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*The Measurement of
Employment Satisfaction*

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The Measurement of Employment Satisfaction

Summary

A study of satisfaction was conducted, as part of the Work Adjustment Project, to develop criterion measures of satisfaction, and to add knowledge concerning satisfaction with employment among the physically handicapped. The instruments used in data collection were the Industrial Relations Center's Employee Attitude Scale, the Hoppock Job Satisfaction Blank and 22 experimental job-attitude items. The samples consisted of 638 physically handicapped persons and 530 "controls" (non-handicapped co-workers of the physically handicapped workers). The handicapped and control samples were classified into four occupational groups (non-skilled blue-collar, skilled blue-collar, non-skilled white-collar, skilled white-collar), making a total of eight groups for study. The analysis proceeded as follows:

1. Mean item score differences between handicapped and control groups, between skilled and non-skilled groups, and between blue-collar and white-collar groups, were tested for statistical significance using an analysis of variance method.
2. For each group, an inter-item correlation matrix was computed. This matrix was then subjected to cluster analysis.
3. Treating each cluster as a scale, mean standardized scale scores were computed for each scale. Analysis of variance was used to test the significance of differences (a) among scales, for each group separately, and (b) among groups, for each scale separately. Hoyt reliability coefficients were computed for all scales.
4. An inter-scale correlation matrix was computed for each group. Each matrix was factor analyzed.
5. For each scale, response choices were reweighted using the reciprocal averages method. New scale scores for individuals were then computed and a new inter-scale correlation matrix was determined for each group. The new matrices were factor analyzed. Hoyt reliability coefficients were recomputed for the new scales.

Following are the principal results of the study:

1. Scales for measuring different components of satisfaction were developed for each group studied. These scales are, for the most part, highly reliable and independent. Procedures for use of the scales are discussed.

2. In general, satisfaction is "organized" in similar fashion for each of the eight groups studied. Five components or areas of satisfaction (each measured by a scale) are found in common for all groups: general job satisfaction, satisfaction with working conditions, with supervision, with compensation, and with co-workers. General job satisfaction represents the worker's satisfaction-in-general with his adjustment to work. This includes satisfaction with his present job, his occupation and his company. The other components represent satisfaction with more specific aspects of the work situation (i.e., with working conditions, supervision, compensation and co-workers).

3. While the "organization" of satisfaction into scales is generally similar for all the eight groups, significant differences are observed among the groups. For example:

a. A "sensitivity" scale appears for all but the skilled white-collar groups (both handicapped and control). This scale represents the worker's sensitivity about his position in the social structure of the world of work. For the blue-collar workers it constitutes a more prominent area to be considered in judging satisfaction than for white-collar workers.

b. A "satisfaction-with-company" scale appears only for skilled blue-collar workers, both handicapped and control. Apparently for these workers, satisfaction with the company is an area of satisfaction separate and distinct from general job satisfaction.

c. A "satisfaction-with-type-of-work" scale appears for the handicapped, skilled blue-collar group only. This scale seems to pertain to occupational rather than job satisfaction.

d. Differences in scale content are observed more frequently between occupational groups (i.e., skilled vs non-skilled, blue- vs white-collar) and less frequently between handicapped and control groups.

4. Differences in the "organization" of satisfaction, therefore, tend to be associated mainly with occupational differences, and only to a lesser extent with presence or absence of disability. However, presence or absence of disability tends to be the more important factor in determining the *level* of satisfaction expressed by workers. Level of satisfaction for the handicapped groups is consistently lower than that of their control counterparts in *all* areas of satisfaction.

5. For most groups, satisfaction with co-workers was at the highest level, followed (in order of satisfaction level) by satisfaction with supervision, satisfaction with working conditions, general job satisfaction, and lastly by satisfaction with compensation.

6. The factor analysis results suggest the following:

a. among the blue-collar workers, the "human relations" factor tends to have larger significance in the satisfactions of the non-skilled than of the skilled. The handicapped, in contrast to the controls, tend to single out the physical aspects of the work environment as a separate factor in their satisfactions.

b. for the white-collar workers, the dominant factor is "satisfaction with employment in general" or "satisfaction with the conditions of work" which includes satisfaction with supervision and compensation. The "human relations" factor is less prominent (in comparison with its role in the blue-collar workers' satisfactions). The handicapped differ from the controls only in emphasis, i.e., both factors are about equally prominent for the handicapped, while the controls deemphasize the "human relations" factor.

Introduction

During the past three years, the Vocational Rehabilitation Regional Research Center at the Industrial Relations Center has engaged in research on the problem of vocational outcome criteria. This problem was given highest priority after earlier research efforts pointed to the need for adequate measures of carefully and well chosen vocational outcome criteria. These outcome criteria are needed to assess the effectiveness of vocational rehabilitation programs as well as other vocational counseling service activities. Improvement of techniques in counseling, training, placement and other phases of vocational rehabilitation depends in large measure upon knowledge of outcomes associated with the use of these techniques. Evaluation of counselors is facilitated by information on counseling outcomes. Caseload management is more effectively undertaken with the knowledge of case outcomes. Research in vocational rehabilitation would profit immensely from the availability of outcome criterion measures. It is evident that progress in many phases of vocational rehabilitation is contingent upon advances in the knowledge of outcome criteria.

As a first step, an exhaustive study of the research literature on outcome criteria was undertaken. This study resulted in the formulation of "work adjustment" as the concept most appropriately integrating the various outcome criteria. Bulletin X of the *Minnesota Studies in Vocational Rehabilitation* series, entitled "A Definition of Work Adjustment,"¹ reviews the research literature and develops a comprehensive research definition of the concept. The following paragraphs are intended to supplement Bulletin X.

"Work adjustment" is conceptualized as being indicated by two complementary classes of criteria: satisfaction and satisfactoriness.² Satisfaction indicates work adjustment as viewed by the individual, i.e., the employee, while satisfactoriness presents work adjustment from the employer's viewpoint. Measures of satisfaction reflect the individual's evaluation of his work environment (i.e., his working conditions, his "boss," his compensation, his co-workers, etc.) The individual brings to the work environment a unique history and a

¹ *Minnesota Studies in Vocational Rehabilitation: X. A Definition of Work Adjustment*. Bulletin 30, May, 1960.

² Heron, A. Satisfaction and satisfactoriness: complementary aspects of occupational adjustment. *Occup. Psychol.*, 1954, 28, 140-153.

set of capacities and skills which he expects to use on certain tasks. The individual has certain expectations concerning the work environment and a set of "work" attitudes which presumably grow out of, and are affected by, the fulfillment or non-fulfillment of his expectations. These attitudes constitute the individual's evaluation of his work environment, i.e., his satisfaction. Optimal work adjustment from the individual's point of view would thus be when the individual evaluates his work situation as "satisfying."

The employer, on the other hand, attempts to utilize his employee's skills and capacities to the fullest extent by providing the employee with a predictable framework within which to work. The predictability of the framework is maintained through a set of rules which specify what is expected of the employee in the performance of his job. From time to time, the employer evaluates the employee's performance as a check on the employee's activity and as a means of attaining his (the employer's) goals. The employee is judged "satisfactory" if he conforms to these requirements and "unsatisfactory" if he fails to conform.

This concept of work adjustment not only evolves from the integration of past research findings; it may also be seen as the logical consequence of employment in a free society. In a free society, employee and employer enter voluntarily into the employment relationship. Within broad limits, employee and employer are both free to make employment decisions. For example, the employee decides when and where he will seek employment. The employer, on the other hand, decides what will be required of his employees in terms of qualifications and effort or output. The employee may decide to remain with the firm or to leave it. The employer may decide to retain the employee or to discharge him. It is to be presumed that such decisions are influenced to a significant degree by the employee's, and/or the employer's evaluation of the employment relationship, that is, by the worker's "satisfaction" and "satisfactoriness."

Future action by employee and employer is expected to be based at least partially on these evaluations. Assuming a labor market which is not highly restrictive, the employee or the employer or both may initiate action. Thus, a dissatisfied employee quits the firm and looks for a new job, or an unsatisfactory employee is fired. A satisfied, satisfactory employee remains and is retained. If movement is difficult, other types of behavior are to be expected. A dis-

satisfied employee who cannot find another job may be expected to show signs of "psychological job withdrawal," such as a higher absence or tardiness or accident record. An unsatisfactory employee who cannot be fired may be faced not only with a "pay freeze" but even with a downgrading of his job. Work adjustment is thus an equilibrium-type concept.

Since satisfaction and satisfactoriness are expected to lead to several kinds of action, a *behavioral* component of work adjustment is needed. For this reason, work history is added as a third indicator to "round out" the definition of work adjustment. This indicator shows the movement of the worker from job to job, how long he stays on each job, how he progresses within a firm, whether he leaves a firm voluntarily or not, and how long he is unemployed between jobs. How satisfaction, satisfactoriness and work history are defined, measured and linked together constitutes the basic problem of the Work Adjustment Project.

The previous paragraphs and, in more detail, Bulletin X of the *Minnesota Studies in Vocational Rehabilitation* series, have defined work adjustment and its three indicators: satisfaction, satisfactoriness, and work history. It remains to determine empirically the significant components of each indicator, and to combine these components if possible into a single criterion of work adjustment. It is also necessary to "explain" work adjustment, that is, to determine how various factors affect it, factors such as presence of a disability, sex, age, education, family circumstances, prior work experience, differential patterns of vocational aptitudes and interests, personality factors, institutional factors (e.g., unionization) and economic factors (e.g., state of the labor market).

The present bulletin is the first of a series of reports devoted to the research problems listed above. It is concerned with the identification and measurement of the significant components of satisfaction. The bulletin also examines the data on satisfaction among physically handicapped workers, deriving conclusions therefrom. Data and conclusions provide the necessary "baseline" knowledge for a more effective use of the satisfaction measures which are developed in this report.

A copy of this scale is also shown in Appendix A. In addition, 22 experimental items were added to the Employee Attitude Scale. These cover the areas of general job satisfaction, supervision, co-workers and pay and promotion. Appendix A includes these experimental items.

Sampling Methodology

The following considerations entered into the sampling methodology:

1. To define the "physically handicapped" precisely, the "handicapped" samples included only persons for whom medical diagnoses of disability were available. To meet this requirement, the "physically handicapped population" was developed from lists of known handicapped persons furnished by rehabilitation agencies and hospitals. These institutions also furnished a medical diagnosis for each person on the lists.

2. In order to determine if the presence of disability had any effect on satisfaction, it was necessary to compare the physically handicapped worker with his non-handicapped counterpart. For this reason, a "control" group of non-handicapped workers was obtained to "match" each group of physically handicapped workers. The method used to match handicapped and control samples is described in detail in the Data Collection section which follows.

3. Research on job attitudes and job satisfaction has consistently shown differences among occupational groups in level and structure of satisfaction, i.e., in the proportions of "satisfied" or "dissatisfied" and in the elements and organization of the elements which make up "satisfaction."⁶ This means that any study of satisfaction must be undertaken with reference to a specified occupation or occupational group. Each occupational group must be studied separately, and findings pertain only to the occupational group under study.

For the purposes of the research project, occupations were classified according to similarity in tasks or work activities (i.e., skill) and similarity in work environment (i.e., "collar"). Skill was defined in terms of the amount of formal training required and the

⁶ See, for example, Herzberg, F., et al., *Job attitudes: review of research and opinion*. Pittsburgh: Psychol. Services, 1957.

degree of control allowed the worker over his work setting. The two categories used were:

(a) non-skilled—a position requiring no training beyond public schools, short courses or company in-plant programs. The worker is allowed little or no discretion or control over alternative methods of performing the job;

(b) skilled—a position requiring trade or business school, college, or lengthy apprenticeship training. The worker has some control over his work methods and/or is allowed some individual decisions.

“Collar” was defined in terms of closeness to product or equipment used in production, methods of payment, and actual “dirtiness” of the work. The two categories used were:

(a) blue-collar—a position which is non-salaried. The worker works on or delivers the finished product and is required to wear some protective clothing or “work clothes”;

(b) white-collar—a position which is usually salaried, is staff, service or clerical in nature, and which is “cleaner” than blue-collar positions.

These categories, cross-classified, result in four occupational groups: non-skilled blue-collar, skilled blue-collar, non-skilled white-collar, and skilled white-collar.

A fifth occupational group, the professional, was added, for which:

(a) skill requirements include a professional collegiate degree and membership in professional associations. The worker has much control over his work methods and is allowed a large area for individual decision;

(b) the work environment differs sufficiently from that of the white-collar worker in the degree of latitude allowed the worker in structuring his work environment.

Thus, for the present study, ten groups were required: two groups, handicapped and control, for each of the five occupational categories described above.

Data Collection

The preceding sections outlined the kind of information and the type of samples required in this study. The following data collection procedures were used to meet those requirements:

1. A list of known physically handicapped persons (with medical diagnoses) was obtained from rehabilitation agencies and hospitals in the Minneapolis-St. Paul metropolitan area. Agencies cooperating included the Minnesota State Division of Vocational Rehabilitation (main office and Minneapolis and St. Paul district offices), Minnesota State Services for the Blind, Minnesota State Employment Service, University of Minnesota Hospitals Rehabilitation Center, University of Minnesota Student Counseling Bureau, Hennepin County Welfare Board, Ramsey County Welfare Board, Fairview Hospital Rehabilitation Center, Goodwill Industries, Sister Kenny Institute, Curative Workshop, Opportunity Workshop, Inc., Salvation Army Medical Services, Minneapolis Hearing Society, Swedish Hospital,⁶ United Cerebral Palsy of Minneapolis, Jewish Vocational Service, Minnesota Association for the Deaf and St. Paul Rehabilitation Center.

2. Name and address of each potential subject were checked against telephone and city directories to determine present address and occupation. Approximately half (2,466) of about 5,000 names obtained from the rehabilitation agencies and hospitals were found to have usable current data on address, occupation and phone number.

3. Telephone contact was attempted with potential handicapped subjects. When successful, the person was asked to participate in the study and an appointment for a home interview was made. Contact was attempted for 1,646 individuals. Of these, 438 refused to participate, 155 were reported as deceased or as no longer residing in the city, and 1,153 were interviewed. Of those interviewed, about a third were found to be self-employed, not working and not seeking work, or were the wrong persons, and were not included in the present study. With the elimination of the professional group,⁷ the number of handicapped persons for this study totalled 638.

⁶ Only those with severe and permanent disability (as identified by the medical records librarian) were included in the list.

⁷ See Sampling Methodology. When analysis of the data was started, the professional groups were too small (N's of less than 30) to be included in the study.

