Presented is a bibliography of approximately 250 documents (1965-1975) related to vocational training and placement for severely handicapped people. The material is said to be drawn from a computerized search of Resources in Education, Current Index to Journals in Education, Exceptional Child Education Abstracts, American Psychological Association Abstracts, and Abstracts of Instructional and Research Materials. An annotated section is comprised of journal articles, final project reports, and monographs presented alphabetically by author's name within the following categories: features of rehabilitation; employment opportunities, progress and recommendations; sheltered workshops; job and skills training; and vocational training and placement programs. Fifteen reviewed books are also annotated and arranged alphabetically by author's name. Listings usually include author, title, source, pagination, date, and availability information (if the document is from the Educational Resources Information Center). (CI)
SELECTED BIBLIOGRAPHY

FOR

VOCATIONAL TRAINING AND PLACEMENT

OF THE SEVERELY HANDICAPPED

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PREFACE

This selected bibliography is the first product of VOTAP, the Vocational Training and Placement of the Severely Handicapped project. VOTAP is an investigation of the vocational training and employment situations of people with severe permanent handicaps.* The goal of the project is to increase the vocational education and employment opportunities for these individuals. A set of handbooks will be written focusing on the following areas:

- identification of job areas which provide the greatest opportunities for the severely handicapped;
- identification and description of a group of vocational training and/or placement programs; and
- determination of research and development needs and recommendations for action to aid the severely handicapped in achieving equality of job training and employment opportunities.

Project activities and related information will be disseminated in existing vocational and career education newsletters published by AIR and in a quarterly newsletter developed for VOTAP.

The bibliography presents differing philosophies and methodologies of job training, placement, and employment of severely handicapped people. No attempt was made to judge the relative contributions of the readings to this field.

*The BEH has defined severely handicapped persons as those who are seriously emotionally disturbed, profoundly or severely mentally retarded, or multiply handicapped (two or more handicapping conditions). Also in the category of severely handicapped are persons with severe language deprivations, perceptual-cognitive deprivations, a fragile physiological condition, and/or a number of abnormal behaviors. These abnormal behaviors may include a failure to attend to pronounced social stimuli, self-mutilation, durable and intense temper tantrums, and the absence of rudimentary verbal control.
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I. INTRODUCTION

Purpose of the Literature Review

The literature review was undertaken to fulfill several project needs. First, it provided staff members with background information about vocational training and placement for severely handicapped people, and it yielded considerable insight into many of the special vocational and rehabilitation needs and capabilities of this group. Second, the literature was also a source of information relating directly to the four monographs that will be written during the project. For example, names of training and placement programs were noted as possible candidates for the survey. Many readings also identified a variety of jobs that have been performed by severely handicapped persons and described different training methods. Finally, the literature made staff members aware of and sensitive to the potential contributions, both economic and social, that severely handicapped individuals can make to our society.

Search Procedures

The search was done almost entirely by means of DIALOG, a computerized information retrieval service. DIALOG is operated by the Information Systems Group of the Lockheed Palo Alto Research Laboratory. Four of the data bases were identified as being most likely to include literature relevant to the project. These bases are Educational Resources Information Center (ERIC), which includes both Resources in Education (RIE) and Current Index to Journals in Education (CIJE); Exceptional Children Education Abstracts; American Psychological Association Abstracts; and Abstracts of Instructional and Research Materials (AIM/ARM). Descriptors were selected from the ERIC Thesaurus of Descriptors and the Psychological Abstracts Thesaurus and were divided into five sets. The first set contained 20 descriptors that were specifically related to the project definition of severely handicapped* such as deaf, blind, quadriplegia, and multiply handicapped. The remaining descriptors were grouped into one of the following categories: vocational education, skills, legislation, and surveys. Each of these four sets was intersected with the first set of descriptors and entered into the DIALOG system.

*See preface for definition of severely handicapped.
This procedure assured that references containing index terms, which included both major and minor descriptors, would be retrieved from both sets.

The original number of items identified was well over 10,000. To reduce the number without eliminating relevant literature, articles written in a foreign language and articles published before 1965 were eliminated. Also eliminated were readings for which index terms were not major descriptors. The final number of references was 1,400. These references and their abstracts, if available, were ordered and printed off-line by the computer.

The definitions of severely handicapped and vocational training and placement were reviewed again, and the decision was made not to read articles dealing only with slow learners and the educable mentally retarded since according to the BEH definition, these groups do not have severe handicaps. It was also decided not to review articles published outside the United States. Readings that focused on elementary-level career education and career awareness programs were also not read since teens, young adults, and adults represent a more valid target population for vocational training and placement. After setting these parameters, the printed abstracts were reviewed by at least two staff members and either rejected or kept as possibilities. Duplicates that occurred among databases were also eliminated. After the double review, the possibilities included 275 documents.

The Reading and Reviewing Process

Most of the citations retrieved from RIE and AIM/ARM were available on microfiche at the ERIC Clearinghouse on Information Resources, located on the Stanford University campus in Palo Alto. Libraries at Stanford University, San Jose State University, San Francisco State University, University of California at Berkeley, and the San Mateo Educational Resource Center were searched for journal articles and books. An inter-library loan service provided access to California State libraries that were not in the immediate vicinity. In many cases, the staff corresponded with or telephoned authors and organizations to secure items that were difficult to locate. Despite these efforts, many documents that were pertinent to the topic remained unavailable and therefore are not annotated in this bibliography.
Organization of the Bibliography

The bibliography consists of five sections: I. Introduction, II. Annotations, III. Additional References, IV. References to Unavailable Documents, and V. Alphabetical Index of Authors.

Section II. Annotations is divided into two parts. The first part includes annotations of documents such as journal articles, final project reports, and monographs. These annotations are divided into five categories:

- Features of Rehabilitation;
- Employment Opportunities, Progress, and Recommendations;
- Sheltered Workshops: General Considerations;
- Job and Skills Training; and
- Vocational Training and Placement Programs.

Within each category, references are listed alphabetically by author(s) or editor(s). For documents available only through the ERIC Clearinghouse, the accession number and length of the article are listed below the citation. The VT number, which follows the ERIC number, is the accession number to the AIM/ARM collection. These annotations are numbered sequentially. The second part of Section II consists of annotations for reviewed books, which are also listed alphabetically by author(s) or editor(s). Numbering of books begins at "1". These numbers are preceded by the letter "B". Throughout all the annotations, different readings pertaining to the same study or program are cross-referenced.

Section III. Additional References lists citations in the broader area of vocational/career education for the handicapped. These documents were retrieved during the computerized search but were not annotated because their content was not within the scope of this project. The three most common justifications for not including them were: the target population was not severely handicapped according to the definition being used; the document did not relate directly to vocational training and placement; and the handicapped group was under high school age. Bibliographies are listed at the end of Section III. The bibliographies were screened, and relevant entries were annotated.

Section IV. References to Unavailable Documents is a list of references that appeared to be promising but were unavailable through any of the rich
resources available for the review. Journals missing from a library account for several of the unavailable articles.

Finally, Section V provides an alphabetical list of authors and editors of annotated references.
II. ANNOTATIONS

Features of Rehabilitation

Planning, Goals, Trends


This article reviews several reports which support the hypothesis that work can be used as a therapeutic tool in the rehabilitation of the disabled and the disadvantaged. The authors note, however, that little has been done to document the value of work therapy and work adjustment training. At present there is little agreement on terminology and limited validation of techniques. The authors conclude that research now needs to move in the direction of careful experimentation, follow-up, and evaluation in order to improve individualized services and to specify which procedures are most effective.


Capabilities, incidence, and definition of the trainable mentally retarded are presented, and public school education for the moderately and severely retarded is discussed. Schools are oriented more towards a caretaker concept than towards providing a realistic education. Rather than slowing down curricula already established for slow learners or the mildly retarded, school personnel need to shift to a program which can focus on all areas of growth simultaneously for the trainable mentally retarded. The establishment of foster homes for 6 to 12 adults for the development of social and vocational skills is proposed as an alternative to institutional care.

(ERIC # ED 078 230, 58 pages)

Vocational rehabilitation programs administered by the Rehabilitation Services Administration in Michigan, North Carolina, and Oklahoma were reviewed by the General Accounting Office in order to determine their effectiveness in terms of eligibility requirements, available services, and financial characteristics of the programs. Each state was evaluated in two areas: (1) the ability of its program to meet the needs of all handicapped persons and (2) its effectiveness in helping each person served. Recommendations are that all handicapped persons be studied to obtain better estimates of growth needed to plan for the expansion of the program, that other federal programs be considered for vocational rehabilitation, and that program staff members be required to follow up on closed cases and examine more carefully client circumstances during the acceptance process. An overall recommendation is that the annual data should be more precise to facilitate evaluation of the program.


The rehabilitation center's first responsibility is to the disabled individual, then to the community, and finally to the center itself. Services should reflect the needs of the individual and should help her/him prepare for the next phase of rehabilitation, education, or vocational training. Placement need not be restricted to employment, but defined in broad terms can mean helping the aged or retired to function in their community, helping the disabled housewife, encouraging further education, making referral to another agency with different services, or in other words, helping the disabled individual to move toward her/his greatest potential for more effective functioning.


Rehabilitation demands of the physically handicapped in 1980 are the subject of this article. The author describes the goal of rehabilitation for the physically disabled as integrating individuals into the rehabilitation process and the community, and he discusses this rehabilitation in terms of enablement, normalization, and integration into the community. Because of social handicapping, the area of integration still poses a major block to rehabilitation. Gellman presents statistical information on the current rehabilitation status of the physically disabled, predicts socioeconomic conditions and social changes for 1980, discusses rehabilitation trends, and uses this information to make projections regarding physical disability for 1980. Among the trends in rehabilitation he cites are greater attention to clients' social problems, more emphasis on situational tools for evaluative and adjustive purposes, and a growing perception of rehabilitation as a right rather than a privilege.

Gellman suggests five correlations between the theoretical and empirical aspects of vocational evaluation and applies these to vocational rehabilitation. He discusses the goals of vocational evaluation and the vocational evaluation process: observing, defining, and analyzing work patterns from internal and external frames of reference. Gellman explains that four classes of prediction are specified in work evaluation: (1) coping behavior, (2) training capacity, (3) modifiability of work patterns, and (4) type of work situation in which the client will function in the job market, and he describes the essential features of a vocational treatment plan. Emphasis is given to the fact that no one technique is superior; selection depends on such varying factors as the client, the situation, and the available resources. Gellman presents seven principles of evaluation that summarize the factors to be considered in the development and use of vocational assessment techniques. Among these principles are statements that vocational evaluation is future oriented; should be specific for the client; be of an if-then nature and involve a plan for treatment; and requires in-depth knowledge of the training and rehabilitation resources available.


The author proposes that "low expectancy on the part of society is perhaps the single most critical deterrent to progress in our field." Potential competence should be assumed for all individuals with the realization that people differ in how much power is needed to train them. In order to accomplish vocational preparation for the mentally retarded, we need to utilize current training technologies. Hiring and testing practices, preconceived notions of intellectual requisites, and low expectancies can no longer guide our approach to vocational rehabilitation of the mentally retarded.


(ERIC # ED 063 472 [VT 015 390], 128 pages)

The author discusses the role of the community college in providing vocational training for the visually impaired, crippled and health impaired, speech impaired, hearing impaired, and emotionally disturbed. Eight separate areas are reviewed: (1) an in-depth discussion of the national concern of vocational education for the handicapped, (2) findings from a review of the existing vocational education programs for the disabled, (3) an analysis of the handicapped population related to the junior college, (4) suggested solutions to problems, (5) labor market trends and needs, (6) program planning, (7) implementation and evaluation of supportive services such as counseling and guidance, and (8) future needs and program development.

The authors state that the move toward inclusion of markedly retarded students necessitates a redefinition of "education" to include the development and application of such skills as toilet training, dressing, grooming, and communication. A description of the training methodology for profoundly retarded persons used in the last decade is given, and problems unique to the profoundly retarded are discussed. Suggested program areas include (1) sensory-motor integration, (2) physical dexterity and recreation, (3) self-care, (4) language and speech development, and (5) self-direction and work. An extensive list of references for severe and profound retardation is given.


This document consists of six papers presented at the Conference on Vocational Education of Handicapped Persons. (1) "Potential for Employment of the Handicapped," by John W. Kidd. (See No. 42 for a complete annotation of this paper.) (2) "Implementing Programs to Serve the Handicapped: Some Concerns and Considerations," by Jerry C. Olson. This article includes an interpretation of the 1968 Amendments of the Vocational Education Act. (3) "Labor and Industry Look at the Training and Placement of the Handicapped," by Ralph A. Peckham. Industry is not committed to hiring the handicapped at the present time. Professional leadership needs to acquire a social militance if the handicapped are to find a place in our economy. (4) "Comprehensive Vocational Preparation of the Handicapped: An Inter-agency Problem," by Salvatore DiMichael. The author recommends state-wide planning conferences in order to increase the information base, encourage inter-agency planning, and assist the State Vocational Education Department in long-range planning. (5) "Integrated and Segregated Vocational Education Programs for the Handicapped," by G. Orville Johnson. This paper reviews the history of education for the handicapped and discusses the trend toward integration of the handicapped into regular classrooms. (6) "The Education of Mentally Handicapped Youth in a Large Urban Community," by Jerry Miller. The author stresses the importance of humanism and individualization in the field of education for the mentally handicapped.

Summary recommendations of conference work groups are presented for the areas of administration, instructional programs, supportive services, personnel preparation, and directions.
Based on the findings of a state-wide assessment in Illinois and developed by Technical Education Research Centers (TERC), a model for vocational education for the handicapped is proposed. The model features a Diagnostic Center for individual assessment and has four components: (1) Occupational Orientation and Introduction to Jobs, (2) Modified Vocational Facilities, (3) Vocational Laboratories, and (4) Cooperative Occupational Education. All activities are directed toward occupational entry to regular employment plus follow-up. The author lists facets of the model that are frequently neglected in existing programs; examples cited include the need for in-depth vocational assessment of handicapped students and individualized programmed instructional materials. "Special needs" students can achieve the occupational competency of nonhandicapped students, though perhaps at a slower rate or with a different method, the author states.


(ERIC # ED 062 554 [VT 015 272], 59 pages)

The author explores the question of why there are relatively few meaningful programs for the handicapped. She concludes that a communication gap exists within the agencies responsible for implementation of the legislation. This article considers some of the problems in implementing a commitment to vocational education for the handicapped. Reviewed are some of the relevant federal laws including Education of the Handicapped Act, Educational Professions Development Act, and Vocational Education Amendments of 1968.


(ERIC # ED 067 462 [VT 016 551], 40 pages)

This pamphlet is designed to serve as a guide for teachers and administrators of vocational education programs for the handicapped and the disadvantaged. The article provides official definitions and methods for classifying both disadvantaged and handicapped students. The specific requirements of the Vocational Education Amendments of 1968 are given, and the types of services that may be funded under the amendments are listed. Some of these are advisory/coordinating committees, survey/evaluation procedures, recruitment/promotion activities, staff development, curriculum and equipment modification, and supplemental services and facilities for the handicapped and disadvantaged.

The author of this article, a man with cerebral palsy complicated by deafness, presents his perspective on the disability and reviews some problems of the cerebral palsied. He discusses the multiply handicapped, independent living skills, education for the handicapped, and communication skills. His reflections on vocational rehabilitation address the problem of overtrained cerebral palsied individuals who cannot perform a professional job because of physical dependency. He suggests job modification and creation for deaf cerebral palsied individuals as well as information gathering and vocational counseling.

General Rehabilitation Research


One hundred and fifty North Carolina Rehabilitation Counseling Association members were surveyed in an attempt to assess the perceived relative handicap of nine different disabling conditions in vocational, educational, and social areas of functioning. Respondents were asked to rank the severity of the following nine conditions on a scale of one to nine: emotional disorders; respiratory disorders; spinal cord injury; mental retardation; bone, joint, and muscle disorders; visual loss; hearing loss; heart and blood vessel disease; and amputations. The authors' interpretation of the results indicate that in the vocational area, spinal cord injury, emotional disorders, and mental retardation are perceived as the most seriously handicapping conditions. In the educational area, mental retardation, emotional disturbances, and hearing loss were considered the most severely handicapping. Amputations were judged the least handicapping condition in these two areas. In the social area, emotional disturbances, mental retardation, and spinal cord injury were perceived as the most severely handicapping.

This article is divided into six sections. In the first section the author states that the basic problem of research utilization is getting the results of research projects incorporated into rehabilitation counseling practice. Three suggestions are given to help solve this problem: (1) involve practitioners in the planning and conducting of research studies, (2) educate practitioners in research methodology, and (3) employ research utilization specialists as middlemen between the researcher and the practitioner. The second section provides a five-part definition of the severely handicapped deaf population. Sections 3 and 4 briefly review four major survey studies and five service demonstration studies and report their implications for educators and rehabilitation planners. In Section 5 several selected studies are briefly reviewed, and their results reported. Section 6 outlines a longitudinal and cross-sectional research project being conducted at Arkansas School for the Deaf to investigate the intellectual, emotional, and vocational development of deaf youth.


The use of behavior modification and the normalization concept in rehabilitation are explained in this article. Behavior modification techniques have been used to normalize personal appearance, speech, eating behaviors, and socialization. They have also reduced deviant behaviors and been effective in vocational training. The investigator gives a brief description of the normalization theory and makes a plea for normalization of the workshop setting, residential facilities, and public school education for the handicapped. In order to effect this change, he suggests that the program components should be work stations (in the community as often as possible), prevocational workshops, skill training, and supportive services. Also included in the article are recommendations for staffing and the use of behavioral data.


This article reviews several studies and projects which have employed the mentally retarded as mental health paraprofessionals. Generally the paraprofessionals served as reinforcers for a specific target behavior in an experimental setting. Whether or not these paraprofessionals can work without extensive supervision and thus conserve staff time remains to be seen. Three conclusions resulted from the review. (1) Mentally retarded residents appeared to exhibit the same learning curves when trained by retardates as when trained by staff. (2) The major value of such programs thus far has accrued to the paraprofessionals. They received greater exposure to training staff, clearer expectations regarding appropriate behaviors, and positive reinforcement for appropriate role behaviors. (3) Data in this area are meager but serve to stimulate and warrant further research.
The purpose of the study was to develop a model to provide rehabilitation, placement, and related services to employable handicapped people between the ages of 18 and 64. Handicapped people were defined as those "whose physical or mental impairments render them occupationally disabled, or, if not dealt with, would cause them to become occupationally disabled." The study also attempted to test the relevance of the proposed model. Several methods were used to collect data for the model. Extensive interviews were conducted with agencies and individuals involved with providing employment opportunities to handicapped people in Baltimore, Maryland and Tacoma, Washington. These cities were selected according to three criteria: (1) moderate size, (2) different types of industry and populations, and (3) relatively tight labor markets. Interviews were designed to determine what services were available to handicapped people and how the services functioned and to identify the problems and needs of the handicapped. In addition, part of the data collected by the investigators on another project was analyzed for characteristics of disadvantaged handicapped people, and 11 in-depth interviews were conducted with clients of the Division of Vocational Rehabilitation of a large city. The proposed model includes the following major components and processes: analysis of the labor market resulting in job development; outreach and recruitment, intake; and diagnostic evaluation resulting in grouping; and job placement and follow-up in competitive, sheltered, and home-bound employment situations. The model indicates that both job development and grouping lead to job placement and follow-up. Also directly related to job placement and follow-up are ancillary services such as medical care, training, counseling. Each component is defined and discussed in the report. The investigators acknowledged that the model is not an original concept and emphasized that its real worth is to demonstrate the inadequacies of current employment programs for the handicapped. One of the many recommendations is that there is a need for an employment system to focus on these specific handicapped groups: the mentally ill or restored, the mentally retarded, the severely and profoundly handicapped, those whose handicaps are unacceptable to employers, and the disadvantaged handicapped. Several pages of findings and recommendations are given. (See No. 21 for a brief summary of the study and information about ordering a copy of the study.)

(ERIC # ED 056 159, 159 pages)

The objectives of the study summarized in this final report were two-fold: (1) to determine the extent to which private enterprise could participate in the vocational rehabilitation of discharged psychiatric patients and (2) to evaluate the effects of rehabilitation services on the community adjustment of such patients. Two hundred and two subjects were randomly assigned to one of three groups: (1) those using the total services of Fountain House, including the Transitional Employment Program, (2) those having vocational counseling services only, or (3) a control group limited to other existing community facilities. Forty business firms supplied employment for those in the Fountain House program. Regular surveys concerning community adjustment of the clients were completed throughout the 18-month study and follow-up period. Results showed that the rehospitalization rate for subjects in the Fountain House group was lower, but not significantly. However, for subjects entering the study within four months of release from the hospital, the reduction in rehospitalization rates for the total agency group was significant. Work exposure was secured for 85 percent of the Fountain House group, and for 57 percent of the other two groups. Appended to the report are instruments, tables, forms, and several earlier papers about the Fountain House program. (See Nos. 41, 84, and 85 for additional information about Fountain House.)


The article briefly summarizes a study entitled "A Study to Develop a Model for Employment Services for the Handicapped." The work was done by Greenleigh Associates for the U.S. Department of Labor's Manpower Administration. Proposed is a model program to serve potentially employable handicapped people. The program would include training stipends, guaranteed job placement in manpower training programs, flexible training techniques, use of sheltered workshops for work evaluation, and work adjustment and pre-employment training. Three major findings and recommendations are: (1) many agencies do not have the resources to predict the changing labor market or the range of medical, social, and financial capabilities necessary to serve the handicapped effectively; (2) to better meet client needs, existing agencies should be reorganized into multiagency centers; and (3) job skills training for the handicapped needs to encompass broader occupational and vocational skills than the discrete tasks being performed in sheltered workshops. Results of the study may be obtained from the Clearinghouse for Federal Scientific and Technical Information, Springfield, Va. 22151, accession # PB 186151. (The study is annotated in No. 19.)
Variables Relating to Rehabilitation

22. AIDUK, Robert, and LANGMEYER, Daniel. "Prediction of Client Success with Vocational Rehabilitation in a State Mental Hospital." Rehabilitation Counseling 16 (September 1972):2-10.

This study used biographical and demographic data from 235 case files of emotionally disabled clients of the Ohio Bureau of Vocational Rehabilitation. Seven variables were related to rehabilitation success: (1) sex, (2) race, (3) age at time of referral, (4) education, (5) referral source, (6) diagnosed emotional disability, and (7) closure status. None of the variables related significantly to rehabilitation outcome. Although no significant differences were found, there was some indication that certain variables would predict outcomes for some subpopulations.


In order to determine what kind of patient variables are significantly associated with vocational efficiency, 113 institutionalized retardates were evaluated in each of the following variables: intelligence tests, academic achievement tests, chronological age, length of institutionalization, and work and behavioral ratings on a vocational adjustment rating scale. This last variable proved to be the best discriminator. The article presents a brief review of the literature and a discussion of method, results, and implications of the study.


This article discusses the problems of habilitation of violent acting-out adolescents. The author suggests that vocational experience can bring psychiatrically ill persons into the stream of "productive participation" where they learn by doing and are paid for their work. Only after this experience do they view the training as basic to getting and holding a good job. This job then makes possible participation in family groups, neighborhood and community associations, church, and sports organizations which are, in the author's words, "what they live for." The South Bronx Center which provides this "productive participation" is briefly described.


For this study the closed cases of 748 vocational rehabilitation clients were divided into rural, rural-urban, and urban categories. Cases were then-analyzed according to classifications based on personal characteristics, service delivery components, and rehabilitation outcomes. The results indicated a wider range of disabilities and a better rehabilitation success rate for rural clients than for rural-urban and urban clients. The investigators suggest that clients in different kinds of areas need different services and approaches.

This study compared economic conditions and community characteristics with the posthospital employment records of 957 male schizophrenics. Results indicated that the schizophrenic subjects had poor posthospital employment records but that their chances for employment depended more upon their individual characteristics than upon economic conditions. The authors believe that vocational rehabilitation counselors should find encouragement in this evidence that vocational rehabilitation success was not determined or limited by general labor conditions. (See No. 28 for related study.)


This study involved the use of the Wechsler Adult Intelligence Scale and the reading and arithmetic sections of the Wide Range Achievement Test to identify cognitive variables to discriminate between employed and unemployed mentally retarded individuals. The instruments were administered to 102 mentally retarded persons between 17 and 21 years old. Results indicated that the comprehension subtest of the WAIS discriminated significantly between the employed and unemployed subjects. Since Wechsler stated that the subtest measures common sense and judgment, the author suggests that young mentally retarded persons may need assistance in learning how to function and to meet simple employment demands.


Using records and self-reports for 957 male schizophrenics, the investigators correlated data on 20 demographic variables with posthospital work and readmission during the nine months after discharge. Results indicated that the best predictor of employment and readmission was past behavior, with extent of employment during the preceding five years predicting posthospital employment and the number of previous hospitalizations predicting readmission. Background variables were found to be better predictors than self-report biographical inventories and about equal to the usefulness of psychopathology ratings. The investigators assert that the study points up the need for rehabilitation staff members to focus attention on the characteristics that made their schizophrenic clients unemployable before hospitalization. (See No. 26 for related study.)

For this study the investigators use eight variables to develop a scale to predict the rehabilitation outcome of stroke victims. Based on medical and demographic data from stroke clients of Pennsylvania's Bureau of Vocational Rehabilitation, the scale attained an overall accuracy of 68 percent in differentiating between rehabilitated and unrehabilitated clients. The investigators urge that the scale be used and tested further.


This article discusses the Rehabilitation Act of 1973 and its broadening of rehabilitation service delivery. It reports on a state-wide survey of the Colorado Division of Rehabilitation that compared rehabilitated and nonrehabilitated clients in regard to demographic and economic characteristics and referral source. Results revealed four groups of clients that are most difficult to rehabilitate: mentally ill referrals, minority members, public assistance recipients, and middle-aged referrals (30 to 49 years). Rehabilitation approaches and techniques that are reputed or proven to be effective for each of these four groups are reviewed. Included are individual psychotherapeutic techniques for the mentally ill and delivery approaches for disadvantaged clients. The authors urge fuller use of existing techniques and the development and evaluation of innovative approaches to serve the severely handicapped.


The authors state, "Central to efforts of training or retraining is the question of an individual's ability to think." These two articles are concerned with how to measure this ability. Part I indicates the need for assessing the cognitive functioning of rehabilitation candidates. It reviews existing evaluative techniques and theories for vocational diagnosis and indicates how each fails to measure cognitive functions. Part II includes a review of research in cognition and related rehabilitation areas. The Devereux Cognitive Process Study (DCPS), which has 11 major categories and deals with sequential development from the nonconceptual level to abstract thinking, is discussed; its validity and its diagnostic and predictive powers are considered. The DCPS uses physical stimuli in problem situations and can provide information like that from work sample situations. The authors suggest possible uses for it and areas for further investigation and study.

Work samples, the author states, are "the most effective tool in rehabilitation assessment." He briefly reviews three types of work samples: actual work samples, simulated work tasks, and isolated trait assessments. Having conducted a literature search for explicit and implicit assumptions underlying work sample theory, Pruitt presents nine major assumptions; e.g., (1) "Persons who do poorly on psychological tests can be effectively evaluated by the method of work sample evaluation," and (2) "Work samples differ from psychological tests in the degree of relatedness to the criterion. The criterion is work behavior and job performance." The author includes discussion and minor assumptions related to the nine major assumptions and concludes, "Perhaps it would be possible to sum up work sample theory under the general assumption of the prognostic value of work experience."

33. SCHLAMP, Fredric T., and RAYMOND, Charles. Meanwhile at Home: A Follow-up Study of Mentally Ill, Vocational Rehabilitation Clients. Project Report. Sacramento: California State Department of Rehabilitation, Research and Statistics Section, April 1971. (ERIC # ED 063 517 [VT 014 461], 64 pages)

More than 300 mentally ill clients who had been referred for vocational rehabilitation services were interviewed two years after their cases were closed. Almost 70 percent of the people interviewed had been hospitalized for schizophrenia; the remainder had been hospitalized for neuroses, manic depression, or chronic brain syndrome. Interview questions dealt with several areas, including personal and family information (e.g., marital status, living arrangements, medical histories), education and training, and rehabilitation testing and ratings. The article presents the data in tabular form. A few of the many conclusions drawn by the authors are these. Clients referred for rehabilitation services while still in the hospital made a better adjustment than those who were referred after they had been released. Clients who had been rehabilitated and were still employed at follow-up (54 percent) indicated that they had received more services and support from their family and employers. This group also had better prior employment and hospitalization histories. Other relationships noted were that previous hospitalization predicted future hospitalization and employment history predicted future employment. The authors also put forth the hypothesis that the deleterious effects of mental illness invalidate most projections about employment level made prior to the disability.
This article reports the findings of a study conducted to determine the major obstacles to successful rehabilitation of the severely handicapped deaf. Data on 106 deaf clients at the Hot Springs Rehabilitation Center in Arkansas were used as the sample for the study. The results showed that the major impediments to the rehabilitation process are impoverished communication skills; behaviors that are inappropriate, inadequate, and/or impulsive; low levels of interest; and a lack of special services and trained staff to work with the severely handicapped deaf. As a result of these findings, the authors cite a need for (1) better family interaction with young deaf children, (2) preschool education, (3) enriched dormitory or residence hall living which fosters independent living, and (4) post-secondary training opportunities.

In an attempt to differentiate between trainable mentally deficient and physically handicapped clients, the author investigated the self-evaluation, perceived reality, and objective reality pertaining to the personal attributes and work performances of 117 vocational training clients: 41 mentally deficient and 76 physically disabled. The two groups were equivalent in terms of age and personality factors but not in general intelligence. On rating scales given to the clients and their vocational training instructors, mentally deficient clients evaluated their own work proficiencies more accurately than they assessed their personal characteristics. In comparison to the physically handicapped clients, the mentally deficient clients had significantly lower personal veracity (extent to which the individual's self-report corresponds to his perception of reality) and lower ecological veracity (extent to which the individual's self-report corresponds to objective reality) associated with the evaluations of their personal attributes and work performances. For both groups, personal veracity was relatively higher than ecological veracity, and the physically handicapped group showed markedly high personal veracity. The investigator discusses his earlier study findings that a general strategy of having vocational rehabilitation clients make periodic self-evaluations helped to increase the correspondence of their perceptions of reality and objective reality. He concludes that this strategy now seems to apply more to physically disabled clients than to mentally deficient clients and that more feedback to mentally deficient clients may be necessary to achieve their high employability.
This study was designed to determine which psychosocial factors and work assets contributed to client improvement in various vocational programs. Among the characteristics measured were intellectual and physical resources, social personality, and emotional stability. Assessments were also made of the subject's goals, losses produced by the disability, degree of interpersonal support from family and friends, attitudes toward disability, belief in determination over own life, interpersonal dominance, and ability to "manage" other people. In order to assure a wide variety of subject ability, 82 subjects were interviewed to obtain background data and asked to complete and return various psychological questionnaires. In Phase I of the project, the selected psychosocial factors were correlated with the degree of benefit derived from the vocational training as measured by improvement on performance ratings, grades, advancement to further training, placement, or employment. The 82 subjects were taken from three distinct groups: college students, a work evaluation/work experience setting, and a skill training environment. Phase II, a follow-up study, explored the long-term effects of the particular vocational program one year after placement. Results of the project are given for each of the three sample groups. Overall results suggest that job skills and a positive attitude toward work are essential for advancement to better training which is a criterion for success in the early stages of the vocational readiness process. Later in the process, emotional stability is a necessary factor. Ultimate employment success requires both job skills and personal adjustment.

Client-Counselor Interactions

The manual, which was developed from a 1968 New Orleans workshop for vocational counselors, presents guidelines for the vocational rehabilitation process of multiply disabled deaf people. Disabilities accompanying deafness included mental retardation, emotional disturbances, or learning disabilities. Procedures in the rehabilitation process which are discussed are identification, diagnosis, vocational evaluation, placement, and follow-up. One specific suggestion to evaluate work skills is the use of the TOWER system. Counselors are cautioned to be sensitive to possible emotional disturbances in these clients. It is also noted that for a deaf retardate, personal skills training throughout the rehabilitation process is often more important than vocational skills training. Other features of the manual are a brief description of the rehabilitation process, a flow chart to aid in identifying and referring deaf children, a checklist to identify atypical deaf adults, a list of centers serving the deaf, a bibliography, a list of psychological tests, and a directory of workshop participants.

Directed toward rehabilitation counselors working with people who have spinal cord injuries, this article discusses factors that seem to be most significant in the vocational rehabilitation of this handicapped group. The first point is that clients' employability will be improved if attention is paid to their physical intolerances. Second, there is evidence that placement prognosis corresponds to the client's educational level. The next factor is age; some research has indicated that because of greater adaptability, strength, and energy, younger spinal cord injured people will probably do better in securing jobs than older ones. The importance of previous work history, though controversial, also appears to be significant, and successful prior work experience is probably related to successful vocational rehabilitation. The author notes that objective evidence on the importance of counselors' involvement with clients' families is scant, but it is felt that family counseling should be a part of the rehabilitation process. Two additional considerations are that urban areas have better employment opportunities than rural areas and that reliable transportation is essential. Vocational training must relate to job placement and must also promote personal adjustment. Client motivation is another important factor. Finally, rehabilitation counseling has been identified as the most significant factor in successful rehabilitation. The author warns counselors that they must deal with their own stereotyped images of spinal cord injured people and their capabilities.


Counselor perceptions were the focus of this study of six counselors and 601 disabled clients of the Jewish Employment and Vocational Service in St. Louis. In the client groups were emotionally disturbed, mentally retarded, and physically disabled persons. Results of the study revealed different perceptual styles, individual biases, and group stereotypes among the counselors. The authors suggest that counselor perceptions may describe the counselor as much as the client and that these variables affect the counselor-client relationship.


This study was designed to determine the occupational therapy goals that quadriplegics and paraplegics consider important and those that occupational therapists consider important. A 21-item Rating Scale of Treatment Values was given to 28 paraplegics, 16 quadriplegics, and 19 occupational therapists in six western Washington hospitals. Results indicated that therapists and paraplegics agreed more about treatment goals than did therapists and quadriplegics. Within all three groups there was wide disagreement about the importance assigned to specific treatment goals. The author suggests that this may be due either to poor communication between occupational therapists and clients regarding treatment goals or to the unique aspect of each individual's therapy, making it unrealistic to generalize about treatment goals.
Industry is demonstrating its willingness to be an active partner with public and voluntary agencies in placing the disabled in business. The Projects with Industry program, funded through Rehabilitation Services Administration, is a good example of the necessary balance of social and industrial efficiency necessary to rehabilitate the disabled. The author reviews two Project with Industry models: Fountain House in New York City, (see Nos. 20, 84, and 85) and the Human Resources Center in Albertson, New York (see Nos. 90, 102, and 103).

The basic theme of this article is that handicapped persons can be productive workers. The author suggests job redesign in order to facilitate the employment of more handicapped persons. Cited are several businesses which employ and endorse the employment of handicapped individuals. Some of the attributes of their handicapped workers are speed, concentration, good attendance and promptness, and accuracy. The author also supports the use of vocational education funds for use in training the handicapped. Expenditure of funds is not a humane requirement, he says, but greatly increases the productive capacity of the nation and is an essential national investment. (See No. 10 for an additional reference to this paper.)

This document summarizes the activities of eight federal agencies which served the handicapped in 1968. Those agencies involved with employment are (1) Civil Service Commission, which reported several major innovations in hiring the handicapped; (2) Department of Commerce, which has encouraged more employment of the handicapped; and (3) Veterans Administration, which has programs for vocational as well as medical rehabilitation. Other agencies include (4) Department of Health, Education, and Welfare, with efforts focused on prevention, treatment, financial assistance, and education programs; (5) Department of Agriculture, which provides assistance to rural areas and 4-H Clubs for the handicapped; (6) Department of Housing and Urban Development, which provides programs that may be used by the handicapped; and (7) Department of Transportation, which has identified transportation barriers so that programs can be designed. Research oriented is (8) Department of Labor, within which Manpower and Wage and Labor Administrations are conducting surveys and studies.

The focus of this article is techniques to use with prospective employers of the handicapped. Qualifying the employer, developing initial contacts, and obtaining an interview are discussed. Methods of initial contact include preapproach letter, business reply letter, informative letter, telephone, personal calls, and referrals (which are the most effective). The authors state that it is important to be ready to overcome possible objections and to concentrate on "selling the benefits" of the retarded worker.


(ERIC # ED 060 223 [VT 013 003], 56 pages)

In this handbook, the Civil Service Commission presents facts about employment of the handicapped in order to promote teamwork between government officials and rehabilitation personnel. Chapter V of the handbook deals specifically with the severely handicapped. Noncompetitive appointment procedures are available for the severely disabled. Special testing arrangements are scheduled for those able to apply through regular channels. In addition to information about employment of various disability groups, the booklet contains information about agency coordinators, rehabilitation counselors, and work release.


(ERIC # ED 072 290 [VT 018 784], 21 pages)

The federal government has employed a total of 7,442 mentally retarded persons since the inception of a program 8 1/2 years ago to increase job opportunities for this group. As of June 1972, 53 percent of these workers were still employed. Of the 40 agencies participating in the program, the U.S. Postal Service employs the greatest number of mentally retarded; geographically, California and District of Columbia employ the greatest number. Approximately 30 percent of the jobs held by the retarded are classified as white collar jobs. The article reports that State Vocational Rehabilitation Department personnel work with the handicapped in placement, postemployment counseling, and training.
The employer's viewpoint is explored in this article on hiring the handicapped. The employability of handicapped persons can be tested by comparing the extra costs and extra benefits of a handicapped employee to a hiring company with those of an able-bodied applicant. In order to determine employer attitudes, questionnaires were mailed to 180 Minnesota employers. Part I of the questionnaire asked employers to indicate for each of ten handicaps to what extent they would consider hiring persons with the specified handicap for clerical, sales, production, and management jobs. Part II of the questionnaire listed 20 economic factors such as training costs, turnover costs, and paid sick leave. Employers were asked to state for each of the ten handicaps whether they considered each of the economic factors an extra benefit or an extra cost for a handicapped employee. Results of the study showed that this group of employers did not consider it good business to hire the average handicapped person.
Sheltered Workshops: General Considerations


The authors review three types of sheltered workshops: the terminal shop which provides employment for persons unable to compete in the labor market; the transitional shop which provides evaluation and training for individuals who may eventually obtain competitive employment; and the clinically oriented workshop which aids those with emotional disturbances. The investigators present a fourth type of workshop, the habilitation workshop, which represents the philosophy of the Work Experience Center operated by the St. Louis Jewish Employment and Vocational Service. The reality-oriented habilitation workshop was designed for those who have never known the world of work. In order to help prepare clients for community living, the habilitation workshop attempts to give clients job-site as well as workshop experience. (See Nos. 78 and 89 and in BOOKS, No. B-8, Section 3, Chapters 25 and 38 for additional information about the Work Experience Center.)


The author presents a brief review of the sheltered workshop. The first workshop opened in 1840 in Boston for the blind. Now workshops number between 1,500 and 1,800. Today's shop, a hybrid of the industrial establishment and a rehabilitation facility, consists of two main types: the transitional workshop and the extended employment workshop. Both types are generally multidisability shops. Thousands of the nation's handicapped are given new hope for a productive future because of the sheltered workshop.


This general review of the sheltered workshop contains three brief sections. In the first section, Ralph Garner gives an overview of the history of society's concern for the handicapped. The second section, authored by Gene Lacy, presents three different types of sheltered workshops: (1) the evaluation and training facility which functions primarily for those two purposes; (2) the sheltered workshop which provides productive extended employment for those unable to compete in the job market; and (3) the work activity center which operates for those not capable of gainful employment. In the third section, Robert Creasy comments on the problems of today's workshops which he identifies as understaffing, lack of community and family involvement, and placement problems.

This article concerns the characteristics of sheltered workshops in general. Serving both clients and business, the workshops often emphasize client dependency and make demands on their clients in regard to religion, personal hygiene, and personal relationships. The authors surveyed workshop personnel and found that in many cases they considered the clients as objects of charity. Gersuny and Lefton suggest that the element of servitude might be reduced by union organization of workshop clients.


(ERIC # ED 058 490, 12 pages)

The author compares the current state of the sheltered workshop with modern industrial techniques. Because of the rapid advancement of technology and the effects of automation, training workshop procedures are 20 years behind actual industrial practices. Two of the problems cited are limited and antiquated equipment and lack of orientation to the needs of present and future industry. Leaders in the field of rehabilitation face the enormous task of developing a model workshop which provides needed services for industry and continues to train and employ disabled clients. The author lists six possible tasks which sheltered workshop employees could do, and he includes several cautions with regard to the implementation of these and related tasks.


(ERIC # ED 016 876 [VT 001 839], 41 pages)

This article, Manpower Research Bulletin No. 15, presents a brief discussion of 11 topics: (1) introduction and purpose and potential of sheltered workshops; (2) workshop clientele; (3) services and types of workshops; (4) organization, size, and location; (5) work and pay in sheltered workshops; (6) job placement and development; (7) role of sheltered workshops under the Manpower Development and Training Act; (8) other workshop programs; (9) recent legislative developments; (10) workshop experience abroad; and (11) new directions for sheltered workshops. The appendix contains statistics from 1961 and 1966 which show workshops and clients by disability group and workshops and disability group served by selected states and by all states combined. Also included is a list of 14 demonstration projects funded under the Manpower Development and Training Act.
In a time when industry, educators, and the public have a favorable view towards employment of the disabled, the sheltered workshop needs to be reevaluated for effectiveness. Popular behavior modification practices inhibit personal growth which is necessary for employment in a competitive world. Clients are treated as children subject to traditional practices which reward or punish them as they meet or do not meet expectations of supervisors. The author proposes that behavior modification is artificial and does not account for the "daily lived world" of the individual. As an alternative to the sheltered workshop, she proposes on-the-job training and cites several successful programs utilizing that technique. Existing workshops could be used for those who cannot work in a competitive environment, but who prefer working to receiving disability pay.
Job and Skills Training


The purpose of the study was to investigate the effects of modeling or verbal instructions on the imitative learning ability of severely retarded children. Forty-five severely retarded male children (mean IQ 27.5) were divided into two treatment groups and one control group. Neither modeling the desired behavior to one treatment group nor explaining verbally what to do to the other treatment group produced imitative learning. These results provided further evidence for the reported nonimitativeness of the severely retarded. The authors note, however, that other studies using operant conditioning to reinforce imitative behavior have resulted in imitative learning by severely retarded people.


To help 20 retarded adults develop adaptive behaviors needed for community living and working, this study evaluated ways to improve their relative thinking as measured by two Piaget's tests. One test deals with understanding the right-left concept; the other deals with understanding the brother-sister concept. Subjects were assigned to control and training groups at two Mental Age levels (low, 5-0 to 6-6 years, high, 7-0 to 8-4 years). Training groups of five at each level were given two 1-hour training periods on multiple classification and kinship concepts. At both MA levels the experimental subjects made temporary gains in relative thinking. After one month, high MA experimental subjects still performed significantly better than controls did, but low MA subjects lost their relative advantage.


Lunch tables set up in a school gymnasium served as a simulated workshop in which public school handicapped children learned to fill envelopes. Teacher praise and knowledge of production results were used to increase the production rates of five emotionally disturbed students. When they could perform the task consistently and efficiently, they were used as models for three trainable mentally retarded students. While their production rates improved, each of the retarded students was affected differently by exposure to direct reinforcement, knowledge of results, and the reinforced models.
This collection of 31 papers, written mostly by teachers, represents a cooperative effort between the Madison Public Schools, the University of Wisconsin, and the Division of Vocational Rehabilitation to plan, organize, and implement a public school prevocational training program. Articles deal with various aspects of educating trainable mentally handicapped or severely emotionally disturbed students. The first three articles are general discussions of instruction for these students; one article includes an example of behavioristic task analysis to develop instructional objectives. The majority of the remaining articles discuss techniques for teaching basic education skills (e.g., spelling, telling time, arithmetic) and home living skills (e.g., using a stove, fixing toast, reading a grocery list). Prevocational training is the focus of the last section which includes six articles. Each one explores the effects of different training techniques on the performance of certain tasks, such as sorting, stuffing envelopes, and packing. Generally, the number of workers participating in each experiment was less than 50, and work sessions were brief. Results indicated that the introduction of a high-rate contingency system, piece-rate payment, and individual work rather than assembly line work increased productivity. Other effective reinforcements were performance charts, soft drinks, and money.

The effects of money, social praise, and production charts as reinforcers for production in a collating task were studied. Systemized manipulation of such consequences resulted in differential increases in productivity in this public school setting. Eighteen 12 to 20 year-old retarded and severely emotionally disturbed students were the subjects of the study. Practical implications of the study are (1) the current rate of performance of clients may not be what they could achieve in a more reinforcing climate, (2) public school prevocational programs are capable of providing severely handicapped students with relevant training and providing other agencies with valuable vocational skills information for their students, and (3) many severely handicapped individuals do not know how to use money or are not allowed extensive use of money, and yet money is the primary reinforcer in our society.

This article reports on the use of A. Bandura's modeling techniques in therapy with a 38-year-old retarded legally blind male. Institutionalized for 26 years, the client had previously avoided social interactions and refused teaching services. The modeling technique, used to reduce his anxiety and enable him to learn new skills, emphasized the primary sense modalities, particularly audition and tactile perception. Use of the modeling technique enabled the client to function at a significantly higher level, improve his self-concept and social skills, and attain employment in the community. The article describes in detail the procedure used with the client; it discusses the implications of modeling techniques for other cases.


The work performance of 34 male chronic schizophrenics was tested over a 12-week period, comparing the effects of two drugs, chlorpromazine and fluanazine decanoate, and a placebo. Results showed a significant increment of performance on a complex task when the subjects were receiving fluanazine decanoate. Implications for vocational rehabilitation are that work program assessments must take into consideration the drug treatment the patient is receiving. The investigators concluded that the ideal equilibrium for managing the patient in the community would be achieved by the drug that provides both clinical control of symptoms and enhanced work performance.


Sheltered workshops for the severely retarded are typically production oriented, matching the job to the worker; workshop staff should find ways to train retarded persons to perform available work. To evaluate this thesis, Crosson used Skinnerian principles of operant behavior in a work training environment. At Fairview Hospital and Training Center in Salem, Oregon, seven severely retarded males were trained to perform two complex workshop tasks, one involving operation of a drill press in the manufacture of wooden pencil holders and one involving the use of a hammer in the assembly of flower boxes. Each task was specified in an operant chain of approximately 100 components. The training techniques included functional analysis, shaping, operant discrimination, and chaining. All of the subjects learned to perform the tasks accurately and reliably with less than 3 hours of training. After two months, subjects required an average of only one trial to regain criterion level; after a year, the percent retained stayed in the high 90s. The data indicated that the procedures are efficient and effective, in terms of both original training and retention.

The article describes a project for psychotics in remission at the Los Angeles Day Treatment Center. An eight-week course in effective marketing skills was given to 15 subjects by a management consultant firm headed by Robert Dease. The course content included developing job objectives, writing resumes and job search letters, and learning how to respond to job leads. Although Dease's technique had previously been successful with two groups of "economic failures" and employer response to this project was positive, none of the subjects was able to follow through on job leads and offers. The authors concluded that psychotics in remission must alter their attitudes and behavior in order to obtain job placement.

64. FENNING, Jerome M., and MCBEE, Edwin D. Developing Adaptive Behavior and Work Skills in Severely Retarded Young Adults. Sacramento: California State Department of Mental Hygiene. Pomona, Calif.: Pacific State Hospital. (ERIC # ED 073 245 [VT 018 593], 10 pages)

The efficacy in providing a vocationally oriented program for severely retarded adults was shown by a Pacific State Hospital (Pomona, California) demonstration experiment in which 12 profoundly and severely retarded young adults were taught a discrete work task. The behavioral objectives of the program were (1) the students will display nonbothering behaviors, (2) the students will learn work skills identical to those required in community sheltered workshops, and (3) the students will become aware of and use money obtained from work projects. Student evaluation after the month-long program indicated success in meeting the objectives and growth in the students' self-esteem and social awareness; however, adaptive behavior was judged to be still unacceptable for community standards.


An industrial subcontract task was used to test 60 schizophrenics at Vermont State Hospital on improvement of performance speed and accuracy. Predictions were made on the assumption that schizophrenics suffer from an attentional deficit and that their speed and accuracy would increase as feedback about their work increased. The 60 subjects were divided into three groups: those given specific feedback information, those given general feedback information, and a control group. Feedback information about performance errors facilitated the acquisition of performance accuracy. An increase in speed depended on the diagnostic category of the subject and retention of speed was dependent on the duration of the patient's illness.

This study examined the effects of cue redundancy and overlearning on the acquisition and transfer of a complex assembly task skill. It also studied the effects of cue redundancy and overlearning on long term retention. Sixty-four moderately and severely retarded young adults (mean IQ of about 47) from four sheltered workshops were selected by workshop directors for the study. Subjects were divided into four groups. Half of the subjects learned to assemble a 15-piece coaster bicycle brake as it came from the factory, that is, without color cues (form-only). The other half of the subjects worked with the 15 parts after they had been color coded (color-form). The parts were color coded by painting the surface of each brake part facing the subject when the part is in the proper position for assembly. All groups then learned how to assemble a 24-piece caliper brake that was not color coded. This was the transfer task. Half of the subjects learned both tasks to a criterion of six correct assemblies out of eight consecutive trials. The other half performed 20 trials beyond criterion (overlearning). The form-only group required more trials on the training task than on the transfer task. The same group also required more trials on the training task than the color-form group required for either task. Overlearning did not affect transfer. One year later, a retention study was done with 53 of the original subjects. Procedures were the same except that no overlearning trials were given and half the subjects started on the caliper brake. Mean number of trials to criterion for assembling both brakes was less during the retention study than during the original learning study.


To compare the effect of verbal labels on the acquisition and retention of a fairly complex task, the investigators trained two groups of moderately and severely retarded people to assemble 12 parts of a 15-piece bicycle brake. Subjects were 16 retarded clients from a work activity center. Their mean IQ was 43 and mean age was 24 years. The goal was to bring all subjects to a criterion of six correct assemblies out of eight consecutive trials. If a subject in the verbal cue group began to make an error in assembling a part (discrimination error), the experimenter cued the subject by saying, for instance, "The flat part goes up. Try another way," or, "The square goes up. Try another way." Subjects in the no verbal cue group who made a discrimination error were told only, "Try another way." After six months, both groups were retrained to the original criterion. During retraining, the verbal cue group received no verbal labels. The mean number of trials to criterion during the original learning period was 34.14; during the retraining period, the mean number of trials to criterion was 12.21. The verbal cue group had less discrimination errors than the no verbal cue group, and there were fewer discrimination errors for retention than for original learning. The authors concluded, "These data support the long term retention literature which indicates that retention is related, in part, to the degree of original learning."
The purpose of this experiment was to obtain base rate data (defined as non-reinforced production) on moderately and severely retarded individuals in the production of a complex assembly. Further, the investigator wished to establish whether a relationship existed between task complexity and productivity. Two separate base rates were obtained. In the first group were 20 people between the ages of 17 and 39 with IQs ranging from 25 to 97. In the second group were 16 people from the ages of 15 to 38 whose IQs ranged from 33 to 67. Members of both groups were chosen from three sheltered workshops. The task was to assemble a 14-piece bicycle brake. After the groups had learned to assemble the brake according to a pre-established criterion, the first group assembled brakes for 1 hour a day for ten days. The mean hourly production rate was 24.9 brakes. Neither the correlation between the amount of time it took to learn the skill and the mean hourly production nor the correlation between IQ and mean hourly production was significant. Materials and procedures for the second group were the same as for the first group, except that the second group worked for 3 hours with a 15-minute break half way through the session. The mean hourly production rate was 20.3. As with the 1-hour group, neither correlation was significant. Both groups received no reinforcement other than a "thank you" at the end of each session. Gold points out that results obtained in this study surpass "both qualitatively and quantitatively any performance of the mentally retarded reported in the literature," and he questions the assumption that pay and praise are the only effective work reinforcers.

Based on an earlier demonstration of the success of using cue redundancy to teach mentally retarded people to assemble a 15-piece bicycle brake (see No. 66), the work reported in this article investigated ways in which color coding of parts could be efficiently faded out without loss of the skill. Gold's rationale was that redundant cue removal could be used to train mentally retarded people to perform a job in industry where it would not be feasible to color code the assemblies. Subjects were 36 mildly and moderately retarded sheltered workshop clients with IQs from 29 to 62. They were randomly assigned to one of three groups: complete removal of color cue, incremental removal of color cue, and forced choice. Twelve parts of the bicycle brake were used, ten of which could be assembled in one of two ways. The surface of these ten parts that faces the subject when properly installed was painted red. A specified criterion was established for the group, and subjects performed four trials a day until criterion was reached. All three methods were effective in teaching the skill, although there was considerable within-group variance between trials, manipulation errors, and discrimination errors.

In California, the San Juan Unified School District and the Sacramento District Office of Vocational Rehabilitation worked together to develop a vocational program for trainable mentally retarded boys. A special education instructor supervised a work crew of six boys in various jobs including gardening, clean up, and manual labor tasks. The work crew demonstrated that trainable mental retardates can work under highly supervised conditions. Based on this experience, the author notes potential advantages of the crew situation: it lends itself to healthy and fair competition for the workers; and the supervisor of a crew need not be a highly trained professional, but might be an older, retired person willing to work with the handicapped for a minimum wage. Several recommendations are made to facilitate wider usage of the crew idea.

71. HUDDLE, Donald D. "Work Performance of Trainable Adults as Influenced by Competition, Cooperation, and Monetary Reward." American Journal of Mental Deficiency 72 (September 1967):198-211.

The subjects of this investigation were 48 trainable mentally retarded male residents (IQ range from 30 to 60; mean IQ of 42) at two campuses of the Ft. Wayne State Hospital and Training Center, Ft. Wayne, Indiana. The subject group was divided according to campus residence into two homogeneous groups: one group received money for performing the experimental task, the other group was assigned the same task but was not paid. The task was assembling TV rectifier units to complete one rectifier unit. Subjects at one campus were randomly assigned to three subgroups: (1) "individual," in which subjects worked alone on the task; (2) "competitive," in which subjects were paired and encouraged to assemble more units than their partners; and (3) "cooperative," in which subjects were paired and encouraged to perform the task together. Members of all three groups were paid according to the number of rectifier units they assembled. At the other campus, subjects were randomly assigned to these three types of groups, but none of the groups were paid.

The experiment involved a two-week training period and daily 45-minute work periods for four five-day weeks. Results indicated that the reward groups performed significantly better than the no-reward groups. In addition, the investigator reports that money earned had positive effects on the behavior of the reward group. No significant differences were found between the individual, competitive, and cooperative subgroups, indicating that work grouping is unimportant when an incentive is given. The investigator states that observations indicated competition among all subgroups. This report includes comparisons of subjects' production rates with those of normal workers and descriptions of training procedures, possible influencing factors, and implications for education, for industry and sheltered workshops, and for research.

This study involved the establishment of a bonus pay procedure in a simulated work environment for 14 "exit-ward" patients at the state hospital in New Castle, Indiana. All of the subjects had either a recent or past history of periodic seizure activity; their IQs ranged from 50 to 99 with a mean of 75. Their average age was 33 years, and their average period of institutionalization was 15 years. For one-half day per week, subjects participated in groups of three in the workshop activity, production of a telephone scratch pad. The 10-week investigation had three phases: (1) baseline: task performance with no bonus for three weeks; (2) experimental: task performance with bonus for five weeks; and (3) return to baseline condition for two weeks. Patients who exceeded their previously established hourly average were given bonus coupons redeemable at the hospital canteen. Results indicated that the bonus conditions stimulated a significant increase in group productivity.


This individualized program of behavior modification for ten severely retarded youths was designed to improve five skills required to convert one-gallon food cans into nursery specimen cans and one general skill, visual attendance to task stimuli. The five tasks are defined and procedures used for each task are given. The sheltered workshop area was screened and a token system was introduced. Mexican centavos served as tokens and could be exchanged for a variety of trinkets, edibles, and privileges. The experimental plan and training procedures are detailed in the article. Among other things, the results showed a reduction in average error and an increase in average production with the tokens. The discussion of the study confirmed the usefulness of behavior modification techniques which did not require expensive equipment or extensive staff training. The performance of all the subjects exceeded staff expectations.


The Shore Training Center in Evanston, Illinois used a client-administered token economy program with four of its sheltered workshop clients. As a result of peers administering reinforcement tokens, two adult males increased conversation, one adult male assumed a better posture, and one quit talking and laughing to himself and began interacting with others. The advantages of using peers rather than staff as reinforcers were more frequent reinforcement, conservation of staff time, increased social interaction for clients, and increased learning for clients acting as reinforcers.

(ERIC # ED 038 532 [VT 010 857], 37 pages)

The Campus Laboratory School of the State College at Buffalo developed a curriculum model which uses a simulated work environment to train educable and trainable retardates for jobs in the hotel/motel industry. The investigators proposed that simulation techniques are more effective and economical than on-the-job training or classroom lecture techniques. The model emphasized a systems analysis approach and consisted of behaviorally based learning experiences. In the program were 18 training modules, each 60 minutes long with a video tape, instructional materials, and a simulated work environment for the student. This article includes a review of simulation literature and a bibliography on that topic. The authors hypothesized that the simulation technique could also be used to train the mentally retarded in the social skills demanded for a vocation.


The investigators developed a timer-control device which was used to administer an avoidance procedure to five mentally handicapped adults. Inappropriate behavior resulted in an aversive event which consisted of taking away a number of finished work units or removing part of a bonus already earned. Production rates and day-to-day stability increased as a result of the increased feedback upon completion of work units.
Mildly and moderately retarded residents of a state institution were trained to assemble components for teaching machines and operant conditioning equipment. The training was conducted at Murdoch Center in Butner, North Carolina, a demonstration site for one of six regional centers established by the Vocational Rehabilitation Administration to offer brief-training in mental retardation for rehabilitation counselors. The first group of trainees were ten retarded males between the ages of 18 and 36 with IQs from 40 to 60. They were taught to assemble relay panels through a series of 20 discrete operations placed in sequence to resemble an assembly line. Each worker was trained to do all the steps; positive reinforcement (verbal praise, attention from the supervisor, hourly pay) was used. Training was flexible, and any steps that the trainees had difficulty learning were modified. Quality control was done visually by the instructor and electrically by the workers.

After a year, production expanded to include other electrical devices. Twelve men and 14 women with IQs from 31 to 81 were employed for 30 hours a week. The reward system was also changed. Raises were given on the basis of quality of work and longevity. Tokens were given to workers for getting to work on time, for being well groomed, and for finding defective products. Tokens were also given on a variable interval 30-minute schedule to workers who were working at their stations when their 30 minutes had passed. About these procedures the authors state, "The token system seemed to lead to better control of behavior in the shop." (See No. B-8, Section 3, Chapter 35 in BOOKS for another reference to Murdoch Center.)

This article reports on the use of operant-based behavior modification techniques in the Behavior Training Unit (BTU) of the Work Experience Center of the St. Louis Jewish Employment and Vocational Service. The BTU was designed to simulate a typical sheltered workshop with simple packaging and assembly tasks. Though the project lasted 15 months, client participation ranged from 3 to 38 weeks. The subject group consisted of 19 noninstitutionalized moderately to severely retarded adolescents; their unmanageable behavior problems and low productivity had made sheltered workshop employment impossible for them. The group was given training that used a token system, a set of cueing lights, and such reinforcers as food, money, break time, and attention from supervisors. The operant techniques were successful in reversing work-interfering behaviors and in increasing productivity. It appeared that the BTU environment needed to be maintained for the improved behavior and performance to persist. In addition to the statistical information, this article gives brief case histories of the members of the subject group and describes other incidents pointing to the success of the training. The investigators concluded that "operant methods are applicable to developing vocational skills in retarded adolescents." (See Nos. 48 and 89 and in BOOKS, No. B-8, Section 3, Chapters 25 and 38 for additional information about the Work Experience Center.)


(ERIC # ED 062 563 [VT 013 750], 46 pages)

The UCLA Division of Vocational Education in cooperation with the Bureau of Industrial Education and the California State Department of Education developed a curriculum guide to seven para-cosmetologist occupations for the physically handicapped. Behavioral objectives are presented for each identified task and are written in a format which stresses clarity. Identified are what students will be given, the students' performance, and the end standard performance. Estimated instructional hours varied from 75 to 500 hours for each of the occupations.
This article describes an automated system that was used to monitor behaviors in a sheltered workshop. Behaviors were transduced by tools wired to operant programming and recording apparatus, and the task consisted of construction of electronic equipment. Workers were assigned to various components of the task according to their work capabilities. To influence work output, a system of rewards was developed. The apparatus and general procedures are described. As a result of this monitoring technique, a great deal of objective information was available to help the supervisor measure the client's progress. Nine advantages of automating the workshop are summarized. Three implications of the automated technique are: (1) it forces a focus on specific methods of developing a program for the client and testing its effectiveness, (2) close attention is paid to discrete objective units of behavior in matching job requirements to particular skills of a client with highly individual capacities, and (3) the client is always rewarded for working to the limits of his capability.

Sixteen multiply handicapped clients with extremely poor prognosis for productive employment were given token reinforcement in a community sheltered workshop in order to improve their production. Baseline production rates were taken before and after the use of the tokens. The effects of the tokens were given on a graduated scale for average, better than average, and optimal production rates as measured by baseline performance. Clients were also measured for a two-week period in which every other day was a "practice day" (no tokens given). Two different tasks were used: assembling terminal boards and folding Goodwill bags. The tokens consisted of varying amounts of points which could be exchanged for canteen items and privileges (such as attendance at an employees' "arcade"). The use of points led to a significant increase in work rates. The removal of points was followed by a significant decrease. The authors encourage assessment of client target behaviors and of training and therapeutic procedures used by staff in order to improve workshop training techniques. (See Nos. 113 and 122 for related readings.)
Vocational Training and Placement Programs


(ERIC # ED 052 349, 31 pages)

The document describes the development, management structure, physical facilities, and services provided by Abilities Inc. of Florida, a center designed to train, employ, and place severely disabled and older workers. Patterned after a similar organization located in Albertson, New York, Abilities Inc. of Florida provided employment in a competitive work environment in the manufacture of electronic equipment, direct mail advertising, and printing. Contracts for work at the center were secured with private enterprise. Generally, applicants had to be able to get to the center, although part of the work in the direct mail operation was handled by homebound employees. All applicants needed to demonstrate a positive attitude and strong motivation to succeed. Employees were from the ages of 22 to over 60 and had a wide variety of physical impairments (e.g., mental retardation, amputation, polio, arthritis, congenital abnormalities).

Employees worked a standard work day and received wages and benefits comparable to outside employment. Some of the jobs done were soldering, fabrication, and assembly of electronic equipment; operation of mechanical addressing and folding equipment and compilation of mailing lists; and operation of letter set and offset presses, binding, plate making, and layout. In an effort to reflect current employer needs and trends in competitive employment, the center's training programs were reviewed by experts in industry, government, and education. Between 1960 and 1966, Abilities Inc. trained approximately 200 people, most of whom had been referred by state vocational rehabilitation agencies. About one-third of them were rehabilitated, and the remainder were referred to sheltered workshops and other agencies.


The Young Adult Institute and Workshop of New York City provided an Adjustment Center for mentally retarded and otherwise disadvantaged persons over the age of 16. Most of the students served were multiply handicapped and were not yet in job training programs. The Adjustment Center provided small-group counseling sessions in problem solving and change, social skills, communication skills, and employment skills. Individual counseling was provided on an as-needed basis. In addition to the 17-hour per week adjustment program, recreative activities were also available to clients. The workshop encouraged an alumni association which functioned as an independent social group. Plans for a permanent residence for working alumni were underway at the time the article was written.
A lack of community facilities for the further social and vocational rehabilitation of deaf psychiatric patients was remedied by the expansion of Fountain House. A halfway house originally designed to serve just emotionally disturbed patients, Fountain House started a special program for deaf patients. Deaf members were referred from the Rockland State Hospital in New York. A deaf staff member served as the liaison between the hospital and the house. The house provided a variety of vocational opportunities for its residents. House functions (kitchen, housekeeping, etc.) were taken care of by residents. The Temporary Employment Placement Program (TEP) provided semi-sheltered community employment so that clients could learn good work habits and become acclimated to the world of work before leaving the house. (See Nos. 20, 41, and 85 for additional information about Fountain House.)

The article reports on the Transitional Employment Program at Fountain House in New York City. Fountain House was a rehabilitation center serving psychiatric patients who found the transition from hospital to community difficult. Almost 90 percent of Fountain House's members, as clients are called, were schizophrenic. The authors make the point that many psychiatric ex-patients who have a job skill face barriers in the employment process that preclude them from securing and retaining a job. These barriers are poor job interview skills and application forms that reveal patients' past hospitalization and past failures in work and school. The purpose of the Transitional Employment Program was to strengthen work habits, motivation, and attitudes necessary for employment by working cooperatively with private industry to provide transitional employment for members. It was hoped that this exposure to transitional employment would thus minimize or eliminate employment barriers. Members worked half days at cooperating businesses for three to six months before trying to get regular, full-time jobs elsewhere. Those unable to hold a regular job could return to Fountain House or be placed for another period of transitional employment. At the time of the article, 40 New York City businesses and industries were employing about 200 Fountain House members. (See Nos. 20, 41, and 84 for additional information about Fountain House.)
An eight-year project (1962 to 1970) of Altro Health and Rehabilitation Services of New York City is described in this article. The project was designed to improve the social and vocational functioning of 79 persons, ages 17 to 22, who were patients in mental hospitals or residential treatment centers. Although their median IQ was 120, the subjects were clinically considered a high-risk group for rehabilitation since 90 percent were diagnosed as schizophrenic and all had had their first onset of illness during adolescence or earlier. The project had four principal features: (1) introduction of rehabilitation services early in treatment, (2) provision of professional and community agency service to assist in patients' maturational problems, (3) special attention to transition points, and (4) use of a community-based therapeutic workshop while patients received major skill training in garment manufacturing, direct mail, offset printing, data processing, bench assembly, and machine shop operation. Assignments were flexible. The length of time that patients remained in the workshop ranged from a few weeks to four years. A case-worker who was not on the project staff rated patient outcome on a six-point scale; 62 percent of the patients were in the three more favorable categories. Results indicated that education and IQ were significant in predicting outcomes; positive motivation was not an essential factor. The article includes brief case histories of several group members. The investigators believe that the project results suggest the usefulness of long-term service for the project population.

This project, a cooperative effort of the Texas Commission for the Blind and the Austin State School for the Mentally Retarded, was designed to evaluate the work potential of 15 blind, severely retarded, multiply handicapped persons. The project enterprise was the manufacture of bath perfume, and clients attempted to master tasks at six work stations: mixing, bottle filling, capping, labeling, boxing, and stacking and inventory. The training program included the maintenance of performance records for each worker and the use of a token economy system. Results indicated 48 successes in 58 attempts, a success rate of 83 percent. Only one 2-hour working day was needed to accomplish 75 percent of the successes. The investigators cited the results as evidence that blind multiply handicapped persons can work competitively if tasks are carefully chosen and properly supervised.

Learning Center for the Visually Handicapped was a residential habilitation program for multiply handicapped blind adolescents and young adults in Watertown, Massachusetts. Sponsored by the Protestant Guild for the Blind, Inc. in cooperation with the Massachusetts Commission for the Blind and the Department of Special Education, the center was concerned with helping the student transfer his learning into life situations. Habilitation assistants worked closely with each student in the following areas: independent personal care, more advanced living skills, marketable skills, practical arithmetic, independent travel, and communication skills. Residential and vocational placement were the goals of the program.


Three agencies cooperated in this three-year demonstration project to habilitate the mentally retarded. The Special School District of St. Louis County, the Missouri State Division of Vocational Rehabilitation, and the St. Louis Jewish Employment and Vocational Service established a Work Experience Center to train clients between 16 and 21 years of age with IQs ranging from 40 to 65. Clients entered a five-phase program including (a) general evaluation and vocational adjustment (intra-mural), (b) jobsite evaluation and vocational adjustment (extra-mural), (c) specific job preparation and/or occupational training, (d) job placement and try-out, and (e) employment and follow-up. As a result of their experience with this project, staff stressed the need for the following items: extra-mural programming which includes community and industrial resources; specific job training; flexible individualized programming coordinated by a case manager; a reality-oriented production shop for vocational adjustment training; examination of evaluation procedures and resources, current wage and hour law interpretation, and work-study scheduling; longer-term habilitation programming and integration early in the school curriculum; special training and self-concept development for trainees.

Appended to the report are tables describing clients, job training sites, and current jobs of former clients. (See Nos. 48 and 78 and in BOOKS, No. B-8, Section 3, Chapters 25 and 38 for additional information about the Work Experience Center).
This article reviews a three-year-old program called Projects With Industry (PWI). Funded by the Social and Rehabilitation Service, this placement-oriented program offers the disabled employment opportunities ranging from labor to professional work in over 500 firms. The author briefly describes several rehabilitation agencies and business firms which are implementing the PWI program. Among those reviewed are the Cole National Corporation; International Business Machines Corporation; MacDonald Training Center in Tampa, Florida; the Easter Seal Goodwill Industries Rehabilitation Center in New Haven, Connecticut; the Chicago Jewish Vocational Services, the Human Resources Center in Albertson, New York; and Fountain House in New York City.

During the latter half of 1973, 62 percent of the 1,724 disabled persons served were placed in jobs. The cost of each placement was $1,000 as opposed to $2,137 in the state-federal vocational rehabilitation program. (See Nos. 102 and 103 for more information about the Human Resources Center and Nos. 20, 84, and 85 for more information about Fountain House. Both facilities are also referred to in No. 41.)

A four-month home economics training program, called Greentree School, was given to chronic schizophrenic women to help them cope with some of the everyday problems that they would encounter following discharge from the hospital. It was hoped that this training would enable them to remain out of the hospital. Participants were of average intelligence and were identified as having sufficient remission to benefit from training. All had been in Central Hospital for at least two years. The women were trained in a variety of homemaking skills, such as the purchase and preparation of food, selection and care of clothing and home furnishings, management of time and money, and caring for children. To measure project effects, the Lorr Psychiatric Rating Scale and a staff-developed homemaking scale were administered several times throughout the training. There was little agreement on patients' ratings on the two scales; however, higher correlations resulted when professionals rated patients directly. Twenty-nine participants were discharged, and 17 remained in the hospital. During the one-year follow-up period, nine returned.

Compared to other chronic schizophrenics, project participants demonstrated a higher percentage of discharges (63 percent as opposed to 14 percent for chronic schizophrenics) and a lower percentage of readmissions (31 percent compared to 69 percent). The article concludes that the training increased patients' chances to be successfully discharged from the hospital.

This article describes the rehabilitation program for retarded persons at Sunland Training Center in Miami. Based on a new organizational model, the program had four interrelated divisions: (1) vocational rehabilitation, (2) education and training, (3) independent living, and (4) development and training. The main focus of this article is the vocational rehabilitation division, serving 180 adult clients. Among the objectives were training and placement, development of social and communication skills, job experience, and follow-up. Clients were given vocational and psychosocial evaluations, and a multidiscipline team developed rehabilitation plans for them. After vocational and community orientation, clients received six weeks of basic on-campus vocational training and about 12 weeks of intensive off-campus training. On-campus facilities included 30 job training stations and a sheltered workshop; off campus were seven workshops and 20 on-the-job training stations. The program encouraged clients to seek competitive employment and attempted to prepare them to live and work competitively in communities. The article describes the program model; no data on client placement are included.


The Auburn, California State Department of Education, Farm Labor Bureau, and DeWitt State Hospital united to develop a training program to teach 19 institutionalized retardates with an average IQ of 41 to pick tomatoes. Although their production rates were not as high as nonpatients, the quality of their work was much better. All of their fruit passed inspection. The color perception and coordination of the workers improved with the work experience.


The Occupational Training Center (O.T.C.) in St. Paul, Minnesota trained handicapped and multiply handicapped youths and adults for useful employment. New clients were evaluated by counselors and instructors on the basis of performance during a three-week "testing by doing" period. If the O.T.C. could help a client, s/he was accepted and an occupations development plan was designed for her/him. O.T.C. used task analysis and job reengineering to facilitate training and placement of the handicapped. The Center entered into an agreement with several private industries in order to place their clients in actual job situations for more training. In order to further prepare employees for outside employment situations, the Center offered individual instruction units on grooming, community relationships, employer expectations, and personal and social attitudes.

The goal of this prevocational program at Dixon State School in Illinois was total release from the institution and return to the community for its more than 100 mentally retarded students. In order to qualify for the program, pupils had to be at least 15 and have community placement potential. The program included total living skills, classroom activities, and on-the-job training. Reinforcement used was praise, favors, and inclusion in groups going off campus to special events. The intermediate and advanced students worked at the Rockford Goodwill Industries. After adequate performance on a job, students were considered for release from the institution.


With the use of a simulated work environment, this prevocational program provided instruction for 30 educable and trainable mentally handicapped students in social behaviors, grooming, attitudes, and skills appropriate to a work environment. This detailed program description lists purpose, materials, instructions, and major evaluation items for each of 20 different pre-skills. Skills ranged in complexity from color discrimination to a packaging exercise involving verbal and written instructions. Also included in the program description is a unit on job sampling and simulated production. Five units in areas such as maid or custodial service are listed with directions, objectives, materials required, and evaluative procedures for each. A formal evaluation report, prepared for each student and sent to the appropriate location for use in securing employment, is also described.

Program staff were very interested in returning the students to the community and therefore very selective with regard to the moderately and severely retarded students they accepted.


This four-year program served adolescents attending school at Residential Treatment Centers. At the time of intake, the emotionally disturbed adolescents were evaluated through interviews with a vocational counselor, psychological testing, and performance in 15 hours of simulated work experience. Students were employed in a rehabilitation workshop and were given individual and group counseling in addition to individual programming. This report identifies and describes elements which should be incorporated into a vocational rehabilitation program.
The Occupational Center of Essex County, the Newark School System, and the New Jersey Rehabilitation Commission cooperatively developed and implemented a vocational rehabilitation program for 300 mentally retarded youth in their last year in a public school system. Students were males, ages 14 to 18 with IQs ranging from 43 to 83; they were divided into control and experimental groups. Goals of the project were to study the impact of the program upon the subsequent vocational development of the mentally retarded students and to develop a pattern of community relationships which could serve as a guide to vocational rehabilitation programs in other communities. The results were measured by testing the experimental and control groups before and after project participation, assessing student functioning in school, and studying subsequent vocational, educational, and social activities.

Some post-project results were that (1) the experimental group had a higher percentage of employment, particularly for the subgroup of students with IQs below 75, and for those with higher social maturity quotients; (2) experimental, especially those with IQs above 75, completed some kind of advanced training after the project year more often than the controls; (3) more of the experimental subjects completed the project year in school; and (4) fewer experimental were institutionalized or reported new incidents with the law. The two groups did not differ in job stability or percentages of students who were not involved in work or school after leaving the project.
Described in this report is a cooperative effort between the Camarillo State Hospital and Jewish Vocational Service for aiding hospitalized schizophrenic men to return to the community. Selected were 146 men who were identified by doctors as being likely to leave the hospital within several months and who were in need of vocational and work adjustment training. After a preliminary period of adjustment to a structured work situation, patients began working in the hospital bakery where they performed a variety of tasks from loading bins with supplies to disassembling, cleaning, and reassembling the machines. The regular bakers were counseled as to how they could assist in the rehabilitation of patients. Three stages of training were involved: work discipline with emphasis on punctuality, grooming, perseverance; work tolerance with emphasis on completing more complex tasks; and increased work pressures and production demands. Men also received group and individual counseling. Since patients were not paid for their bakery work, motivation was release from the hospital. Once released they were employed by the Handcraft Industries of the Jewish Vocational Service, where they were paid on a piece-rate system. Rather than return to their homes, the men were established in half-way houses. Of the 146 subjects, 89 left the hospital. Sixty-three of them stayed out for at least six months, and 31 became self-supporting.

The authors discuss major problems encountered during the hospital work phase of the program. Scheduling patients for a full day's work was often difficult because much of the bakery activity occurred earlier than patient-workers could get to their stations. The regular bakers were skeptical about the quality of work that could be expected of patients and therefore often made unrealistic demands on patients. The need for close communication between project staff and hospital staff is emphasized in the report. The authors also feel that rehabilitation involves more than learning how to perform in a work environment and that other services (such as housing, medical care, social activities) need to be available to the patient as he enters the community if he is to make a satisfactory adjustment.

(ERIC # ED 060 223 [VT 013 393], 65 pages)

This document describes the evaluation, training, and placement procedures of the Memphis, Tennessee Goodwill workshop program. Clients were generally multiply disabled and under 25. They had to be able to manage their own transportation and had to be proficient in daily living skills before admission to the program. Evaluation lasted about five weeks and included 50 table tests. Available to the client was a work habit training program. Specific information in this report includes (1) sources of clients, (2) types of clients, (3) center capacity, (4) facilities and equipment, (5) evaluation procedure, (6) job sample tests, (7) work habit tests, (8) placement techniques, (9) history of 147 workers, and (10) reasons for the job turnover. Recommendations concerning evaluation, training, and placement are also included.


(ERIC # ED 026 770, 89 pages)

This program trained and prepared mentally and multiply handicapped young adults (average IQ 55) to enter competitive employment. The initial evaluation of clients consisted of four weeks of objective testing and observed work experience. Sixty to 90 persons per year used subcontracts from local businesses as a training tool for outside employment. The most important predictor of successful job placement was the client's own initiative. After four years of operation, follow-up indicated a 50 percent permanent employment rate.

This final report notes that the Occupational Training Center is one facet of a Comprehensive Care Center which also includes a nursery for public school preparation, a day care program, a prolonged employment shop, and social development and recreational programs for all groups.

The article describes a program that trained disabled persons to handle teacher substitutions for school districts. The disabled persons ranged in age from 24 to 64; their disabilities included cerebral palsy, osteoporosis, and rheumatoid arthritis. Developed by the Human Resources Center in Albertson, New York, the program provided training, evaluation, and follow-up services. The clerks worked at home, making and receiving telephone calls during evening and morning hours when substitute teachers were needed. Equipment was modified as necessary. The article reports that ten school districts employ clerks trained by the program; the authors express hope that the program can be expanded. (See Nos. 41 and 103 for further information on the Human Resources Center.)


Described in the article are the approaches used by personnel at the Human Resources Center in Albertson, New York to obtain white-collar jobs and expand vocational opportunities for severely disabled people. Projects with Industry, as the program was called at the Center, was one of 11 models funded by DHEW in 1970 to place handicapped individuals in private enterprise. In four years, over 300 people were served, about half of whom were disabled men between the ages of 40 and 55. Approximately 220 clients were placed in competitive employment in such jobs as microfilm technician, stock transfer clerk, accounting clerk, credit authorizer, file clerk, clerk typist, and teller. Clients' disabilities were quadriplegia, paraplegia, hemiplegia, cerebral palsy, cancer, blindness, deafness, heart disease, post-stroke conditions, and sickle cell anemia.

Services provided by Projects with Industry reflected the multi-faceted role of the rehabilitation counselor, whose primary function was to help clients make the transition from dependence to independence and self-sufficiency. Since the project attempted to place clients in jobs as quickly as possible, training and evaluation at the Center was generally limited to 11 weeks. Industry assumed responsibility for specific skills training. Another goal was to involve the business community in rehabilitation of project clients. Counselor-coordinators visited potential employers several times to become familiar with company procedures and available jobs and to orient supervisors to the project. Vocational profiles on potential employees were sent monthly to cooperating companies, and employers were invited to the center to attend seminars. By making several contacts with employers, counselor-coordinators were able to conduct meaningful follow-ups on placed clients and to keep abreast of changing employer needs. Once a company began participating, a coordinator from that company worked with project staff to fill job openings and conduct follow-ups. (See No. 90 for another reference to Projects with Industry and Nos. 41 and 102 for more information about the Human Resources Center.)

The Pittsburgh branch of the Pennsylvania Association for the Blind and the Western Pennsylvania School for Blind Children cooperated in a program which provided students at a residential school for the blind with part-time sheltered employment. At the time of intake, a student was given a six-week (9 hours per week) orientation and training period, which was carefully evaluated. The program had been judged successful by staff and students and was being modified and improved. This article is the second in a series of three articles describing work-experience programs for blind, visually handicapped, and multiply handicapped youths. (See Nos. 111 and 126 for annotations of the other articles.)


This report describes a pilot project in Austin, Texas that was designed to serve severely retarded persons who were ineligible for regular vocational rehabilitation programs. The project involved 15 severely retarded adults and had two major areas. The first area was extended sheltered workshop employment opportunities, including personal-social adjustment training, work adjustment training, and on-the-job training in assembly work. The second area was community living services at two half-way houses. During the pilot program's first five months, occupancy rate was nearly 100 percent; monthly earnings per client ranged from six dollars to twenty-five dollars, with eight dollars the average. Recreational activities have been provided by the halfway houses and local mental health agencies. Funds were being sought from the Texas state legislature so that the program could be implemented on a state-wide basis.


The California School for the Blind joined forces with the California Vocational Rehabilitation Department to establish a work training program for blind and multiply handicapped persons. The program served three groups and used several sites. High school students who resided at the Center for the Blind, a transitional work experience group ages 16 to 19, and a less able work evaluation group all participated in the program. Students were employed in the Contra Costa Community Rehabilitation Workshop in Richmond and the Wapert Center for the Retarded in Hayward. Conclusions of this article are (1) working with multiply handicapped blind persons requires much time, many services, and an individualized program; (2) there are not adequate services now available; (3) individual and group counseling must include parents; (4) progress with blind persons is increased by interaction with sighted coworkers and associates; and (5) the cooperation of two agencies was necessary for the success of this program.

Socially and mentally retarded blind persons were aided in a "total life" rehabilitation project conducted by Tennessee State Services for the Blind and the Orange Grove Center for the Retarded in Chattanooga. This article briefly describes the program which emphasized evaluation and mobility skills. Out of 18 individuals served in the project, four were placed in competitive employment and two in sheltered situations.


A try-out approach to job placement of the handicapped was the focus of this investigation. Sixty-two clients, most of whom were neuro-psychiatric patients at the VA hospital in Waco, Texas, were divided into control and experimental groups. The control group was given the routine placement services of the agencies working with them. The experimental group members were employed by Baylor University in Waco for a one- to two-week period and were assigned to various companies in which try-out placements had been arranged. Evaluation of immediate placement results and subsequent one-year and five-year follow-up studies did not show try-out placements to be qualitatively different from routine placements. The marked advantage of the try-out placement was in the readiness and timeliness of the placement. Two precautions are listed for short-term subsidy programs, and implications for the rehabilitation process are also given.


This brief summary describes a residential program for blind and multiply handicapped blind students in North Dakota. The center was located on a university campus, and its curriculum included orientation and mobility, prevocational classes, typing, braille, and physical conditioning. Students entered vocational training in their chosen area and then were helped to find employment with the aid of placement services.

(ERIC # ED 043 181, 83 pages)

The target population of this demonstration project was mentally retarded students who did not fit into a regular special education class. Over 200 students were served in 1969. Program areas for the students included academics, arts and crafts, home economics, independent living, job training, language center, manipulative dexterity, music, physical education, sewing, social perceptual training, and cocurricular activities. Follow-up procedures explored adjustment to community living and employment. In addition to describing the program areas, this article discusses the student population and the administrative components, and it considers the implications for the future of Cooperative School-Rehabilitation Centers. (In BOOKS, see No. B–11, Part IV, Chapter 14 for related information.)


The Sacramento Society for the Blind established an intensive five-week vocational course for young adults 15 to 20 years old. The Self-Reliance Institute operated on three basic assumptions: first, that blind adolescents behave according to the expectations of those around them; second, they are essentially underachievers with a poor self-image; and third, they have a latent capacity to become productive workers. The individualized approach often used with the handicapped was abandoned in favor of a "boot camp" attitude which pushed the group to achieve. The five-week course included part-time work experience, daily living instruction, and job placement. This is the last article in a series of three articles which describe work-experience programs for blind, visually handicapped, and multiply handicapped youths. (See Nos. 104 and 126 for annotations of the other articles.)
112. MCKINNON, Rachel; LINDEN, Doris; SAVINO, Michael; and FOWLER, Eldon. 
A Follow-up Study of Graduates from a Vocational Rehabilitation 
Program in a Residential Training Center for the Mentally Retarded. 
Sacramento: California State Human Relations Agency, Department 
of Rehabilitation, August 1970. 
(ERIC # ED 057 254 [VT 012 129], 47 pages)

One hundred and thirty-six men and women who participated in the Agnews 
State Hospital Residential Training Program for the Mentally Retarded 
were interviewed in an attempt to determine the success or failure of 
the program. Goals of the project were to provide an individualized 
program of services to help resident students reach their maximum 
development and to rehabilitate residents either in competitive employ-
ment, sheltered workshops, or homebound programs. Results of the study 
showed that almost half of the 136 men and women were judged to be 
rehabilitated at the time of their departure from the program. Of that 
number, 75 percent were still working at the time of follow-up. Voca-
tionally rehabilitated persons had an average IQ of 46, an average age 
of 41, and had spent an average of 2.3 years in the program and 18 
years in institutions for the mentally retarded.

113. MILLER, Maurine R. "A Pre-vocational Training Program for Hard-core Handi-

This Indianapolis Goodwill Industries project provided vocational 
training and experience for severely handicapped individuals with 
no previous work experience and limited schooling. Clients worked 
6 hours per day and met weekly in small groups for counseling. 
Early tasks involved manual assembly; later tasks were more complex. 
When clients were judged ready, placement is attempted. Three research 
projects have begun in connection with this four-year project. (See 
Nos. 81 and 122 for related readings.)
114. OVERS, Robert P.; HOLMES, Elizabeth; and MCFATTRIDGE, Diane. Paid Domestic Work for the Trainable Retarded Girl. A Pilot Project. (Report No. 8) Milwaukee, Wis.: Curative Workshop, Research Department, February 1970. (ERIC # ED 043 177, 110 pages)

This article describes a project which trained four girls in basic household tasks, and reports evaluation data reflecting the girls' performance, amount of supervision, job satisfaction, relationship to employer and supervisor, motivation, and interpersonal competence. Appendices contain task descriptions, safety skills, checklists, related inventories of visual and auditory skills, and the project evaluation form. Almost half of the 110-page article is an annotated bibliography divided into the following categories: evaluating and teaching the mentally retarded, motivation, predicting vocational success, retardate learning, other related subjects not elsewhere classified, and bibliographies and directories.

115. PAIK, George; SANBORN, Kenneth O.; MURATA, David M.; and MORAVEC, George J. The Remotivation of Chronic Schizophrenic Men Patients Through the Use of "Work Conditioning" in Hospital Work Areas. Final Report. Kaneohe: Hawaii State Hospital, 1966. (ERIC # ED 016 101 [VT 004 062], 80 pages)

A program closely related to the Work Adjustment Center in Chicago was initiated at Hawaii State Hospital to evaluate work functioning and to develop competence in a sheltered environment for long-hospitalized mental clients. Three project goals were: (1) to establish vocational evaluation procedures, (2) to provide a work conditioning program for chronic schizophrenics, and (3) to provide adequate aftercare service including job placement, training, and assistance in making community adjustment. The major focus of the project was to determine whether patients who received a program of work conditioning and vocational rehabilitation services were more likely to find employment in the community and remain there longer than patients who received vocational rehabilitation services alone and patients who were involved only in the regular hospital program. Analysis of the data showed that equal numbers of all three groups were discharged, but only those who received work conditioning found employment in the community; however, the difference of these findings was not significant. The rate of return to the hospital for the regular hospital program group was 50 percent; for the work conditioning and vocational rehabilitation group, 19 percent; and only 14 percent for the vocational rehabilitation group. Results indicated that vocational rehabilitation plus follow-up is the most effective program of rehabilitation for schizophrenics.
Eighty-nine retarded females were given an eight-week Evaluation and Prevocational Conditioning Course (EPVC) at the West Virginia Rehabilitation Center in Institute, West Virginia. The Course included instruction in daily living activities, domestic arts, and productive work activities such as laundry and ironing. Forty-nine of the 89 girls were judged vocationally rehabilitated as a result of the course. Analysis of the data demonstrated that family characteristics, emotional problems, special education training, and client attitudes were not significant variables in the success of work placement. However, three factors judged to be important in placement success were staff agreement concerning suitability for placement, social and vocational adjustment, and the level of aspiration of each mentally retarded girl. The article includes several tables which deal with client characteristics and the difference between the 49 rehabilitated and the 40 nonrehabilitated subjects.

A research and demonstration project was initiated by the Hot Springs, Arkansas Rehabilitation Center in order to provide independent living training for multiply handicapped deaf young adults. Admission criteria for the Center were (1) age of 16 years or older, (2) deaf, (3) reading achievement at the level of grade 4 or below, (4) history of unemployment or underemployment, (5) borderline or higher intelligence, and (6) freedom from behavior problems and physical mobility restrictions. The Center provided training in advanced living skills including driver education, recreation activities, vocational tutoring and evaluation, personal and social adjustment, work adjustment, and independent living. After completion of the advanced living skills training, staff members helped clients find an apartment or appropriate residence and set up housekeeping.

This report details the methodology and results of a five-year vocational readiness project in New York City for handicapped high school students. Vocational rehabilitation and guidance services were given twice a week for two school years to three groups of disabled students (about 280 in all) between the ages of 14 and 17. Half the sample was studied during the first two years of the project and half during the next two years. Each group was divided into an experimental group and a control group, and all students were appraised both prior to and following their participation in the project. The appraisal included an intake interview, a medical/psychiatric examination, psychological testing, an academic examination, and a vocational evaluation. Samples of instruments are included in the report appendixes.

The first group consisted of 105 physically handicapped young women and men. Their handicaps included organic heart disease, sickle cell anemia, cerebral palsy, asthma, rheumatoid arthritis, and epilepsy. The Federation of the Handicapped in Manhattan provided services in the following areas: vocational exploration in major work areas, field trips to industry, paid work experience, observation of vocationally related deficiencies, development of good work habits, group vocational guidance, vocational counseling, and comprehensive case records. Results indicated that these students were better able to adapt to work, but their actual employability could not be assessed because they were still in school.

Similar services were offered to the second group, which consisted of 66 mentally retarded students with IQs from 42 to 85. Some characteristics of this group were underdeveloped nervous systems, symptoms of neurological abnormalities, and sensory defects. Services were given by the Training Center and Workshop of the New York Association for the Help of Retarded Children. Reappraisal indicated that the experimental group had gained in socialization and interpersonal skills.

In the third group were 112 emotionally disturbed students, many of whom were from broken families. These students were attending a special school because they presented severe behavior problems and were too disruptive to remain in regular schools. The Federation Employment and Guidance Service worked with this group. No substantial gains were detected on rating scales.

The report draws the general conclusion that "ethnic and socioeconomic status...were very important determiners of both progress and outcome." Finally, it suggests that prevocational services might be more effective if provided within the school system.
Features of the Pre-Sheltered Workshop and Community Placement Program in Pontiac, Illinois are discussed in this article. The program taught 32 trainable mentally handicapped students in several special areas: industrial arts, home maintenance, home arts, physical education, physical therapy, and speech and language therapy. Coordinated curricular areas were designed to prepare students to hold independent jobs by emphasizing work habits and attitudes and maintenance of a residence. Job placement potential for students between the ages of 16 and 21 was evaluated by a task analysis technique which involved recording a student's ability to perform each individual step in a procedure before and after instruction. Advantages of using this technique are discussed. The author notes that the school was located in a two-story house close to the regular school and the downtown area, a feature that contributed to students' integration into the community.

The 1967 Amendments to the Vocational Rehabilitation Act were the impetus behind the National Center for Deaf-Blind Youth and Adults. The Center's accomplishments of the past year included intake services for 196 deaf-blind persons and research focused on three sensory aids. Plans for the immediate future include a new complex to be built on Long Island, the author states. A vocational training building will be part of this complex.

A rehabilitation services delivery system developed for quadriplegic students at the University of California at Berkeley is described in this report. The project goal was to provide training and assistance to maximize the independence of quadriplegic students and to enable them eventually to obtain jobs paying enough to meet their economic needs. The quadriplegic students had to be at least 18 years old, have a relatively stable condition, have passed the need for intensive medical therapy, and have a particularly favorable academic prognosis. At the time the report was written, 18 clients had been served, and their academic average was higher than that of the rest of the Berkeley student population.

Known as the Cowell Project, the program consisted of three parts. First was the establishment of a special on-campus residence within Cowell Hospital, where each project client had a private room and maintenance of home-like atmosphere was encouraged. Second was the provision of a full-time rehabilitation nurse on duty at Cowell. She trained project clients in self-care skills and taught them how to train attendants. Third was the assignment to the program of a full-time rehabilitation counselor. A primary aim of counseling was to minimize client dependence. Among other features of the project were a student-organized social organization called the Rolling Quads and such medical management concerns as evaluation of clients by a physiotherapist, provision of equipment for physical exercise, and use of Cowell's Bird machine.

The project was funded by state and federal grants. The projected average cost of rehabilitation over the life of a case was over $12,000; however, the report points out that welfare costs for a similarly disabled but unrehabilitated client in California is $5,000 each year so that the project did result in fiscal benefits.
The purposes of this three-year project were (1) to develop work potential of hard-core handicapped, (2) to determine the need for an intermediate workshop, and (3) to study the costs involved. Participants had a wide range of disabilities and were selected on the basis of ability to commute to work, ability to manage personal needs, motivation to work, and a poor prognosis for productive employment. At the time of the report, 83 people had been served. Twelve had been placed in competitive employment and 29 in sheltered employment. Few were placed within the first six months of their participation in the project. Nineteen were unemployed. Because of emotional disturbances, physical limitations, or mental retardation, more than 20 clients could not maintain a productivity level necessary to work for Goodwill, and yet they performed at a level higher than what was expected in a work activities center. These clients demonstrated the need for an intermediate workshop that would provide the supervision and psychosocial and medical services necessary for them to be productive. The cost analysis indicated that, given the existence of an intermediate workshop in which clients could be earning money, the initial investment to evaluate, train, and place clients would be justified.

To see if quantitative changes could be made in clients' work performance, the project staff conducted a token reinforcement program with 16 clients. A point system was used that was based on each individual's prior productivity. After a 50-day period, the data showed that the experimental program increased the group's productivity.

The report also contains a description of participants' disabilities; a checklist for rating clients' personal, social, and work habits; and three case summaries. (See Nos. 81 and 113 for related readings.)

This article describes a research and development project at George Washington University Medical Center, Washington, D.C. that provided training in the use of information handling equipment to homebound physically disabled persons. Clients learned to use portable machines to perform microfilm equipment operations, remote computer programming, and data entry operations. Project results indicated that the disabled clients, previously considered unadaptable for rehabilitation programs, learned to operate the information handling equipment productively and competitively. The activities of 19 workers are reported in terms of work environment, tools, adaptations, process, schedule, assistance, output, and earnings. The article focuses on the role of the occupational therapist in evaluating disabled persons' capacities to perform work tasks and in adapting or modifying equipment to eliminate disability barriers.


(ERIC # ED 039 370 [VT 008 697], 77 pages)

Under the administration of the Jewish Employment and Vocational Service (JEVS) of Philadelphia, this project attempted to rehabilitate disabled older people by providing them with flexible, individualized vocational rehabilitation services. The project also sought to identify factors related to vocational adjustment of older disabled workers. Services were provided at the Work Adjustment Center of JEVS, where a variety of jobs contracted with private industry were performed. Some of the jobs were packaging goods, soldering, assembling and testing products, and typing. Clients had unsuccessful past employment records which, in many cases, resulted in serious emotional problems. All participants were disadvantaged and were over the age of 45. Clients were classified according to one of four disability categories: (1) emotional, personality, and intellectual; (2) sensory; (3) chronic systemic disease; (4) multiply physically disabled. After an intake interview, these services were given on an individualized basis: prevocational evaluation, personal and work adjustment training, testing, counseling, family interview and casework, academic remediation, staff review and reporting, placement, and follow-up. The report details the varied approaches used by project staff in each area. During the four years of the project, which ended in June 1966, 600 intake interviews were conducted. Over 350 people were recommended for training and rehabilitation. Of these about 240 completed services and were placed in either competitive employment or sheltered workshops. Clients who were interviewed but not recommended for training in this project were referred to more appropriate agencies. In addition to a discussion of variables affecting rehabilitation, the report deals with some of the special problems facing older disabled people and emphasizes that this group needed extra support, especially emotional and psychological, during the rehabilitation process.

(ERIC # ED 023 855, 137 pages)

This final report contains a detailed program description of the Vocational Evaluation Unit initiated in 1961 by the Springfield, Massachusetts Goodwill Industries. Several objectives of the program were to establish a system of vocational evaluation, establish counseling and guidance services, develop a personal adjustment-work adjustment program, and establish new on-the-job training programs and placement services. Clients included physically, mentally, and/or emotionally handicapped individuals, many of whom were multiply or severely disabled. Procedures for intake, evaluation, training, placement, and counseling of the clients are explained in this report. Simulated and actual work tasks are described. Descriptions of 27 work tasks such as mail sorting and pipe fitting are given. Specifications for ten on-the-job training programs such as furniture repair, PBX operation, and sound and TV equipment repair are detailed. During the four-year existence of the project, 434 clients were served. Fifty-two percent of them entered some sort of employment. Also included in this final report is the impact of the project on its parent agency, Goodwill Industries, and the impact on the community.


The Oak Hill School, conducted by the Connecticut Institute for the Blind, recently added a work-experience program for its students. The program had three main components: (1) the core area consisting of English, history, mathematics, physical education, and vocational classes; (2) the specialty area which was chosen by the student after a year's introduction to major work fields; and (3) ancillary services such as therapy and psychosocial and medical services. During the program each student was offered a work experience. The nature of the work, like the rest of the program, was geared to the capabilities of the student. The Oak Hill School also had a placement service for those completing the program. This article is the first in a series of three articles describing work experience programs for blind, visually handicapped, and multiply handicapped youths. (See Nos. 104 and 111 for annotations of the other articles.)

This article describes a one-year project at the Kankakee State Hospital in Illinois, which sought to improve the adaptive behavior of 100 mentally retarded or mentally ill adults. The project goal was to prepare these persons for partial or total self-supporting citizenship in the community. Staffed by an interdisciplinary team, the program consisted of basic education, independent living skills instruction, prevocational counseling, prevocational sheltered work experience, in-school work experience, on-the-job adjustment training, and follow-up services. Job training areas included domestic service, agriculture, clerical work, and carpentry. Also offered to program members were activities such as field trips, special forums and lectures, arts and crafts, sports, and psychosocial therapy. No final results are given, but the author estimates that 50 percent of the released residents would be self-employed, 40 percent would live in approved homes and work in sheltered workshops, and 10 percent would live at home and help with housework.


The Micrographics Training Program at the Texas Institute for Rehabilitation and Research in Houston attempted to meet the manpower needs of the micrographics industry by training and placing severely physically impaired people in this field. The work was described as technical and repetitive and demanding considerable attention to detail. It also required the worker to remain stationary for long periods of time. The program included both formal and on-the-job training. Formal training featured an audiovisual introduction to micrographics, a visit to a microfilm facility, discussions on microfilming topics, and self-instructional materials packets that taught terminology, equipment care, quality control, and properties of film. Some of the specific jobs that trainees learned were mending tears, reinforcing onion skin documents, filming documents, processing and editing film, indexing film, and making copies of microfilm. During 1974 seven people were trained; their physical impairments were quadriplegia, muscular dystrophy, back injury, and birth defects. One was successfully placed in competitive employment; the others were unable to maintain the necessary level of accuracy to do this work but have been placed in clerical work. From the experience of this project, the author recommends that others initiating similar training should be aware of the real limitations of the handicapped group and understand the demands of the particular industry involved.
BOOKS


This volume consists of 60 papers delivered at the 1972 International Seminar on Vocational Rehabilitation of the Mentally Retarded, a series of meetings held in Washington, D.C.; Madison, Wisconsin; Houston, Texas; and New York City. Seven subject areas provide the focus of the papers: (1) general concepts, (2) varied individual approaches, (3) staff training, (4) comprehensive evaluation, (5) vocational training and job placement, (6) research theory and specific projects, and (7) program summaries.

Of the 60 papers, 45 concern vocational rehabilitation programs in foreign countries, and six are related to educable mentally retarded persons or are otherwise outside the range of vocational training and placement for the severely handicapped. The following material concerns the nine remaining papers.

In "Summary of Development of Standards for Comprehensive Services," T. K. Taylor discusses the Accreditation Council for Facilities for the Mentally Retarded, its philosophy, and procedures. He emphasizes the 12 constellations of services considered essential for any community; three examples are #1, Information Referral, Consultation, and Follow Along; #5, Social, Emotional, and Interactional Experiences; and #8, Work.

Melvin E. Cohen, in "Special Programs for Individual Needs," reviews the plans of Region III for serving mentally retarded persons, including the following approaches: accessibility, availability, accountability, local delivery of services, multiple and joint funding, and specific programs to meet individual needs.

The organization and activities of the Texas Rehabilitation Commission Services are described by Max Arrell. The Cooperative School Program provides a team approach to meet the vocational needs of mentally retarded individuals, 16 to 21 years old; state residential schools offer rehabilitation programs with on-campus work training, sheltered workshop training, personal and social adjustment training, work adjustment training, counseling, and job placement in the community. Services are also offered through halfway houses, mental health-mental retardation centers, and extended living and workshop training programs.

Henry Platt tells about the work adjustment services provided by Devereux Schools, a group of facilities for emotionally and mentally handicapped children and young adults. His focus is upon the Vocational Rehabilitation Center in Pennsylvania which serves both residents and community referrals. At the Center is a five-step approach to work adjustment services directed toward independent work in the community for each client. Workshop experiences are varied and provide training opportunities in employment areas that exist in the community. The Center uses a "coordinator model" in which the rehabilitation counselor is responsible for the total rehabilitation program.
of his clients and coordinates all of the facets of the program that relate to his clients.

In "Vocational Capacity Scale," Marcelino Huerta, Jr. reports on an instrument designed to distinguish among the various levels of potential of the mentally retarded. The scale is designed for clients between 16 and 30 years old with IQs of 84 or less. It is intended for use on clients with multiple handicaps, but not on the severely physically handicapped. The Vocational Capacity Scale is composed of separate ratings or tests for these eight factors: (1) work habits, (2) physical capacity, (3) Vineland Social Maturity Scale, (4) general health, (5) manual skills, (6) arithmetic, (7) motivation, and (8) direction following. Scores are used to obtain a profile sheet with groupings for day care, sheltered, borderline, or competitive placement. The primary purpose of the scale is to improve prediction of clients' vocational potential and to permit finances to be directed toward the greatest number of clients in the least amount of time. It can also suggest areas of weakness in training and serve as a tool for vocational goal selection.

Salvatore DiMichael discusses the question "What is the outcome of mental retardation in adulthood?" by reviewing follow-up studies. Although outcomes can be predicted for groups, the author points out that long-term outcomes for individuals are not possible. Repeated assessments are necessary, he states, and must consider the quantity and quality of services and the socioeconomic condition of the client's community.

In "Research: A Consideration for Theory," Philip Browning points out the neglect of theory in most prognostic research with mentally retarded adults. He presents inductive and deductive approaches to building theory and offers research examples of each. He emphasizes the need for both approaches and urges theories be developed to provide explanations of phenomena.

The basic characteristics of a behavior or learning approach to the education and rehabilitation of the mentally retarded are presented by W. I. Gardner. He explains that the vocational, social, and personal adaptation problems of mentally retarded persons are commonly ascribed to internal psychological deficits, and rehabilitation efforts are designed to modify or correct the internal states. In contrast is the behavior model, which posits that, although these factors may exist, they cannot be worked with if they cannot be measured. The model directs attention to the environment in order to obtain the desired behavior. Gardner provides examples of the use of behavior modification techniques, particularly in research done at the Laboratory of Applied Behavior Analysis and Modification, as well as a rationale and discussion of the behavioral system.

The Motivational Systems Project at the Jewish Vocational Service of Milwaukee is briefly described in "Applying Behavior Control Technology and Learning Principles" by C. G. Screven. The project attempts to improve the work behavior of mentally retarded workers by redesigning their rehabilitation training and work management procedures. Various motivational methods and workshop management systems for mentally retarded persons are pilot tested in small work settings; effective ones are used and further tested.
in regular sheltered workshops. The project is also testing instruction and training methods such as programmed audiovisual systems.

The book also contains seminar recommendations, a general description of rehabilitation programs in the United States including the organization of the Rehabilitation Service Administration and other state and federal programs for the disabled, and reports from three evaluation committees, with the questions and recommendations regarding projects and groups visited.
Part 1 - The Concept of "Cure" Versus the Reality of Improvement

In "New Concepts of Rehabilitation as Applied to Hiring the Mentally Restored" (1966), David N. Daniels suggests that the use of the criterion "mentally restored" for employment may be questionable, since many poor-risk individuals may need work experience in order to become truly mentally restored. In "The Social Utility of Disability and Rehabilitation" (1970), David B. Hershenson and Herman Murov advance the hypothesis that society defines and tends to foster disabilities in order to maintain certain social structures. They consider the implications of this situation for counselors.

Also included in Part 1 are the following pre-1965 articles: "The Vocational Rehabilitation of the Emotionally Handicapped in the Community" (1964) by Sol Richman and "Social Stratification and Psychiatric Disorders" (1953) by August B. Hollingshead and Frederick C. Redlich.

Part 2 - Personal Problems of the Emotionally Disturbed Related to Job Placement

C. H. Patterson, in "Counseling the Emotionally Disturbed Person" (1967), urges that rehabilitation counselors take advanced courses in psychology and that they gain experience in working with seriously disturbed persons. He outlines what can be expected from such clients and emphasizes the need for clients to develop self-respect and self-esteem. "Employment and Mental Illness" (1965), by Nyla J. Cole, Dixie S. Covey, Richard S. Kapsa, and C. Hardin Branch, reports on a survey of 67 employers regarding their attitudes toward employing 15 individuals, each with a specific psychiatric problem. Results indicated that employers identified mental illness in terms of degree of deviancy from normal personality and that there was an overwhelming negative response to those persons regarded as mentally ill. The authors conclude that job prospects for mental patients appear to be bleak.

Richard E. Lamy, in "Social Consequences of Mental Illness" (1966), describes a study in which undergraduate students were given hypothetical situations and asked to choose between an ex-convict and an ex-mental hospital patient. Of the 30 situations, 23 significantly discriminated items resulted, and the role of ex-mental hospital patient was seen as less desirable than that of ex-convict, even in cases of emergency involving staying with young children. "Social-economic Factors and Outcome of Released Mental Patients: Influence of Type of Placement, Occupational Adjustment, Compensation and Type of Hospital" (1965) by Gloria J. Fischer reports on a study of the relationship between occupational adjustment and family living set-up. Results were inconclusive, but the kind and amount of work was found to be related to the type of family structure and income factors.

Part 2 also includes these two articles: "Work Requirements and Ego Defects" (1963) by Leonard Oseas and "Comparison of Total Interest Profiles of a Psychotic and a Normal Group" (1960) by Samuel F. Klugman.
Part 3 - Readiness for Work and Appraisal of Readiness

The first section is "Assessment or Diverse Methods." Donald E. Perkins and Leonard A. Miller describe their study, "Using a Modified NMZ Scale to Predict the Vocational Outcomes of Psychiatric Patients" (1969). The medical and age factors of the scale were redefined, the age and education factors were retained, and the modified scale was used to rate 80 psychiatric patients during their hospitalization. Patients were categorized after a year. A multiple $r$ of .75 with employment was obtained with two items: (1) cognizance of reasons for hospitalization and admission of need for help and (2) promptness for interviews with doctor and other staff members. Factors of occupation, age, and education could be eliminated without loss of prediction. "Predicting Success of Schizophrenics in Industrial Therapy" (1965) by Ronald E. Ritchey involved the use of four variables—prehospital level of success, extent of psychiatric impairment, ability to get along with others, and preference of work conditions—to predict the success of 192 schizophrenic patients in unskilled work settings. An important factor in work success was the type of work setting.

This section of the book also includes "Screening Ex-Patients for Employability" (1963) by W. Ray Poindexter; "Guide for Evaluating Employability after Psychiatric Illness" (1962) by American Medical Association; "Work Adjustment Program: A Pre-Vocational Experience" (1964) by Lela A. Llorens, Ralph Levy, and Eli Z. Rubin; and "Evaluation of the Rehabilitation Potential of the Mentally Ill Patient" (1962) by C. H. Patterson.

The second section of Part 3 is "Test Methods of Appraisal." C. Marshall Lowe, in "Prediction of Posthospital Work Adjustment by the Use of Psychological Tests" (1967), reports on a study of 88 Wechsler Adult Intelligence Scale (WAIS) scores, 138 Minnesota Multiphasic Personality Inventory (MMPI) scores, and 204 Rorschach Ink Blot scores obtained by VA hospital mental patients. Since the test scores were not found to be related to vocational outcome, the author questions their continued use for prediction.

The other articles in this section are all pre-1965: "Comparison of Normals and Schizophrenics on a Work-Oriented Projective Technique" (1957) by Bernard A. Stotsky; "An Incomplete Sentences Test and the Attitudes of Manual Arts Therapy Patients" (1956) by Verne A. Walter and Allan W. Jones; "Outcome of Posthospital Rehabilitative Treatment of Mental Patients as a Function of Ego Strength" (1960) by J. Edward Conners, George H. Wolkon, Don P. Haefner, and Bernard A. Stotsky; "The Relation of Vocational Preference to Emotional Adjustment" (1952) by Arthur Steinberg; and "Maze Score and Job Performance in Psychiatric Patients" (1962) by Wayne P. Anderson, Joseph T. Kunce, and John Baxter.

Part 4 - Rehabilitation and Placement of the Emotionally Disturbed as a Process

Richard T. Goldberg, in "Need Satisfaction and Rehabilitation Progress of Psychotic Patients" (1967), describes his use of Maslow's hierarchy of needs and Roe's application of it to occupations and to the disabled. In a study of 60 hospitalized schizophrenics, he investigated the effect of a rehabilitation program on the needs for belonging and esteem. Results indicated a positive relationship between need and satisfaction at work and progress in
rehabilitation; no significant relationship was found between satisfaction on the ward and progress in rehabilitation. Goldberg concludes that rehabilitation programs can use work as a therapeutic modality. "Standard Pay or Token Pay for Rehabilitation of Mental Patients?" (1968) by John J. Brennan details the Bedford, Massachusetts VA Hospital's policy of paying at least the national minimum wage to patients who work in the hospital. The rationale and the procedures used for this policy are discussed.

Patrick J. Doyle reviews new mental health legislation in "New Horizons in Rehabilitation of the Mentally Ill and Retarded" (1965) and summarizes the work of the U.S. Vocational Rehabilitation Administration. Since the article was first printed in 1965, much of its information is now out of date. In "Mental Patients Work Back Into Society" (1970), Janet K. Brown reports on a social and vocational training program for mental patients at Vermont State Hospital in Waterbury. Given by paraprofessionals, the training was for work as farmhands, maintenance persons, cook's helpers, and general maids, and it lasted from 14 to 22 weeks. Of 40 trainees, three dropped out of the program due to illness, and 22 have jobs. The author cites as a major feature of the program its realistic preparation of long-term patients for jobs existing in the community.

Also appearing in Part 4 are the following: "Vocational Goals for the Psychiatric Patient" (1955) by Joseph Stubbins and Peter J. Napoli; "Understanding Psychiatric Diagnosis: A 'Must' in Rehabilitation" (1962) by Reuben J. Margolin; "A Critical Point in Rehabilitation of the Mentally Ill Patient" (1964) by Horace F. Stewart, Jr.; "The Special Contributions of a Hospital Halfway House" (1963) by George J. Wayne; and "Modified Community Employment for the Mental Patient" (1964) by John J. Brennan.

Part 5 - Hiring Attitudes and Practices of Employers

Simon Olshansky and Hilma Unterberger, in "Employer Prejudice against the Mentally Restored: Fact or Fancy?" (1965), suggest that the education and work history of mental hospital patients, not their mental illness history, determine their employability. The authors urge hospital personnel and rehabilitation counselors to recognize the real reasons for placement problems and to direct their efforts toward improvement of service and training for patients. In "Expanding Comprehensiveness of Psychiatric Rehabilitation" (1965), Lawrence C. Hartlage reports on a survey of Louisville employers in agriculture, manufacturing, nonmanufacturing, clerical and sales, and service industries. Using a questionnaire to measure employer attitudes regarding their expectations of the work performance for ex-mental patients, the survey revealed that employers were generally willing to hire ex-mental patients who were trained and qualified for available positions. Those who seemed most receptive to hiring ex-mental patients were large manufacturing firms. In "Factors Influencing Receptivity to Ex-Mental Patients" (1966), Hartlage describes administering another survey of employer attitudes, this one using two different cover letters and two different kinds of interviews. One letter and one interview described the former patient in disability terms; one of each described the former patient in problem-oriented terms. The receptivity indexes computed for each group revealed no significant difference.
A third Hartlage study, "Assessing Employer Receptivity Toward Physically and Mentally Handicapped Workers" (1970), was done with Paul E. Roland, and it investigated the attitudes of Indianapolis employers toward former psychiatric patients, the mentally retarded, and persons with major amputations. Given a questionnaire on which to rate the problems they would expect from the three groups on seven kinds of work-related behaviors, the employers revealed attitudes that made significant differentiations among the three disability groups. Employers considered persons with major amputations most favorably on all variables; former psychiatric patients were considered least favorably; the mentally retarded were placed in between the other two groups. "The Vocational Worker's Double Bind" (1968) by Peter P. Hale discusses some of the problems that vocational workers face, such as the hypocrisy of many employers who say that they are willing to hire disabled workers but will not actually do so and the frequently unrealistic demands of professional hospital staff members that workers find jobs for their patients.

Also in Part 5 is "Employer Attitudes, Discharged Patients and Job Durability" (1964) by Charles D. Whatley, Jr.

Part 6 - Follow-up of Placement of the Emotionally Disturbed

Leila McGowen, Robert Harrison, and Jules V. Coleman describe their study of services for mental patients in the New Haven, Connecticut area in "Can Mental Patients Use Traditional Vocational Services?" (1966). Most of the 100 ex-mental patients surveyed had poor work histories and poor motivation; a great disparity between services needed and services available was indicated. The investigators concluded that "Clients with a history of mental illness need highly individual service from the counselor, including a reliable relationship that may have to be sustained over a considerable period of time." In "Employment Experience Among 200 Schizophrenic Patients in Hospital and After Discharge" (1965), Robert Walker and James McCourt question post-hospital planning practices for veterans treated for schizophrenia. They investigated patients' employment after discharge from the hospital as compared to their participation in word-like activities during hospitalization and found that patients were more productive while in the hospital than after discharge. Charles S. Chandler and Dill D. Beckman, in "Follow-up Survey of Psychiatric Clients" (1965), provide the results of a study of ex-mental patients served by the South Carolina VA Hospital during 1958 to 1963. After one to five years, 82 percent of the clients had satisfactory adjustment.

Part 6 also includes these three articles: "Survey of Employment Experiences of Patients Discharged from Three State Mental Hospitals During Period 1951-1953" (1960) by Simon Olshansky, Samuel Grob, and Miriam Ekdahl; "Factors in the Vocational Adjustment of Schizophrenics After Mental Hospital Discharge" (1947) by Benjamin Balinsky; and "In-hospital Vocational Training" (1964) by Henrietta Heilmen. A two-page bibliography lists selected related resources.
This collects 15 author-contributed chapters is divided into three main parts. Chapters 1-3 make up the first part, Mental Retardation: A Frame of Reference. Chapters 4-11 make up the second section, Rehabilitation and Mental Retardation. The third part, Counseling and Mental Retardation, includes chapters 12-15. Several chapters in the second section are relevant to vocational training and placement of the severely handicapped. They are listed below with the author's name and a brief annotation.

Chapter 4, "Rehabilitating the Mentally Retarded: An Overview of Federal-State Impact" by Philip L. Browning and Esther Brummer, discusses the emergence of mental retardation as a national priority under the direction of John F. Kennedy in the early 1960s. The government's role and impact are discussed in terms of various government agencies. Reviewed are the Social and Rehabilitation Service (SRS) and the Rehabilitation Services Administration (RSA), one of five main agencies operating under the SRS.

Chapter 5, "Pre-Vocational Considerations in Rehabilitating the Mentally Retarded" by R. William English and Philip L. Browning, considers three main topics. The authors look at the prevocational education process first and conclude that education programs should give a broad introduction to possible future occupations and orientation to specific job situations and skills. They next review the prevocational training process. Examples of generic and behavioral processes are given. Last they consider avocational habilitation. Success in this area will contribute greatly to the total quality of life of the mentally retarded, particularly in the face of rising unemployment.

Chapter 8 is entitled "Rehabilitating the Mentally Retarded: A Behavioral Approach." Authored by James E. Crosson, C. Duane Youngberg, and Owen R. White, this chapter describes an experimental model for vocational training and placement. This behavioral approach to rehabilitation was done in cooperation with the Pearl Buck Center for trainable mentally retarded children and adults. It consisted of a set of developmentally oriented sequential experiences which were closely related to the actual requirements of community adaptation.

Chapter 9 is entitled "The Work Adjustment of the Mentally Retarded: A Frame of Reference for Practice and Research." Philip L. Browning, the author, presents the definition and need for theory as an introduction to the chapter. A theory of work adjustment is briefly outlined and consists of a matching model in which the correspondence between the worker and work setting is considered in terms of degree of correspondence and stability of correspondence. The work adjustment theory is then assessed in terms of practical and research implications.
Chapter 10, "Predictive Studies on Rehabilitation Outcome with the Retarded: A Methodological Critique," is authored by Alfred J. Butler and Philip L. Browning. Four questions form the structure of this article. (1) What research has been reported on the prediction of rehabilitation outcome with the mentally retarded and what generalizations can be made from these studies? (2) What methodological dimensions should be considered in assessing the investigations which have been undertaken? (3) How are these methodological dimensions illustrated in selected outcome studies? (4) What recommendations can be made for future research strategy? A review of research revealed a lack of definitive findings and an absence of consensus concerning the correlates of rehabilitation success. Based on this finding, the authors make the following recommendations for further research techniques: more representative sampling techniques need to be used and greater attention must be given to situational variables such as training, treatment, work conditions, and community environment. Recommendations are also made for outcome criteria, statistical design, and research strategy.

Chapter 11, "Rehabilitating the Mentally Retarded: Predicting the Future" by George E. Ayers, deals with total rehabilitation of the mentally retarded individual. Employment opportunities for the mentally retarded are one of several trends discussed in this chapter. The author suggests that the techniques used to increase job possibilities for the mentally retarded will be job specifications which emphasize abilities, job redefinition, community action, and increased awareness of underutilization of abilities.
This economic study is focused on the need for the state-federal vocational rehabilitation program and on its results. The book gives an overview of vocational rehabilitation and then attempts an economic evaluation of the state-federal program. The closing issue explored by the author is the future of vocational rehabilitation. The book contains a brief introductory chapter and five other chapters. The title of each chapter, its major topics of discussion, and a summary sentence follow.

Chapter 2 is entitled "The Extent, Characteristics, and Costs of Disability." Major topics are incidence and characteristics of the disabled, economic effects of disability on society, and means of reducing disability. Some conclusions of this chapter are that economic losses due to disability are large and that in order to combat the problem, reasonably full employment, either competitive or sheltered, is necessary.

In Chapter 3, "Vocational Rehabilitation in the United States," major topics for discussion are the rehabilitation process, who provides vocational rehabilitation, and legislation affecting rehabilitation. The most important and comprehensive vocational rehabilitation program is the state-federal program.

Subtopics in Chapter 4, "An Economic Evaluation of the Program," are a summary of data relating to the performance of the program, economic criteria for evaluating the program, problems of program costs and increases in earnings, and the value of rehabilitation output. Also considered are other benefits from vocational rehabilitation and the costs and benefits of rehabilitation to taxpayers. The author determines that the present value of the long run gain to taxpayers of the rehabilitation program appears to lie between 1.5 and 5 times its cost.

Chapter 5 is "Factors Influencing the Success of Rehabilitation." Discussion topics include measures of success, the ability to work, attitudes of the disabled toward rehabilitation, the availability of work, and legislation reducing incentives to work. The failure of many persons to achieve successful vocational adjustment cannot be explained by any one factor, but rather by a combination of factors.

In the final chapter, "Should More Persons Be Rehabilitated?", Conley explores the theory behind the provision of rehabilitation services and cites empirical evidence for unmet vocational needs among the handicapped. Other topics are requirements for an optimal program, earnings and costs in an expanding program, and whether or not the scope of the vocational rehabilitation program should be expanded. One of the concluding statements of this chapter relates directly to the severely handicapped. The author states that as a vocational program expands, it will serve more severely disabled clients, and the risk of rehabilitation failure will rise. As a result, earnings of successfully rehabilitated people will fail to keep pace with earnings of the rest of the population.
This book deals with two concepts of work adjustment: training aspects and adjustment to employment. It is intended to assist social service and rehabilitation workers and consists of a collection of 14 article-chapters organized into two parts. Part 1 is Work Adjustment: An Overview (nine chapters); Part 2 is Special Problems and Special Considerations (five chapters).

Part 1 - Work Adjustment: An Overview

In Chapter 2, "Vocational Evaluation and Work Adjustment: A Future Thrust of the Rehabilitation Movement," Edward Newman deals with Section 15 of the 1968 amendments to the Vocational Rehabilitation Act. Section 15 allows for the provision of vocational evaluation and work adjustment services to disadvantaged persons, including those without disabilities, and the author considers the implications of this section for rehabilitation personnel.

Rene' V. Dawis, in Chapter 3, "A Theory of Work Adjustment," reports on the Work Adjustment Project, the Minnesota Studies in Vocational Rehabilitation Program. The Project uses a definition of work adjustment that covers the whole career or work life of the individual. Elements of the theory are discussed, and nine propositions of the theory are given in formal statements. The theory of work adjustment states that "the key to the prediction of work adjustment outcomes (satisfactoriness, satisfaction, and tenure) lies in the determination of work-personality/work-environment correspondence." The Work Adjustment Project developed instruments to measure the theory's primary concepts: satisfaction, satisfactoriness, needs, abilities, reinforcer systems, and ability requirements. Descriptions of these instruments and an experimental application of the theory are included.

Chapter 4, "The Meaning of Work," by Robert P. Anderson and Jack L. Bodden, uses a framework combining Adlerian and learning theory in order to examine the meaning of work. It includes a review of other definitions of work, and it relates the meaning of work first to the theory of work adjustment detailed in the previous chapter and then to disability. An instrument for measuring occupational needs, the Minnesota Importance Questionnaire (MIQ), is described.

C. Roy Woodruff, in Chapter 5, "The Relationship of Work Adjustment to Leisure Adjustment," emphasizes the fact that "adjustments in one significant area of life relate to adjustments in other significant areas of life, and that the whole man must be considered in the process of life's adjustments." In elaborating on the goal of total adjustment, the author discusses the concepts of the whole man, self-concepts and life styles, and "workaholism" and compulsive leisure.

In Chapter 6, "The Contribution of Group Work to Work Adjustment," Gerald McCardless considers the advantages and disadvantages of four methods for investigating group processes (sensitivity training, introspection, written material, and practical experience). He describes the following groups found in the vocational evaluation work setting: remotivation, occupational therapy, resocialization, work adjustment, and community work placement: follow-up. He discusses each group in terms of typical members, goals, and method of organization.
B-5. (continued)

"The Contribution of Psychological Evaluation to Work Adjustment," Chapter 8, by Robert E. Brabham, is a discussion of the advantages of psychometrics. Among the advantages are the time saved by both client and staff members and the opportunity to assess a client's level of functioning on a particular scale of behavior.

Craig R. Colvin in Chapter 9, "Work Adjustment and the Dictionary of Occupational Titles," suggests ways to use the DOT as a resource tool. He offers information on how the DOT is organized—the industry designations, the occupational group arrangement, worker trait arrangement, and the qualifications profile—and provides examples from the DOT. He underscores the necessity of combining information from the DOT with other available resources.

Part 2 - Special Problems and Special Considerations

In Chapter 10, "Special Problems in Work Adjustment of the Mentally Ill," Robert L. Gunn uses his personal experience to review the problems faced by persons involved with work adjustment of the mentally ill. He describes characteristics of the average mentally ill client—e.g., inadequate or ineffective behavior in interpersonal situations, poor self-image, poor or erratic past work record; and he deals with techniques for evaluating the client's strengths and weaknesses. Gunn discusses the "work scene" for mentally ill clients, including job placement boards, Employ the Handicapped Group, Professionally Endorsed Patients program, and sheltered workshops; and he suggests what rehabilitation counselors can expect—the difficulties, frustrations, and rewards—from mentally ill clients.

Chapter 11, "Special Problems of the Disadvantaged in Work Adjustment" by Philip Spergel, focuses on individuals who suffer from educational or socioeconomic deprivation and considers the implications for rehabilitation counselors.

In "The Vocational Potential of Mentally Retarded Persons," Chapter 13, George S. Baroff presents a personality model that sees man in terms of resources and needs and that understands retardation as a consequence of a deficiency in the resource "intelligence." Baroff elaborates on three elements of retardation: subaverage general intelligence, origin in developmental years, and impairment in adaptive behavior. He sees vocational potential as a function of resources and services, and he considers these vocational resources of retarded persons: intelligence, communication skills, physical skills, personality, reading and number skills, aptitudes and talents, and values. He provides a list of "competitive employment opportunities for persons with borderline and mild retardation," discusses their characteristics in competitive employment, and briefly considers the use of sheltered workshops for work evaluation and training.

The final chapter, "Special Problems in Work Adjustment of the Mentally Retarded" by George J. Kleinschmidt, describes the Cooperative Vocational Rehabilitation Program (CVRP), operating within a Minnesota institution for the retarded and also serving referrals from its community. CVRP
staff members view retardation as primarily a behavior problem and give particular emphasis to teaching life skills and fostering independence. Training is provided at unit, hospital, and community levels, and the program is organized into four units: vocational evaluation, social habilitation, industry therapy, and rehabilitation counseling. For each unit, the author describes the objectives and resources in detail; the forms used for each unit are included in a special section.

The following articles appear both in this book and in Hardy and Cull's "Manual of Procedures for Rehabilitation Programs."

"The Vocational Evaluation and Work Adjustment Association Looks to the Future" by Robert H. Couch; "The Materials Development Center: A National Resource for Materials on Work Evaluation and Work Adjustment" by Arnold B. Sax and C. Thomas Allen; and "The Rehabilitation Facility's Role in Preparing the Disadvantaged for Work" (slightly different title) by Cull and Hardy.

For information on these chapters, see No. B-11 in this section.
This book is a resource tool, designed to be used by groups of rehabilitation personnel or students. Pertinent discussion questions and a suggested reading list are given at the end of each chapter.

In the first chapter, "The Application of Personality Theory to Explain Psychological Reactions to Physical Disability," R. William English examines four prominent theories in the psychology of physical disability: psychoanalytic theory, individual psychology, body image theory, and social role theory. He then analyzes each of the four theories on a five-point scale in terms of 12 statements. Three of these statements are: "Hereditary influences the psychological adjustment of the physically disabled." "Disability results in stigmatization of the physically disabled." "Stigma towards the physically disabled can be reduced."

The remaining 13 chapters are actual case studies of individuals with the following disabling conditions: epilepsy, spinal cord injury, pulmonary condition, cardiovascular disease, mental retardation, visual impairment and/or diabetes, cancer, deafness, amputation, rheumatoid arthritis, and drug abuse.

Contributors in addition to the editors and English are Roy W. Brooks, Arnold H. Freedman, A. G. Garris, Ann Glass, Parnell McLaughlin, Seymour Mund, Aubrey E. Neeley, Clinton S. Vieth, and John H. Webb.
A basic introductory text in vocational rehabilitation counseling, this book is also intended as a reference for practitioners. It is divided into six parts and contains 29 chapters, four of which are directly relevant to the topic of this bibliography. Annotations of these four chapters follow.

"Selective Training," by George R. Jarrell, reviews several definitions of training and briefly discusses four general training methods: (1) personal adjustment training, (2) prevocational training, (3) compensatory skill training, and (4) vocational training. Described are formal training methods, such as those provided by junior colleges, trade schools, apprenticeship programs, and correspondence courses, and informal training methods, such as on-the-job training.

Hardy, in "Vocational Placement," states that "Above all, the rehabilitation counselor must be able to understand the 'work personality' of his client," including his interests, abilities, needs, work habits, psychological maturity and interaction with on-the-job factors. He discusses client-centered placement and emphasizes that it involves a trilateral relationship of counselor, client, and employer. He considers a number of factors relating to the counselor's development of an employment program, e.g., obtaining and disseminating information about placement of the handicapped, and he provides answers to "five questions counselors must be able to answer" regarding employment of handicapped persons. Hardy provides suggestions for locating employment opportunities, describes job analysis techniques, and outlines steps for relating medical, psychological, and social data to job analysis information. He emphasizes the importance of planning, follow-up after placement, and client-centered procedures.

"Working with the Rehabilitation Facility," by Harry W. Troop, is about the nature, make-up, and value of sheltered workshops. The author describes transitional workshops and long-term, or extended, workshops, and he considers each of these services offered by workshops: intake, evaluation, training, rehabilitation potential determination, remedial education, counseling, medical services, recreation services, job placement, and follow-up. He points out that not all workshops can offer all of these services. Troop also considers the type of clients to be referred to sheltered workshops, and what the rehabilitation counselor and the workshop can expect from one another.

In "Working with the Community," Keith C. Wright focuses on the problems involved in the delivery systems of service agencies. He discusses the need for cooperation and coordination among professional workers and agencies and briefly describes CAMPS (Cooperative Area Manpower Planning System). Wright suggests ways for a rehabilitation counselor to get acquainted with a community, and he describes some of the resources the counselor can use, e.g., the state employment service, state welfare department, sheltered workshop, and training facilities.
Titles and authors of the remaining chapters are listed below.

Part 1 - Introduction to Vocational Rehabilitation

"History of the Rehabilitation Movement in America" by Robert A. Lassiter

"Philosophical Considerations in Rehabilitation and Work" by William R. Phelps

"Changing Rehabilitation Manpower Utilization" by Edward Newman

"Developing Trends in Rehabilitation" by Corbett Reedy

Part 2 - The Rehabilitation Practitioner

"The Challenge of New Dimensions in Rehabilitation Counselor Education in the Seventies" by Beatrix Cobb

"The Professional Status of the Rehabilitation Counselor" by W. Alfred McCauley

Part 3 - The Rehabilitation Process

"Case Finding" by John M. Cobun

"Work Evaluation an Overview" by Paul R. Hoffman
(See No. B-11 in BOOKS for an annotation of this chapter.)

"Techniques of Counseling in the Rehabilitation Process" by John G. Cull and John D. Hutchinson

Part 4 - The Rehabilitation Practitioner in a Work Setting

"Orientation of the Counselor in the General Rehabilitation Program" by Parnell McLaughlin

"Cooperative Programming" by William A. Crunk

"Administrative Concerns in the Cooperative Program" by Joe C. Morrow

"The Vocational Rehabilitation-Public Education Cooperative Program" by Joe C. Morrow

"The School Unit Counselor" by Edward F. Rose and Harold F. Shay

"The Correctional Institution and Vocational Rehabilitation" by Craig R. Colvin

"Rehabilitative Counseling in Correctional Settings" by James A. West

"The Mental Health Rehabilitation Counselor" by Leon Meenach

"Providing Counseling Services to Blind and Severely Visually Impaired Persons" by Richard E. Hardy
Part 5 - The Clients in the Rehabilitation Process
"I, the Client" by Clayton A. Morgan
"Adjustment to Disability" by John G. Cull
"Rehabilitation Needs of the Older Adult" by John G. Cull

Part 6 - Working with Other Professionals in the Rehabilitation Process
"Working with the Physician" by Leslie F. McCoy
"The Psychologist and Rehabilitation" by Wayne S. Gill
"Planning for Psychological Services in Vocational Rehabilitation: A Priority Consideration" by Richard E. Hardy and John G. Cull
"State Rehabilitation Administrators' Views on Psychological Evaluation" by John G. Cull and Richard E. Hardy
The entire rehabilitation process for the mentally retarded is the subject of this book. Divided into seven sections, it consists of 73 article-chapters on practical and conceptual issues. Section 1, Chapters 1-12, deals with behavior modification approaches, the rationale for them, and their current use in institutions. Section 2, Chapters 13-18, concerns work study programs. Section 3, Chapters 19-41, is the largest; it presents what the editor terms "a conceptual framework for work adjustment training, appraisal techniques, predictive criteria, the sheltered workshop, and vocational adjustment training." Section 4, Chapters 42-47, centers on vocational training methods, and Section 5, Chapters 48-53, focuses on factors affecting employment of the mentally retarded, for example, employer attitudes. Section 6, Chapters 54-62, is on community adjustment, and Section 7, Chapters 63-73, is on personnel serving the mentally retarded.

Of the 73 articles, 18 are clearly related to the vocational training and placement for the severely mentally retarded. The other articles, though of possible interest, concern less severe levels of mental retardation, very young retardates, or subjects unrelated to training and placement, or they were first published prior to 1965. The relevant articles are briefly described below, along with the section, chapter number, and author name.

Section 1 - Behavior Modification Approaches

(2) "An Overview of Behavior Modification with the Severely and Profoundly Retarded," by M. Mike Nawas and Stephen H. Braun, considers how stimulus response connections can be shaped to form complex functional units and how to make them self-sustaining and independent of reinforcers. The principles of fading, generalization, and self-control are discussed, research in behavior modification techniques is reviewed, and applications for the techniques are suggested.

(4) "A Total Token Economy," by Carl L. Roberts and Robert M. Perry, describes a behavior modification program used for the population of the Mental Retardation Center in Pueblo, Colorado. Started in 1968, the program used tokens and/or points as immediate, generalized reinforcers for specified behaviors. The goals, organization, procedures, and problems are discussed; no results are included.

Section 2 - Work Study Programs

(13) "A Review of the Development of Work-study Programs for the Mentally Retarded," by Walter J. Cegelka, surveys the development of cooperative work-study programs between education, vocational rehabilitation, and other community agencies. A history of vocational training and federal legislation is provided, and specific work-study programs are described.

Section 3 - Vocational Adjustment Training

(19) "A Conceptual Framework for Work Adjustment Training," by Phyllis N. Hallenbeck and John L. Campbell, proposes a phase-task approach for a transitional workshop. The framework has four phases: settling in, learning, growth, and job readiness. For each phase, the authors suggest the problems
of the client, psychological tasks the client must master to solve the problems, and environmental factors that facilitate the tasks. The framework was designed to increase professional persons' understanding of the dynamics inherent in work adjustment.

(21) "A Vocational Adjustment Rating Scale for the Mentally Retarded," by Lloyd K. Daniels and James A. Stewart, describes a two-part measure of vocational adjustment. One is a rating scale of 23 items indirectly related to work success; the other is a scale of 39 items directly related to work success. Included in the article are the rating scale items and an outline of procedures used to establish the validity and reliability of the scale.

(25) "Using Employer Job-Sites in Evaluation of the Mentally Retarded for Employability," by James A. Bitter, tells of an evaluation technique used at the Work Experience Center in St. Louis. It involved the use of short-term employer job sites to determine the functional ability of mentally retarded persons. Among its advantages are that it provided a realistic and meaningful measure in various job areas and a functional appraisal of job behavior by both a professional and the employer. (See Nos. 48, 78, and 89 and Chapter 38 below for other references to the Center.)

(30) "Potential: An Unknown Quantity," by Will H. Burrow, discusses a number of factors that affect the vocational adjustment of mentally retarded persons. Among them are physical visibility, vocational maturity, the job market, agency roles, social visibility, and self-image.

(35) "A Demonstration Sheltered Workshop in a State Institution for the Retarded," by George S. Baroff and Bobby G. Tate, presents a description of North Carolina's Murdoch Center, an institution for 1,500 retarded persons. Organizational tasks and problems are included as are sections on business procedures, contract procurement, workshop supervision, reward system (a token system supplementing weekly pay), worker characteristics, and the present status of the shop. (See also No. 77.)

(36) "Vocational Adjustment of Young Retarded Adults," by Jack Tobias, is a summary of the results of a follow-up survey of students who had been assigned to New York City special education classes for the retarded. The subjects, whose degree of retardation is not specified, were in their mid-20s and had been out of school for five to seven years when surveyed. Their psychometric, social, and educational characteristics are related to their adult vocational experience. At the time of the survey, almost 60 percent of the males and 30 percent of the females were employed.

(38) "Development of Vocational Competence in the Mentally Retarded," by James A. Bitter and D. J. Bolanovitch, describes a five-phase training program at the Work Experience Center in St. Louis. Students were from 16 to 21 years old with IQs in the 40 to 65 range. Training focused on general work adjustment and specific job skills in 13 areas including kitchen helper, shipping and dock worker, manufacturing assembly worker, and nursery home helper. Training was done primarily in the workshop; audiovisual techniques were also used. (See Nos. 48, 78, and 89 and Chapter 25 above for more information about the Center.)
Section 4 - Vocational Training

(43) "Behavior Modification in a Workshop," by Simon Olshansky, raises a number of questions regarding the use of behavior theory and techniques. He describes a workshop that follows the therapeutic milieu and suggests background factors to consider in modifying work behavior within a workshop, e.g., granting the client freedom to choose, enter, or leave the workshop. He discusses such issues as the use of punishment and the difference between workshops that focus on attitudes and those that focus on behavior. Olshansky suggests that "we should begin to ask those kinds of questions that might lead in productive directions."

Section 5 - Employment

(51) "Factors Affecting Employer Receptivity Toward the Mentally Retarded," by Lawrence C. Hartlage, describes a survey of 120 Kentucky employers. A 15-item, five-point checklist questionnaire was used; receptivity indices were computed. Results indicated significant differences toward the mentally retarded among different types of industries. Most receptive were manufacturing industries; least receptive were service industries. Another significant result was a linear relationship indicated between receptivity and size of industry, with larger industries more receptive than smaller ones.

(52) "Attitudes Related to the Employment of the Mentally Retarded," by William R. Phelps, reports on the development of an attitude questionnaire and its use in surveying West Virginia service employers. Responses to the questionnaire on attitudes toward mentally retarded workers were obtained for 132 personnel managers of hospitals, nursing homes, hotels, motels, restaurants, and laundry and dry cleaning establishments. The results indicated significant differences between nursing home and hospital personnel managers and between hospital and restaurant personnel managers; restaurant and nursing home managers were more reluctant to employ mentally retarded persons than were other subgroups. Phelps suggests that rehabilitation counselors should consider these differences in employer attitudes.

Section 6 - Community Adjustment

(55) "The Mentally Retarded Adult in the Community (San Francisco Programs)," by Elias Katz, discusses ways to integrate the mentally retarded adult into the community and to maintain her/him there. Five general guidelines are suggested; emphasis is given to a consideration of the individual's psychological and physiological needs. A variety of San Francisco programs for mentally retarded adults are described, including the Adult Training Center, the San Francisco Community Rehabilitation Workshop, and the Independent Living Rehabilitation Program.

(57) "De-institutionalization of Mentally Retarded Men Through Use of a Halfway House," by Arthur A. Woloshin, Guido Tardi, and Arnold Tobin, reports on a program at Mary McDowell Settlement House in Chicago. Environmental, group, and milieu therapy were used to disrupt the institutional syndrome which makes individuals resistive to treatment. A four-step deinstitutionalization process is described in detail; results with four original program subjects, all of whom obtained employment and left the house, are reported.
Section 7 - Personnel

(63) "The Role of the State Rehabilitation Counselor in Institutional Programming" by Herbert Rusalem, Neale Peterson, and Harriet McCraney, deals with ways that rehabilitation counselors can help institutions plan vocational training programs with a greater degree of reality orientation. Specific steps discussed are: (1) using counselors as a source of occupational information, (2) obtaining follow-up information on former students, and (3) promoting the use of community work resources to help mentally retarded persons make the transition from institution to community.

(64) "Effectiveness of Counselor-trainees with Mentally Retarded Sheltered Workshop Clients," by Jerold D. Bozarth and Ralph R. Roberts, Jr., reports on an investigation of the effectiveness of two types of treatment experiences: counseling treatment and attention treatment for mentally retarded clients in a sheltered workshop. The 127 subjects were from 17 to 26 years old and had an IQ range of 48 to 85; all were clients at a sheltered workshop sponsored by Southern Illinois University. Counselor trainees worked with three treatment groups: a counseling group which received individual counseling sessions, an attention group which was "attended" but not counseled, and a control group which continued with usual workshop activities and procedures. Improved performance was the goal; work supervisors rated clients on 15 criterion variables on a pretest/posttest basis. Findings suggested that counseling was not effective in improving the performance of the mentally retarded clients and that social conversation and directed attention by inexperienced counselor-trainees may be detrimental.
Oriented toward the work of the practitioner in rehabilitation facility administration, this book is divided into two parts: (1) Diagnostic Services of the Rehabilitation Facility and (2) Service Programs in Rehabilitation Facilities. The term rehabilitation facility includes halfway houses, physical medicine, rehabilitation departments of hospitals, comprehensive rehabilitation centers, sheltered workshops, work activity centers, evaluation centers, and industries and facilities for specific disability groups.

Three chapters are in Part I. In Chapter 1, "Extended Evaluation in a Rehabilitation Workshop," Dale E. Eazell describes an evaluation process that includes a diagnostic interview, prevocational assessment, and assessment of client capability in an actual job situation. The author stresses the importance of the job market and tasks and of ascertaining community support of rehabilitation for seriously disabled or disadvantaged persons.

Chapter 2 is "The Uses and Abuses of Psychological Assessment and Psychologists in Rehabilitation Facilities" by Alan Frankel and Joseph J. Duetsch. Because behavior is multidetermined, the authors state, rehabilitation personnel must know the conditions under which the client can behave in a socially reasonable manner; they must know the client's competencies, commitments, and personality. The chapter includes a discussion of psychologists: the possible problems in working with them and their use as assessment consultants and program consultants. The limits and implications of the testing situation are considered, and the value of client self-assessments is suggested.

"Evaluation for Disability Determination Units" is the subject of Chapter 3 by Kay Hess, Bea Nishimuta, and Ron Hampton. In evaluating social security cases, the authors say, the concern is with potential for work immediately, not with potential for work in the future. The steps in orientation, data gathering, and data synthesis are described, and a flow chart of the evaluation sequence and a report format with sample report are provided.

The remaining seven chapters make up Part II. In Chapter 4, "Vocational Counseling Approaches in Rehabilitation Facilities," Cull and Hardy discuss the general responsibilities of counselors: study of the world of work, the patterns of career movement, and the psychological, economic, and social aspects of work. Also discussed are counselor responsibilities for individual clients. Chapter 5, also by Cull and Hardy, is "Techniques of Group Counseling in the Rehabilitation Facility," a general consideration of group counseling. Included are its goals, client characteristics, ground rules, and group leadership methods.

"Work Adjustment" is the subject of Chapter 6 by Howard Weiss. Though the author states that "at this time work adjustment training is more of an art than a science," he describes the role of work adjustment in the rehabilitation process, the techniques of work adjustment training, the administration and organization of a work adjustment unit, and staff training. He stresses the importance of designing the training for each individual and viewing each client as unique. He presents case histories and describes the following techniques: teaching, including identification and modeling; counseling, including role playing and the use of videotapes as well as
one-to-one and group counseling; operant conditioning; and milieu therapy, the therapeutic value of work in workshop programs. Most programs, he says, use more than one approach.

Chapter 7, "Occupational Therapy" by Richard D. Burk, and Chapter 8, "Physical Therapy: Its Role in Rehabilitation Facilities" by Anthony J. DeRosa and Harold E. Potts, are concerned with the role, training, and responsibilities of therapists and thus include such specific matters as "splinting, bracing, and self-help devices" and "equipping a physical therapy department."

In Chapter 9, "Rehabilitation Services in the Facility," Francis W. Mulcahy reviews two kinds of rehabilitation services. First are the services offered directly to clients, such as skill training, vocational evaluation, work adjustment, personal adjustment, vocational counseling, work experience, job placement, physical restoration, and behavior modification. Second are the services offered indirectly by facilities including psychological services and psychiatric training of staff and inservice training to staff. These and other specific rehabilitation services are described.

"Extended Employment" by Albert P. Calli and Margaret L. Smith is Chapter 10. The principal factor in determining the need for extended employment, the authors state, is the possibility of the client obtaining work in business or industry. If this seems unlikely, the client should have the opportunity for extended employment in a sheltered workshop. The authors discuss the value of sheltered workshops; the need for on-going evaluation; the selection of clients; workshops for the physically disabled, the emotionally disturbed, and the mentally retarded; work activity centers; and the need for ancillary services such as medical, social, and psychiatric or psychological services.

The final chapter, 11, is "Community Residential Facilities for the Handicapped" by Joan H. Criswell and John H. Beard. The halfway house movement is discussed, and the authors cite a 1970 National Institute of Mental Health survey that found a total of 500 halfway houses in the U. S.: 241 for the mentally ill, 216 for alcoholics, and 43 for miscellaneous, primarily drug addicts. For each of these three groups, the halfway houses are reviewed in terms of physical characteristics, staff, selection of residents, programs, and length of stay. The authors describe four innovative community residential facilities for the handicapped: (1) a residential business, location not given, established by a group of chronic mental patients; (2) the Kansas State University Rehabilitation Living Unit established on two corridors of a college dormitory, (3) the boarding houses of the Nebraska Psychiatric Institute in Omaha, and (4) the Residential Day and Apartment Program of Fountain House, New York. The authors cite the need for thousands more residential programs, the lack of such programs for the chronically physically disabled, and the importance of providing different kinds of residences for different individual needs.
Of the 14 chapters of this book, 13 focus on a particular severe disability. The other is on assistive devices. Authored by experts in the field, each chapter presents definitions of the subject disability; describes its causes, symptoms, and treatment; and considers the unique problems that it presents. Included are social, educational, and rehabilitation concerns.

Chapter 1 by Edward Wicas and Gloria Bidwell deals with mental retardation. Among the rehabilitation considerations are counseling needs, for example, overcoming clients' failure orientation, and suggested programs for mentally retarded clients. The program proposed for work preparation is a gradual one including classroom work, field trips, and workshop experience. The program suggested for community living preparation features a gradual entry program with halfway houses or satellite centers.

Chapter 2 by Sheldon A. Grand and Alayne K. Grand centers on epilepsy. Particular emphasis is given to society's fear, rejection, and ignorance of epileptics and the prejudice against hiring them, despite their good work records. The Three Cities Job Clinic and Services System, a successful employment program for epileptics, is described.

Cerebral palsy is the subject of Chapter 3 by Cleylon L. Meharty and James A. Chaney. Among the special rehabilitation concerns discussed are the need for the realistic consideration of all the client's strengths and weaknesses and the need for many counseling sessions. Vocational evaluations are considered, particularly those based on New York City's TOWER - Testing, Orientation, and Work Evaluation in Rehabilitation - developed by the Institute for the Crippled and Disabled.

Chapter 4 by Perry Hall and Gus Alexander is devoted to handicapping speech disorders. Counseling and adjustment should focus, the authors say, on (1) psychological adjustment, (2) social problems, (3) educational implications, and (4) vocational implications. Each of these four topics is discussed.

Blindness and severe visual impairment are the concern of Chapter 5 by Cull and Hardy. Among the matters discussed are the factors associated with adjustment, the role of defense mechanisms in adjustment, and the wide range of job possibilities.

Chapter 6 by Robert A. MacGuffie centers on mental illness and emphasizes the need for rehabilitation counselors to create positive experiences for ex-mental patients, who often have negative self-concepts and few positive experiences. The author suggests that as a model for perceiving mental illness, rehabilitation counselors should determine how a client behaves in his environment.

Spinal cord injury is the focus of Chapter 7 by Sena Sword and M. M. Roberts. Included is a description of the four-stage emotional adjustment of most patients. Though the authors acknowledge that a large percentage of the spinal cord injured never become employed, they state that "a minimal level of rehabilitation is nearly always possible." Possible jobs and the use of

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gadgets are considered; for example, mechanical hands can be used on electric typewriters. It is noted that most clients require help and support from the rehabilitation counselor for a long period of time.

Chapter 8 by Richard K. Johnson is about deafness. The four principal methods of educating deaf persons in the U.S. are reviewed. Frequently, the author notes, a breakdown of communication in the deaf individual's family and poor education make her/him poorly prepared for competitive employment. The results of various studies of deaf persons are summarized, and tables of the services provided by the post-secondary schools for the deaf are included.

Diabetes is the topic of Chapter 9 by Amos Sales. The author points out that only those individuals with complications from diabetes require rehabilitative assistance. The client's emotional reaction is of particular importance since stress aggravates the condition.

Chapter 10 by Kent M. Samuelson and Cecil O. Samuelson deals with cancer and emphasizes the number of individuals who are cured of the disease. Especially important in rehabilitation is the client's response to the disease, the reaction of the family, and the attitude of the counselor.

Rheumatoid arthritis is the concern of Chapter 11 by William H. Graves and James T. Bowman. Of special importance to rehabilitation is the need for threat-free counseling situations and employment to minimize stress. Placement problems are discussed, including the unpredictable course of the disease and clients' limited general mobility. The author states that rheumatoid arthritics must avoid rapid changes in atmosphere, extremely heavy physical labor, and work primarily involving standing, walking, or climbing stairs.

Chapter 12 by Evan Jones focuses on end stage renal failure. Because the disease is fatal, counseling is difficult and must include the client's realization of the nature of the disease. Transplants can restore individuals to normal life, but most victims of this disease must depend on dialysis. The rehabilitation considerations for both groups are considered, for example, the need for transplant recipients to avoid physically demanding jobs because of their vulnerability to infection.

Pulmonary disability is the subject of Chapter 13 by Richard E. Acciaiatti. Counseling considerations are given for various types of respiratory diseases, for example, the need for a reduction of anxiety for bronchial asthma sufferers.

Chapter 14 by A. G. Garris is titled "How Mechanical Assistive Devices and Adaptive Behavior Can Aid in the Rehabilitation of Severely Disabled Persons." It includes information on custom-designed devices as well as commercially available ones and provides two tests for the counselor to assess awareness of the disabled person's need for and use of mechanical assistive devices and adaptive behavior.
This book concerns "the basic body of knowledge of vocational evaluation and its importance in the rehabilitation of persons who are handicapped for employment." It consists of 16 chapters by various authors, and it is divided into four parts: I. Overview of Evaluation (three chapters), II. Vocational Evaluation and Professionalism (three chapters), III. Vocational Evaluation Approaches and Procedures (six chapters), IV. Evaluations in Specialty Areas (four chapters). Designed for professional workers in the rehabilitation field, the book focuses upon disabled clients in general, without specifying particular disabilities or levels of severity.

Part I - Overview of Evaluation

In the first chapter, "Work Evaluation an Overview," Paul R. Hoffman defines work evaluation as "a process of assessing vocational strengths and weaknesses through the utilization of work, real or simulated, for the purpose of developing a vocational plan of action." He reviews the theory on work evaluation, noting that it is eclectic and needs more research, and discusses the following techniques for work evaluation: job analysis, psychometric testing, work samples, situational approach, and job tryout. The focus of work evaluation, he states, is upon both general and specific employability factors. The author considers the responsibilities, duties, and necessary skills for work evaluators and concludes that individuals need professional training in order to carry out the job of work evaluator properly.

Stanley H. Crow, in "The Role of Evaluation in the Rehabilitation Process," Chapter 2, reviews the changes in the concept of rehabilitation from insuring persons as complete a functional recovery as possible to enabling persons to attain as much function and independence as possible. Evaluation, he says, must be considered as a "dynamic, in which every individual in the rehabilitation process, especially the client, plays a part." Rehabilitation should teach the client to make independent, responsible decisions. Crow describes three steps of evaluation: data gathering, hypothesis formulation, and evaluative interpretation. As a model for the rehabilitation process, he presents five interrelated functions that should begin at the onset of disability: evaluation, remedial, adjustment, skill-training, and personal decision-making dynamics, all of which point to rehabilitation, "self-directed options for living." The author gives particular emphasis to ongoing evaluation and client choices.

Richard D. Jones and Fred R. McFarlane consider influences and effects in Chapter 3, "The Counseling Impact of Work Evaluation." They review research related to evaluator impact and conclude that the evaluator is not just an objective observer but a "significant other in the rehabilitation process" whose impact is extremely important. The evaluator-counselor is "both model and agent for the client's change and gain," they state. The authors review characteristics of effective helpers previously identified as essential for constructive growth, and they discuss Carkhuff's Systematic Human Relations Training Model. The importance of the communication process is stressed.

As a catalyst for evaluation, the use of activity counseling is considered, including use of Neff's four approaches to work evaluation (mental testing approach, job analysis approach, work sample approach, and situational approach).
Part II - Vocational Evaluation and Professionalism

In Chapter 4, "The Vocational Evaluation and Work Adjustment Association Looks to the Future," Robert H. Couch focuses on VEWAA, a professional division of the National Rehabilitation Association. He surveys VEWAA's past and present activities and makes predictions for the future in these six areas: (1) the development of service programs to deal with people's problems, (2) enabling legislation related to the handicapped and disadvantaged, (3) divergent settings for vocational evaluation and work adjustment, (4) the educational and experiential backgrounds of practitioners, (5) available and preferred techniques, and (6) training programs for evaluators and adjustment personnel. The author relates all of these areas to the Association and its activities.

"Evaluating the Evaluator," Chapter 5, by John K. Stout considers guidelines for assessing the performance and competence of the work evaluator. The author believes that such an evaluation is currently impossible, and he discusses three main problems. One problem is that the behavioral sciences are based on an unvalidated body of knowledge. Another issue is the criterion problems involving process outcome variables. The third problem is that the profession of vocational evaluation is unspecified and variable. Stout submits that the same problems in evaluation exist throughout the professions in the behavioral sciences.

Arnold B. Sax and C. Thomas Allen describe the MDC in Chapter 6, "The Materials Development Center: A National Resource for Materials on Work Evaluation and Adjustment," a program within the Department of Rehabilitation and Manpower Service at the University of Wisconsin-Stout. The MDC is a national source of materials in work adjustment. Its purpose is "to collect, develop, and distribute information and materials which may be used to facilitate the development and improvement of work evaluation and work adjustment programs." The authors discuss the need for information and materials, the MDC's information service, and its research, utilization, and development components.

Part III - Vocational Evaluation Approaches and Procedures

In Chapter 7, "The Work Sample Approach to Vocational Evaluation," Bernard Rosenberg reviews the history of this approach and discusses specific approaches, e.g., the THOMASAT approach developed by Highland View Hospital in Cleveland and the series of work sample tasks designed by the Philadelphia Jewish Employment and Vocational Service. The vocational evaluation process, resulting benefits, and recommendations are discussed. The TOWER System work sample approach is described in detail, and its evaluation categories are included. The author presents 12 items for a job analysis, along with format suggestions, scoring criteria, and follow-up procedures for practical validation.

"The Modapts Approach to Vocational Evaluation," Chapter 8, by Bruce C. Hume describes a system that relates time to movement of the parts of the body. Recently developed by Centre Industries in Australia, Modapts is named for MODular Arranged Predetermined Time Standards, and its primary virtue, says Hume, is its simplicity. The system includes equipment and tests for such things as finger movements, wrist movements, placement ability, and eye use and decision making. The test battery yields a profile of the efficiency and effectiveness of the individual in performing work-related motions; a cross match with actual work tasks points out discrepancies that aid in planning the rehabilitation program.
Charles Smolkin focuses on effective report writing in Chapter 9, "The Work Evaluation Report." He provides a format that includes the following sections: background information, psychological test interpretation, work sample clarification-personality variables, and summary and recommendations. He considers each of these in detail and emphasizes the need for follow-up to determine the effectiveness and dependability of the report.

Chapter 10, "The Utilization of the Dictionary of Occupational Titles in Work Evaluation," is written by Craig R. Colvin. With minor changes, this chapter appears in Cull and Hardy's Adjustment to Work. For an annotation, see No. B-5, Part I, Chapter 9 in BOOKS.

Chapter 11, "Prevocational Evaluation," by Richard R. Wolfe deals with related concerns, the role of prevocational evaluation in determining eligibility, and the areas of prevocational evaluation such as limitations imposed by the disability and the client's psychological strengths and weaknesses. Prevocational planning and counseling, length of prevocational evaluation, and attitudes related to prevocational evaluation are also considered.

In "Scientific Observation in Work Evaluation," Chapter 12, Robert P. Overs applies the principles of scientific observation to work evaluation. He emphasizes the need to establish scope limits, and he discusses sampling techniques and reliability as they relate to observation. To understand client behavior, Overs suggests a synthesis of the client's life history data, psychological test data, and work evaluation data.

Part IV - Evaluations in Specialty Areas
David D. Clark, in Chapter 13, "Purpose of Psychological Testing in Work Evaluation," points out the importance of client-centered vocational evaluation, training, and placement. Determining the client's personal functioning is of vital importance, he states. The evaluator should obtain information on the personality correlates of contact, stress, and motivation; should use the information from the client's psychological evaluation; and should conduct on-going evaluations of procedures. Four practical suggestions for the evaluator are given; e.g., "Provide test data objectively and interpret it in simple terms with which the reader is familiar."

In Chapter 14, "Purpose of Approaches of Educational Evaluation," Gordon Krantz presents a chart, "Vocational Service Flow of the Severely Disabled and Marginal Rehabilitation Client," and discusses the relationship of vocational evaluation to the entire educational process. He considers the involvement in vocational evaluation of three arms of public education: special education, vocational education, and educational programs for disadvantaged youth. Using various Minnesota programs as examples, the author describes vocational evaluation in urban and rural educational settings, and he deals with such issues as the extent to which vocational evaluation can contribute to educational diagnosis. (For a related document, see No. 110.)
"A Model for Vocational Evaluation of the Disadvantaged," Chapter 15, by Julian M. Nadolsky describes a structural model that the author says is applicable to any population, including disabled or disadvantaged clients. Designed to provide tentative guidelines, the model consists of a pyramid inserted into a square that represents the world of work. The pyramid is composed of ten techniques and procedures from the core content of vocational evaluation; they lead to the peak, "ideal occupation." Beginning at the pyramid base, the ten techniques are: (1) biographical data, (2) the evaluation interview, (3) psychological tests, (4) occupational information and exploration, (5) work samples, (6) situational/workshop tasks, (7) informal conferences with other staff, (8) job tryouts, (9) formal staff conferences, and (10) vocational counseling.

The final chapter is "The Rehabilitation Facility's Role in Evaluating the Welfare Recipient" by Cull and Hardy. It includes a review of welfare reform legislation and facilities' evaluation and a discussion of the impact of poverty on the individual and the implications for rehabilitation personnel. To rehabilitate the disabled disadvantaged, the authors suggest that rehabilitation facilities and personnel should be more active in community life; change staffing patterns to provide more group work, evaluation, work adjustment training, personal adjustment training, and vocational training; work with clients in the context of their families, peers, and environments; and provide information and referral service for community service agencies.
This book emerged as a result of an experimental lecture program conducted by the University Rehabilitation Counselor Training programs of four New York schools. Each chapter in the book is based on one of the lectures given. The book consists of five main parts with two or three chapters in each part and a list of discussion questions at the end of the part.

Part I - Vocational Rehabilitation: Past and Present
Chapter I. "The Current Scene" by Salvatore DiMichael
Chapter II. "Historical Background" by James Garrett
Chapter III. "Legislative Contributions" by Mary Switzer

Part II - Philosophical Viewpoints
Chapter IV. "The Meaning of Work" by Anne Roe
Chapter V. "The Development of Vocational Potential" by Donald Super
Chapter VI. "Some Psychosocial Aspects of Disability" by Beatrice A. Wright

Part III - The Vocational Rehabilitation Process
Chapter VII. "Referral, Evaluation, Treatment" by John McGowan
Chapter VIII. "Training, Job Placement, Follow-Up" by Daniel Sinick
Chapter IX. "The Research Role" by Herbert Rusalem

Part IV - Counseling
Chapter X. "Implications of Personality Theory for Counseling" by Milton Schwebel
Chapter XI. "Theories of Counseling" by Cecil Patterson
Chapter XII. "Selected Techniques of Counseling" by Lloyd Lofquist

These three authors each attempt to capitalize on the similarities in the various schools of counseling in order to make rehabilitation counseling a communicable process. Schwebel deals with the roots of rehabilitation counseling, Patterson indicates the relationships between counseling theories, and Lofquist finds a common base in modern technology for various counseling theories.
Part V - Professional Considerations
Chapter XIII. "Professional Concepts" by Frederick Whitehouse
Chapter XIV. "The Status of the Profession" by John Muthard

Part V summarizes the current state of vocational rehabilitation as a profession. Whitehouse discusses rehabilitation in terms of the counselor's commitment and responsibility. Muthard emphasizes the historical and social context of rehabilitation counseling.
This book, designed as an introductory text in rehabilitation techniques, concerns handicaps in general and not specific severe disabilities. It is divided into three sections: (1) Developing Human Resources, (2) Vocational Adjustment of the Handicapped, and (3) Overview of Services.

Section 1 presents the theoretical framework of the book. It reviews a number of theories about the nature of man, including those of Riesman, Shostrom, and Maslow, and it focuses on the theory of man developed by Dr. Clare Graves. Maslow's hierarchy of needs is the basis of Grave's theory, which has eight major levels or systems of existence: (1) reactive, (2) tribalistic, (3) egocentric, (4) saintly-conformist, (5) manipulator-materialistic, (6) sociocentric, (7) cognitive, and (8) experientialistic. For each level, the motivating force and organizational problems are described. Graves' theory is then applied to rehabilitation counseling. For example, a chapter on "The Managing of People" suggests managerial styles to use with persons at each level.

Section 2 concerns practical matters: "Meeting Employers Face to Face," "Developing and Maintaining Employer Support," "Evaluation and Follow-up," and "Vocational Adjustment in Perspective." It includes tips on how to get a "foot in the door" to get employers to hire handicapped persons and how to maintain their interest and support. It offers suggestions on how to evaluate individuals who are placed, including using sample checklist forms.

Section 3 discusses the need for early intervention and for career education programs in elementary and secondary schools. Of particular interest is Chapter 12, "Facilities for the Handicapped," in which various eras of treatment are described. (1) In those classified as "change environment" are the Camphill Movement, Innisfree Village, Marbridge Ranch, and Dan Torisky's program for parks. Each of these is described in the text and features an environment that assures handicapped individuals an opportunity for work, cultural life, and social contacts in a sensitive community. (2) In facilities classified as "remove from society" are institutions. The authors foresee more vocational training in this area and less custodial maintenance. (3) In facilities classified as "change clients" are those which try to prepare handicapped persons for gainful employment in society. They are work-study programs or vocational education programs. (4) In the last type are combination programs that change both the client and the environment: sheltered workshops. Chapter 13, "Services for the Handicapped," considers intake, diagnostic evaluation, vocational evaluation, guidance and counseling, prevocational training, vocational training, placement, and follow-up, all in general, descriptive terms. The final chapter, 14, is "Humanism and Behaviorism," an analysis of the two methodologies as they apply to education of the handicapped.

This book is composed of 52 articles, most of them published between 1965 and 1970. Designed to interest rehabilitation counselors, psychologists, medical personnel; social scientists, educators, and parents, the material is divided into 15 chapters. The first eight chapters are based on these subjects: (1) General Considerations such as the prevalence, classification, history of mental retardation, and the effects of inner-city poverty; (2) Assessment and Diagnosis of Mental Retardation, including both medical and psychological evaluations; (3) Learning Theory and Mental Retardation, dealing with the relationship between sensory stimulation and specific responses, and the application of Hebb's theory to understanding the learning disabilities of mentally retarded children; (4) Early Childhood Education; (5) School Programs for the Educable Mentally Retarded; (6) Secondary School Programs for the Mentally Retarded; (7) School Programs for the Trainable Mentally Retarded, mainly concerning children; and (8) Community Day-Care Programs (for preschool mentally retarded children.)

Of particular interest is Chapter 9 on Programs for the Mentally Retarded Adult. An article by Edgar A. Doll provides a general discussion of sheltered workshops and supervised employment and a description of the state of Washington's program for the retarded. Herbert Goldstein and Rick Heber discuss the preparation of mentally retarded youth for gainful employment and focus on the school's role. They deal in general terms with such matters as the role of counseling, in-school work experiences, and evaluation.

Also in Chapter 9 is a comprehensive discussion by Julius S. Cohen of the definition, purpose, and organizational principles of the sheltered workshop. Cohen states that "a workshop must provide a basic four-phase program for each client: (1) evaluation, (2) training, (3) short-term preplacement or interim employment, and (4) terminal employment for those less capable clients." He describes each of these phases as well as the matters of accreditation and community relations.

The remaining chapters are the following: (10) Institutional Care of the Retarded; (11) Communication Skills for the Mentally Retarded; (12) Parent Counseling; (13) Organization and Administration of State and Local Programs; (14) Research, summarizing research from the 1969 President's Commission on Mental Retardation Message, research of the education of mentally retarded persons mainly done in the late 1950s and early 1960s, and research needs in the special education of the mentally retarded; and (15) A Look at the Future, a summary of the Report of the President's Panel on Mental Retardation, first published in 1963.

An appendix provides the following lists related to mental retardation: organizations, surveys of literature, journals, texts, specialized bibliographies, government agency publications, films, and film sources.
This book contains an overview of mental retardation: its causes, history of education, related legislation, educational and vocational rehabilitation, research, and preventive approaches. The intended audience is professionals and special educators; the content includes all levels of mental retardation. Three chapters are of particular relevance to the area of vocational training and placement of the severely handicapped.

Chapter 3, "Vocational Placement of the Mentally Retarded Client," discusses preparing clients for employment, and it includes examples of job readiness tests and client self-rating scales. Counselor-employer relations are considered, and suggestions for the rehabilitation counselor are given. "Questionable assumptions" in regard to placement are discussed, in particular these two: (1) the level of intelligence needed for a specific job is always known, and (2) the retarded individual will be satisfied with employment in certain occupational fields. The chapter concludes with proposals for action, for example, encouragement of job redesign and reduction of the number of jobs unnecessarily requiring a high school diploma.

Chapter 4, "Assessment Techniques as Predictors of Job Success," reviews studies of techniques and reaches these three "possible conclusions." First, intelligence tests that measure performance are more useful in predicting the job success of mentally retarded clients than are tests that are verbally oriented. Next, motor aptitude tests usually provide only rough estimates of job success because of the tasks involved; actual job tasks may not be like those measured by tests. Finally, projective techniques and rating scales are most valuable to rehabilitation counselors in testing the personality traits needed for job success. The factors that appear to be most conducive to vocational success are desire for success, realism of job goals, teamwork, acceptance of rules and authority, extent to which assistance is sought, amount of supervision required, and importance of job training to client. The chapter also includes a list of four general criteria for instruments predicting job readiness behavior.

Chapter 5, "The Role of the Sheltered Workshop in the Habilitation Process," briefly notes the history of workshops and the various ways of classifying them. The book suggests that the most comprehensive system classifies workshops according to length of the clients' workshop placement: extended employment (terminal), which is for clients who cannot be employed elsewhere, or transitional employment, which includes evaluation, work orientation, and therapy. Included is a discussion of short-term objectives of workshops, e.g., work-potential evaluation, improvement of physical function, and preparation for employment; and long-term objectives, e.g., development of clients' self-reliance. The dual base of workshop structure is emphasized--the production of goods and services and the training and rehabilitation process.
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