is placed in this status if he received medical, surgical, psychiatric, or therapeutic treatment, or is being fitted with an appliance. A case remains in this status until physical restoration services are completed.

Status 18. Training. A case is in this status if actually receiving one or a combination of the following types of training: (a) school training in a public or private school; (b) employment training in a commercial or industrial establishment under employment conditions; (c) training at some other facility, or by an individual teacher or instructor or by correspondence, the training not being given under school or employment conditions. See Chapter 18, Section 1, of the VR Manual for explanatory material about rehabilitation training. Cases remain in this status until they have either completed training or training is terminated, whether by the client or by VR.

Status 20. Ready for Employment. An individual is placed in this status when he has completed preparation for employment (counseling, guidance, treatment, fitting of an appliance, training, etc.) and is ready to accept a job, but has not yet been placed, or has been placed but has not yet begun employment.

Status 22. In Employment. An individual is placed in this status when he has been prepared for, placed in, and begun employment. He must be observed in this employment for a minimum of 30 days prior to being closed employed (status 26) to ensure adequacy of employment in accordance with the needs and limitations of the individual. Homemakers and unpaid family workers should be included if they meet the observation criteria.

Status 24. Service Interrupted. An individual is recorded in this status if rehabilitation services are interrupted while he is in one of the statuses 14, 16, 18, 20, or 22. Such cases are then held in this status until the client returns to one of the statuses 14, 16, 18, 20, or 22; or pending closure.

Disposition of Active Case. The case of an individual remains in the active load until the individual has completed his vocational rehabilitation or until it has been determined that the vocational rehabilitation process should be discontinued. See Chapter 24, Section 2, of the Vocational Rehabilitation Manual for requirements, principles, and standards relating to closing cases from active load. Cases closed from the active load are classified in one of the three following categories.

Status 26. Closed Rehabilitated. Cases closed as rehabilitated must as a minimum (a) have been declared eligible, (b) have received appropriate diagnostic and related services, (c) have had a plan of vocational rehabilitation services formulated, (d) have completed the plan insofar as possible, (e) have been provided substantial counseling (and/or) one or more other rehabilitation services, and (f) have been determined to be suitably employed for a minimum of 30 days. His Social Security Disability Status must be determined and coded at this time, and a completed Form OA-D853 Revised transmitted together with the VRA Form R-300 to the state office, for every applicant coded a, b, or c.

Status 28. Closed Other Reasons AFTER Rehabilitation Plan Initiated. Cases closed in this category must have met the criteria (a), (b), and (c) above, at least one of the services provided for by the plan must have been initiated, but for some reasons one or more of the other three criteria above were not met. Included here are cases meeting these criteria which are transferred to another state rehabilitation agency, either within the state, or in some other state. Also included here are those cases for which a rehabilitation plan for counseling and guidance only was written and initiated.

Status 30. Closed Other Reasons BEFORE Rehabilitation Plan Initiated. Cases closed in this category are those cases which although accepted for rehabilitation services did not progress to the point that rehabilitation services were actually initiated under a rehabilitation plan. Included here are cases meeting these criteria which are transferred to another state rehabilitation agency, either within the state, or in some other state.

APPENDIX B

CODES OF REFERRAL SOURCE

<u>VRA Code Number</u>		<u>Description</u>
<u>Tele-</u>	<u>De-</u>	
<u>scoped</u>	<u>tailed</u>	
00		Educational institutions
00	01	College or university (offering degrees at or beyond bachelor's level)
00	02	Other college (offering less than bachelor's degree); includes business college or school, junior college, and other specialized schools and colleges
00	03	Private vocational school
00	04	Public vocational school
00	05	Public elementary or high school
00	06	Private elementary or high school
00	07	School for the physically and mentally handicapped
00	08	Other educational institution
01		Hospitals, sanatoriums and other health agencies (public and private), including rehabilitation centers
01	10	State mental hospital
01	11	Other mental hospital
01	12	State or local tuberculosis hospital or sanatorium
01	13	Other tuberculosis hospital or sanatorium
01	14	General hospital
01	15	Hospital or other specialized facility for chronic conditions
01	16	Other hospital or clinic, n.e.c.
01	17	Rehabilitation center
01	18	State Crippled Children's Agency
01	19	State or local public health department or agency (including public health nurse, clinics, etc.)
01	20	Arthritis and rheumatism organization (private)
01	21	Blind organization (private)
01	22	Cancer organization (private)
01	23	Cerebral palsy organization (private)

01	24	Crippled children and adult organization (private)
01	25	Deaf and hearing organization (private)
01	26	Epilepsy organization (private)
01	27	Heart organization (private)
01	28	Mental retardation organization (private)
01	29	Mental health organization (private)
01	30	Multiple sclerosis organization (private)
01	31	Poliomyelitis organization (private)
01	32	Tuberculosis organization (private)
01	33	Other health agency or organization (public or private)
02	34	Physicians, not elsewhere classifiable
03	41	Social Security Administration
04		Workmen's compensation agencies
04	43	State workmen's compensation agency
04	44	U.S. Bureau of Employees' Compensation (Federal employees; longshoremen; etc.)
05		Welfare agencies (public and private)
05	50	Public welfare agency (State and local government)
05	51	Private welfare agency
05	52	United Mine Workers Welfare and Retirement Fund
05	53	Other Labor Union Welfare Fund
05	54	Civic organizations and clubs
05	55	Community advisory center
06	62	State Employment Service
07	70	Artificial appliance company
08	73	Individual, except client himself
09	74	Self-referred persons, not elsewhere classifiable--use when application is made by the client, either in person or by letter, to the State agency.
10		Other source
10	40	Insurance company
10	42	State temporary disability insurance agency
10	60	Selective Service System (including local boards)
10	61	State vocational rehabilitation agency
10	63	Public official (local, State, and Federal, n.e.c.)--use for referrals from a public official who is not associated with an agency, i.e., that is, the official was not acting as a representative of an agency --Do not use this code if public official is making a "public offender" referral

County	County Numbers	Counselor Numbers	Office
Grady	26	028	Norman
Grant	27	105	Enid
Greer	28	120	Granite
Harmon	29	127	Granite
Harper	30	101	Fort Supply
Haskell	31	240	Muskogee
Hughes	32	080	Ada
Jackson	33	147	Altus
Jefferson	34	146	Ardmore
Johnston	35	145	Ardmore
Kay	36	106	Ponca City
Kingfisher	37	104	Enid
Kiowa	38	148	Altus
Latimer	39	244	Talihina
LeFlore	40	246	Talihina
Lincoln	41	108	Stillwater
Logan	42	018	O.C. District
Love	43	146	Ardmore
Major	44	105	Enid
Marshall	45	145	Ardmore
Mayes	46	308	Vinita
McClain	47	030	Norman
McCurtain	48	245	Talihina
McIntosh	49	240	Muskogee
Murray	50	145	Ardmore
Muskogee - City	51	241	Muskogee
Muskogee	51	243	Muskogee
Muskogee High School	51	249	Muskogee
Noble	52	107	Ponca City
Nowata	53	314	Vinita E. St. Hosp.
Okfuskee	54	080	Ada
Oklahoma	55	001	O.C. District
Oklahoma	55	003	O.C. District
Oklahoma	55	006	O.C. District
Oklahoma	55	009	Midwest City
MWC DC CA High Sch.	55	010	Midwest City
Oklahoma	55	012	Midwest City
Oklahoma	55	014	Midwest City
Oklahoma	55	016	Midwest City
Oklahoma	55	024	O.C. SW 29th
Oklahoma	55	025	O.C. SW 29th
Oklahoma	55	026	O.C. SW 29th
Capitol Hill H.S.	55	061	O.C. Capt. Hill
SE & USG H.S.	55	062	O.C. SE High School
NWC & JM H.S.	55	063	O.C. NW Classen

County	County Numbers	Counselor Numbers	Office
Central H.S.	55	064	O.C. Central High
NE & SS H.S.	55	065	O.C. Central High
Carver Center	55	065	O.C. Central High
Orchard Park	55	066	O.C. SE High School
Douglass H.S.	55	067	O.C. Douglass High
Dungee High S.	55	067	O.C. Douglass High
University Hosp.	55	040	O.C. University Hosp.
Okmulgee	56	343	Okmulgee Tech. Sch.
Osage	57	107	Ponca City
Osage	57	368	Tulsa, Longfellow
Ottawa	58	315	Vinita, E.St. Hosp.
Pawnee	59	107	Ponca City
Pawnee	59	344	Tulsa, Longfellow
Payne	60	103	Stillwater
Pittsburg	61	070	McAlester
Pontotoc	62	080	Ada
Pontotoc	62	082	Ada
Pottawatomie	63	086	Shawnee
Pushmataha	64	245	Talihina
Roger Mills	65	122	Clinton
Rogers	66	309	Vinita
Seminole	67	087	Shawnee
Sequoyah	68	240	Muskogee
Sallisaw H.S.	68	249	Muskogee
Stephens	69	142	Lawton
Texas	70	101	Fort Supply
Tillman	71	148	Altus
Tulsa - TPF	72	306	Tulsa Psych. Clinic
Tulsa - TPF	72	317	Tulsa Psych. Clinic
Tulsa - TPF	72	318	Tulsa Psych. Clinic
Tulsa	72	346	Tulsa, Longfellow
Tulsa	72	347	Tulsa, Longfellow
Tulsa	72	348	Tulsa, Longfellow
Tulsa	72	349	Tulsa, Longfellow
Tulsa	72	360	Tulsa, Longfellow
Tulsa	72	361	Tulsa, Longfellow
Tulsa Juv. Ct.	72	362	Tulsa, Irving
Tulsa	72	363	Tulsa, Longfellow
Booker T. H.S.	72	365	Tulsa, Irving
Webster H.S.	72	367	Tulsa, Irving
Tulsa	72	368	Tulsa, Longfellow
Wagoner	73	243	Muskogee
Washington	74	303	Vinita
Washita	75	121	Weatherford
Woods	76	105	Enid
Woodward	77	101	Fort Supply

County	County Numbers	Counselor Numbers	Office
Central State Hosp.	78	021	Norman - CSH
Central State Hosp.	78	022	Norman - CSH
Central State Hosp.	78	027	Norman - CSH
Central State Hosp.	78	030	Norman - CSH
Western State Hosp.	79	102	Fort Supply
Western State Hosp.	79	109	Fort Supply
Granite	80	069	O.C. District
Granite	80	120	Granite
Granite	80	127	Granite
Granite	80	128	Granite
Granite	80	348	Tulsa, Longfellow
Central St. Hosp. CMHC	81	023	Norman, Mental Health
Central St. Hosp. CMHC	81	029	Norman, Mental Health
Tulsa Rogers	84	362	Tulsa, Irving
Tulsa Central	84	269	Tulsa, Central
Vinita State Hosp.	87	313	Vinita, Hospital
Vinita State Hosp.	87	314	Vinita, Hospital
Vinita State Hosp.	87	315	Vinita, Hospital
Vinita State Hosp.	87	316	Vinita, Hospital
Taft State Hosp.	88	248	Taft, Hospital
McAlester	90	068	O.C. District
Stringtown	90	076	Stringtown
McAlester	90	077	McAlester, OSP
Stringtown	90	078	Stringtown
McAlester	90	079	McAlester, OSP
McAlester	90	348	Tulsa, Longfellow

APPENDIX D

CODES OF DISABLING CONDITIONS AND CAUSES

VRA Code	
(1--)	VISUAL IMPAIRMENTS
(10-)	Blindness, both eyes, no light perception, due to:
100	cataract
101	glaucoma
102	general infectious, degenerative, and other specified diseases, including ocular and local infections
106	congenital malformations
107	accident, poisoning, exposure or injury
109	ill-defined and unspecified causes
(11-)	Blindness, both eyes (with correction not more than 20/200 in better eye or limitation in field with 20 degrees, but not VRA 10), due to:
110	cataract
111	glaucoma
112	general infectious, degenerative, and other specified diseases, including ocular and local infections
116	congenital malformations
117	accident, poisoning, exposure or injury
119	ill-defined and unspecified causes
(12-)	Blindness, one eye, other eye defective (better eye with correction less than 20/60, but better than 20/200, or corresponding loss in visual field), due to:
120	cataract
121	glaucoma
122	general infectious, degenerative, and other specified diseases, including ocular and local infections
126	congenital malformations
127	accident, poisoning, exposure or injury
129	ill-defined and unspecified causes

- (13-) Blindness, one eye, other eye good, due to:
- 130 cataract
 - 131 glaucoma
 - 132 general infectious, degenerative, and other specified diseases, including ocular and local infections
 - 136 congenital malformations
 - 137 accident, poisoning, exposure or injury
 - 139 ill-defined and unspecified causes

- (14-) Other visual impairments, due to:
- 140 cataract
 - 141 glaucoma
 - 142 general infectious, degenerative, and other specified diseases, including ocular and local infections
 - 146 congenital malformations
 - 147 accident, poisoning, exposure or injury
 - 149 ill-defined and unspecified causes

(2--) HEARING IMPAIRMENTS

- (20-) Deafness, unable to talk, due to:
- 200 degenerative and other non-infectious and specified diseases of ear
 - 202 upper respiratory infections and other infectious diseases
 - 206 congenital malformations
 - 208 accident, poisoning, exposure or injury
 - 209 ill-defined and unspecified causes

- (21-) Deafness, able to talk, due to:
- 210 degenerative and other non-infectious and specified diseases of ear
 - 212 upper respiratory infections and other infectious diseases
 - 216 congenital malformations
 - 218 accident, poisoning, exposure or injury
 - 219 ill-defined and unspecified causes

- (22-) Other hearing impairments, due to:
- 220 degenerative and other non-infectious and specified diseases of ear
 - 222 upper respiratory infections and other infectious diseases
 - 226 congenital malformations
 - 228 accident, poisoning, exposure or injury
 - 229 ill-defined and unspecified causes.

(3--)

ORTHOPEDIC DEFORMITY OR FUNCTIONAL IMPAIRMENT,
EXCEPT AMPUTATIONS

(30-,31-) Impairment involving three or more limbs or entire body,
due to:

- 300 cerebral palsy
- 301 congenital malformation or other and ill-defined birth injury
- 303 other diseases, infectious and non-infectious, (excluding
VRA 646, varicose veins), other infections (including local),
and other neurological and mental diseases (excluding VRA
630, Epilepsy).
- 310 arthritis and rheumatism
- 312 intracranial hemorrhage, embolism, and thrombosis (stroke)
- 314 poliomyelitis
- 315 muscular dystrophy
- 316 multiple sclerosis
- 317 Parkinson's disease
- 319 accidents, injuries, and poisonings

(32-,33-) Impairment involving one upper and one lower limb (includ-
ing side), due to:

- 320 cerebral palsy
- 321 congenital malformation or other and ill-defined birth
injury
- 323 other diseases, infectious and non-infectious, (excluding
VRA 646, varicose veins), other infections (including
local), and other neurological and mental diseases (ex-
cluding VRA 630, Epilepsy).
- 330 arthritis and rheumatism
- 332 intracranial hemorrhage, embolism and thrombosis (stroke)
- 334 poliomyelitis
- 335 muscular dystrophy
- 336 multiple sclerosis
- 337 Parkinson's disease
- 339 accidents, injuries, and poisonings

(34-,35-) Impairments involving one or both upper limbs (including
hands, fingers, and thumbs), due to:

- 340 cerebral palsy
- 341 congenital malformation or other and ill-defined birth
injury
- 343 other diseases, infectious and non-infectious, (excluding
VRA 646, varicose veins), other infections (including
local), and other neurological and mental diseases (ex-
cluding VRA 630, Epilepsy).

350 arthritis and rheumatism
 352 intracranial hemorrhage, embolism, and thrombosis (stroke)
 354 poliomyelitis
 355 muscular dystrophy
 356 multiple sclerosis
 357 Parkinson's disease
 359 accidents, injuries and poisonings

(36-,37-) Impairment involving one or both lower limbs (including feet and toes) due to:

360 cerebral palsy
 361 congenital malformation or other and ill-defined birth injury
 363 other diseases, infectious and non-infectious, (excluding VRA 646, varicose veins), other infections (including local), and other neurological and mental diseases (excluding VRA 630, Epilepsy).
 370 arthritis and rheumatism
 372 intracranial hemorrhage, embolism, and thrombosis (stroke)
 374 poliomyelitis
 375 muscular dystrophy
 376 multiple sclerosis
 377 Parkinson's disease
 379 accidents, injuries, and poisonings

(38-,39-) Other and ill-defined impairments (including trunk, back, and spine), due to:

380 cerebral palsy
 381 congenital malformation or other and ill-defined birth injury
 383 other diseases, infectious and non-infectious, (excluding VRA 646, varicose veins), other infections (including local), and other neurological and mental diseases (excluding VRA 630, Epilepsy).
 390 arthritis and rheumatism
 392 intracranial hemorrhage, embolism, and thrombosis (stroke)
 394 poliomyelitis
 395 muscular dystrophy
 396 multiple sclerosis
 397 Parkinson's disease
 399 accidents, injuries, and poisonings

(4--)

ABSENCE OR AMPUTATION OF MAJOR AND MINOR MEMBERS

(40-) Loss of at least one upper and one lower major extremity (including hands, thumbs, and feet), due to:

400 malignant neoplasms
 402 congenital malformation

- 404 diseases, infectious and non-infectious (including peripheral vascular, diabetes, tuberculosis of bones and joints),
and infections (including gangrene)
- 409 accidents, injuries, and poisonings
- (41-) Loss of both major upper extremities (including hands or thumbs), due to:
- 410 malignant neoplasms
- 412 congenital malformation
- 414 diseases, infectious and non-infectious (including peripheral vascular, diabetes, tuberculosis of bones and joints),
and infections (including gangrene)
- 419 accidents, injuries, and poisonings
- (42-) Loss of one major extremity (including hand or thumb), due to:
- 420 malignant neoplasms
- 422 congenital malformation
- 424 diseases, infectious and non-infectious (including peripheral vascular, diabetes, tuberculosis of bones and joints),
and infections (including gangrene)
- 429 accidents, injuries, and poisonings
- (43-) Loss of one or both major lower extremities (including feet), due to:
- 430 malignant neoplasms
- 432 congenital malformation
- 434 diseases, infectious and non-infectious (including peripheral vascular, diabetes, tuberculosis of bones and joints),
and infections (including gangrene)
- 439 accidents, injuries, and poisonings
- (44-) Loss of other and unspecified parts (including fingers and toes, but excluding thumbs), due to:
- 440 malignant neoplasms
- 442 congenital malformation
- 444 diseases, infectious and non-infectious (including peripheral vascular, diabetes, tuberculosis of bones and joints),
and infections (including gangrene)
- 449 accidents, injuries, and poisonings

(5--) **MENTAL, PSYCHONEUROTIC, AND PERSONALITY DISORDERS**

(50-) **Psychotic disorders:**

500 psychotic disorders

(51-) **Psychoneurotic disorders:**

510 psychoneurotic disorders

(52-) **Other mental disorders:**

520 alcoholism

521 drug addiction

522 other character, personality, and behavior disorders

(53-) **Mental retardation:**

530 mental retardation, mild

532 mental retardation, moderate

534 mental retardation, severe

(6--) **OTHER DISABLING CONDITIONS FOR WHICH ETIOLOGY
IS NOT KNOWN OR NOT APPROPRIATE**

(60-) **Other conditions resulting from neoplasms (n.e.c.):**

600 colostomies resulting from malignant neoplasms

601 laryngectomies resulting from malignant neoplasms

602 leukemia and aleukemia

605 other malignant neoplasms

609 benign and unspecified neoplasms

(61-) **Allergic, endocrine system, metabolic and nutritional
diseases:**

610 hay fever and asthma

611 other allergies

614 diabetes mellitus

615 other endocrine system disorders

619 avitaminoses and other metabolic diseases

(62-) **Diseases of the blood and blood-forming organs:**

620 haemophilia

629 anaemia and other diseases of the blood and blood-forming organs (except VRA 602, Leukemia and Aleukemia)

(63-) Other specified disorders of the nervous system:

630 epilepsy

639 other disorders of the nervous system, n.e.c.

(64-) Cardiac and circulatory conditions:

640 congenital heart disease

641 rheumatic fever and chronic rheumatic heart disease

642 arteriosclerotic and degenerative heart disease

643 other diseases or conditions of heart

644 hypertensive heart disease

645 other hypertensive disease

646 varicose veins and hemorrhoids

649 other conditions of circulatory system

(65-) Respiratory diseases:

650 tuberculosis of the respiratory system

651 emphysema

652 pneumoconiosis and asbestosis

653 bronchiectasis

654 chronic bronchitis and sinusitis

659 other diseases of respiratory system

(66-) Disorders of digestive system:

660 conditions of teeth and supporting structures

661 ulcer of stomach and duodenum

662 chronic enteritis and ulcerative colitis

663 hernia

664 colostomies (from other than malignant neoplasms)

669 other conditions of digestive system

(67-) Conditions of genito-urinary system:

670 conditions of genito-urinary system

(68-) Speech impairments:

680 cleft palate and harelip with speech imperfections

682 stammering and stuttering

684 laryngectomies (from other than malignant neoplasms)

- 685 aphasia resulting from intracranial hemorrhage, embolism,
 or thrombosis (stroke)
- 689 other speech impairments (except VRA 685, Aphasia result-
 ing from stroke)

- (69-) Disabling diseases and conditions, n.e.c.:
- 690 diseases and conditions of the skin and cellular tissue,
 n.e.c.
- 699 other disabling diseases and conditions, n.e.c.

APPENDIX E

CODES OF SOURCE OF SUPPORT

This code will be used to provide data on how the client was being supported at the time he was accepted for rehabilitation services or extended evaluation.

- A. Definition - The client's primary source of support is simply his largest single source of support, even though this may account for less than half his total support. The counselor, through interview and observation, must make a professional judgment to determine this.

B. Code

<u>Primary source of support</u>	<u>Code</u>
Current earnings, interest, dividends, rent	00
Family and friends	01
Private relief agency	02
Public assistance, at least partly with Federal funds	03
Public assistance, without Federal funds	04
Public institution--tax supported	05
Workmen's Compensation	06
Social Security Disability Insurance benefits	07
Other disability, sickness, survivors' or age-retirement benefits (except from private insurance); unemployment insurance benefits	08
Annuity or other non-disability insurance benefits (private insurance)	09

Disability or sickness benefits (private insurance; savings; other sources	10
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Not reported	99
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APPENDIX F

CODES OF VOCATIONAL OBJECTIVE

All vocational objective codes, except the five listed below are obtained from the third edition of the Dictionary of Occupational Titles (D.O.T.), Volume I, "Definitions of Titles." Occupational codes shown in the D.O.T. are six-digit numbers; for recording the Vocational Rehabilitation Agency uses only the first four digits.

The following codes, not duplicated in the D.O.T., are used in the cases where appropriate:

<u>Occupation</u>	<u>Code Number</u>
Homemaker (own home)	5999
Sheltered workshop operator	6999
Unpaid family worker (own family)	7999
Vending stand clerk	8999
Vending stand operator	9999

NON-INDUSTRIAL OCCUPATIONS

(Code consists of 1st & 2nd digits)

Professional, Technical, & Managerial

Architecture, engineering	(00)
Math., physical sciences	(02)
Life sciences	(04)
Social sciences	(05)
Medicine, health	(07)
Education	(09)

Museum, library, archival science	(10)
Law and jurisprudence	(11)
Religion, theology	(12)
Writing	(13)
Art	(14)
Entertainment recreation	(15)
Admin. specializations	(16)
Managers and officials, n.e.c.	(18)
Misc. professional, technical, & managerial	(19)

Clerical & Sales

Steno., type., filing, etc.	(20)
Computing, account-recording	(21)
Material, product.-recording	(22)
Information & message distribution	(23)
Miscellaneous clerical	(24)
Salesmen, services	(25)
Salesmen, salespersons	(26)
Merchandising	(29)

Service

Domestic service	(30)
Food, beverage prep. service	(31)
Lodging, etc.	(32)
Barbering, cosmetology	(33)
Amusement and recreation	(34)
Miscellaneous personal service	(35)

Apparel, furnishings	(36)
Protective service	(37)
Building	(38)

Farming, Fishery, etc.

Plant farming	(40)
Animal farming	(41)
Miscellaneous farming	(42)
Fishery	(43)
Forestry	(44)
Hunting, trapping	(45)
Agricultural service	(46)

INDUSTRIAL OCCUPATIONS

Skilled, Semi-skilled, & Unskilled

(Code consists of 1st and 4th digits)

Processing	(51 - 58)
Machine trades	(61 - 68)
Bench work	(71 - 78)
Structural	(81 - 88)
Miscellaneous	(91 - 98)