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Workers, Administrators, Coordinators, and Supervising
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A STUDY OF PERCEPTIONS OF VOCATIONAL REHABILITATION
WORKERS, ADMINISTRATORS, COORDINATORS, AND SUPERVISING
STAFF MEMBERS CONCERNING SERVICES, LEGISLATION,
PROBLEMS, TRAINING NEEDS, AND CHANGES AT THE
RECIFE VOCATIONAL REHABILITATION CENTER, BRAZIL

By

Elza Nogueira De Souza Barros

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements for
the degree of

DOCTOR OF PHILOSOPHY

Department of Educational Administration

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ABSTRACT

A STUDY OF PERCEPTIONS OF VOCATIONAL REHABILITATION WORKERS, ADMINISTRATORS, COORDINATORS, AND SUPERVISING STAFF MEMBERS CONCERNING SERVICES, LEGISLATION, PROBLEMS, TRAINING NEEDS, AND CHANGES AT THE RECIFE VOCATIONAL REHABILITATION CENTER, BRAZIL

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Elza Nogueira De Souza Barros

The problem. The high level of unemployment among vocationally rehabilitated adult disabled persons has been of concern to interested groups including policy makers, legislators, governments, administrators, practitioners, and researchers (Acton, 1984; Corner, 1984; Wenman, Kregel, & Seyforth, 1985).

Purpose of the study. The purpose was to determine and compare vocational rehabilitation workers and administrators' opinions concerning (1) effectiveness of vocational rehabilitation service components, (2) use of national rehabilitation policies in improving job opportunities for rehabilitated adults, (3) importance of hypothetical legislative policies in increasing job opportunities for rehabilitated adults, (4) seriousness of problems in the placement of rehabilitated adults in competitive jobs, (5) training needs in job placement competencies for rehabilitation workers, (6) interest in participating in vocational rehabilitation courses, and (7) changes needed to increase the participation of rehabilitation workers in job placement activities.

Method. A survey instrument with seven parts was used to gather data during April, 1986. Fifty-five questionnaires were distributed, and 45 (82%) usable questionnaires were received. Responses were analyzed using descriptive statistics and one-way analyses of variance.

Findings. Seven (50%) of 14 vocational rehabilitation service components were identified as not very effective. One of 39 respondents had used and knew the existence of two vocational rehabilitation legislative policies. Seven (78%) of nine hypothetical vocational rehabilitation legislative policies were identified as important. Seven (21%) of 25 problem statements were identified as very serious. Ten (100%) job placement competencies were identified as in high need. Eight (62%) of 13 hypothetical vocational rehabilitation courses were identified as being interesting for participation. Nine (100%) hypothetical changes were identified as important for increasing the participation of vocational rehabilitation workers in job placement activities.

Results. A one-way analysis of variance revealed significant differences at the .05 level between the perceptions of vocational rehabilitation workers (Group 1) and those of state rehabilitation administrative personnel--administrators, coordinators, and supervising staff members--(Group 2) on (1) two of 14 service components, (2) six of 25 problem statements, (3) one of 10 job placement competencies, and (4) two of 13 hypothetical vocational rehabilitation courses.

Implications. The implications of this study were that (1) future research is needed to examine vocational rehabilitation services in other regions of Brazil; (2) education of vocational rehabilitation workers and staff personnel needs to

include employment relations, legislative policies, and job placement skills; and
'3) practicing vocational rehabilitation workers need to play a more active role
in job placement activities.

DEDICATION

This dissertation is dedicated to my mother,
CELESTE DE BARROS NOGUEIRA, deceased,
and to my father,
JOSE LEITE NOGUEIRA,
for guiding me toward career and continued education goals.

I thank my mother for my persistence
and my father for my determination.

ACKNOWLEDGEMENTS

I am indebted to my husband **Rosival** and daughter **Michelle** for their unfailing support and encouragement during the writing of this dissertation.

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A special thank you goes to Dr. Robert Craig, Office of Measurement and Quantitative Methods, who guided me through the entire research. Appreciation is expressed to Leonard Bianchi for all his help and to Barbara Reeves for typing this dissertation.

My appreciation also extends to my brothers and sisters for their prayers and expectations and the patience with which they bore my absence from home.

It is through the encouragement of each of these individuals that "continuing education" as a lifelong learning process motivated me as an adult learner to pursue my professional development goals.

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CHAPTER I

INTRODUCTION

Disabled persons are a large, often overlooked group of people. There are in the world an estimated 200,000,000 disabled persons suffering the effects of unemployment or underemployment (Acton, 1984). Many of these disabled persons have not worked in the commercial sense for many years or have been underemployed. However, the combination of little recent experience in paid work, little or no source of income, lack of education and training, lack of marketable skills, and, often, lower self esteem gives disabled persons significant handicaps in finding jobs to support themselves. It is within this context that the writer proposed to study the "Perceptions of Vocational Rehabilitation Workers, Administrators, Coordinators, and Supervisors Concerning Services, Legislation, Problems, Training Needs, and Changes Needed at the Recife Vocational Rehabilitation Center, Brazil."

Bernard and Thompson (1984) said that it takes motivation to get an employer to focus on a disabled person's skills and overlook what that disabled person must overcome. Disabled persons are continually being left behind because of their lack of education, training, or marketable skills. Available labor market data indicate that the supply of people willing to work will exceed the number of available jobs through the 1980s. Consequently, vocational rehabilitation which aims to help people with disabilities make appropriate occupational choices and assist with their placement into suitable employment has to embark on a radical change.

Disabled persons must work harder than able-bodied persons to succeed, become better educated and trained, and be helped by vocational rehabilitation services to enter a labor force that is now experiencing a high unemployment rate. Chronic unemployment among disabled persons requires more effectiveness from vocational rehabilitation services in helping clients in job placement. There is legislation to promote employment opportunities for vocationally rehabilitated disabled persons (Article 212 of the National Social Insurance Institute, decree number 72.721 of September 6, 1973), yet no way to enforce such employment policy in Brazil. Today's vocational rehabilitation services must function as a skilled labor market instrument to assist, prepare, and place disabled persons into suitable employment because the high level of unemployment among disabled persons has become a chronic political issue in the world (Corner, 1984).

Under these circumstances, vocational rehabilitation policy makers, administrators, personnel officials, and employers have to cooperate to put into action strategies to solve the problem created by the high level of unemployment and socioeconomic constraints facing disabled persons in Brazil. The remedy requires that policies for the employment of disabled people accommodate clients' changing needs. Therefore, the remedy requires four coordinated lines of action, and it is by them and by their relevance to the socioeconomic circumstances of the country that any national policy must be judged (Acton, 1984). The policies must accomplish the following: (1) require the removal of physical, social, and economic barriers; (2) ensure that education and training are provided to prepare disabled persons for work opportunities since most of the world's people who are impaired, illiterate, and without basic education impose restrictions as severe as their impairments; (3) require the creation of more employment opportunities that are open to people with disabilities; and (d)

establish systems that service disabled people and employers by making connections between them (Acton, 1984).

While the impact of new funding and emphasis on the problems of disabled persons cannot be fully evaluated, there are many issues policy makers would like to address as new programs develop. For example, even with augmented vocational rehabilitation programs, will adequate funding be directed specifically to disabled persons? Can disabled persons who often have limited income support in Brazil afford vocational training? Do the programs that serve disabled persons meet clients' special needs (for example, job readiness, counseling, peer group support, and training for nontraditional jobs)? Educational technology may play an important role in preparing disabled persons for jobs in the open labor market. This research considers both the potential of technology to improve work skills of disabled persons and the effects of technology on the kinds of jobs that might be created or are available in the Brazilian economy.

Thus, Brazil and many other countries are experiencing transitions in vocational rehabilitation services, as new policies, actions, and changes must be implemented if the end product of vocational rehabilitation is to be accomplished. In other words, the resettlement of disabled persons in remunerative work--their reentry into active economic life--which is not only suited to the individual concerned but also makes the best use of his/her available skills (Acton, 1984).

The decision to examine vocational rehabilitation of disabled persons in Brazil reflects the researcher's growing interest and concerns with the magnitude of the problems disabled persons face and the need to ensure for them a more equitable share in the benefits of social and economic development and integration.

Background Information

Brazil is a developing country in South America, the population of which is estimated to be 138 million people (Evans, 1986). The country's growth rate is estimated to be 2.3% annually, and it covers an area of 3,286,490 square miles, the fourth largest country in the world.

On the basis of United Nations' (1983) contention that at least one person in ten is disabled, Brazil's disabled may well number 13 million. As the majority of the disabled are unable to find work, they often opt out of society or take up begging in the streets (International Labor Office, 1985). These disablement problems in Brazil are major issues which require social policy measures for the integration of disabled persons into productive life.

The Rehabilitation Problem in Brazil

Rehabilitation is considered a generic term covering the continuous medical, para-medical, and vocational processes through which a person who has been disabled by congenital causes, injury, or illness can, to the extent possible, achieve his/her full acceptance and become an integral part of general life (International Labor Office, 1984).

In Brazil, rehabilitation services are provided through facilities affiliated with:

1. voluntary organizations that provide services to selected groups of disabled, such as physically handicapped, blind persons, etc.;
2. the Ministry of Education that provides educational opportunities for the developmentally disabled and operates rehabilitation services such as The Clinical Hospital of the Federal University of Pernambuco;
3. private organizations such as the Pestalozzi Society and the Mental Retardation Parents' Association; and
4. the National Social Insurance Institute (INPS).

The National Social Insurance Institute (INPS) is a national governmental body within the Ministry of Social Insurance and Assistance (MPAS) and so far has established 19 comprehensive vocational rehabilitation centers in cities with the highest concentration of disabled persons.

The perceptions and opinions of vocational rehabilitation workers, administrators, coordinators, and supervisors play key roles in the vocational rehabilitation and employment process of disabled persons in Brazil. These opinions are a central factor in the establishment of national employment policy: the development and maintenance of an effective vocational rehabilitation and employment service component for disabled persons. Perceptions concerning training needs of vocational rehabilitation workers are relevant for the improvement of professionals to better assist their clients.

With the increasing difficulty for a disabled person to choose a career due to a surplus labor force, lack of education and skills, fewer marketable skills, and less access to employment information, it is essential to determine the present status of vocational rehabilitation and placement service components provided to disabled persons in Brazil through the National Social Insurance Institute. Also, it is necessary to closely review and thoroughly understand current vocational rehabilitation and employment legislative policies. In addition, it is necessary to understand the problems facing vocational rehabilitation. Further, it is necessary to examine the changes needed to improve vocational rehabilitation. Therefore, as vocational rehabilitation faces many new challenges, it is essential to learn from vocational rehabilitation workers, administrators, coordinators, and supervisors their perceptions relative to the above factors.

In a country such as Brazil, a vocational rehabilitation system has a great responsibility for helping people through methods, procedures, and techniques to mutually adapt disabled workers and the workplace. A vocational rehabilitation

system should be called upon to increase job opportunities for disabled persons through actions such as (1) determination of job requirements, (2) assessment of working capacities, (3) definition of matching rules between job requirements and working capacities, (4) selection and training of the disabled, and (5) work design and organization (International Labor Office, 1984).

In addition, vocational rehabilitation services should provide the starting point from which disabled persons can attain social and economic independence and the self-respect and dignity that go with them. Vocational rehabilitation services should be made available to all disabled persons, whatever the origin and nature of their disability taking into consideration the right of the disabled to secure and retain employment and to have their needs taken into consideration at all levels of economic and social planning (ILD, 1985). Thus, the research designed to interpret social and economic long-term rehabilitation needs that exist in Brazil, to examine the steps in more detail, as perceived by vocational rehabilitation workers, administrators, coordinators, and supervisors at Recife Vocational Rehabilitation Center was judged to be important.

Purpose of the Research

This study is intended to make an assessment that could be used as feedback to modify ongoing programs, to improve the vocational competence of disabled persons, to increase effectiveness in developing employment skills needed for competitive employment, and to further the job placement competence of vocational rehabilitation workers in Brazil. More specifically, the following objectives will help clarify the extended purposes of this study:

1. to examine the opinions of vocational rehabilitation workers, administrators, coordinators, and supervising staff members of the Recife Vocational Rehabilitation Center related to the effectiveness of vocational rehabilitation service components;

2. to examine the opinions of vocational rehabilitation workers, administrators, coordinators, and supervising staff members of the Recife Vocational Rehabilitation Center related to the use of national vocational rehabilitation policies in improving job opportunities for rehabilitated disabled persons;
3. to obtain the opinions of vocational rehabilitation workers, administrators, coordinators, and supervising staff members of the Recife Vocational Rehabilitation Center with respect to the importance of hypothetical vocational rehabilitation legislative policies on increasing job opportunities for disabled persons;
4. to analyze the perceptions of vocational rehabilitation workers, administrators, coordinators, and supervising staff members of the Recife Vocational Rehabilitation Center with regard to the seriousness of problems encountered to vocationally place rehabilitated disabled persons in competitive labor markets;
5. to assess the perceptions of vocational rehabilitation workers, administrators, coordinators, and supervising staff members of the Recife Vocational Rehabilitation Center with regard to the job placement training needs of vocational rehabilitation workers;
6. to investigate the perceptions of vocational rehabilitation workers, administrators, coordinators, and supervising staff members of the Recife Vocational Rehabilitation Center regarding their interest in participating in selected professional development courses;
7. to examine through the opinions of vocational rehabilitation workers, administrators, coordinators, and supervising staff members of the Recife Vocational Rehabilitation Center the importance of changes needed to increase the participation of vocational rehabilitation workers in vocational placement activities;
8. to gather basic socio-demographic information regarding vocational rehabilitation workers, administrators, coordinators, and supervising staff members of the Recife Vocational Rehabilitation Center; and
9. to provide feedback for vocational rehabilitation workers, administrators, coordinators, and supervising staff members of the Recife Vocational Rehabilitation Center regarding tools for the assessment of existing vocational rehabilitation delivery systems for modification and improvement of vocational placement for work-injured disabled persons in Brazil.

Research Questions

In order to achieve the purposes of the study, specific research questions were formulated. They were based on a needs' assessment format, the results of which were used as a basis for the final conclusions and recommendations of the research.

1. To what extent are vocational rehabilitation services performed at Recife Vocational Rehabilitation Center perceived as being effective by vocational rehabilitation workers, administrators, coordinators, and supervising staff members?
2. What legislative policies have been used in Brazil for the provision of vocational rehabilitation services for work-injured adults in the opinion of vocational rehabilitation workers, administrators, coordinators, and supervising staff members at the Recife Vocational Rehabilitation Center?
3. The Brazilian government has not yet adopted those policies. If available, which of them would be important in creating job opportunities for disabled persons, in the perceptions of vocational rehabilitation workers, administrators, coordinators, and supervising staff members at the Recife Vocational Rehabilitation Center?
4. How serious a problem do vocational rehabilitation workers, administrators, coordinators, and supervising staff members perceive problems to be at the Recife Vocational Rehabilitation Center?
5. In what job placement competencies do vocational rehabilitation workers, administrators, coordinators, and supervising staff members presently working with work-injured persons at the Recife Vocational Rehabilitation Center feel a need for professional development?
6. If training courses were available on an inservice basis, how much interest would vocational rehabilitation workers, administrators, coordinators, and supervising staff members at the Recife Vocational Rehabilitation Center have in participating in selected professional development practices?
7. What are the perceptions of vocational rehabilitation workers, administrators, coordinators, and supervising staff members at the Recife Vocational Rehabilitation Center with regard to the importance of changes needed to increase the participation of vocational rehabilitation workers in the job placement activities of their clients into competitive labor markets?

Hypotheses

In this study, six null hypotheses were tested.

- H₁ There will be no significant differences between rehabilitation workers and administrative staff members regarding their perceptions in terms of the effectiveness of vocational rehabilitation service components provided at the Recife Vocational Rehabilitation Center
- H₂ There will be no significant differences between rehabilitation workers and administrative staff members regarding their perceptions in terms of the importance of hypothetical vocational rehabilitation legislative policies.
- H₃ There will be no significant differences between rehabilitation workers and administrative staff members regarding their perceptions in terms of seriousness of problems faced by the Recife Vocational Rehabilitation Center.
- H₄ There will be no significant differences between rehabilitation workers and administrative staff members regarding their perceptions in terms of training needs in job placement competencies.
- H₅ There will be no significant differences between rehabilitation workers and administrative staff members regarding their perceptions in terms of interest in participating in vocational rehabilitation courses.
- H₆ There will be no significant differences between rehabilitation workers and administrative staff members regarding their perceptions in terms of the importance of changes needed to increase the participation of rehabilitation workers in job placement activities.

Significance of the Study

Contemporary vocational rehabilitation services are offered with great emphasis on a clinical view (Corner, 1984). Matta (1985) found in his research that rehabilitation workers see their roles as providing emotional support instead of job placement. He emphasized that there is a need to provide long-term training for rehabilitation workers to better equip them for the task of job placement. As a result of this finding, it has been a generally accepted fact that in recent years the future of work for people with disabilities lies in increasing

their opportunities for better education, vocational training, and effective job placement services. While counselors have widened their conceptions of vocational rehabilitation to include non-economic dimensions, administrators and policy decision makers have continued to view vocational rehabilitation as a labor market instrument to help people with disabilities, make appropriate occupational choices, and assist with their placement into suitable employment (Corner, 1984). Thus it has become imperative to accurately understand the role of vocational rehabilitation and placement services from a broader perspective including policy makers, vocational rehabilitation workers, administrators, coordinators, supervising staff members, and clients so a consensus can be reached with regard to (1) characteristics of services, (2) problems, (3) legislative measures for the creation of job opportunities, (4) training needs, and (5) changes which need to be implemented in vocational rehabilitation services for full participation and equitable socioeconomic integration of disabled persons into a competitive labor market is accomplished.

The results of this study could provide assessment and base data necessary for the consideration and implementation of job placement service components and vocational rehabilitation workers' training in job placement in the vocational rehabilitation centers of Brazil. More specifically, the significant contributions of this study may be the provision of:

1. an assessment of the effectiveness of the Recife Vocational Rehabilitation Center's service components as perceived by vocational rehabilitation workers, administrators, coordinators, and supervising staff members;
2. an assessment of the use of existing vocational rehabilitation legislative policies as perceived by vocational rehabilitation workers, administrators, coordinators, and supervising staff members of the Recife Vocational Rehabilitation Center;
3. an assessment of the importance of hypothetical vocational rehabilitation legislative policies as perceived by vocational rehabilitation workers, administrators, coordinators, and

supervising staff members of the Recife Vocational Rehabilitation Center as possible measures to increase job placement opportunities for disabled persons;

4. an assessment of the seriousness of the problems facing the vocational placement of rehabilitated disabled persons of the Recife Vocational Rehabilitation Center as perceived by vocational rehabilitation workers, administrators, coordinators, and supervising staff members;
5. an assessment of the training needs in job placement skills for vocational rehabilitation workers as perceived by administrators, coordinators, and supervising staff members of the Recife Vocational Rehabilitation Center;
6. an assessment of the interest to participate in vocational rehabilitation professional development courses as perceived by vocational rehabilitation workers, administrators, coordinators, and supervising staff members of the Recife Vocational Rehabilitation Center;
7. an assessment of the importance of changes needed to increase the participation of vocational rehabilitation workers in job placement activities as perceived by vocational rehabilitation workers, administrators, coordinators, and supervising staff members of the Recife Vocational Rehabilitation Center; and
8. a replicable survey instrument for the assessment of vocational rehabilitation centers on a statewide, regionwide, and national basis.

Assumptions of the Study

This study was based on the following assumptions:

1. that vocational rehabilitation services must function as a labor market instrument to assist disabled persons increase their education, training, and marketable skills and be placed into suitable employment in the labor market;
2. that an adequate and effective professional development inservice training program for vocational rehabilitation workers is an essential part of the supervisory program of vocational rehabilitation;
3. that vocational rehabilitation workers, administrators, coordinators, and supervising staff members will benefit by taking more frequent part in well-planned inservice training programs;

4. that rehabilitation workers, administrators, coordinators, and supervising staff members, by and large, are eager to grow educationally and professionally while in the service if opportunities through inservice training programs are provided for them;
5. that governmental action must pay close attention to a manpower policy to improve the economic performance of all disabled persons in Brazil;
6. that the results of this study will provide a basis for improving the economic performance of all disabled persons by the following actions:
 - a. maintaining favorable labor market conditions;
 - b. providing manpower opportunities in the area of education, vocational training, employability skills, and labor market information;
 - c. pursuing strong affirmative action policies to create employment opportunities for disabled persons; and
 - d. continuing research activities into the economic performance of disabled persons in Brazil, especially in comparing the performance of disabled persons living in the five different regions of Brazil;
7. that the results of this study will provide a basis for improving the vocational rehabilitation and placement programs at Pernambuco State;
8. that job placement is a top priority and ultimate goal of vocational rehabilitation program services and the number of vocational rehabilitation workers trained to place disabled persons in competitive jobs is limited in spite of the fact that the primary goal of vocational rehabilitation is job placement of the disabled person;
9. the research and its data gathering device were understood by vocational rehabilitation workers, administrators, coordinators, and supervising staff members prior to their completion of the survey questionnaire;
10. that the vocational rehabilitation workers, administrators, coordinators, and supervising staff members' answers to the questionnaire were honest and accurate;
11. that the institution selected for this study shared as a common mission and purpose the advancing of full participation and equality for disabled persons;

12. that a survey study utilizing a survey questionnaire is an acceptable and adequate method of gathering data for descriptive studies in the social science and education areas;
13. that personal interviews with 18 vocational rehabilitation questionnaire respondents, three policy makers, and two clients further supported the study; and
14. that the topic was selected as a result of the researcher's increasing awareness of job placement problems faced by adult disabled persons. In addition, after reading and studying in the field of adult education, vocational rehabilitation counseling, and special education, the researcher believes a needs' assessment is required before overt action can be initiated to solve the problems of the disabled persons represented here.

Limitations of the Study

The following limitations must be considered when interpreting the results of this study.

Data were obtained from questionnaires completed and returned by 33 rehabilitation workers, three administrators, three coordinators, and six supervising staff members of Recife Vocational Rehabilitation Center. However, additional data were also secured from reports provided by three policy makers at the National Social Insurance Institute (INPS) in Brazil. In order to double check the data obtained through the written questionnaires and to gather additional information pertinent to the study, personal interviews were conducted with 18 vocational rehabilitation participants who answered the written questionnaires. To further analyze the needs of vocational rehabilitation and placement outcomes, documents and reports from the Recife Vocational Rehabilitation Center and from the National Social Insurance Institute were examined.

Ideas and practices in the accommodations made as a result of this study, information on the characteristic of clients, job skills' preparation, and job accommodations made by clients at Recife were obtained through printed

information and interviews with two vocationally rehabilitated clients of the Recife Vocational Rehabilitation Center who were employed in competitive labor markets during the time of the interviews.

Finally, the approach used in the research was to analyze indepth the Recife Vocational Rehabilitation Center as a case study to identify the dynamics of the process of translation of a vocational rehabilitation needs' model. As a result, the primary concern of the study was its replicability in different contexts, not its generalizability. Therefore, it has limited potential for generalization to application in various contexts.

Definition of Terms

The following terms used in the research are defined as follows.

The National Social Insurance Institute (INPS) is a governmental service which operates under national legislative provisions. Its responsibility is to provide social welfare services available through 19 state vocational rehabilitation centers.

Needs assessment is the process of determining needs of a given institution or vocational rehabilitation system.

Objective is used in speaking about ends of various component units, programs, and services. Thus the vocational rehabilitation planner (or program evaluator) might speak of "program objectives, vocational rehabilitation administrators, and practitioners" of program objectives. In contrast to the other kinds of ends, determination of program objectives is primarily the task of the relevant vocational rehabilitation professionals with little "outside" influence. Program objectives, however, would be expected to be roughly consistent with institutional goals.

Placement is a crucial event in the rehabilitation process. It indicates that a client has accepted a job offer that yields appropriate career enhancement opportunities (Vandergost, Jacobson, & Worrall, 1973).

Rehabilitation outcomes (placement rates) are the number of cases closed rehabilitated (placed in the open labor market or sheltered workshop) as a percentage of all cases closed from the active caseload (Matta, 1985).

Adequate outreach is that which specifically targets disabled persons and is matched to the racial/ethnic/age distribution of the disabled persons in the geographic area being served; in rural areas it may require itinerant programming (periodic delivery of services to disabled persons in remote, scattered areas).

Intake/orientation procedures are those that recognize the lack of confidence common to disabled persons and the need for an immediate positive experience; orientation procedures that provide disabled persons with an introduction to the program and especially to other participants.

Personal counseling includes individual counseling, guided support groups, crisis intervention services, ongoing counseling both on a regular and as-needed basis, and appropriate referrals to mental health professionals and alcohol/drug abuse programs.

Assessment and testing is a balanced use of interest inventories, skill testing, work samples, educational assessments, employability development plans, and other instruments and activities useful to adult disabled persons with an emphasis on self-assessment and personal decision making and the identification and transfer of skills developed in previous jobs, homemaking, child-rearing, and volunteer work to the paid labor force.

Career/educational counseling includes activities and resources presenting a broad range of career and educational options in the context of local labor

market data, including information about nontraditional jobs, vocational training, basic education, high school equivalency, financial aid, and short-term as well as traditional programs.

Life skill development emphasizes workshops on assertiveness training, single parenting, short- and long-range planning and goal setting, financial management, dressing for the labor force, health concerns and other requested topics.

Skills training provides access to skill training programs in both traditional and nontraditional areas.

Overview of the Study

In Chapter II a review of the literature pertaining to the study is presented. Chapter III focuses on the methodology, instrument, participants, and data collection. Chapter IV provides data analysis and findings. In Chapter V, discussion, reflections, and conclusions of the study are presented.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

A review of literature has produced major categories which require analysis for understanding the results and implications of the findings obtained. This review of vocational rehabilitation literature is organized to serve several purposes. It provides:

1. general aspects of rehabilitation services in Brazil,
2. medical rehabilitation in Brazil,
3. vocational rehabilitation in Brazil,
4. eligibility requirements for vocational rehabilitation in Brazil,
5. governmental and non-governmental responsibilities for vocational rehabilitation in Brazil,
6. legislative policies through INPS in Brazil,
7. vocational training in Brazil,
8. job placement in Brazil,
9. prevention of discrimination against disabled workers in Brazil, and
10. findings from the literature on vocational rehabilitation in Brazil.

General Aspects of Rehabilitation Services

Legislation on Rehabilitation

In Brazil, the general social insurance regulations approved by Decree 60, 501/1967 (articles 127-131) provide for vocational rehabilitation and orthotic/prosthetic care for physically and mentally disabled persons. Industrial

accident insurance has also been incorporated into the general social insurance system as executed by the National Social Insurance Institute; consequently, the rehabilitation of victims of industrial accidents are included in these programs.

Eligibility Requirements

Rehabilitation services are provided under social security, and eligibility for the service is restricted to beneficiaries of the schemes. Eligibility includes only those who have contributed to the scheme for which their employer pays a contribution. In addition, preference for rehabilitation services is given to those between 18 and 40 years of age.

Registration of the Disabled

Like many countries reviewed by the United Nations (1976), Brazil does not keep a general national register of all disabled persons. At the time of the United Nations study, only Uganda and Zambia had established national disablement registers in 1965 and 1968, respectively; however, these registers did not fully cover the disabled population of these countries in 1970.

Right to Appeal

In Brazil persons denied rehabilitation services by laws and regulations may appeal to two different bodies under the provisions laid down in the General Social Insurance Regulations. The first body is the Social Insurance Appeals Board which operates in each state and the federal district and is comprised of two governmental representatives, one of the insured population and one of the employers. The second body is the Social Insurance Appeals Council comprised of nine governmental representatives, four employee representatives, and four representatives of the employers.

Coordination of Rehabilitation Services

The means of achieving coordination between different governmental agencies responsible for various aspects of rehabilitation is through a national rehabilitation council, statutory bodies created by law. Its members include representatives of both voluntary organizations and governmental departments and agencies which are responsible for providing rehabilitation services, including individual rehabilitation specialists.

Medical Rehabilitation in Brazil

Provisions of Medical Rehabilitation Services

Medical rehabilitation services in Brazil began as an extension of medical treatment. Brazil has basic facilities for medical or surgical treatment in cases of disability arising from injury or deformity. Provisions are made for physiotherapy, occupational, and speech therapy are also available. Brazil also provides for prosthetic and orthotic appliances. To the extent they are provided under federal sources, medical rehabilitation services in Brazil are comprehensive services.

Eligibility requirements. With regard to legal provisions concerning eligibility for medical rehabilitation services, these services are available to all citizens.

The following are some problems of medical rehabilitation in Brazil.

1. The industrial injury or an injury that diminishes working capacity is the part of rehabilitation which is given priority in Brazil. This type of injury is more prevalent among the poorer classes. Since these are precisely the classes which are socially most affected by disability, elimination of charges to a patient in the field of rehabilitation is a legitimate objective which has not yet been accomplished in Brazil.
2. Another barrier to medical rehabilitation services in Brazil is that there are locations of the country with inadequate services, regions of the country where it has not been possible as yet to

provide any services whatsoever. Another problem is that the service area is so overloaded that long waiting lists may make it impossible to provide services during the early stages of disability and thus to achieve the optimum results from treatment.

Governmental Agencies Responsible for Medical Rehabilitation

Brazil has given central responsibility for medical rehabilitation services to the Ministry of Social Insurance and Assistance (MPAS) which has a special rehabilitation advisory service. Regarding state levels of administration, decentralization of rehabilitation services was necessary in Brazil due to the country's size and population density.

Vocational Rehabilitation

Legal Provisions for Vocational Rehabilitation

Brazil has administrative provisions for rehabilitation services for disabled persons, and respective laws and regulations include vocational rehabilitation services. In Brazil, basic vocational rehabilitation services include vocational training (and retraining), vocational guidance, and job placement in either competitive employment or sheltered workshops. For example, the following services are provided in Brazil: guidance, orientation services, individual evaluation, and vocational assessment of the disabled person. The service also covers psychological testing, counseling services, work induction, and the selection of appropriate training courses. In Brazil, for example, vocational assessment and guidance and work preparation for the disabled are available through short-term courses given at industrial rehabilitation units. In Brazil, the Vocational Rehabilitation Act (Order 3, SPS 20, 1975; and SPS 5, 1980) gives an outline of evaluation and work adjustment services; these include, among other provisions:

1. preliminary diagnostic study to determine the employment handicap and needed services;
2. diagnostic study of pertinent medical, psychological, and vocational aspects; and
3. services to appraise an individual's patterns of work behavior and ability to acquire occupational skills. (ILO, 1982)

Brazil offers specialized placement services for the disabled within the framework of the state employment service. The country is also developing systems of cooperatives for the disabled providing a wide range of employment opportunity for large numbers of physically and mentally handicapped persons. In addition, with restrictions, Brazil provides funds for a person to develop his/her own business.

Sheltered workshop facilities are available for severely disabled individuals and for those requiring a special transitional rehabilitation period under protective conditions. The important criterion is that these persons are unable to accept employment under ordinary competitive conditions but are nevertheless capable of carrying out work of a remunerative as distinct from a diversionary nature.

Eligibility Requirements for Vocational Rehabilitation in Brazil

The great majority of the vocational rehabilitation facilities and services is the result of public laws or other issuances of competent governmental authorities. Such statutes are decrees or regulations which contain a statement of the right of handicapped persons to receive vocational rehabilitation services. The stipulation is general followed by the conditions of eligibility. In Brazil, a national commission for rehabilitation was created in 1961 by legislation which stipulated that the commission should implement a complete program of rehabilitation services for those disabled through work accident or illness. These

national legislation contains a formal vocational rehabilitation rights' provision as a benefit under health and disability insurance.

The Vocational Rehabilitation Act in Brazil reports restrictions in terms of age, generally a limitation to handicapped persons who have reached school-leaving age (excepting pre-vocational training of handicapped children), and in some cases there is an upper-age limit of 40 years.

In Brazil, as in the majority of countries, it is not an easy task to make a clear distinction between vocational rehabilitation services which are provided under decree and vocational rehabilitation services which are offered by independent providers. Vocational rehabilitation is made available as a general community service, for instance, under the laws of state education departments, health service departments, labor and industry departments. For example, certain state government departments provide coordination for multiplicity of agencies, public and private procuring services on behalf of handicapped persons.

Rehabilitation units, industrial and occupational therapy services, and workshop facilities are attached to public hospital or private rehabilitation institutions in which government monies support vocational rehabilitation activities of private organizations in part.

In Brazil vocational rehabilitation services are also a part of the service programs of a wide range of independent voluntary organizations, including the following:

1. private, non-profit agencies and foundations, often organized along disability category lines, which operate rehabilitation facilities and workshops, carry out research and furnish services for the disabled persons with whom they are primarily concerned. These include organizations serving the blind, the deaf, and the mentally retarded (especially children). In Brazil, in addition, we find a number of specialized agencies for various physical impairments and also for specific mental, psychological, and social disorders. Some of these voluntary organizations are

sponsored by parents of disabled persons, by donations, and by religious denominations (e.g., the Association for Parents of Disabled Children--APAE);

2. university hospitals, institutes of physical medicine and rehabilitation, and other research-related institutions which provide vocational rehabilitation services as part of medical therapy and, as a follow-up to it, for example--in case of occupational diseases and accidents such as the State University of Sao Paulo;
3. private organizations such as the Association of Assistance for Disabled Children (AACD) in San Paulo; and
4. vocational rehabilitation services provided under the National Social Insurance Institute (INPS) which is the concern of this study.

Vocational rehabilitation services provided under the above types correspond to the range of such services specified under public law for vocational rehabilitation services. They cover counseling, guidance, and placement services; training; and sheltered workshop activities. Some private agencies established special criteria for serving their clientele, including financial charges; in addition, they tend to specialize in the provision of rehabilitation activities, but the services as such follow professional standards quite equivalent to those clauses in public law.

Governmental and Non-governmental Responsibility for Vocational Rehabilitation in Brazil

In Brazil, administrative arrangements for the operation and supervision of vocational rehabilitation services on the national as well as regional, state, or local levels, are under the control of the National Social Insurance Institute (INPS) schema. As an autonomous entity of the Ministry of Social Insurance and Assistance (MPAS), it supervises vocational rehabilitation for work accidents and diseases acquired at work. Vocational rehabilitation for developmental disabilities (such as mental retardation, developmental/physical disabilities, as

examples) are connected with schooling programs under the direction of education ministries.

Brazil is federally divided into 26 states, and there is a parallel between field branches (state and local) of central government agencies and the offices of state or municipal community authorities. National departments exercise primary administrative supervision on the basis of structures and dominant financial participation. Voluntary organizations are actively involved in vocational rehabilitation, particularly in relation to services for specific groups of disabled persons such as the blind, deaf, mentally retarded, cerebral palsy, etc. Often these organizations operate independently without direct governmental control. In many cases, however, financial support is provided by the government. Numerous charitable organizations have developed out of mutual support activities carried out by parents' groups (e.g., parents of retarded children) and often make valuable financial contributions. Some private organizations have established schools and training centers; others founded specialized clinics, as an example, parents' groups of retarded children. In 1980, it was estimated that there were more than 1000 vocational rehabilitation centers in Brazil (INPS, 1980).

Legislative Policies Through INPS in Brazil

Eligibility Criteria Through the INPS

Disabled persons entitled to vocational rehabilitation programs through the National Social Insurance Institute 'INPS' are defined as those whose working capacity has been reduced through illness or accident at work and who are unable to exercise their normal occupation or activity. There is an upper age limit of 40 years of age.

**Vocational Rehabilitative
Legislative Policies**

Vocational rehabilitation and placement services offered through the National Social Insurance Institute (INPS) in Brazil are provided under the following legislative provisions:

1. Orders SPS-20 (1975) and SPS-5 (1980) which deal with vocational rehabilitation;
2. Decree 77.077 (1976) which is a consolidated text of the social welfare acts relating to vocational rehabilitation;
3. Decree 83080 (1979) which provides for social welfare benefits concerning vocational rehabilitation; and
4. Article 212 of the National Social Insurance Institute; Decree 72.771 (September 6, 1973) was created to promote employment opportunities for disabled persons. It requires that enterprises vinculated to the National Social Insurance Institute (INPS) employing 20 or more workers must reserve from two to five percent of available job openings for vocationally rehabilitated clients from the INPS, referred by the 19 state vocational rehabilitation centers in Brazil. (Ministry of Social Insurance and Assistance—MPAS, 1984)

Two further directives provide for coordination among vocational rehabilitation, medical care, and occupational accident policies (ILO, 1982):

1. eligibility for vocational rehabilitation services through INPS: disabled people entitled to vocational rehabilitation programs are defined as those whose working capacity has been reduced through illness or accident at work and who are unable to exercise their normal occupation or activity; and
2. vocational rehabilitation programs: under legislative provisions, social welfare service is available through the INPS. The programs developed in the state vocational rehabilitation centers include medical, psychological, and vocational assessment of the disabled as well as placement, employment, and follow-up services. They are carried out by a multidisciplinary team including physicians, social workers, psychologists, physiotherapists, occupational therapists, speech therapists, instructional trades and crafts instructors, basic education, and technicians in orthopedics and prosthetics.

Financial Assistance Through INPS

Disabled individuals are entitled to social insurance or social assistance payments and participation in vocational rehabilitation programs will not affect the payment of such benefits.

Vocational Training in Brazil

It is known that in a large number of countries, vocational training for the disabled is provided through more than one institutional arrangement. The multiplicity depends, to be sure, on a number of cultural, social, and political factors, among them the resources available in a particular country, the diversification of educational and training systems, and general labor market conditions (United Nations, 1983; ILO, 1985).

Brazil is among countries (Belgium, Canada, Finland, Greece, etc.) which have undertaken to integrate disabled persons as much as possible into the general system of vocational education, vocational training, and employment placement. Special facilities tend to be limited to services for severely handicapped persons and for very specialized training programs. Brazil, like the other above-mentioned countries, emphasizes the principle of normalization which means all existing training facilities are available for education and training of the handicapped. Training opportunities for disabled persons in the Brazilian scheme, whereby the disabled, depending on their degree of disablement, can be trained under the normal nongovernmental training scheme (i.e., under an apprenticeship school and technical above-apprenticeship level schools) such as the following vocational training schools:

1. SENAI (Marcel Brib School in Recife, Brazil) which provides apprenticeship courses in 12 crafts, mainly in general engineering, motor engineering, electrical and wood-working fields. The age range is 14 and 18 and the educational standard completion of primary education. In addition to these two year courses there are courses for adults in the evenings who have no

previous experience, as well as short improvement courses for those who have. The disabled can be admitted to any course for which they fulfill the conditions. The courses are in considerable demand; and

2. SENAC (Joseph Tubor School in Recife, Brazil) was first established in 1946 on the same principles as SENAI, to provide training for commercial and service occupations. SENAC offers courses for about 90 different occupations and through on-the-job training courses in large commercial enterprises. As an example, with the expansion of tourism in Brazil and the objective of attracting tourists from abroad by offering them accommodations with internationally acceptable standards, the training of hotel and restaurant personnel has become a priority endeavor. Thus SENAC operates its own restaurants to train cooks, waiters, and bartenders.

Brazil, like Belgium, Colombia, Finland, Greece, Iran, Israel, and Sri Lanka, uses apprenticeships and other employer-supervised training programs to serve the handicapped, often with financial and advisory support of governmental rehabilitation and social service agencies (United Nations, 1977).

Job Placement in Brazil

According to the United Nations (1977) study on legislation and administration of rehabilitation services for disabled persons, the majority of the countries reviewed have some arrangements for the placement of handicapped persons in the ordinary labor force, but only about half of the countries apply the force of law to these measures by ordering employers to accept and retain a certain number or percentage of handicapped persons among their staffs. No compulsory quota, scheme, or job allocations exist in Brazil, Argentina, Australia, Greece, the United States of America, etc. Brazil goes further when it maintains that "statutory pressures are unnecessary since the desire of employers to hire well-trained individuals may give rehabilitated disabled persons an advantage" (United Nations, 1977, p. 18).

In Brazil, as well as in countries such as Belgium, Bulgaria, Burma, Czechoslovakia, Egypt, etc., the law states that establishments above a certain

size must accept a fixed proportion of handicapped employees. The percentage may range from two to five percent, and the quota may be reviewed and adjusted each year or periodically (United Nations, 1984). It seems that such legislation is not being enforced in Brazil.

Placement services units for the handicapped persons in Brazil exist within the structure of social security schemes.

Prevention of Discrimination Against Disabled Workers in Brazil

In many countries publicity campaigns are being conducted to encourage the employment of disabled people and inform employers and the general public about the possibilities of resettling disabled persons through appropriate measures. In countries such as for example, Canada, the Federal Republic of Germany and the United States of America, these campaigns are based on a positive approach and the demonstration that handicapped persons make good and productive employees--if they are placed appropriately. Such slogans as "It is not what a person has lost which counts, but what abilities he has left," "Everyone is handicapped," and "It is ability which is important, not disability" encourage employers to hire handicapped persons for sound business reasons as well as humanitarian ones. Considerable progress has been made on this basis (United Nations, 1983). Even though such campaigns exist in those countries as well as in Brazil, it seems that the impact on employers' attitudes are still not making the desired impact (ILO, 1984).

In Brazil, sometimes social security systems or invalidity insurance programs sponsor publicity campaigns. Voluntary agencies of and for the handicapped also conduct educational and promotional activities in the employment field. Another way of promoting employment opportunities for the disabled is through organized disabled self-advocacy groups, which are politically

well organized groups, that advocate their rights and economic integration into society. We can cite, for example, the Movement for the Rights of Disabled Persons in San Paulo.

Evaluation, Research, and Statistics in Brazil

General Overview

Brazil has undertaken some kind of evaluation of the results of vocational rehabilitation services and programs. For example, a full-scale review of national programs in vocational rehabilitation, a comprehensive follow-up of handicapped; school-leavers, follow-up studies on the placement of the disabled, cost-benefit analyses, vocational rehabilitation experts from the International Labor Organization assisted in reviewing and evaluating existing services and facilities in Brazil (ILO, 1967, 1982).

Research activities in the field of vocational rehabilitation are conducted in Brazil by bodies such as university departments or faculties, government departments, national commissions or research institutes for rehabilitation, national associations or non-governmental organizations, rehabilitation centers and institutions, and private individuals.

Although research is conducted on a wide variety of vocational rehabilitation subjects, there seems to be an increasing awareness in Brazil of the importance of basic research--research that can give practical solutions to the existing needs and problems in the field of vocational rehabilitation: job opportunities for the disabled, methods and techniques of vocational assessment and training services, techniques to improve the motivation and work habits of rehabilitees, job adaptation and ergonomics related to handicapped workers, vocational rehabilitation of the mentally handicapped, cooperative schemes for disabled workers, problems of alcoholism and drug addiction, and the like.

Statistics

Brazil has developed some statistical data concerning recipients of vocational rehabilitation services. Most of the information is based on research activities or limited investigations covering particular aspects of services and programs; for instance, the number of disabled persons taking or completing courses at special institutions and rehabilitation centers, the number of disabled workers employed, the number of cases dealt with by insurance institutions and social security agencies (ILO, 1967, 1982; Ministry of Social Insurance and Assistance, 1981).

The International Year of Disabled Persons (1981)

The momentum of interest and action engendered by the International Year of Disabled Persons (IYDP) appears to have been maintained in Brazil. We saw the results of the International Year on the awakening of the public conscience to problems faced by disabled people, but provisions were made in Brazil for the expansion of existing services and the development of new programs in the overall field of rehabilitation. The World Program of Action Concerning Disabled Persons, associated with the special year and its designation by the United Nations of the years 1983-92 as the Decade of Disabled Persons, have done much to sustain and reinforce those positive trends (ILO, 1985).

It is useful to review the principal objectives of the IYDP with its theme of "full participation and equality, helping disabled persons in their physical and psychological adjustment to society" (International Rehabilitation, 1984).

Summary of the Findings on Vocational Rehabilitation Studies in Brazil

Research studies on the vocational rehabilitation centers in Brazil are scanty. Three studies were found through the review of literature. The first was

conducted by Phillip (1967) with the support of the International Labor Office. The researcher conducted a survey of the vocational rehabilitation and placement of disabled persons in three Brazilian cities, Porto Alegre, Recife, and San Paulo. The study's purposes were to:

1. determine the scope of the problem of disability and ascertain what resources were available to cope with it;
2. advise vocational rehabilitation personnel with their tasks of planning, establishing, and developing a national vocational rehabilitation program;
3. advise vocational rehabilitation personnel on the organization and coordination of vocational guidance, vocational assessment, placement, and follow-up activities;
4. advise vocational rehabilitation personnel on the establishment of rehabilitation and training centers for the disabled;
5. train necessary staff; and
6. work in close consultation with the World Health Organization (WHO) consultant in medical rehabilitation.

The findings of Phillip's study were the following:

1. It was not possible to make any accurate estimate of the numbers of persons of working age who were physically or mentally handicapped as no statistics designed to give this information were available.
2. Twelve laws and regulations were considered to have an important bearing on a disabled person's prospects of securing or retaining employment.
3. The study found out that there was a lack of coordination between many services operating in the field of vocational rehabilitation in Brazil.
4. In a situation where unskilled labor is abundant and skilled labor is scarce, there is a need to better train disabled persons to compete for job placement.

Phillip's recommendations which were relevant to the present study are:

1. a change in legislation to benefit disabled persons,
2. vocational evaluation conducted to assess the training needs of disabled persons,

3. a better coordination of vocational training services implemented to serve disabled persons, and
4. vocational rehabilitation workers performing the roles of job placement rehabilitation workers should receive training to upgrade their vocational placement skills.

The above findings seem to lend credence to the stress that needs to be placed on the need to examine social policy measures and provide continuing educational training for vocational rehabilitation workers in Brazil.

The second research found was conducted by the United Nations in 1976 with joint support from the International Labor Office and the World Health Organization. The purpose of the study was to assess the legislation, organization, and administration of rehabilitation services for the disabled in Brazil and 48 other countries. The study utilized a questionnaire sent to officials of various governmental agencies in 62 countries. Replies were received from 49 countries. Instead of using quantitative comparisons between countries, the data were analyzed to provide a general picture of the ways in which countries were approaching rehabilitation, to distinguish patterns of approach where these were described, and to see whether it was possible to anticipate trends in rehabilitation practices. The findings indicated a deep concern for the further development of rehabilitation services and reflect the situation as it existed in 1970-71.

The third research found was conducted in 1982 by members of the International Labor Office. The researchers examined vocational rehabilitation services for disabled persons in order to gather documentation on legislation, experience, and research in the area of vocational rehabilitation of the physically and mentally handicapped in member countries. The methodology utilized to conduct the study was to submit a questionnaire to member governments requesting information on their national legislative provisions for

the vocational rehabilitation of disabled persons, covering vocational counseling, assessment, training, and placement in open or sheltered employment. Particular mention was to be made of specific measures aimed at creating job opportunities for disabled persons, including "quota schemes," specially designated jobs or reserved employment, incentive schemes, etc. In the absence of statutory provisions, a brief description of functioning national vocational rehabilitation services was requested. In addition, information was sought on current and planned research in the field of vocational rehabilitation for disabled persons. A total of 68 questionnaires were returned with complete data from all regions of the world.

Chapter Summary

Literature was reviewed from three perspectives. First, general aspects, including medical, vocational, eligibility, governmental, and non-governmental responsibilities dealing with vocational rehabilitation in Brazil were reviewed. Second, legislative policies, vocational training, job placement, prevention of discrimination, and the impact of the 1981 International year of Disabled Persons in Brazil were also reviewed in terms of their importance to creation and/or enforcement of employment legislative policies to promote job opportunities for disabled persons. Third, a summary of findings related to vocational rehabilitation research conducted in Brazil was reviewed in terms of its effect, importance to program planning, implementation, continuing education, and socioeconomic integration of disabled persons. This review indicates the limited, almost non-existent research studies dealing with vocational rehabilitation services in Brazil. The need for such research is beyond question.

CHAPTER III

METHODOLOGY

Introduction

Rehabilitation participants at the Recife Vocational Rehabilitation Service (INPS) were surveyed regarding their perceptions of (1) service components' effectiveness, (2) use of legislative policies, (3) importance of hypothetical legislative policies, (4) problems and constraints of vocational rehabilitation centers, (5) training needs in job placement skills, (6) interest in participating in vocational rehabilitation courses, and (7) importance of changes needed to increase the participation of rehabilitation workers in job placement activities.

Data collection procedures included the distribution of questionnaires, site visits, analysis of documents, and personal interviews. This chapter describes the (1) statement of the problem, (2) variables of the study, (3) research questions, (4) research hypotheses, (5) research setting, (6) research participants, (7) research design, (8) data collection procedures, (9) instrumentation, (10) revision of the instrument, (11) translation, (12) treatment of the data, and (13) a brief summary.

Statement of the Problem

Due to the nature of the research and the context in which the state agency vocational rehabilitation worker functions, coupled with problems encountered in vocational rehabilitation, lack and/or non-enforcement of legislative measures, and changes that need to be implemented for the successful outcome of job placement of disabled persons, it seems that no well-defined competencies or role models have been developed by the Recife Vocational

Rehabilitation Center to be used as a guide for development of professional training or a continuing education program. Creation of a professional development core model could result in training that would be appropriate and useful with a number of purposes other than information dissemination. The training could perhaps be used for continuing education credit and the creation of a vocational rehabilitation committee to be active in the enforcement of rehabilitation legislative policy for the employment of disabled persons in competitive labor markets, as well as other purposes.

The purpose of this investigation was to examine the opinions of vocational rehabilitation workers, administrators, coordinators, and supervising staff members of the Recife Vocational Rehabilitation Center (INPS) toward the (1) effectiveness of service components, (2) use of vocational rehabilitation legislative policies, (3) importance of hypothetical vocational rehabilitation legislative policies, (4) seriousness of problems encountered in vocational rehabilitation, (5) training needs in job placement skills for rehabilitation workers, (6) interest of respondents to participate in rehabilitation courses, and (7) importance of changes needed to increase the participation of rehabilitation workers in job placement activities. The study was directed toward securing the perceptions of each respondent to generate data for reasons other than accountability, such as program improvement, program expansion, job placement goals, policy planning, development of training programs for rehabilitation staff members, and implementation of solutions as a reflection of the analysis of variables examined in this study.

Variables of the Study

There were seven outcomes (dependent variables) and four predictors (independent variables) included in this research. The outcomes were

(1) effectiveness of service components, (2) use of vocational rehabilitation legislative policies, (3) importance of hypothetical vocational rehabilitation legislative policies, (4) seriousness of problems encountered, (5) training needs in job placement skills, (6) interest in participating in professional rehabilitation development courses, and (7) importance of changes needed at the Recife Vocational Rehabilitation Center. The predictors were (1) status of respondents, (2) age, (3) gender, and (4) years of experience.

Dependent Variables

Effectiveness of service components. Effectiveness of vocational rehabilitation services is the level of performance of the services at the Recife Center as perceived by vocational rehabilitation workers, administrators, coordinators, and supervising staff members, rated on a five-point Likert scale.

Use of legislative measure. Use of legislative measure is the perception of rehabilitation workers, administrators, coordinators, and supervisors as to whether or not a legislative measure is used. It was measured on a two-point nominal scale (one = yes, two = no).

Importance of hypothetical legislative measures. Importance of hypothetical legislative measure is the level of performance of the hypothetical measures at the Recife Center as perceived by rehabilitation workers, administrators, coordinators and supervising staff members and rated on a five-point Likert scale.

Seriousness of problems. Seriousness of vocational rehabilitation problems is the perception of rehabilitation workers, administrators, coordinators, and supervising staff members as to whether or not a problem is encountered. It was measured on a six-point Likert scale.

Training needs in job placement skills. Need in job placement training is the degree of need in such training for vocational rehabilitation as perceived by rehabilitation workers, administrators, coordinators, and supervising staff members and was measured on a Likert scale.

Interest in hypothetical vocational rehabilitation training courses. Interest in hypothetical vocational rehabilitation training course is the perception of rehabilitation workers, administrators, coordinators, and supervising staff members as to whether or not such a course is perceived as interested for professional development. It was measured on a six-point Likert scale.

Importance of changes. Importance of vocational rehabilitation changes are the degree of importance of vocational rehabilitation changes to improve job placement outcomes as perceived by rehabilitation workers, administrators, coordinators, and supervising staff members and was measured on a five-point Likert scale.

Independent Variables

Status of respondents. Status of respondents is the classification of respondents according to client, rehabilitation worker, administrator, policy maker, or other personnel staff. The status was measured on a five-point nominal scale (one = client, two = rehabilitation worker, three = administrator, four = policy maker, five = other personnel staff). The data were treated as discrete.

Years of experience. Years of experience is the category showing period of time respondents had worked (one = 1-4 years, two = 5-9 years, three = 10-14 years, four = 15-19 years, five = 20-24 years). The data were treated as discrete.

Gender. Gender was measured with a two-point nominal scale (one = male, two = female). Data were treated as discrete.

Age. Age was measured with a four-point nominal scale (one = 17-24 years, two = 25-44 years, three = 45-64 years, four = above 65 years). Data were treated as discrete.

Marital status. Marital status was measured with a three-point nominal scale (one = married, two = single, three = other). Data were treated as discrete.

Academic level. Academic level was measured with an eight-point nominal scale (one = illiterate, two = elementary school, three = junior high school, four = high school, five = Bachelor's degree, six = Master's degree, seven = doctoral degree, eight = other). Data were treated as discrete.

Field of study. Field of study is the area of education in which respondents graduated: social worker, physician, psychologist, sociologist, rehabilitation counselor, or other.

Research Questions

Data obtained were used to answer the following research questions.

1. To what extent are vocational rehabilitation services performed at Recife Vocational Rehabilitation Center perceived as being effective by vocational rehabilitation workers, administrators, coordinators, and supervising staff members?
2. What legislative policies have been used in Brazil for the provision of vocational rehabilitation services for work-injured adults in the opinion of vocational rehabilitation workers, administrators, coordinators, and supervising staff members at the Recife Vocational Rehabilitation Center?
3. The Brazilian government has not yet adopted these policies. If available, which of them would be important in creating job opportunities for disabled persons, in the perceptions of rehabilitation workers, administrators, coordinators, and supervising staff members?

4. How serious do vocational rehabilitation workers, administrators, and supervising staff members perceive problems to be at the Recife Vocational Rehabilitation Center?
5. In what job placement competencies do vocational rehabilitation workers, administrators, coordinators, and supervising staff members presently working with work-injured persons at the Recife Vocational Rehabilitation Center feel a need for professional development?
6. If training courses were available on an inservice basis, how much interest would vocational rehabilitation workers, administrators, coordinators, and supervising staff members have in participating in selected professional development practices?
7. What are the perceptions of vocational rehabilitation workers, administrators, coordinators, and supervising staff members at the Recife Vocational Rehabilitation Center with regard to the importance of changes needed to increase the participation of vocational rehabilitation workers in the job placement activities of their clients into competitive labor markets?

Hypotheses

In this study, six null hypotheses were tested.

- H₁ There will be no significant differences between rehabilitation workers and administrative staff members regarding their perceptions in terms of the effectiveness of vocational rehabilitation service components provided at the Recife Vocational Rehabilitation Center
- H₂ There will be no significant differences between rehabilitation workers and administrative staff members regarding their perceptions in terms of the importance of hypothetical vocational rehabilitation legislative policies.
- H₃ There will be no significant differences between rehabilitation workers and administrative staff members regarding their perceptions in terms of seriousness of problems faced by the Recife Vocational Rehabilitation Center.
- H₄ There will be no significant differences between rehabilitation workers and administrative staff members regarding their perceptions in terms of training needs in job placement competencies.
- H₅ There will be no significant differences between rehabilitation workers and administrative staff members regarding their perceptions in terms of interest in participating in vocational rehabilitation courses.

- H₆ There will be no significant differences between rehabilitation workers and administrative staff members regarding their perceptions in terms of the importance of changes needed to increase the participation of rehabilitation workers in job placement activities.

The Setting

The National Social Insurance Institute (INPS), a federal department under the Ministry of Social Insurance and Assistance (MPAS) in Brazil, has 30 years of experience in providing a comprehensive rehabilitation program to secured adults whose working capacity has been reduced through illness or accident at work and who are unable to participate in their normal occupations and activities. The INPS has so far established 19 state comprehensive vocational rehabilitation centers located in those Brazilian states with the highest levels of disability.

Through its state vocational rehabilitation services, the INPS is ready to:

- provide services to any secured employee following an injury or disease at work that necessitates learning new job skills
- provide physiological, psychological, social, and vocational assessment
- provide medical, psychological, and social treatment
- provide vocational training and career formation
- assist with job placement
- provide follow-up services

The vocational rehabilitation centers are in five different geographic regions of Brazil:

1. north region,
2. northeast region,
3. central region,
4. southeast region, and
5. south region.

Recife in the state of Pernambuco in the northeast region of Brazil was selected for the research. The city of Recife was the most highly developed in the region with an estimated population of 1.3 million inhabitants. The research site was chosen for several reasons.

Recife is a comprehensive vocational rehabilitation center located in a strategic region of the country. The northeast has an estimated population of over 43 million people and has an income that is a little over one-third of that in the southeast part of the country. It has the country's highest unemployment rate and lowest income. The land suffers from prolonged drought and sudden catastrophic floods, and it has been the victim of successive booms and busts in the Brazilian economy in sugar, cotton, and cocoa. There are other aspects of this region that differentiate it from the southeast part of Brazil, which includes the country's highest infant mortality, poverty, illiteracy, and acute lack of medical care, education, and rehabilitation facilities. Since this region has many social problems to be solved, disabled persons are in need of effective services to increase their opportunities for job placement.

Recife is the capital city of the state of Pernambuco. Appendix G includes a map of Brazil showing the contours of her various states. The state of Pernambuco has been shaded on the map for rapid identification. Appendix H includes a map of the state of Pernambuco showing Recife.

Research Participants

The surveyed respondents included policy makers at the National Social Insurance Institute (INPS) supervisors, building administrators, coordinators, rehabilitation workers, and clients of the Recife Vocational Rehabilitation Center.

As representative policy makers, the general coordinator of vocational rehabilitation, the communicator specialist of social services, and director of training in the National Social Insurance Institute (INPS) at Pernambuco State were included because an examination of perceptions including those of administrators at legislative levels as well as administrators, professionals, and clients of Recife Vocational Rehabilitation Center would provide a broader analysis of the present situation of vocational rehabilitation.

Those surveyed participants of 68 members of the five distinct groups (45 questionnaires and 23 interviews) were selected to participate in the research. Fifty-five questionnaires were distributed to (1) rehabilitation workers (n = 41), (2) building administrators (n = 4), (3) coordinators (n = 3), and (4) supervising staff members (n = 7). Three policy makers representing the INPS at the state level and two clients were interviewed, utilizing a guideline (see Appendix F). After the questionnaires were returned, 18 respondents, representing 40% of the subjects, were personally interviewed by the researcher. In addition, five persons (three staff at regional superintendency of INPS and two ex-clients) were also interviewed by the research.

Research Design

This study was carried out using (1) descriptive analysis with distribution of a questionnaire and (2) qualitative field work research procedures that emphasize description, inductive analysis, and the study of people's perceptions through personal interview with the research participants. It was believed that analysis is best done using quantitative and qualitative data; moreover, inductive and contextual meaning are crucial in understanding human behaviors. To better understand the theoretical frameworks, both views were presented.

Descriptive Research

According to Sax (1968), descriptive research involves the collection of data for the purpose of describing conditions as they exist. Armore (1966) affirms that descriptive statistics provide methods to organize, summarize, and describe sets of data which represent the population. The open-ended portion of the questionnaire where the respondents commented about their perceptions of vocational rehabilitation and were subjected to descriptive analysis in order to determine whether there is evidence of recurring statements in the data.

Researchers such as Ary et al. (1972) provide the base for descriptive studies when they assert that descriptive research studies are designed to obtain information concerning the current status of the phenomena. According to Van Dalen and Meyer (1962), one of the objectives of a descriptive study is to determine the nature of prevailing conditions, practices, and attitudes, seeking accurate descriptions of activities, objects, processes, and persons. In addition, Isaac and Michael (1971) say that descriptive studies can make contributions to the advancement of knowledge. The purposes of survey studies for the above researchers are to (1) collect detailed, factual information that describes existing phenomena; (2) identify problems and justify current conditions and practices; (3) make comparisons and evaluations; and (4) determine what others are doing with similar problems or situations and benefit from their experience in making future plans and decisions.

Qualitative Research Method

The qualitative research method is advocated by researchers such as Schatzman and Strauss (1973) and Bogdan and Biklen (1982). Bogdan and Biklen stated the following.

Educational research is changing. A field once dominated by measurement, operationalized definitions, variables, and empirical fact has had to make room for the research approach gaining in popularity, one that emphasizes inductive analysis, description, and the study of people's perceptions. . . . Partly because of education's historical link with measurement and experimental design, research in education has not been as quick to embrace the new wave of interest in qualitative methods, but dependence on qualitative methods for studying various educational issues is growing. One has to look at the funding patterns of government agencies and the recent programs of education research conventions to know that qualitative research in education has or will soon come of age. (xiii)

The following are the reasons for employing those qualitative methods.

1. The research is concerned with the context in which vocational rehabilitation and employment services have been implemented to disabled persons and attempts to portray their dimensions rather than a narrow focus. As qualitative researchers, Bogdan and Biklen (1982) feel, "Action can best be understood when it is observed in the setting in which it occurs" (p. 27).
2. The data to be collected will describe the perceptions and attitudes of vocational rehabilitation policy makers, personnel, and participants and are not easily handled by statistical procedures.
3. Qualitative field studies have a number of positive features. Mehan (1982) strongly recommends the qualitative research method.

Often when I complete reading a report of field research, I have a sense of presence, I feel as if I have been there. Furnished with rich details about the setting, I can often smell the smells and hear the noise. I find myself nodding my head in affirmation of the descriptions. (p. 15)

Data Collection Procedures

The process of collecting data was accomplished by four different methods: responses to questionnaires, personal interviews, site visit, and analysis of documents (see Table 3.1). A seven-part instrument was developed to identify and/or examine (1) service components' effectiveness, (2) legislative policies used, (3) legislative measures needed, (4) job placement training needs of rehabilitation workers, (5) problems encountered, (6) interest in participating in

Table 3.1
Methods of Data Collection

Questionnaires (N = 45)		Interviews (N = 23)	Site Visits (N = 3)	Documents (N = 5)
F	%			
Questionnaires Distributed	55	100.0	Three policy makers	Recife Vocational Rehabilitation Center
Questionnaires Returned	49	89.0 (of 55)	Two clients	INPS, Recife Headquarters
Unusable Questionnaires	10	8.1 (of 55)	18 questionnaire respondents	INPS, Recife Training Office
Usable Questionnaires	45	82.0 (of 55)		U.S. Documents Ministry of Social Insurance and Assistance (MPAS)
TOTALS USED:	45 surveys	23 interviews	3 site visits	5 document sources

vocational rehabilitation courses, and (7) changes needed. In addition, (1) in-country data collection and (2) a more detailed description of the instrument, description of the data, collection procedures used to answer research questions, description of the instrument follow.

Data Collection at Recife

Three procedures were used to collect data sought for this study. First, a letter was forwarded to the director of the Recife Vocational Rehabilitation Center, explaining the purpose and goals of the study. In addition, upon arriving in Recife, the researcher had a meeting with the director and vice-director in the director's office at the Center. Approval was given the researcher to administer the questionnaires.

Second, to facilitate the work of the researcher, three meetings were organized on different days and at different times for rehabilitation staff practitioners, coordinators, administrators, and supervisors. The purpose of these meetings was to provide an overview of vocational rehabilitation in the United States as well as to explain the goals of the research and need for accurate answers and to assist each rehabilitation respondent in completing the questionnaire. It seems that the presentations given by the researcher about vocational rehabilitation in the USA contributed for a more participatory approach, making respondents feeling an exchange of tasks. After the presentations, time was allowed for questions and answers so that rapport was achieved between the researcher and respondents. To assure the anonymity of respondents, the 55 questionnaires were handled to three key persons who delivered them to each respondent. All participants were advised that the information received would be held in the strictest confidence and no one would be identified by name in this study. Personal contacts were made to those who

failed to return the questionnaires on the designated dates. This procedure enabled the researcher to obtain returns from 49 questionnaires (89%) of the selected participants during the month of April, 1986.

In addition to the written questionnaire, personal interviews with 18 rehabilitation participants were conducted after the return of the questionnaires to further support the study. Interviews were either invited/volunteered or requested by the researcher. The purpose of these interviews was to examine in detail rehabilitation participants' perceptions and to describe as accurately as possible the current situation of vocational rehabilitation, including its value, problems, service components, and future measures for job creation. These items were viewed as they exist at Recife Vocational Rehabilitation Center in terms of its administration and the success of its job placement. The value of personal interviews with a sample of respondents ($n = 18$) lied in the degree to which they generated a better description and understanding of the problems associated with job placement in vocational rehabilitation. In order that each interviewee respond to basically the same questions, an interview guide sheet was structured (see Appendix F).

The researcher systematically kept a detailed written record of what was heard and observed. The interviews were taped with permission of the interviewees. The data collected were in the form of words rather than numbers. Subjects' identities remained confidential and no names were associated with individuals when reporting this study.

Documents

The data mentioned above were supplemented by other data such as Recife State Vocational Rehabilitation documents, records, and library publications.

Description of the Instrument

The questionnaire developed for this study is presented in Appendix D. It consists of seven parts (see Table 3.2).

Part I: Service Components

This section of the questionnaire was designed to obtain data regarding the type and effectiveness of service components offered at the Center. This segment contained 14 service component statements which may be needed by a rehabilitation center. The service component statements were presented in random order, and respondents were asked to rate each statement according to a five-point Likert scale. Subjects were requested to indicate the effectiveness of each service component statement for practitioners working with work-injured people. Each service component statement was rated from one (not provided) to five (extremely effective). The purpose of this part was to ascertain the perceptions of administrators, supervisors, coordinators, and rehabilitation workers concerning the effectiveness of the 14 service component statements selected for the study.

Part II: Legislative Measures

This segment of the questionnaire was developed by the researcher. It contained two parts.

Section 1. Subjects were requested to indicate the use of legislative measures. Each statement was rated one (yes, we have used it) or two (no, we have not used it). The purpose of this section was to ascertain the perceptions of respondents concerning the knowledge and use of the three legislative measures selected for the study.

Table 3.2
Instrumentation Parts Used in Data Collection

<u>Parts</u>	<u>Items</u>	<u>Data Collection</u>	<u>Data Analysis</u>	<u>Measure</u>	<u>Variable</u>
I	14 service components, effectiveness	From questionnaires using Likert scale	Total mean score, standard deviation, percentage	Effectiveness of service	Dependent
II	Section 1, three legislative measures use Section 2, nine hypothetical measures	From questionnaires, two-point nominal scale From questionnaires, five-point Likert scale	Frequency and percentage Total mean score, standard deviation, percentage	Use of legislative measures Importance of legislative measures	Dependent Dependent
III	25 problem statements, seriousness	From questionnaires using Likert scale	Total mean score, standard deviation, percentage	Seriousness of problem	Dependent
IV	10 job placement competency statements, training needs	From questionnaires using Likert scale	Total mean score, standard deviation, percentage	Needs in training	Dependent
V	13 hypothetical rehabilitation interests	From questionnaires using Likert scale	Total mean score, standard deviation, percentage	Interest in training	Dependent
VI	Seven change statements, importance	From questionnaires, Likert-type scale	Total mean score, standard deviation, frequency, percentage	Importance of change	Dependent
VII	Eight socio-demographic information	From questionnaires, descriptive purposes	Frequency, percentage	Descriptive purposes	Independent

Section 2. The purpose of this part was to determine respondents' perceptions of the importance of hypothetical legislative measures related to the content of policy development. This segment contained nine measures which could be implemented for the creation of job opportunities for disabled persons. Respondents were directed to rate the importance of each measure from one (not important) to five (very important).

Part III: Problems of Vocational Rehabilitation

In this section of the questionnaire, subjects were asked to indicate the seriousness of 25 problem statements by rating each according to a scale from zero (this problem does not exist in this service) to five (serious problem).

Part IV: Job Placement Training Needs

In this portion of the questionnaire, subjects were asked to indicate job placement training needs by rating each of the 10 competency statements. The purpose of this part was to determine job placement professional training needs of the respondents. In order to analyze the data, a score of one (no need) to five (very high need) was assigned to each response. This part of the questionnaire was developed by Morsh, Madden, and Christal (1961) and modified by Muthard and Salomone (1969). It was further modified by Matta (1985) and by the present researcher. The ranking scale was modified to ascertain the perception of subjects with respect to need in training in job placement.

Part V: Hypothetical Training Courses

The purpose of this section was to ascertain the interest respondents had in taking hypothetical professional development courses. This part related to the content of professional development. It determined interest in 13 professional

rehabilitation courses designed to improve competencies that subjects perceived as needing improvement. Subjects were directed to rate their interest levels on hypothetical training courses on a scale of zero (no interest; I am well trained) to six (extremely interested). This part of the questionnaire was an adapted version of an instrument developed by the Texas Rehabilitation Commission in 1980. It was based on competencies identified by Sink (1979) and utilized by Ostrowski (1983).

Part VI: Changes Needed

This part of the questionnaire consisted of one section. The purpose of this section was to determine the perceptions of subjects in relation to the importance of changes in vocational rehabilitation to increase professional involvement in vocational placement. Subjects were directed to indicate the importance of change statements by rating each of the seven change statements from one (not important) to five (very important).

Part VII: Personal and Professional Data

This part of the questionnaire contained 10 items to be checked by respondents: (1) professional category, (2) number of years in the profession, (3) gender, (4) age range, (5) region of the Center, (6) marital status, (7) educational level, (8) area of undergraduate study, (9) work conditions, and (10) occupation. The information collected was used for descriptive purposes in the study. In addition, the data related to the number of years of working experience, type of training, and age range served as independent variables in the analysis of responses.

Revision of the Instrument

A revision of the instrument was done to elicit suggestions for improvement and recommendations for modification. The survey was given to two Master's degree students at Michigan State University at the vocational rehabilitation program and to one instructor in the Office of Measurement and Quantitative Methods at MSU. The objective was to obtain feedback from those people the researcher gave the survey instrument. The aim, of course, was to revise the instrument on the basis of the suggestions received to clarify any ambiguities and help ensure content validity. The students did not make any suggestions, but those made by the instructor in measurement and quantitative methods were followed by the researcher.

Instrument Translation

After the translation of the instrument, it was verified by three Brazilian students at Michigan State University to obtain an estimation of the clarity and applicability of the instrument and to measure the approximate completion time. The changes that occurred as a result of this verification were made in parts I, III, and V.

Treatment of the Data

The 45 completed questionnaires were analyzed using descriptive statistics (mean and standard deviation) and frequencies. Responses to the survey items were placed on the instruments themselves. These data were coded and translated into computer programs using a Zenith computer. Data files were developed for analysis using the Microstatic Package (ECO Software, 1984) and tabulated. Further statistical analysis was conducted using an IBM 3000 micro-computer at the Michigan State University Computer Center using the Statistical Package for the Social Sciences (Nie, Bent, & Hull, 1975). The

qualitative information provided by personal interviews were analyzed to further support the quantitative data.

A one-way analysis of variance (ANOVA) was used to test significant differences between groups. There were 13 items related to effectiveness of service components, 9 items related to importance of hypothetical vocational rehabilitation legislative policies, 25 items related to seriousness of problems faced by the Recife Vocational Rehabilitation Center, 10 items related to training needs in job placement competencies, 13 items related to interest in participating in vocational rehabilitation courses, and 7 items related to importance of changes to increase participation of vocational rehabilitation workers in job placement activities. The level of significance for rejection of each null hypothesis was set at the .05 alpha level. The .05 level of significance is a commonly accepted one, according to Borg (1979). According to Walpole (1974), the ANOVA is a method of splitting the variance into more meaningful components that measure different sources of variation. This test was selected since it assumes variance to be roughly equal and because the researcher's hypotheses concerns the variability of sample means.

Summary of Description of Data Collection Procedures

1. interviews utilizing a guideline with three policy makers: (1) the general coordinator of vocational rehabilitation, (2) a specialist in communication, and (3) the director of training in the National Social Insurance Institute at the state level;
2. interviews with two Recife vocational rehabilitation building administrators;
3. interviews with two Recife vocational rehabilitation ex-clients;
4. interviews with three multidisciplinary vocational rehabilitation coordinators;
5. interviews with the placement specialist office coordinator;

6. statistical reports from the Ministry of Social Insurance and Assistance (MPAS);
7. written questionnaires completed by 33 vocational rehabilitation workers, three coordinators, three building administrators, and six supervisors;
8. interviews with a research sample of participants ($n = 18$), 40% of respondents of the questionnaire to further understand vocational rehabilitation and placement services;
9. site visits to Recife Vocational Rehabilitation Center, the National Social Insurance Institute state headquarters, and the training center office of the National Social Insurance Institute to observe the service components; and
10. analysis of secondary documents.

Summary

In Chapter III, the procedures involved in the research have been presented. This chapter is concerned with the participants, data analysis, research questions, research hypotheses, setting, research design, data collection procedures, description of the instrument, preparation and actual interview procedures used in the study, and treatment of the data.

Chapter IV contains the analysis of data, including a discussion of the results of the questionnaire and a descriptive report of on-site interviews.

CHAPTER IV

ANALYSIS OF THE DATA

Introduction

The purpose of the study was to determine, through responses and opinions of vocational rehabilitation workers, administrators, coordinators, and supervising staff members at the Recife Vocational Rehabilitation Center, the following:

1. To what extent are vocational rehabilitation services performed at Recife Vocational Rehabilitation Center perceived as being effective by vocational rehabilitation workers, administrators, coordinators, and supervising staff members?
2. What legislative policies have been used in Brazil for the provision of vocational rehabilitation services for industrially-injured adults in the opinions of vocational rehabilitation workers, administrators, coordinators, and supervising staff members at the Recife Vocational Rehabilitation Center?
3. The Brazilian government has not yet adopted these policies. If available, which of them would be important in creating job opportunities for disabled persons, in the perceptions of rehabilitation workers, administrators, coordinators, and supervising staff members?
4. How serious do vocational rehabilitation workers, administrators, coordinators, and supervising staff members perceive problems to be at the Recife Vocational Rehabilitation Center?
5. In what job placement competencies do vocational rehabilitation workers, administrators, coordinators, and supervising staff members presently working with industrially-injured workers at the Recife Vocational Rehabilitation Center feel a need for professional development?
6. If training courses were available on an inservice basis, how much interest would vocational rehabilitation workers, administrators, coordinators, and supervising staff members have in participating in selected professional development practices?

7. What are the perceptions of vocational rehabilitation workers, administrators, coordinators, and supervising staff members at the Recife Vocational Rehabilitation Center with regard to the importance of changes needed to increase the participation of vocational rehabilitation workers in the job placement activities of their clients into competitive labor markets?

This chapter presents an analysis of the Center participants' responses to a survey questionnaire and written responses to the survey instrument. The survey utilized a model based on Sperry (1978), the United Nations (1985), and Matta (1985). It was designed to (1) determine a purpose, (2) identify data needed, (3) design a data-gathering approach, (4) gather data, and (5) analyze and verify.

In this chapter, findings related to these purposes are reported in four sections. The first section reports analyses of the findings with respect to:

1. general findings of vocational rehabilitation service components and their levels of effectiveness in rank order (not provided/not effective to very effective) by computed mean scores and standard deviations,
2. general findings of vocational rehabilitation legislative policies and their levels of use in nominal order (yes, we use it; no, we don't use it) by computed mean scores and standard deviations,
3. general findings of hypothetical vocational rehabilitation legislative policies and their level of importance in rank order (not important to very important) by computed mean scores and standard deviations,
4. general findings of the problem statements and their level of seriousness in rank order (this problem does not exist at the Center to extremely serious problem) by computed mean scores and standard deviations,
5. general findings of the job placement competencies and their level of need in rank order (no need to very high need) by computed mean scores and standard deviations,
6. general findings of hypothetical vocational rehabilitation professional courses and their level of interest in rank order (not interested; I'm too well trained to very interested) by computed mean scores and standard deviations, and

7. general findings of hypothetical changes to increase the participation of vocational rehabilitation workers in job placement activities and their level of importance in rank order (not important to very important) by computed mean scores and standard deviations.

The second section describes the vocational rehabilitation workers, administrators, coordinators, and supervising staff members of Recife Vocational Rehabilitation Center who participated in the study in terms of their demographic characteristics.

The third section describes the six research hypotheses to determine if there were significant differences in perceptions between rehabilitation workers (Group 1) and a group formed by vocational rehabilitation administrative personnel (Group 2). Group 2 was formed by the three vocational rehabilitation administrators, three vocational rehabilitation coordinators, and six vocational rehabilitation supervisors of the Recife Vocational Rehabilitation Center.

The fourth section reports findings from the written reports on the survey. Presenting the findings in these four sections conforms to the purposes of the study. Tables were designed to present descriptive statistics and the number (N) of surveys used, with frequencies (F) and percentages (%). Variables were prioritized in most table listings with highest total mean score and highest frequent item appearing at the top. This was done to facilitate the reader's ability to quickly identify items most responded to by participants. The presentation and analysis of data follow a framework provided by the seven research questions. Each question is restated and followed by a discussion of the findings.

Response Rate

The data summarized in this study were compiled from responses obtained when 55 questionnaires were distributed to vocational rehabilitation workers,

administrators, coordinators, and supervising staff members employed by the National Institute of Social Welfare (INPS), Recife Vocational Rehabilitation Center in Recife, Brazil. Initial demographic information elicited by the research instrument revealed that of the 55 surveys distributed, 45 (82%) were returned with complete data. Four others were returned, but they were incomplete.

Profile of Vocational Rehabilitation Position

Table 4.1 presents responses received from the various types of vocational rehabilitation respondents. Of the total of 55 surveys distributed, 41 were given to vocational rehabilitation workers, four to vocational rehabilitation center administrators, three to coordinators, and seven were given to state vocational rehabilitation supervisors. Responses came from 33 rehabilitation workers (80% response rate), three administrators (75% response rate), three coordinators (100% response rate), and six supervisors for an 86% response rate.

Table 4.1
Response Rate by Vocational Rehabilitation Position
(N = 45)

Position	Questionnaires Distributed	No Response/ Unusable	Complete Quest. Returned	Response Rate
Recife vocational rehabilitation workers	41	8	33	80%
Recife vocational rehabilitation administrative personnel	4	1	3	75%
Recife vocational rehabilitation coordinators	3	0	3	100%
Recife vocational rehabilitation supervisors	7	1	6	86%
TOTALS:	55	10	45	100%
PERCENTAGES:	100	18	82	

The Study's Findings

This part of the chapter focuses on how vocational rehabilitation workers, administrators, coordinators, and supervising staff members at the Recife Vocational Rehabilitation Center perceived the following attitudinal variables considered in the study, opinions about (1) service components and their effectiveness, (2) the use of vocational rehabilitation legislative policies, (3) the importance of hypothetical vocational rehabilitation legislative policies, (4) the seriousness of problems they face, (5) the seriousness of needed job placement training, (6) their interests in participating in selected vocational rehabilitation courses, and (7) the importance of changes needed to increase the participation of rehabilitation workers in job placement activities. Responses were recorded and tabulated in rank order according to descriptive statistics (means and standard deviations performed on them). Observed frequencies (F) and percentages (%) of vocational rehabilitation workers, administrators, coordinators, and supervising staff members' ratings of each attitudinal variables is also presented before each rank order table.

Perceived Effectiveness of Service Components

Research Question #1. To what extent are vocational rehabilitation services performed at the Recife Vocational Rehabilitation Center perceived as being effective by vocational rehabilitation workers, administrators, coordinators, and supervising staff members? The results are presented in Tables 4.2 and 4.3. Frequency distributions for the service components can be seen in Table 4.2, and Table 4.3 shows the number of responses, total mean score, rank order, standard deviation, and effectiveness level for 14 service components. The variables were (1) not provided/ineffective, (2) not effective, (3) not very effective, (4) effective, (5) very effective.

The rating scale used included options ranging from "not provided" which was assigned a value of 1 to "very effective" which was assigned a value of 5. That is, each service component had a mean range from 1 to 5, and its effectiveness was determined according to the following:

4.51 - 5.00:	very effective
3.51 - 4.50:	effective
2.51 - 3.50:	not very effective
1.51 - 2.50:	not effective
1.00 - 1.50:	not provided/ineffective

Table 4.2
Frequency Distributions on Perceived Effectiveness for the
14 Service Components by Vocational Rehabilitation Workers, Administrators,
Coordinators, and Supervising Staff Members of the
Recife Vocational Rehabilitation Center
(N = 45)

Item	Service Components	<u>Perceived Effectiveness</u>				
		Not Provided 1	2	3	4	Very Effective 5
1	The service provides outreach that targets disabled persons.	36 80.0%	3 6.67%	6 13.33%	0 0.0%	0 0.0%
2	The service provides intake/ orientation procedures as an introduction to the program.	6 13.33%	16 35.56%	20 44.44%	2 4.44%	1 2.22%
3	The service provides personal counseling.	1 2.22%	6 13.33%	31 68.89%	6 13.33%	1 2.22%
4	The service provides a balanced use of assessment and testing.	3 6.67%	13 28.89%	23 51.11%	6 13.33%	0 0.0%
5	The service provides career/ educational counseling activities.	5 11.11%	14 31.11%	21 46.67%	4 8.89%	1 2.22%
6	The service provides life skill development (assertiveness training, goal setting, dressing for the labor force).	17 37.78%	15 33.33%	8 17.78%	5 11.11%	0 0.0%

Table 4.2, continued

Item	Service Components	<u>Perceived Effectiveness</u>				
		Not Provided 1	2	3	4	Very Effective 5
7	The service provides access to skills training (classroom training, internships, on-the-job training).	1 2.22%	10 22.22%	26 57.78%	7 15.56%	1 2.22%
8	The service provides pre-employment preparation (how to prepare a resume, filling out job applications, taking tests, etc.).	26 57.78%	10 22.22%	7 15.56%	2 4.44%	0 0.0%
9	The service provides supportive services (transportation, allowance, books, etc.).	1 2.22%	9 20.00%	23 51.11%	11 24.44%	1 2.22%
10	The service provides referrals (to legal aid, services, health care, etc.).	12 26.67%	9 20.00%	19 42.22%	4 8.89%	1 2.22%
11	The service assists with job development (outreach to potential employers, guided job clubs, etc.).	3 6.67%	18 40.00%	19 42.22%	4 8.89%	1 2.22%
12	The service assists with job placement (assisted self-placement, direct program employment, etc.).	6 13.33%	16 35.56%	20 44.44%	3 6.67%	0 0.0%
13	The service provides follow-up activities.	16 35.56%	23 51.11%	4 8.89%	1 2.22%	1 2.22%
14	The service provides program management information systems (up-to-date identification and monthly compilation of data on client characteristics and program results.	14 31.11%	5 11.11%	14 31.11%	11 24.44%	1 2.22%

Table 4.3
Rank Order of Perceived Effectiveness of 14 Service
Components by Vocational Rehabilitation Workers, Administrators,
Coordinators, and Supervising Staff Members of the
Recife Vocational Rehabilitation Center
(N = 45)

Item #	Service Statement	Rank	Mean	S.D.	Effectiveness Level
9	The service provides supportive services (transportation, allowance, meals, accommodations)	1	3.04	.80	Not very effective
3	The service provides personal counseling (individual, group, guided support, etc.)	2	3.00	.68	Not very effective
7	The service provides access to skills training (classroom, on-the job, community internships, etc.)	3	2.93	.75	Not very effective
4	The service provides a balanced use of assessment and testing (e.g., interest inventories, educational assessment, employability, development plans)	4	2.71	.79	Not very effective
11	The service assists with job development (out-reach to potential employers by professionals)	5.5	2.60	.84	Not very effective
5	The service provides career educational counseling activities and resources in the context of labor market data (information about vocational training, basic education, etc.)	5.5	2.60	.89	Not very effective
14	The service provides program management information systems (up-to-date identification and monthly compilation of data on client characteristics and program results)	7	2.56	1.24	Not very effective
2	The service provides intake/orientation procedures that provide disabled persons with an introduction to the program and especially to other participants	8	2.47	.87	Not effective

Table 4.3, continued

Item #	Service Statement	Rank	Mean	S.D.	Effectiveness Level
12	The service assists with job placement (competitive labor market, self-employment, etc.)	9	2.44	.81	Not effective
10	The service provides referrals to other services (health care to legal aid, advocacy, social services)	10	2.40	1.05	Not effective
6	The service provides life skills development (sensitivity group, assertiveness, goal setting, dressing for the labor force, etc.)	11	2.02	1.01	Not effective
13	The service provides follow-up and continued support to clients and employers.	12	1.84	.85	Not effective
8	The service provides pre-employment preparation (e.g., how to search for a job, filling out applications)	13	1.67	.90	Not effective
1	The service provides adequate outreach that specifically targets disabled people.	14	1.33	.71	Not provided/ not effective

Table 4.3 gives data relating to the service components in which level of effectiveness was expressed. Service components were rank ordered according to their means and standard deviations. Only three of the 14 items had a TMS of 2.93 or greater. The service ranked first was Item 9, "The service provides supportive service (allowance, transportation, meals, accommodations, etc.)." The TMS for this item was 3.04 (S.D. = .80). The service ranked second was Item 3, "The service provides personal counseling (individual, group, guided support, etc.);" with a TMS of 3.00 (S.D. = .68). The service ranked third was Item 7, "The service provides access to skills training (classroom, on-the-job, community

internships, etc.)" with a TMS of 2.93 (S.D. = .75). The average mean ratings ranged from 1.33 (S.D. = .71) to 3.04 (S.D. = .80). The results presented in this section indicated that vocational rehabilitation workers, vocational rehabilitation administrators, coordinators, and vocational rehabilitation supervisors rated the overall effectiveness from not provided/not effective to not very effective.

A more detailed examination of Table 4.3 indicates that respondents perceived their top seven service components as not being very effective (2.51 - 3.50), with the other seven being perceived as not effective (1.51 - 2.50) or not provided (1.00 - 1.50). Further, the Recife Center tended to emphasize supportive services and personal counseling rather than job placement and job seeking skills. The top four service component areas were (1) supportive service, (2) personal counseling, (3) access to skills training, and (4) assessment and testing. The effective service with the highest mean was Item 9. Job placement service components and pre-employment service components were perceived to be not effective. Outreach services were not provided at the Recife Vocational Rehabilitation Center.

Table 4.3 shows the standard deviations of service components and total means. The relatively high variations in ratings suggest that respondents varied in their ratings of the effectiveness presently placed on service component areas. Further, a relatively low effectiveness was placed on current job placement service components.

Perceived Use of Legislative Policies

Research Question #2. What legislative policies have been used in Brazil for the provision of vocational rehabilitation services for industrially-injured adults in the opinions of vocational rehabilitation workers, administrators,

coordinators, and supervising staff members at the Recife Vocational Rehabilitation Center? Results are presented in Tables 4.4 and 4.5. Table 4.4 gives the number of surveys used, frequencies, and percentages for three legislative measures. The variables were (1) yes, we have used it; and (2) no, we have not used it. Four blank spaces were provided for the respondents to specify other legislative measures they knew in addition to the ones listed.

There were a total of 39 surveys used. Of these, 38 respondents (97%) reported they have not used vocational rehabilitation legislative measures and did not have knowledge of their existence. One respondent (3%) reported having used the legislative measures and having knowledge of them.

Table 4.5 shows the perceptions of vocational rehabilitation workers, administrators, and supervising staff members at the Recife Vocational Rehabilitation Center concerning actual vocational rehabilitation legislative policy statements in rank order, means, and standard deviations.

Table 4.4
Frequency Distributions on Perceived Use of Three Vocational Rehabilitation
Legislative Policies by Vocational Rehabilitation Workers, Administrators,
Coordinators, and Supervising Staff Members of the
Recife Vocational Rehabilitation Center
(N = 39)

Item	Legislative Policy	Yes	No	Total
1	Orders SP-20 (1975) which deals with vocational rehabilitation	1 2.6%	38 97%	39 100%
2	Orders SPS-5 (1980) which deals with vocational rehabilitation	1 2.6%	38 97%	39 100%
3	Decree 77.077 (1976) which is a consolidated text of social welfare acts relating to vocational rehabilitation	0 0.0%	39 100%	39 100%

Table 4.5
Rank Order of Perceived Use of Three Vocational Rehabilitation
Legislative Policies by Vocational Rehabilitation Workers, Administrators,
Administrators, Coordinators, and Supervising Staff Members at the
Recife Vocational Rehabilitation Center
(N = 39)

Item	Legislative Policy	Rank	Mean	S.D.
1	Orders SPS-20 (1975) which deals with vocational rehabilitation	3	1.94	.223
2	Orders SPS-5 (1980) which deals with vocational rehabilitation	2	1.97	.16
3	Decree 77.077 (1976) which is consolidated text of social welfare acts related to vocational rehabilitation	1	2.00	.00

Table 4.5 shows the vocational rehabilitation legislative policies ranked by total mean score. One legislative policy, Item 3, "Decree 77077 (1976)," had a total mean score of 2.00 (S.D. = .00). One legislative policy, Item 2, "Orders SPS-5 (1980)," had a total mean score of 1.97 (S.D. = .16). One legislative policy, Item 1, "Orders SPS-20 (1975)," had a TMS of 1.94 (S.D. = .223). The average mean ratings ranged from 1.94 (S.D. = .223) to 2.00 (S.D. = .000). The results shown indicated that vocational rehabilitation workers, administrators, coordinators, and supervising staff members rated the overall use from "No, we have not used the legislative policy" to "Yes, we have used the legislative policy."

Perceived Importance of Hypothetical Legislative Policies

Research Question #3. The Brazilian government has not yet adopted these policies. If available, which of them would be important in creating job opportunities for disabled persons, in the perceptions of rehabilitation workers, administrators, coordinators, and supervising staff members? Table 4.6 gives

data for nine possible legislative measures using the variables of (1) not important (2) somewhat important, (3) moderately important, (4) important, and (5) very important. There were also four blank spaces for respondents to write down any possible measures that had not been listed. The importance of hypothetical vocational rehabilitation legislative policies was determined based on the following:

4.51 - 5.00:	very important
3.51 - 4.50:	important
2.51 - 3.50:	moderately important
1.51 - 2.50:	somewhat important
1.00 - 1.50:	not important

Table 4.6
Frequency Distributions on Perceived Importance of Nine Hypothetical
Vocational Rehabilitation Legislative Policies by Vocational Rehabilitation
Workers, Administrators, Coordinators, and Supervising Staff Members
at the Recife Vocational Rehabilitation Center

Item	Legislative Statement	<u>Perceived Importance</u>					Totals
		1	2	3	4	5	
1	National employment offices with services for disabled persons.	1 3.13%	2 6.25%	2 6.25%	13 40.63%	14 43.75%	32 100.0%
2	Designated placement specialist at national employment offices to help disabled job seekers.	3 8.57%	3 8.57%	3 8.57%	16 45.11%	10 28.57%	35 100.0%
3	Creation of quota scheme.	3 9.09%	0 0.0%	11 33.33%	10 30.30%	9 27.27%	33 100.0%
4	Projects with industries.	3 8.33%	1 2.78%	1 2.78%	15 41.67%	16 44.44%	36 100.0%
5	Job tax programs for employers.	2 5.56%	0 0.0%	1 2.78%	9 25.0%	24 66.67%	36 100.0%

Table 4.6, continued

Item	Legislative Statement	<u>Perceived Importance</u>					Totals
		1	2	3	4	5	
6	Designated jobs for disabled persons.	3 8.33%	0 0.0%	3 8.33%	9 25.0%	21 58.33%	36 100.0%
7	Cooperatives of disabled persons.	3 8.33%	0 0.0%	2 5.56%	13 36.11%	18 50.0%	36 100.0%
8	Information programs to educate society.	2 5.56%	1 2.78%	1 2.78%	17 47.22%	15 41.67%	36 100.0%
9	Pilot employment programs in the community.	2 5.56%	0 0.0%	0 0.0%	15 41.67%	19 52.78%	36 100.0%

Table 4.7
Rank Order of Perceived Importance of Nine Hypothetical Legislative Policies by Vocational Rehabilitation Workers, Administrators, Coordinators, and Supervising Staff Members of the Recife Vocational Rehabilitation Center
(N = 36)

Item #	Legislative Statement	Rank	Mean	S.D.	Importance Level
5	Job tax program for employers	1	4.47	1.00	important
9	Pilot employment programs in the community	2	4.36	.96	important
6	Designated jobs for disabled persons	3	4.25	1.18	important
7	Cooperatives of disabled persons	4	4.19	1.14	important
8	Information programs to educate society	5	4.17	1.03	important
1	National employment offices with services for disabled persons	6	4.16	1.02	important
4	Projects with industries	7	4.11	1.17	important

Table 4.7, continued

Item #	Legislative Statement	Rank	Mean	S.D.	Importance Level
2	Designated placement of a specialist at the national at the national employment offices to help disabled job seekers	8	3.77	1.21	important
3	Creation of quota schemes	9	3.67	1.16	important

Seven of the nine items had total mean scores of 4.00 or greater, and two had TMSs greater than 3.50. The legislative measure ranked first by TMS was Item 5, "Job tax credit program (an incentive measure for employers to employ disabled persons," with a TMS of 4.47 (S.D. = 1.00). The second legislative measure ranked as important was Item 9, "Community service employment pilot program to provide full- or part-time community employment to handicapped persons referred to by vocational rehabilitation agencies." Its TMS was 4.36 (S.D. = .96). The average mean ratings ranged from 3.67 (S.D. = 1.16) to 4.47 (S.D. = 1.00). The results presented indicated that vocational rehabilitation workers, administrators, coordinators, and supervising staff members at the Recife Vocational Rehabilitation Center rated the overall importance as important.

Problems of Vocational Rehabilitation

Research Question #4. How serious do vocational rehabilitation workers, administrators, coordinators, and supervising staff members perceive problems to be at the Recife Vocational Rehabilitation Center? To answer this question, respondents were asked to rate their perceptions of the problems currently facing vocational rehabilitation by responding in one of six categories: (0) this

problem does not exist at the Recife Vocational Rehabilitation Center, (1) not a serious problem, (2) low serious problem, (3) medium serious problem, (4) very serious problem, and (5) extremely serious problem. The results are presented in Tables 4.8 and 4.9. The observed frequency distribution for the 25 problem statements can be seen in Table 4.8. Table 4.9 shows the perceptions of the 45 respondents regarding the 25 problems facing Recife Vocational Rehabilitation Center in rank order according to means and standard deviations.

Each participant was asked to circle a number to the left of each problem statement which would show his/her concern and how serious s/he thought the problem statement was. In Table 4.8 problem statements are listed according to the scale rating preference, from "This problem does not exist at Recife Vocational Rehabilitation Center," which was assigned a value of 0, to "very serious problem," which was assigned a value of 5. The seriousness of problems perceived by vocational rehabilitation workers, administrators, coordinators, and supervising staff members was determined according to the following:

4.51 - 5.00:	extremely serious problem
3.51 - 4.50:	very serious problem
2.51 - 3.50:	medium serious problem
1.51 - 2.50:	low serious problem
1.00 - 1.50:	not a serious problem/this problem does not exist at the Center

Table 4.8
Frequency Distributions on Perceived Seriousness of 25 Problem
Statements by Vocational Rehabilitation Workers, Administrators,
Coordinators, and Supervising Staff Members of the
Recife Vocational Rehabilitation Center
(N = 45)

Item	Problem Statement	<u>Perceived Seriousness</u>					
		0	1	2	3	4	5
1	Lack of literacy skills, basic education, vocational training among disabled persons.	4 8.89%	0 0.0%	0 0.0%	5 11.11%	16 35.56%	20 44.44%
2	Lack of job training in trade areas compatible with labor market needs.	6 13.33%	4 8.89%	2 4.44%	11 24.44%	15 33.33%	7 15.56%
3	Lack of participation of existing local institutions.	4 8.89%	0 0.0%	1 2.22%	9 20.0%	17 37.78%	14 31.11%
4	Lack of trained personnel to develop vocational evaluation.	12 26.67%	1 2.22%	3 6.67%	9 20.0%	9 20.0%	11 24.44%
5	Lack of follow-up services.	1 2.22%	0 0.0%	5 11.11%	8 17.78%	18 40.0%	13 28.89%
6	Prejudice and stigma of employers and the public.	0 0.0%	0 0.0%	1 2.22%	0 0.0%	15 33.33%	29 64.44%
7	Lack of national legislation which provides incentives to employers.	0 0.0%	0 0.0%	0 0.0%	0 0.0%	8 17.78%	37 82.22%
8	Lack of national policy to enforce quota scheme.	1 2.22%	0 0.0%	0 0.0%	2 4.44%	9 20.0%	33 73.33%
9	Lack of revisions of the national rehabilitation policy to examine the relevance of services.	0 0.0%	0 0.0%	0 0.0%	2 4.44%	13 28.89%	30 66.67%

Table 4.8, continued

Item	Problem Statement	<u>Perceived Seriousness</u>					
		0	1	2	3	4	5
10	Lack of rehabilitation policy planned in cooperation with other agencies.	0 0.0%	0 0.0%	0 0.0%	2 4.44%	8 17.78%	35 77.78%
11	lack of inter-ministerial rehabilitation committee.	1 2.22%	0 0.0%	1 2.22%	5 11.11%	9 20.0%	29 64.44%
12	Architectural barriers.	0 0.0%	0 0.0%	1 2.22%	4 8.89%	18 40.0%	22 48.89%
13	Lack of coordination of policies and programs.	0 0.0%	0 0.0%	0 0.0%	2 4.44%	19 42.22%	24 53.33%
14	Economic conditions (surplus offer of labors).	0 0.0%	0 0.0%	0 0.0%	0 0.0%	13 28.89%	32 71.11%
15	Lack of cooperation and support from employers to develop job opportunities.	0 0.0%	0 0.0%	0 0.0%	2 4.44%	16 35.56%	27 60.0%
16	Lack of communication and public relations activities from rehabilitation workers.	3 6.67%	1 2.22%	2 4.44%	14 31.11%	16 35.56%	9 20.0%
17	Lack of support systems (legislators, professionals, unions).	0 0.00	0 0.0%	0 0.0%	5 11.11%	19 42.22%	21 46.67%
18	Negative attitudes of vocational rehabilitation workers in relation to job placement activity.	6 13.33%	1 2.22%	11 24.44%	11 24.44%	8 17.78%	8 17.78%
19	Job placement corresponds to a small percentage of time spent by rehabilitation workers.	2 4.44%	2 4.44%	6 13.33%	11 24.44%	17 37.78%	7 15.56%

Table 4.8, continued

Item	Problem Statement	<u>Perceived Seriousness</u>					
		0	1	2	3	4	5
20	Lack of motivation of disabled persons to be placed in competitive labor market.	1 2.22%	0 0.0%	1 2.22%	15 33.33%	17 37.78%	11 24.44%
21	Lack of work incentive and job security.	1 2.22%	0 0.0%	0 0.0%	2 4.44%	15 33.33%	27 60.0%
22	Insufficient number of vocational rehabilitation workers to develop job placement activity.	10 22.22%	4 8.89%	4 8.89%	11 24.44%	9 20.0%	7 15.56%
23	Lack of public relations skills and sales techniques of vocational rehabilitation workers.	4 8.89%	1 2.22%	7 15.56%	15 33.33%	11 24.44%	7 15.56%
24	Lack of skills of rehabilitation workers to assist disabled to find and keep jobs.	4 8.89%	4 8.89%	10 22.22%	10 22.22%	9 20.0%	8 17.78%
25	Lack of skills in job analysis and job placement by vocational rehabilitation workers.	5 11.11%	4 8.89%	7 15.56%	16 35.56%	6 13.33%	7 15.56%

Table 4.9
Rank Order of Perceived Seriousness of 25 Problem Statements by
Vocational Rehabilitation Workers, Administrators, Coordinators, and
Supervising Staff Members of the Recife Vocational Rehabilitation Center
(N = 45)

Item #	Problem Statement	Rank	Mean	S.D.	Problem Level
7	Lack of national legislation which provides an incentive to employers to create job opportunities for disabled persons (tax deductions, credit, money, etc.)	1	4.82	.39	very serious
10	Lack of a national rehabilitation policy planned and coordinated in collaboration with all interested governmental and non-governmental agencies and in consultation with employers and workers' organizations and disabled people themselves.	2	4.73	.54	very serious
14	The current national economic conditions (e.g., surplus offer of labors) creates problems for the absorption of disabled people in the competitive labor market.	3	4.71	.46	very serious
9	Lack of periodic revision of the national rehabilitation policy to examine the relevance of services provided in a broader context of national development.	4	4.62	.58	very serious
8	National policy limitations to enforce quota scheme of disabled persons in the labor market.	5	4.60	.89	very serious
6	Prejudice and stigma of employers and public toward a disabled person's skills.	6	4.60	.62	very serious
15	Lack of cooperation and support from employers to develop job opportunities for qualified disabled persons.	7	4.56	.59	very serious

Table 4.9, continued

Item #	Problem Statement	Rank	Mean	S.D.	Problem Level
13	Lack of coordination of policies and programs concerning vocational rehabilitation with policies and programs of social and economic development.	8	4.49	.59	serious
21	Lack of work incentive and and security for the disabled person to adapt and stay on the job (insufficient wage, architectural barriers, lack of transportation, be fired before a predetermined period of time worked, etc.).	9	4.47	.89	serious
11	Lack of a small interministerial rehabilitation committee (health, labor, education, and social insurance) which ensures the advice and recommendations of the advisory committee are considered and acted promptly.	10	4.40	1.03	serious
17	Lack of support systems necessary for the development of job placement activities in the competitive labor market (legislators, professionals, employers, labor unions, etc.).	11.5	4.36	.68	serious
12	Architectural barriers which restrict a disabled person from using public transportation, places of employment, leisure places, etc.).	11.5	4.36	.74	serious
1	Lack of literary skills, basic education, and vocational training among disabled persons.	13	3.98	1.42	serious
5	Lack of follow-up services to assist clients to adapt to work situations and guarantee employers' satisfaction, allowing the creation of new job opportunities for disabled persons.	14	3.80	1.12	serious

Table 4.9, continued

Item #	Problem Statement	Rank	Mean	S.D.	Problem Level
20	Lack of motivation of disabled persons to be placed in the competitive labor market.	15	3.78	1.00	serious
3	Lack of direct participation of existing local institutions (e.g., employers, trade unions, vocational schools, etc.) on job training, placement, and employment creation activities at the Recife Vocational Rehabilitation Center.	16	3.71	1.41	serious
16	Lack of communication activities and public relations of vocational rehabilitation professionals with employers to create employment for qualified disabled persons.	17	3.47	1.31	medium serious
19	The job placement activity corresponds to a small percentage of time worked by the vocational rehabilitation professional.	18	3.33	1.28	medium serious
23	Lack of skills in public relations and sales techniques of vocational rehabilitation professionals to relate with possible employers.	19	3.09	1.40	medium serious
2	Lack of job training in trade areas compatible with the local job market.	20	3.02	1.62	medium serious
24	Lack of skills of vocational rehabilitation professionals to assist disabled persons to find and keep their jobs.	21	2.89	1.53	medium serious
18	Negative attitudes of vocational rehabilitation professionals in relation to the activity of job placement with insufficient job placement outcomes.	22	2.84	1.57	medium serious

Table 4.9, continued

Item #	Problem Statement	Rank	Mean	S.D.	Problem Level
25	Lack of skills in job analysis and job placement by vocational rehabilitation professionals.	23.5	2.78	1.56	medium serious
4	Lack of trained personnel to develop vocational evaluation preemployment preparation and residual skills' assessment of disabled persons.	23.5	2.78	1.94	medium serious
22	Insufficient number of vocational rehabilitation professionals to develop job placement activity.	25	2.58	1.78	medium serious

The item means and standard deviations for the 45 participants' ratings on the 25 problem statement items are displayed in Table 4.9. The average ratings ranged from 2.58 (S.D. = 1.78) to 4.82 (S.D. = .39). Participants' average ratings on the 25 problem statement items were categorically separated into rating ranges for comparative purposes. There were seven items (28%) in the very serious range (mean = 4.51+), nine (36%) in the serious range (3.51-4.50), and nine (36%) in the medium range (2.51-3.50).

Twelve (48%) of the 25 items had a TMS of 4.0 or greater, and one had a TMS of 3.97. The problem statement item ranked first by TMS was Item 7, "Lack of national legislation which provides incentives to employers to create job opportunities for disabled persons." Its TMS was 4.82 (S.D. = .39). The problem statement ranked second by TMS was Item 10, "Lack of national rehabilitation policy planned and coordinated in collaboration with all interested governmental and non-governmental agencies and in consultation with employers and workers' organizations and disabled people themselves." Its TMS was 4.73

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(S.D. = .54). Finally, Item 14, "The current national economic conditions (e.g., surplus offer of labors) creates problems for the job placement of disabled persons in the competitive labor market," had a TMS of 4.62 (S.D. = .46). The results shown indicated that vocational rehabilitation workers, administrators, coordinators, and supervising staff members of the Recife Vocational Rehabilitation Center perceived overall seriousness of problems to be from medium to very serious.

Research Question #5: In what job placement competencies do vocational rehabilitation workers, administrators, coordinators, and supervising staff members presently working with industrially-injured workers at the Recife Vocational Rehabilitation Center feel a need for professional development? To answer this question, perceptions of the 45 respondents regarding their need for professional development on 10 job placement competency statements were tabulated in rank order according to mean and standard deviations. These results are presented in Tables 4.10 and 4.11 below. Table 4.10 presents the observed frequency distribution for the 10 job placement statements. Vocational rehabilitation respondents could rate their needs by responding in one of five categories: (1) very high need, (2) high need, (3) medium need, (4) low need, and (5) no need.

The rating scale included options ranging from "no need" which was assigned a value of 1 to "very high need" which was assigned a value of 5. Job placement professional development need was determined according to the following:

4.51 - 5.00:	very high need
3.51 - 4.50:	high need
2.51 - 3.50:	medium need
1.51 - 2.50:	low need
1.00 - 1.50:	no need

Table 4.10
Frequency Distributions on Perceived Needs of 10 Job Placement
Competencies by Vocational Rehabilitation Workers, Administrators,
Coordinators, and Supervising Staff Members of the
Recife Vocational Rehabilitation Center
(N = 45)

Item	Competency Statement	<u>Perceived Need</u>				
		1	2	3	4	5
1	Assist the client to acquire standards of acceptable work behavior	1 2.22%	3 6.67%	11 24.44%	14 31.11%	16 35.56%
2	Interpret vocational evaluation results to assist clients in self-appraisal and vocational planning	1 2.22%	2 4.44%	10 22.22%	18 40.0%	14 31.11%
3	Use of sources of occupational information to assist client planning for training and placement	0 0.0%	0 0.0%	8 17.78%	22 48.89%	15 33.33%
4	Visit employers to elicit their cooperation in hiring the handicapped	0 0.0%	2 4.44%	4 8.89%	15 33.33%	24 53.33%
5	Analyze the tasks of jobs and the corresponding abilities and training needs for jobs	0 0.0%	1 2.22%	6 13.33%	16 35.56%	22 48.89%
6	Provide assistance in job modification and restructuring to accommodate clients' needs	1 2.22%	2 4.44%	9 20.00%	21 46.67%	12 26.67%
7	Negotiate training agreements with employers, including on-the-job training	0 0.0%	1 2.22%	8 17.18%	19 42.22%	17 37.78%
8	Discuss a client's work skills with an employer in order to meet training needs	0 0.0%	2 4.44%	6 13.33%	16 35.56%	21 46.67%
9	Assist clients to acquire job seeking skills (e.g., obtain job leads, fill out applications and develop interview skills)	4 8.89%	3 6.67%	7 15.56%	16 35.56%	15 33.33%

Table 4.10, continued

Item	Competency Statement	<u>Perceived Need</u>				
		1	2	3	4	5
10	Provide post-employment follow-up to assure adequate client performance and adjustment as well as employer satisfaction	1	6	10	15	13
		2.22	13.33%	22.22%	33.33%	28.89%

Table 4.11
Rank Order of Perceived Needs of 10 Job Placement Competencies by Vocational Rehabilitation Workers, Administrators, Coordinators, and Supervising Staff Members of the Recife Vocational Rehabilitation Center
(N = 45)

Item #	Competency Statement	Rank	Mean	S.D.	Need Level
4	Visit employers to elicit their cooperation in hiring the handicapped.	1	4.36	.83	very high need
5	Analyze the tasks of jobs, corresponding abilities, and training needs for jobs.	2	4.31	.79	very high need
8	Discuss a client's work skills with an employer in order to meet training needs.	3	4.24	.86	very high need
3	Use sources of occupational information to assist client planning for training and placement.	4.5	4.16	.71	high need
7	Negotiate training agreements with employers including on the job training and other educational programs to meet training needs.	4.5	4.16	.80	high need
2	Interpret the vocational evaluation results to assist clients in self-appraisal and realistic vocational planning.	6	3.93	.96	high need

Table 4.11, continued

Item #	Competency Statement	Rank	Mean	S.D.	Need Level
6	Provide assistance in job modification and restructuring to accommodate clients' needs.	7.5	3.91	.93	high need
1	Assist the client to acquire standards of acceptable work behavior.	7.5	3.91	1.04	high need
9	Assist clients to acquire job seeking skills (e.g., obtain job leads, fill out job applications, and develop interview skills.	9	3.78	1.24	high need
10	Provide post-employment services to assure adequate client performance and adjustment as well as employer satisfaction.	10	3.73	1.10	high need

Job placement training needs were prioritized in ranking order according to highest total mean score and standard deviation. A job placement training need at the top of the list was one having the highest mean and considered by respondents to be the most needed area in which to receive training.

Table 4.11 shows that respondents gave high ratings for all 10 job placement competency statements. Mean ratings revealed that the vocational rehabilitation professionals, administrators, coordinators, and supervisors who participated in this study regarded the selected job placement competency skills as important in the professional development of vocational rehabilitation practitioners. As can be seen from the table, the average mean ratings ranged from 3.73 (S.D. = 1.10) to 4.36 (S.D. = .83). On a scale of one to five, these scores indicate a high degree of need.

The table indicates data relating to job placement skills competencies in which there is a high level of need in receiving training. Five (50%) of the 10 items had a TMS of 4.0 or greater. The greatest amount of need for training was shown for Item 4, "Visit employers to elicit their cooperation in hiring the handicapped." The TMS for this Item was 4.36 (S.D. = .83). The competency receiving the second highest level of need was Item 5, "Analyze the tasks of a job and corresponding abilities and training needs for the job," which received a TMS of 4.31 (S.D. = .79). Next in line was Item 8, "Discuss a client's work skills with an employer in order to procure a job offer." The TMS for this item was 4.24 (S.D. = .86).

Perceived Interest in Vocational Rehabilitation Courses

Research Question #6. If training courses were available on an inservice basis, how much interest would vocational rehabilitation workers, administrators, coordinators, and supervising staff members have in participating in selected professional development practices? The results are presented in Tables 4.12 and 4.13 below. Table 4.12 provides the observed frequency distribution for the 13 hypothetical rehabilitation courses. Table 4.13 gives the number of survey used, mean scores, standard deviations, and level of interest for 13 professional development courses. Respondents were asked to indicate interest in taking these courses on a scale of zero to five. Interest in participating in the hypothetical training courses was determined according to the following:

4.51 - 5.00:	very interested
3.51 - 4.50:	interested
2.51 - 3.50:	fairly interested
1.51 - 2.50:	somewhat interested
1.00 - 1.50:	low interest
0.00 - 0.99:	not interested/I am well trained

The variables were (1) not interested; I am well trained; (2) low interest; (3) somewhat interested; (4) fairly interested; (5) interested; and (6) very interested.

Table 4.12
Frequency Distributions on Perceived Interest of 13 Vocational Rehabilitation
Courses by Vocational Rehabilitation Workers, Administrators,
Coordinators, and Supervising Staff Members of the
Recife Vocational Rehabilitation Center
(N = 41)

Item	Hypothetical Courses	<u>Perceived Interest</u>					
		0	1	2	3	4	5
1	Vocational evaluation skills	3 7.32%	2 4.88%	4 9.76%	6 14.63%	17 41.46%	9 21.95%
2	Personal counseling	5 12.22%	0 0.0%	2 4.88%	6 14.63%	20 48.78%	8 19.51%
3	Assist clients to acquire job seeking skills (e.g., obtain job leads, fill out application forms, develop interview skills, etc.)	2 4.88%	4 9.76%	7 17.07%	10 24.39%	14 34.15%	4 9.76%
4	Visit employers to elicit their cooperation in job placement for disabled	2 4.88%	1 2.44%	4 9.76%	5 12.20%	19 46.34%	10 24.39%
5	Job placement skills	2 4.88%	0 0.00	5 12.20%	8 19.51%	15 36.59%	11 26.83%
6	Job analysis and job restructuring to accommodate clients' needs	5 12.20%	0 0.0%	3 7.32%	8 19.51%	14 34.15%	11 26.83%
7	Follow-up activities	2 4.88%	0 0.0%	5 12.20%	7 17.07%	18 43.90%	9 21.95%
8	Job development skills	2 4.88%	0 0.0%	0 0.0%	10 24.39%	15 36.59%	14 34.15%
9	Public relations and sales techniques	2 4.88%	1 2.44%	5 12.20%	7 17.07%	14 34.15%	12 29.27%

Table 4.12, continued

Item	Hypothetical Courses	<u>Perceived Interest</u>					
		0	1	2	3	4	5
10	Psycho-social aspects of disabilities	3 7.32%	0 0.0%	2 4.88%	5 12.20%	14 34.15%	17 41.46%
11	Medical aspects of disabilities	2 4.88%	0 0.0%	5 12.20%	13 31.71%	13 31.71%	8 19.51%
12	Assessment of residual work capacity	3 7.32%	1 2.44%	1 2.44%	9 21.95%	14 34.15%	13 31.71%
13	Employment legislation	3 7.32%	0 0.0%	1 2.44%	4 9.76%	11 26.83%	22 53.66%

Table 4.13
Rank Order of Perceived Interest to Participate in 13 Vocational Rehabilitation Courses by Vocational Rehabilitation Workers, Administrators, Coordinators, and Supervising Staff Members at the Recife Vocational Rehabilitation Center (N=41)

Item #	Hypothetical Course	Rank	Mean	S.D.	Interest Level
13	Employment legislation which benefits job opportunities for disabled persons	1	4.10	1.40	Interested
8	Job development skills	2	3.90	1.18	Interested
10	Psycho-social aspects of disability	3	3.90	1.40	Interested
12	Assessment of residual working capacity	4	3.68	1.40	Interested
4	Visit employers to elicit their cooperation in hiring the handicapped	5	3.66	1.30	Interested
5	Job placement skills	6	3.63	1.28	Interested

Table 4.13, continued

Item #	Hypothetical Course	Rank	Mean	S.D.	Interest Level
7	Provide post-employment services to assure adequate client performance and adjustment as well as employer satisfaction	7.5	3.61	1.24	Interested
9	Human relations skills and sales skills to employ the client	7.5	3.61	1.36	Interested
2	Counseling skills (individual group, etc.)	9	3.46	1.50	Fairly interested
11	Medical aspects of disabilities	10	3.44	1.23	Fairly interested
1	Vocational evaluation skills	11	3.44	1.45	Fairly interested
6	Job analysis and job restructuring to accommodate clients' needs	12	3.44	1.57	Fairly interested
3	Assist clients to acquire job seeking skills (e.g., obtain job leads, fill out applications, resume, and develop interview skills)	13	3.02	1.33	Fairly interested

Table 4.13 shows the course items ranked by mean scores and standard deviations for the 41 participants' ratings on the 13 hypothetical rehabilitation courses. Average ratings ranged from 3.02 (S.D. = 1.33) to 4.10 (S.D. = 1.40). Participants' average ratings on the 13 hypothetical rehabilitation courses were categorically separated into rating ranges for comparative purposes. There were eight (62%) items in the interested range (3.51 - 4.50) and five (38%) in the fairly interested range (2.51 - 3.50). One course item had a total mean score of 4.10 (S.D. = 1.40), Item 13, "Employment legislation." Four items had total mean

scores of 3.66 or greater: (1) Item 8, "Job development and placement," had a TMS of 3.90 (S.D. = 1.18); (2) Item 10, "Psycho-social aspects of disability," had a TMS of 3.90 (S.D. = 1.40); (3) Item 12, "Assessment of residual working capacity," had a TMS of 3.68 (S.D. = 1.40); and (4) Item 4, "Visit employers to elicit their cooperation in hiring the handicapped," had a TMS of 3.66 (S.D. = 1.30). The results presented indicated that vocational rehabilitation workers, administrators, coordinators, and supervising staff members at the Recife Vocational Rehabilitation Center perceived overall interest in participating in hypothetical rehabilitation courses from "fairly interested" to "interested."

Perceived Importance of Change Actions

Research Question #7. What are the perceptions of vocational rehabilitation workers, administrators, coordinators, and supervising staff members at the Recife Vocational Rehabilitation Center with regard to the importance of changes needed to increase the participation of vocational rehabilitation workers in the job placement activities of their clients into competitive labor markets? The results are presented in Tables 4.14 and 4.15 below. The observed frequency distributions for the seven changes can be seen in Table 4.14. Table 4.15 gives the number of respondents, total mean scores, standard deviation, and level of importance for seven changes needed. The variables were (1) not important, (2) somewhat important, (3) moderately important, (4) important, and (5) very important. Four blank spaces were provided for respondents to specify other changes needed besides the ones listed. Respondents were asked to rate the importance of the seven changes needed according to the following:

4.51 - 5.00:	very important
3.51 - 4.50:	important
2.51 - 3.50:	moderately important
1.51 - 2.50:	somewhat important
1.00 - 1.50:	not important

Table 4.14
Observed Frequency Distributions on Perceived Importance of Seven
Change Actions by Vocational Rehabilitation Workers, Administrators,
Coordinators, and Supervising Staff Members of the
Recife Vocational Rehabilitation Center

Item	Change Statement	<u>Perceived Importance</u>					N
		1	2	3	4	5	
1	Change priorities and policies at the Center	0 0.0%	0 0.0%	4 10.81%	15 40.54%	18 48.65%	37
2	Decrease number of clients per vocational rehabilitation teams	9 23.68%	9 23.68%	5 13.16%	11 28.95%	4 10.53%	38
3	Reduction of bureaucratic work	3 7.89%	6 15.79%	12 31.58%	7 18.42%	10 26.32%	38
4	Long term training in job placement	0 0.0%	5 13.51%	4 10.81%	12 32.43%	16 43.24%	37
5	Short term training in job placement	1 2.78%	1 2.78%	5 13.89%	14 38.89%	15 41.67%	36
6	Financial reward by clients placed in competitive labor market	8 22.22%	6 16.67%	5 13.89%	9 25.00%	8 22.22%	36
7	New legislations providing incentives to employers	1 2.63%	0 0.0%	1 2.63%	11 28.95%	25 65.79%	38

Table 4.15
Rank Order of Perceived Importance of Seven Hypothetical
Change Actions by Vocational Rehabilitation Workers, Administrators,
Coordinators, and Supervising Staff Members of the
Recife Vocational Rehabilitation Center
(N=45)

Item #	Change Statement	Rank	Mean	S.D.	Importance Level
7	New legislations to provide incentives to employers	1	3.84	1.82	Important
1	Change in priorities at the Center	2	3.60	1.80	Important
4	Long term training in job placement for counselors (Masters')	3	3.33	1.83	Moderately important
5	Short term training in job placement for counselors (conferences, inservice training, etc.)	4	3.31	1.88	Moderately important
3	Reduction of bureaucratic work	5	2.87	1.70	Moderately important
6	Financial reward of vocational rehabilitation professionals by clients placed in competitive jobs	6	2.47	1.83	Somewhat important
2	Decrease of number of clients per professional rehabilitation teams	7	2.36	1.63	Somewhat important

The item means and standard deviations for the 38 participants' ratings on the seven change items are shown in Table 4.15. Average ratings ranged from 2.36 (S.D. = 1.63) to 3.84 (S.D. = 1.82). Participants' average ratings on the seven change items were categorically separated into rating ranges for comparative purposes. There were two items (29%) in the important range (3.51 - 4.50), three (42%) in the moderate range (2.51 - 3.50), and two (29%) in the somewhat important range (1.51 - 2.50).

The seven change items were arranged in rank order. Two of them (29%) had a TMS of 3.50 or greater, two others (29%) had a TMS of 3.00 or greater. The change statement item ranked first by TMS was Item 7, "New legislation which provides incentives to employers to provide job opportunities to disabled persons." Its TMS was 3.84 (S.D. = 1.82). Item 1, "Changes in the politics and priorities of the vocational rehabilitation center," was ranked second with a TMS of 3.60 (S.D. = 1.80). Item 4, "Long term training in job placement for counselors (Master's degree)," was ranked third with a TMS of 3.33 (S.D. = 1.83). The results presented in this section indicated that vocational rehabilitation workers, administrators, coordinators, and supervising staff members at the Recife Vocational Rehabilitation Center rated the overall importance of changes from "somewhat important" to "important."

Analysis of Variance (ANOVA)

Comparison Between Vocational Rehabilitation Workers' Perceptions and Administrative Personnel's Perceptions

The six research hypotheses of this study were tested using a one-way analysis of variance (ANOVA) to determine if there were significant differences in perceptions of (1) the 14 service components, (2) the nine hypothetical vocational rehabilitation legislative policies, (3) the 25 problems faced by the Recife Vocational Rehabilitation Center, (4) the 10 job placement competencies and training needs, (5) the 13 hypothetical vocational rehabilitation courses, and (6) the seven changes needed in vocational rehabilitation in perceived forms. An ANOVA was used to determine which means for services, legislative policies, problems, job placement needs, interest in vocational rehabilitation courses, and changes needed have differences in perceptions by vocational rehabilitation workers (Group 1) and vocational rehabilitation administrative personnel

(Group 2). The hypotheses were tested at the alpha .05 level. Tables 4.16, 4.17, 4.18, 4.19, 4.20, and 4.21 show the mean square, value of F, and significance of F for each variable.

Table 4.16
One-Way ANOVA for Comparing Perceptions of Effectiveness of Service Components
by Vocational Rehabilitation Workers and Administrative Personnel*

Item	Service Component	Group 1			Group 2			F-test	Sig. of F-test
		Rank	Mean	S.D.	Rank	Mean	S.D.		
1	The service provides adequate outreach that specifically targets disabled people.	14	1.3333	.6922	14	1.3333	.7735	0.00	1.0000
2	The service provides intake/orientation procedures that provide disabled persons with an introduction to the program and especially to other participants	7.5	2.4545	.8326	7	2.5000	1.000	.024	.8737
3	The service provides personal counseling (individual, group, guided support, etc.)	2	3.0303	.3294	4.5	2.9167	.9962	.246	.6226
4	The service provides a balanced use of assessment and testing (e.g., interest inventories, educational assessment, employability, development plans)	6	2.6061	.1473	2.5	3.000	.3523	2.269	.1393
5	The service provides career educational counseling activities and resources in the context of labor market data (information about vocational training, basic education, etc.)	4.5	2.6667	.7773	8.5	2.9167	1.1645	.691	.4106
6	The service provides life skills development (sensitivity group, assertiveness, goal setting, dressing for the labor force, etc.)	4.5	1.9697	.9130	10.5	2.1667	1.2673	.329	.5693
7	The service provides access to skills training (classroom, on-the-job, community internships, etc.)	3	2.9697	.6840	6	2.3333	.9374	.236	.5953
8	The service provides pre-employment preparation (e.g., how to search for a job, filling out applications)	13	1.6667	.9242	13	1.6667	.3376	0.00	1.000
9	The service provides supportive services (transportation, allowance, meals, accommodations)	1	3.0606	.7882	2.5	3.000	.3523	.050	.8244
10	The service provides referrals to other services (health care to legal aid, advocacy, social services)	7.5	2.4545	.9712	13	2.2500	1.2381	.327	.5705
11	The service assists with job development (outreach to potential employers by professionals)	4.5	2.6667	.3898	3.5	2.9167	.6686	.732	.3815
12	The service assists with job placement (competitive labor market, self-employment, etc.)	10	2.2727	.8758	7.5	2.9167	.2337	6.162	.0170**
13	The service provides follow-up and continued support to clients and employers.	12	1.7273	.8758	10.5	2.1667	.7177	2.413	.1273
14	The service provides program management (information systems (up-to-date identification and monthly compilation of data on client characteristics and program results)	9	2.3333	1.2910	7	3.1667	.8348	4.308	.0440**

* Administrative personnel is a group formed by vocational rehabilitation administrators (N = 3), vocational rehabilitation coordinators (N = 3), and vocational rehabilitation supervising staff members (N = 6) at the Recife Vocational Rehabilitation Center.

** Significant at $\alpha = .05$

Table 4.17
One-Way ANOVA for Comparing Perceptions of Importance of Hypothetical Legislative Policies
by Vocational Rehabilitation Workers and Administrative Personnel*

Item	Hypothetical Legislative Policy Statement	Group 1			Group 2			Sig. of	
		Rank	Mean	S.D.	Rank	Mean	S.D.	F-test	F-test
1	National employment offices with services for disabled persons	6	4.0417	1.0826	3	4.5000	.7559	1.221	.2779
2	Designated placement specialist for disabled persons	8.5	3.8148	1.2101	8	3.6250	1.3025	.147	.7040
3	Creation of quota scheme	8.5	3.8148	1.1448	9	3.000	1.0954	2.521	.1225
4	Projects with industries	4	4.1481	1.1670	7	4.000	1.2247	.106	.7465
5	Job tax programs for employers	1	4.3704	1.1145	4	4.7778	.4410	1.125	.2963
6	Designated jobs for disabled	3	4.1852	1.1448	5	4.4444	1.3333	.319	.5757
7	Cooperatives of disabled	7	4.0000	1.2403	1	4.7778	.4410	3.341	.0764**
8	Information programs to educate society	5	4.1111	1.1209	6	4.3333	.7071	.309	.5819
9	Pilot employment programs in the community	2	4.2963	1.0675	2	4.5556	.5270	.484	.4912

* Administrative personnel is a group formed by vocational rehabilitation administrators (N = 3), vocational rehabilitation coordinators (N = 3), and vocational rehabilitation supervising staff members (N = 6) at the Recife Vocational Rehabilitation Center.

** Significant at $\alpha = .05$

Table 4.13
One-Way ANOVA for Comparing Perceptions of the Seriousness of Vocational
Rehabilitation Problems by Vocational Rehabilitation Workers and Administrative Personnel*

Item	Problem Statement	Group 1			Group 2			F-test	Sig. of F-test
		Rank	Mean	S.D.	Rank	Mean	S.D.		
1	Lack of literacy skills, basic education, vocational training among disabled persons	14	3.9697	1.4467	11.5	4.0000	1.4142	.004	.9503
2	Lack of job training in trade areas compatible with labor market needs	24	2.3485	1.7342	16	3.5000	1.1677	1.444	.2361
3	Lack of participation of existing local institutions	15	3.2182	1.4242	11.5	3.4167	1.3790	.711	.4038
4	Lack of trained personnel to develop vocational evaluation	21.5	2.9091	1.3935	25	2.4167	2.1033	.561	.4581
5	Lack of follow-up services	13	4.0303	.8833	19	3.1667	1.4668	5.803	.0204**
6	Prejudice and stigma of employers and the public	6.5	4.6667	.4787	5.5	4.4167	.9003	1.455	.2343
7	Lack of national legislation which provides incentives to employers	1	4.8753	.3314	1	4.6667	.4924	2.754	.1043
8	Lack of national policy to enforce quota scheme	4	4.7273	.5168	7.25	4.2500	1.4843	2.623	.1123
9	Lack of revisions of the national rehabilitation policy to examine the reluctance of services	5	4.6970	.5294	5.5	4.4167	.6686	2.141	.1507
10	Lack of rehabilitation policy planned in cooperation with other agencies	2	4.8182	.4647	3.5	4.5000	.6742	3.217	.0799**
11	Lack of inter-ministerial rehabilitation committee	9	4.5455	1.0633	11.5	4.000	.8523	2.548	.1177
12	Architectural barriers	12	4.3939	.7473	13.5	4.2500	.7532	.325	.5716
13	Lack of coordination of policies and programs	8	4.6061	.5556	10	4.1667	.5774	5.393	.0259**
14	Economic conditions (surplus offer of labors)	3	4.7576	.4352	2	4.5833	.5149	1.220	.2642
15	Lack of cooperation and support from employers to develop job opportunities	6.5	4.6667	.4787	13.5	4.2500	.7533	4.336	.0333**
16	Lack of communication and public relations activities from rehabilitation workers	17	3.6970	1.1388	21	2.3333	1.5275	4.112	.0483**
17	Lack of support systems (legislators, professionals, unions)	21.5	4.5152	.6135	22.5	3.9167	.6686	7.399	.0074**
18	Negative attitudes of vocational rehabilitation workers in relation to job placement activity	21.5	2.9091	1.6652	22.5	2.6667	1.3027	.207	.6314
19	Job placement corresponds to a small percentage of time spent by rehabilitation workers	18	3.3030	1.3375	17.5	3.4167	1.0836	.068	.7956
20	Lack of motivation of disabled persons to be placed in competitive labor market	16	3.7576	1.0616	14	3.8333	.8348	.050	.8247
21	Lack of work incentive and job security	11	4.4545	1.0022	3.5	4.5000	.5222	.022	.8822
22	Insufficient number of vocational rehabilitation workers to develop job placement activity	25	2.1515	1.7375	15	2.7500	1.1382	8.300	.0062**
23	Lack of public relations skills and sales techniques of vocational rehabilitation workers	13	3.1212	1.4739	20	3.000	1.2060	.065	.8000
24	Lack of skills of rehabilitation workers to assist disabled to find and keep jobs	20	2.9697	1.5101	20.5	2.6667	1.6143	.342	.5618
25	Lack of skills in job analysis and job placement by vocational rehabilitation workers	23	2.8753	1.4739	24	2.5000	1.6237	.551	.4619

* Administrative personnel is a group formed by vocational rehabilitation administrators (N = 3), vocational rehabilitation coordinators (N = 3), and vocational rehabilitation supervising staff members (N = 4) at the Recife Vocational Rehabilitation Center.

** Significant at $\alpha = .05$

Table 4.19
One-Way ANOVA for Comparing Perceptions of the Needs of Job Placement
by Vocational Rehabilitation Workers and Administrative Personnel*

Item	Competency Statement	Group 1			Group 2			Sig. of F-test
		Rank	Mean	S.D.	Rank	Mean	S.D.	
1	Assist the client to acquire standards of acceptable work behavior	6	4.0606	1.058	8.5	3.5000	.9045	.1109
2	Interpret vocational evaluation results to assist clients in self-appraisal and vocational planning	8	3.9697	.9838	3.25	3.8333	.9374	.6794
3	Use of sources of occupational information to assist client planning for training and placement	5	4.2424	.6629	2	3.9167	.7930	.1736
4	Visit employers to elicit their cooperation in hiring the handicapped	2	4.4242	.7513	1	4.1667	1.0299	.3632
5	Analyze the tasks of job areas, corresponding abilities, and training needs for jobs	1	4.4848	.6671	6	3.8333	.9374	.0130**
6	Provide assistance in job modification and restructuring to accommodate clients' needs	7	4.0000	.9014	7	3.6667	.9847	.2902
7	Negotiate training agreements with employers,	4	4.2727	.6742	3.25	3.8333	1.0299	.1003
8	Discuss a client's work skills with an employer in order to meet training needs	3	4.3939	.7044	3.25	3.8333	1.1146	.0511**
9	Assist clients to acquire job seeking skills (e.g., obtain job leads, fill out applications, and develop interview skills							
10	Provide post-employment follow-up to assure adequate client performance and adjustment as well as employer satisfaction	9	3.9394	1.1770	10	3.3333	1.3707	.1495
		10	3.8182	1.0141	8.5	3.5000	1.3143	.8951

* Administrative personnel is a group formed by vocational rehabilitation administrators (N = 3), vocational rehabilitation coordinators (N = 3), and vocational rehabilitation supervising staff members (N = 6) at the Pacific Vocational Rehabilitation Center.

** Significant at $\alpha = .05$

Table 4.20
One-Way ANOVA for Comparing Perceptions of Interest in Participating in Vocational
Rehabilitation Courses by Vocational Rehabilitation Workers and Administrative Personnel*

Item	Vocational Rehabilitation Courses	Group 1			Group 2			Sig. of F-test
		Rank	Mean	S.D.	Rank	Mean	S.D.	
1	Vocational evaluation skills	12	3.4667	1.3060	4	3.7000	1.5670	.6441
2	Personal counseling	11	3.6333	1.2452	8	3.3000	1.8886	.5254
3	Assist clients to acquire job seeking skills (e.g., obtain job leads, fill out application forms, develop interview skills, etc.)	13	3.1000	1.1847	10	3.1000	1.5239	1.0000
4	Visit employers to elicit their cooperation in job placement for disabled	10	3.6667	1.0613	1	4.0000	1.4907	.4429
5	Job placement skills	8.5	3.7000	1.0222	7.5	3.8000	1.5492	.8160
6	Job analysis and job restructuring to accommodate clients' needs	7	3.7667	1.3047	13	2.8000	1.8135	.0741**
7	Follow-up activities	5.5	3.8000	.9613	6.5	3.4000	1.5055	.3319
8	Job development skills	3	4.0667	.8277	7.5	3.8000	1.4737	.4780
9	Human relations and sales techniques	5.5	3.8000	1.1567	6.5	3.4000	1.5055	.3856
10	Psycho-social aspects of disabilities	2	4.3667	.8503	12	2.9000	1.6633	.0008**
11	Medical aspects of disabilities	8.5	3.7000	.9879	11	3.0000	1.3333	.0838
12	Assessment of residual work capacity	4	3.9667	.9994	9	3.2000	1.8738	.1045
13	Employment legislation	1	4.4333	.7279	5	3.5000	2.0683	.0381**

* Administrative personnel is a group formed by vocational rehabilitation administrators (N = 3), vocational rehabilitation coordinators (N = 3), and vocational rehabilitation supervising staff members (N = 6) at the Recife Vocational Rehabilitation Center.

** Significant at $\alpha = .05$

Table 4.21
One-Way ANOVA for Comparing Perceptions of Importance of Changes Needed to Increase
Participation in Job Placement Activities by Vocational Rehabilitation Workers and Administrative Personnel*

Item	Change Statement	Group 1			Group 2			Sig. of	
		Rank	Mean	S.D.	Rank	Mean	S.D.	F-test	F-test
1	Change priorities and policies at the Center	1	4.4828	.6336	3	4.2500	.7071	.807	.3753
2	Increase number of clients per vocational rehabilitation team	7	2.8276	1.4160	7	2.5556	1.2360	.268	.6081
3	Reduction of bureaucratic work	5	3.2414	1.3271	3	3.6667	1.3229	.706	.4062
4	Long term training in job placement	4	3.9655	1.0516	4	4.0000	1.0690	.007	.9352
5	Short term training in job placement	3	4.1724	.9662	1	4.5000	.5345	.837	.3665
6	Financial reward by clients placed in competitive labor market	6	3.0741	1.4392	6	2.7778	1.6415	.267	.6086
7	New legislations providing incentives to employers	2	4.6296	.4921	2	4.4444	1.3333	.384	.5398

* Administrative personnel is a group formed by vocational rehabilitation administrators (N = 3), vocational rehabilitation coordinators (N = 3), and vocational rehabilitation supervising staff members (N = 6) at the Recife Vocational Rehabilitation Center.

As can be observed in Table 4.16 (p. 91), service component statements numbers 12 and 14 have a significant difference at the alpha level .05.

In Table 4.17 (p. 92), hypothetical vocational rehabilitation legislative policy number 7 has a significant difference close to the alpha level .05.

In Table 4.18 (p. 93), statements of problems faced by the Recife Vocational Rehabilitation Center numbers 5, 13, 15, 16, 17, and 22 have a significant difference at the alpha level .05. Problem statement number 10 has a significant difference close to the alpha level .05.

In Table 4.19 (p. 94), job placement statement number 5 has a significant difference at the alpha level .05. Job placement statement number 8 has a significant difference close to the alpha level .05.

As shown in Table 4.20 (p. 95), statements on interest in participating in vocational rehabilitation courses numbers 10 and 13 have a significant difference at the alpha level .05. Course statement number 6 has a significant difference close to the alpha level .05.

As can be seen in Table 4.21 (p. 96), change statements do not have significant differences at the alpha level .05.

Testing of Hypotheses

The first hypothesis of this study is stated as follows.

H₁ There will be no significant differences between rehabilitation workers and administrative staff members regarding their perceptions in terms of the effectiveness of vocational rehabilitation service components provided at the Recife Vocational Rehabilitation Center

There was a significant difference in perceptions of rehabilitation workers and those of rehabilitation administrative personnel staff members with regard to service components.

Number 12: The service assists with job placement (competitive labor market, self-employment, etc.).

Vocational rehabilitation administrative personnel placed a higher effectiveness on this service component than did vocational rehabilitation workers. This service statement was ranked number 10 in effectiveness by the rehabilitation workers and number 4.5 by the vocational rehabilitation administrative personnel. The F probability for this service component was .0170.

Number 14: The service provides program management information systems (up-to-date identification and monthly compilation of data on client characteristics and program results).

The rehabilitation administrative personnel placed a higher effectiveness in this service component than the rehabilitation workers. This service component was ranked first in effectiveness by rehabilitation administrative personnel and ninth by rehabilitation workers. The F probability for this service component was .0440. Therefore, the null hypothesis was rejected (see Figure 4.1, p. 99, for ANOVA test on service components).

The second hypothesis of the study states the following.

H₂ There will be no significant differences between rehabilitation workers and administrative staff members regarding their perceptions in terms of the importance of hypothetical vocational rehabilitation legislative policies.

There was a very close significant difference in perceptions of rehabilitation workers and vocational rehabilitation administrative personnel staff members with regard to the following vocational rehabilitation legislative policy statement.

Number 7: Cooperatives of disabled persons.

Vocational rehabilitation administrative personnel placed a higher importance on this legislative policy than did rehabilitation workers. This

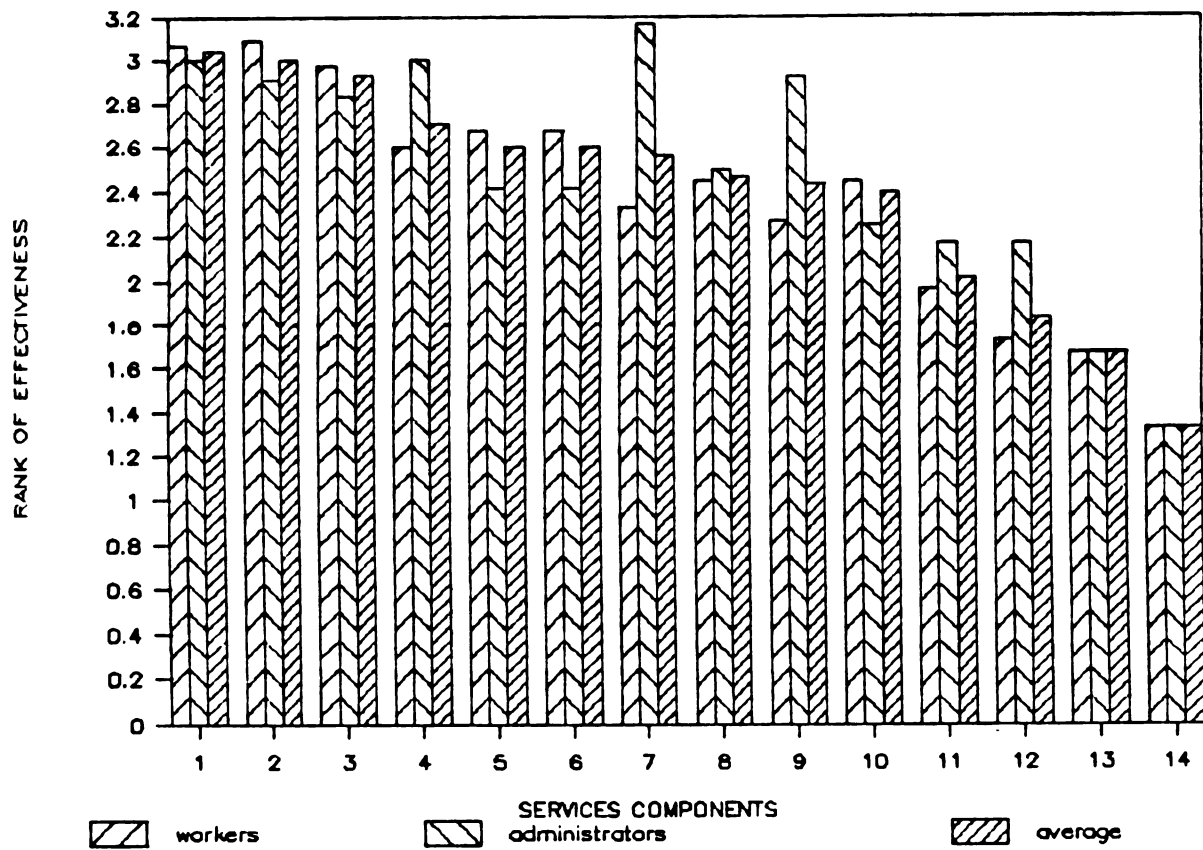


Figure 4.1. ANOVA tests on service components. The figure depicts the average ratings of probable effectiveness of rehabilitation service components by workers and administrators of the Recife Center.

legislative policy was ranked number one in importance by vocational rehabilitation administrative personnel and number seven by rehabilitation workers. The F probability for this legislative policy was close to .05; it was .0764. Thus, the null hypothesis was not rejected (see Figure 4.2, p. 101, for ANOVA for rehabilitation policies).

The third hypothesis of this study states the following.

H_3 There will be no significant differences between rehabilitation workers and administrative staff members regarding their perceptions in terms of seriousness of problems faced by the Recife Vocational Rehabilitation Center.

There was a significant difference in perceptions of rehabilitation workers and administrative personnel staff members with regard to the following problem statements.

Number 5: Lack of follow-up services to assist clients to adapt to work situations and guarantee employers satisfaction, allowing the creation of new job opportunities for disabled persons.

Rehabilitation workers placed a higher seriousness in this problem than did rehabilitation administrative personnel staff members. The problem statement was ranked number 13 in serious by rehabilitation workers and number 19 by rehabilitation administrative personnel staff members. The F probability for this problem was .0204.

Number 13: Lack of coordination of policies and programs concerning vocational rehabilitation with policies and programs of social and economic development.

Rehabilitation workers placed a higher seriousness on this problem than did rehabilitation administrative personnel staff members. The problem was ranked number 8 in seriousness by rehabilitation workers and number 10 by rehabilitation administrative personnel staff. The F probability for this problem was .0250.

Number 15: Lack of cooperation and support from employers to develop job opportunities for qualified disabled persons.

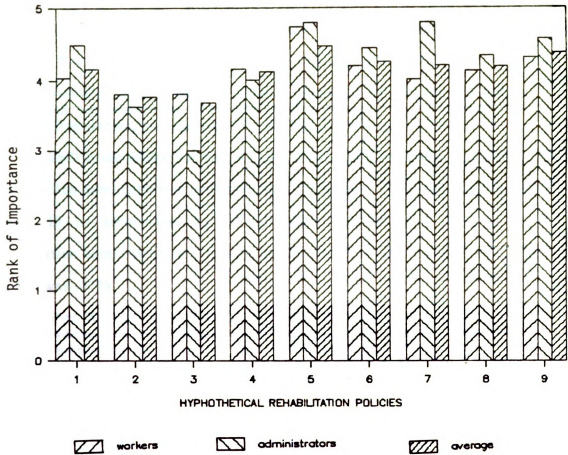


Figure 4.2. ANOVA tests on rehabilitation policies. The figure depicts the average rating of probable importance of hypothetical rehabilitation policies by workers and administrators of the Recife Center.

Rehabilitation workers placed a higher seriousness on this problem than did vocational rehabilitation administrative personnel. This problem statement was ranked 6.5 by rehabilitation workers and 7.35 by rehabilitation personnel staff members. The F probability for this problem was .0333.

Number 17: Lack of support systems necessary for the development of job placement activities in the competitive labor market (legislators, professionals, employers, labor unions, etc.).

Rehabilitation workers placed a higher seriousness on this problem than did rehabilitation administrative personnel staff members. This problem was ranked number 10 in seriousness by rehabilitation workers and number 13 by rehabilitation administrative personnel staff members. The F probability for this problem was .0074.

Number 16: Lack of communication activities and public relations of vocational rehabilitation workers with employers to develop employment creation for qualified disabled persons.

Rehabilitation workers placed a higher seriousness on this problem than did rehabilitation administrative personnel staff members. This problem was ranked number 17 in seriousness by rehabilitation workers and number 21 by rehabilitation administrative personnel staff members. The F probability for this problem was .0488.

Number 22: Insufficient number of vocational rehabilitation workers to develop job placement activities.

Rehabilitation administrative personnel staff members placed a higher seriousness on this problem than did rehabilitation workers. This problem was ranked number 15 in seriousness by rehabilitation administrative personnel staff members and number 25 by rehabilitation workers. The F probability for this problem was .0062.

Number 10: Lack of a national rehabilitation policy planned and coordinated in collaboration with all interested governmental and non-governmental agencies and in consultation with employers and workers' organizations and disabled people themselves.

Rehabilitation workers placed a higher seriousness on this problem than did rehabilitation administrative personnel staff members. This problem was ranked second in seriousness by rehabilitation workers and number 3.5 by rehabilitation administrative personnel staff members. The F probability for this problem was .0799, close to .05. Thus, the null hypothesis was rejected (see Figure 4.3, p. 104, for ANOVA on problems detected).

The fourth hypothesis of this study is stated as follows.

H₄ There will be no significant differences between rehabilitation workers and administrative staff members regarding their perceptions in terms of training needs in job placement competencies.

There were significant differences in perceptions of rehabilitation workers and rehabilitation administrative personnel staff members with regard to the following job placement competency statements.

Number 5: Analyze the tasks of jobs and corresponding abilities and training needs for jobs.

Rehabilitation workers placed a higher need on this job placement competency than did rehabilitation administrative personnel staff members. This job placement competency was ranked first in need by rehabilitation workers and number six by rehabilitation administrative personnel staff members. The F probability for this job placement competency was .0130.

Number 8: Discuss a client's work skills with an employer in order to meet training needs.

Rehabilitation workers placed a higher need on this job placement competency than did rehabilitation administrative personnel staff members. This job placement competency was ranked third in need by rehabilitation workers and number 3.35 by rehabilitation administrative personnel staff members. The F probability for this job placement competency was .0511, close

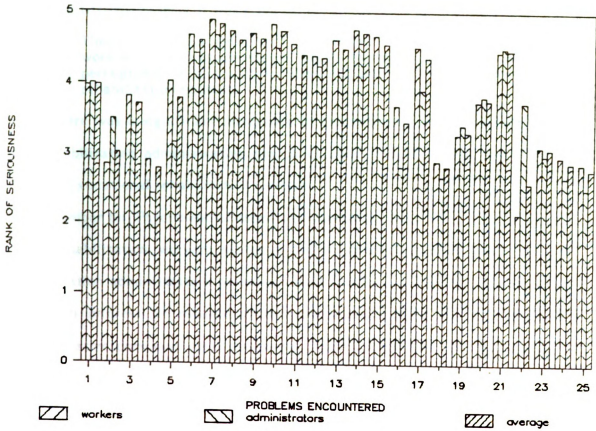


Figure 4.3. One-way ANOVA test on problems detected. The figure depicts the average ratings of probable seriousness of problems encountered by workers and administrators of the Recife Center.

to the alpha level of .05. Therefore, the null hypothesis was rejected (see Figure 4.4, p. 106, for ANOVA on job placement needs).

The fifth hypothesis of this study states the following.

H₅ There will be no significant differences between rehabilitation workers and administrative staff members regarding their perceptions in terms of interest in participating in vocational rehabilitation courses.

There was a significant difference in perceptions of rehabilitation workers and rehabilitation administrative personnel staff members with regard to the following vocational rehabilitation courses.

Number 10: Psycho-social aspects of disability.

Rehabilitation workers placed a higher interest on this course than did rehabilitation administrative personnel staff members. This course was ranked second in interest by rehabilitation workers and number 12 by rehabilitation administrative personnel staff members. The F probability for this course was .0008.

Number 13: Assist clients to acquire job seeking skills (e.g., how to obtain job leads, fill out application forms and resume, and develop interview skills).

Rehabilitation workers placed a higher interest on this course than did rehabilitation administrative personnel staff members. This course was ranked first in interest by rehabilitation workers and number five by rehabilitation administrative personnel staff members. The F probability for this course was .0383.

Number 6: Job analysis and job restructuring to accommodate clients' needs.

Rehabilitation workers placed a higher interest on this course than did rehabilitation administrative personnel staff members. This course was ranked number 7 in interest by rehabilitation workers and number 13 by rehabilitation administrative personnel staff members. The F probability for this course was

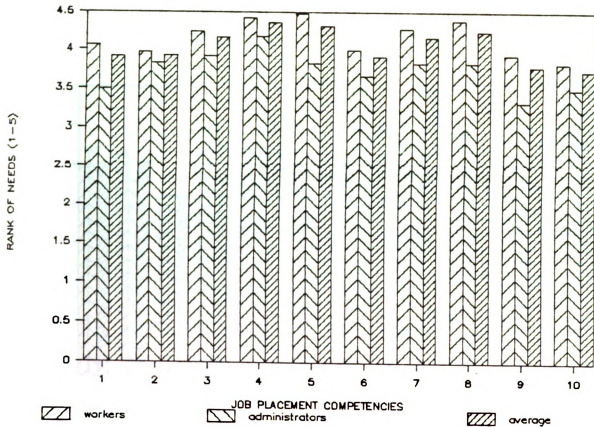


Figure 4.4. One-way ANOVA job placement needs. The figure depicts the average ratings of probable training needs of job placement competencies by workers and administrators of the Recife Center.

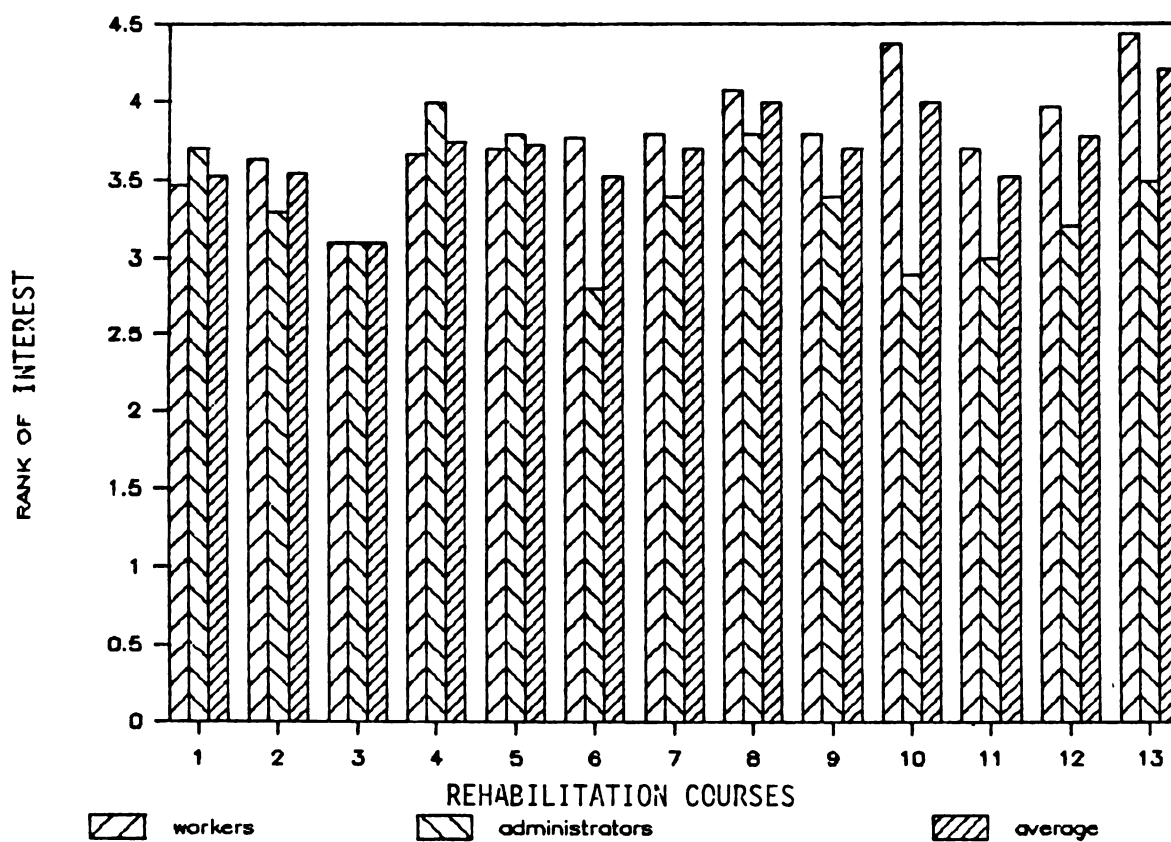


Figure 4.5. ANOVA tests on rehabilitation courses. The figure depicts the average ratings of probable interest of rehabilitation courses' interest by workers and administrators of the Recife Center.

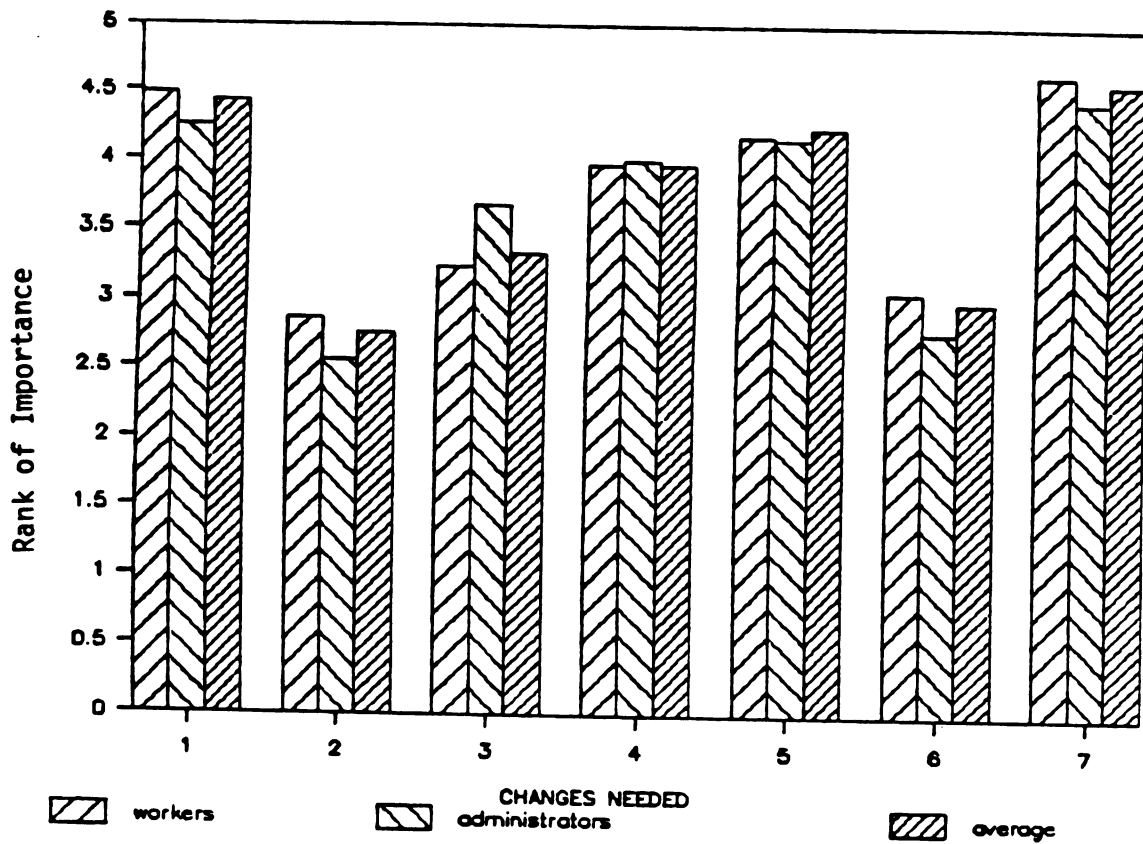


Figure 4.6. One-way ANOVA tests on changes. The figure depicts the average ratings of probable importance of changes needed by workers and administrators of the Recife Center.

.0741, close to .05. Thus, the null hypothesis was rejected (see Figure 4.5, p. 107, for ANOVA on rehabilitation courses).

The sixth hypothesis of this study states the following.

H₆ There will be no significant differences between rehabilitation workers and administrative staff members regarding their perceptions in terms of the importance of changes needed to increase the participation of rehabilitation workers in job placement activities.

The null hypothesis was not rejected, indicating that there were no significant differences in perceptions of rehabilitation workers and rehabilitation administrative personnel staff members with regard to the importance of possible changes of vocational rehabilitation to increase the participation of rehabilitation workers in job placement activities (see Figure 4.6, p. 108, for ANOVA on changes).

Survey of Write-in Responses

The questionnaire was designed to provide space for respondents to add other service components, legislative policies, hypothetical legislative policies, problems encountered, job placement needs, hypothetical professional development courses, and change actions needed besides those mentioned in the survey. In fact, respondents were encouraged to utilize the last four items on each part of the questionnaire to write their own views. While it is difficult to categorize and quantify these responses, such services, legislations, problems, training needs, and changes were nonetheless important to enumerate since they seem to be significant to respondents and possibly to others in the population.

A sampling of the comments made by respondents are summarized below under the following headings: (1) other service components of the Recife Vocational Rehabilitation Center; (2) other problem areas as viewed by rehabilitation workers, administrators, coordinators, and supervising staff members; and (3) other hypothetical training courses.

The following comments are taken directly from the questionnaires in an attempt to answer the question, "What other service components are offered by the Center?"

1. The service offers vocational training in wall painting, cake decorating, hair design, cooking, tailoring, and shoe making.
2. Adult basic literacy education and remedial education.
3. Short term psychotherapy.
4. Psychological sensitivity and group counseling.
5. Orthese and protheses devices provided to clients.
6. Orthese and protheses follow-up and maintenance service.
7. Transportation services.
8. Labor market analysis made by sociologists.
9. The service provides tools, equipment, machinery for clients to establish as autonomous workers.
10. Pharmacy service.
11. Physiotherapy service.
12. Occupational therapy service.
13. Work evaluation and basic education training before the client is referred to community probational training (on-the-job training).
14. Library for clients and technicians.
15. Nursing services and sanitary education.
16. Nutrition services and supervision of snacks and lunch.
17. Physical experiences compatible with job needs (TET).

The following comments are taken directly from the questionnaires in an attempt to answer the question, "What other problems have been encountered by the respondents?"

1. Lack of adaptation and conservation of orthoses and protheses devices.
2. Lack of money for external activities, resulting in absence of planning and priorities in primordial activities.
3. Lack of professional development activities for rehabilitation professions.
4. Lack of team work skills among rehabilitation personnel staff.
5. Lack of professional ethics.
6. Lack of money.
7. Better wages for vocational skills instructors and adult basic education trainers.
8. Conservation of machinery used in vocational workshops.
9. Purchasing of modern and current machinery and tools for use with clients.
10. Lack of raw materials for the development of vocational skills activities of clients (e.g., leather for shoes, wood, etc.).
11. Lack of physical environment security.
12. Insufficient numbers of job openings in the Northeast Region.
13. The huge competition for jobs by non-disabled persons.
14. Clients motivated for retirement as an economic security strategy.
15. Clients with a long period of benefit are motivated for retirement.
16. Lack of unemployment benefit.
17. Existence of a multidisciplinary team which does not work in a coordinated way or is goal oriented.
18. Staff performs as bureaucratic public workers.
19. Lack of respect for the vocational aptitudes of clients.
20. There is no job placement and job security.
21. The absence of job security and stability creates the problem of physical self-mutilation among workers.
22. Lack of professional qualifications of clients.

23. Distortion between lack of professional qualifications versus high wages (workers from the harbors).
24. Age above 40 years, added to low educational level, to the limitation and lack of professional qualification.
25. Disabled workers from rural area faces social problems and family maladjustment.
26. Period of 240 days for vocational program is short for including medical rehabilitation and vocational rehabilitation.
27. Lack of quality medical rehabilitation treatments.
28. Lack of follow-up services to clients who received instruments and tools to become self-employed.
29. Lack of communication among professional rehabilitation staff personnel.
30. Lack of good work relationship among all members of the service.
31. Reports are not read with attention by other professionals.
32. Lack of competence, understanding, and respect to other professionals' experience.
33. Lack of conscientiousness among clients about the goal of the National Institute of Social Welfare.

The following comments are taken directly from the questionnaires in an attempt to answer the question, "What other professional developmental training are you interested in?"

1. Portuguese and mathematic skills.
2. Adult human relationship techniques.
3. Communication skills.
4. Training about the role and position of the vocational rehabilitation centers in the current context of Brazil.
5. Provide to all personnel staff training about all services offered by the Recife Center.
6. Training in vocational education areas.
7. Statistical charts for the follow-up activities of clients.

Clearly indicated in the survey of write-in responses is a wide variety of service components offered which can be improved for the positive outcome goal of job placement of clients. It was also observed a concern for other problems which need to be overcome. In addition, it indicated a concern and need for professional development training programs.

Socio-Demographic Characteristics

After presenting the study's findings on the Recife Vocational Rehabilitation Center, it is important to consider their socio-demographic characteristics. A basic familiarity with these characteristics will help to situate the findings related to the effectiveness of services, use of legislation, importance of hypothetical legislative measures, seriousness of problems, job placement training needs, interest in professional development courses, and importance of changes to increase the participation of rehabilitation workers in job placement activities. The data related to these characteristics were collected through the use of the seventh part of the instrument described in the preceding chapter. The demographic variables considered for analysis were (1) age, (2) years of experience, (3) educational level, and (4) gender.

Age

Table 4.22 shows the number of surveys used, frequencies, and percentages for three age groups: (1) 21-24 years, (2) 25-44 years, and (3) 45-64 years. As shown in Table 4.22, 78% of the respondents were between 25 and 44 years of age. One respondent was below the age of 25 (2.2%), and nine were 45-69 years of age (20%). (See Figure 4.7, p. 116, for Recife Center participants by age.)

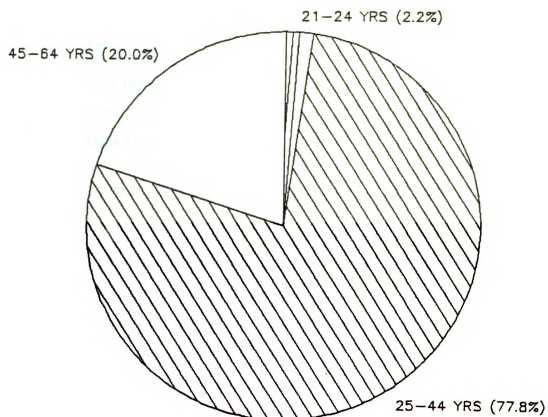


Figure 4.7. Recife Center participants by age.

Table 4.22
 Age of Vocational Rehabilitation Workers, Administrators,
 Coordinators, and Supervising Staff Members at the
 Recife Vocational Rehabilitation Center
 with Percentages and Total
 (N = 45)

Age	F	%
21-24 years	1	2.2
25-44 years	35	78.0
45-64 years	9	20.0
TOTALS:	45	100.0

Years

Table 4.23 gives the number of responses, frequencies, and percentages per four years of experience level, showing years employed as a vocational rehabilitation worker, administrator, coordinator, or supervisor at the Recife Vocational Rehabilitation Center. The staff is middle-aged and highly experienced. The most frequent response was in the the 10-14 year category (38%). Only six professionals (13%) indicated that they had fewer than four years' experience, while 24% of the Recife respondents had more than 15 years of vocational rehabilitation experience (see Figure 4.8, p. 118, for Recife Center participants by years of experience).

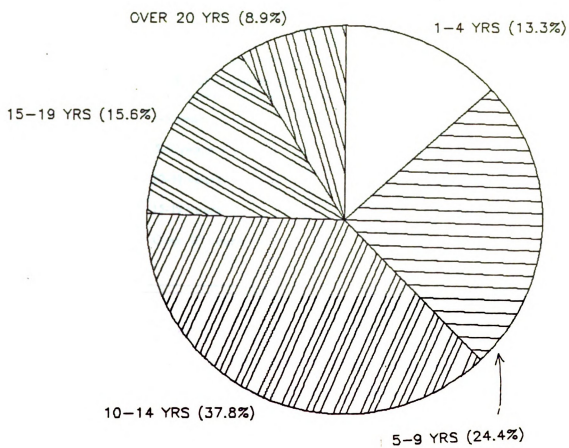


Figure 4.8. Participants by years of experience.

Table 4.23
Years of Experience as Vocational Rehabilitation Workers,
Administrators, Coordinators, and Supervising Staff Members
with Percentages and Totals
(N = 45)

Years of Experience	F	%
1-4 years	6	13
5-9 years	11	24
10-14 years	17	38
15-19 years	7	16
Over 20 years	4	9
TOTAL:	45	100.0

Educational Level

Table 4.24 gives the number of surveys used, frequencies, and percentages for four educational degrees. The variables were (1) high school diploma, (2) Bachelor's degree, and (3) graduate school degree.

The educational level of Recife Vocational Rehabilitation Center participants who responded to this study ranged from holding a high school diploma through obtaining a graduate degree. Four respondents (9%) had earned less than a Bachelor's degree. As indicated in Table 4.24, over 91% of the respondents held Bachelors' or higher degrees. Bachelor's degree holders comprised 86.7% of the respondents, with approximately 4.4% holding graduate school degrees (see Figure 4.9, p. 120, for Recife Center participants by education).

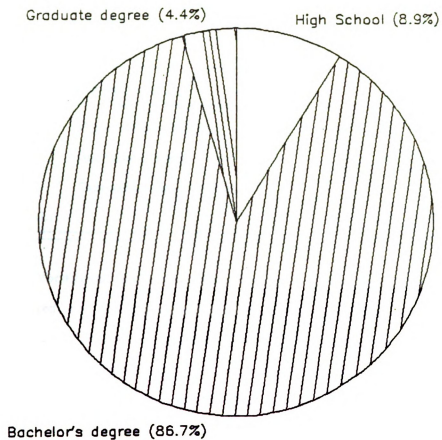


Figure 4.9. Recife Center participants by education.

Table 4.24
Educational Levels of Vocational Rehabilitation Workers,
Administrators, Coordinators, and Supervising Staff Members
with Percentages and Totals
(N = 45)

Educational Level	F	%
High school diploma	4	9.1
Bachelor's degree	39	86.6
Graduate school degree	2	4.3
TOTAL:	45	100.0

Vocational rehabilitation services ". . . draws into its ranks persons not qualified in a full professional sense" (Matta, 1985; Ostrowski, 1983). Lack of educational degrees for rehabilitation counselors is a concern in Brazil as well as in the United States and Israel. Lack of professional qualifications has been confronted by vocational rehabilitation services since vocational rehabilitation is a field where persons with different educational backgrounds become members of the staff. Five of the staff (11.1%) possessed Bachelors' degrees in social work, three of the staff (6.7%) graduated from the area of human medicine, 15 (33.3%) hold Bachelors' degrees in psychology, four respondents (8.9%) hold degrees in sociology, 5 (16.1%) hold degrees in physio-therapy, 6 (13.3%) in occupational therapy, and 4 (2.9%) in education (elementary or secondary teaching). None of the respondents possessed Bachelors' or Masters' degrees in rehabilitation counseling. (See Figure 4.10, p. 122, for Recife Center participants by field of study.)

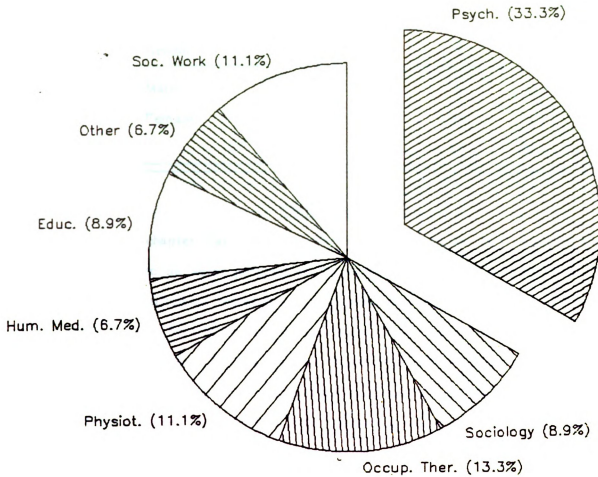


Figure 4.10. Recife participants by field of study.

Gender

Table 4.25 gives the number of surveys used, frequencies, and percentages by gender. The variables were (1) male and (2) female. Thirty-nine of the respondents (86.67%) were female, while six (13.33%) were male.

Table 4.25
Gender of Vocational Rehabilitation Workers,
Administrators, Coordinators, and Supervising Staff Members
with Percentages and Totals
(N 45)

Gender	F	%
Male	6	13
Female	39	87
TOTAL:	45	100.0

Chapter Summary

This chapter has presented the research analysis in a fashion that conformed to the seven purposes of the study mentioned in Chapter I. Data on the seven attitudinal research questions were presented in the first section of this chapter. Section two presented the results of the six research hypotheses and indicated more similarities than differences between the perceptions of rehabilitation workers and administrative personnel's perception. Significant differences were found in four null hypotheses (H_1 , H_3 , H_4 , and H_5) and no significant differences were found in two hypothesis (H_2 and H_6). Section three presented written comments from the survey instrument. Data on the demographic characteristics of the vocational rehabilitation workers, administrators, coordinators, and supervising staff members of the Recife Vocational Rehabilitation Center were presented in the fourth section.

Throughout this chapter, the researcher presented detailed tables containing the data collected in Recife, Brazil, and highlighted the significant findings of this study. In Chapter V, a summary of the previous chapters, along with discussion and recommendations, are presented.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Summary

The need to develop challenging employment opportunities for disabled persons has become an imperative issue. Experts such as Elder (1985), Szymanski and Danek (1985), Vandergoot (1979), Corner, Roessler, and Bolton (1983, 1984, 1985), and Roessler and Johnson (1985) have emphasized the importance of employment in achieving independence, productivity, and the community integration goals of persons with disabilities. However, no reports were found of research or studies of rehabilitation personnel's perceptions of variables such as (1) service components, (2) legislation, (3) problems, (4) professional training needs, and (5) the changes needed to develop challenging employment opportunities for disabled persons in Brazil.

In Brazil, as in the rest of the world, vocational rehabilitation is changing. More positive job placement outcomes must be achieved for the cost benefit value of state vocational rehabilitation services. This study provides information that can be used in the decision making process for the professional development programs for the staff of the Recife Vocational Rehabilitation Center. The study examined program development in the context of today's economic climate where there is a surplus of non-disabled laborers in a competitive labor market. Consequently, the problems of placing disabled persons are accentuated.

Purpose

The purposes of this study of the Recife Vocational Rehabilitation Center, National Institute of Social Welfare, Brazil, were to (1) identify perceived service components, (2) identify perceived legislative measures in vocational rehabilitation, (3) identify perceived important hypothetical legislative policies, (4) identify perceived problems, (5) identify professional development training needs, and (6) investigate changes perceived as important in vocational rehabilitation and job placement. The study was based on the need for accountability and periodic updating of personnel skills through continuing education.

Research Procedures

A survey questionnaire, interviews, and personal observations were used to collect data. The population consisted of 55 persons employed as (1) workers, (2) administrators, (3) coordinators, and (4) supervisors at the Recife Center.

The study was conducted using the winter term months of 1986 with the vocational rehabilitation staff of the National Institute of Social Welfare at the Recife Center. The research sequence consisted of three separate operations: (1) letter requesting permission to conduct research at Recife, (2) on-site research, and (3) questionnaires and interviews. The research took place during April, 1986, in Recife, Brazil. There was a usable response rate of 45 (82%) of the 55 questionnaires distributed. The study data were analyzed using descriptive statistics, frequencies, percentages, and analysis of variance.

Naturally, not all questions related to assessing services, legislation, problems, training needs, and changes needed at the Recife Vocational Rehabilitation Center have been answered by this research. The results of the study can be generalized to other Brazilian state vocational rehabilitation

centers, taking into consideration that comparisons have to be drawn carefully and some states have different economic situations with better or worse job opportunities.

The methodology employed in this study can be generalized to a variety of training needs assessment situations since the competency-based methodology model employed was enriched by the assessment of the (1) service components, (2) legislative needs, (3) problems encountered, (4) training needs, and (5) changes needed. All variables analyzed complement the competency-based methodology model, providing a broader view of training needs.

Findings

Findings related to each research question and hypothesis are presented in order, and additional information is given to provide further insights into the data.

Research Questions

Service component perceptions. To what extent are vocational rehabilitation services performed at Recife Vocational Rehabilitation Center perceived as being effective by vocational rehabilitation workers, administrators, coordinators, and supervising staff members?

The perception of service components has been summarized in Tables 4.2 and 4.3 on a scale of 1-5. No services were considered effective. Those ranked highest in effectiveness, but still not very effective, are listed below:

1. supportive services (transportation allowance, meals, accommodations, etc.).
2. personal counseling (individual, group, guided support, etc.).
3. access to skill training (including classroom training, on-the-job training, community internships, etc.).

4. a balanced use of assessment and testing (e.g., interest inventories, educational assessment, development plans, etc.).
5. job development outreach to potential employers by professionals.
6. career/educational counseling (activities and resources in the context of labor market data, including information about vocational training, basic education, etc.).

There were 14 service component statements on the instrument to measure perception about service component effectiveness. Respondents indicated that the overall effectiveness of service components was perceived from not effective/not provided to not very effective.

Respondents showed a great interest in improving the quality of service components and receiving training to develop their competencies. This would enable them to increase their knowledge, to learn to work as a team aiming at the job placement of rehabilitated adult disabled persons, and to utilize the multidisciplinary team approach to vocational rehabilitation service.

Legislative policies' perceptions. What legislative provisions are available in Brazil for the vocational rehabilitation of disabled persons in the opinions of vocational rehabilitation workers, administrators, coordinators, and supervising staff members?

This part of the questionnaire was a list of available vocational rehabilitation legislative policies in Brazil. It was included to obtain data pertaining to knowledge and use of legislative policies. Three vocational rehabilitation legislative policies were listed.

The results demonstrated that the three legislative policies were not used by 38 (97.4%) of the respondents and had been used by one respondent (2.6%). Subjects indicated a lack of knowledge about and use of legislative policies that

could benefit disabled persons in the process of being placed in a competitive labor market.

Hypothetical legislative policies' perceptions. The Brazilian government has not yet adopted the policies. If available, which of these policies would be important in creating job opportunities for disabled persons, in the perceptions of rehabilitation workers, administrators, coordinators, and supervising staff members?

Of the nine legislative statements perceived by respondents as important measures to create job opportunities for disabled persons the top seven were the following:

1. Job tax program for employers.
2. Community service employment pilot program.
3. Specifically designated jobs.
4. Cooperatives of disabled persons.
5. Vocational educational and information programs to educate society.
6. National employment offices with services for disabled persons.
7. Projects with industries.

Nine hypothetical legislative policy statements were presented to examine perceptions about their probable importance in creating job opportunities for disabled persons. The analysis showed that subjects perceived these legislative statements as important measures for creating or enforcing job opportunities for rehabilitated adult clients. Three legislative policies related to employers: those ranked one, three, and seven. The results showed that if job tax programs for employers were created professionals believed job opportunities for the disabled would increase since such measures would empower professionals to negotiate with employers. Thus, a shift from asking for help to offering services

to employers would be achieved. Moreover, the results for others ranked could be implemented as strategic approaches for creating jobs in the hope that disabled persons could be hired in local areas. These legislative policies could be effective if the federal government measures included plans to facilitate economic development at Recife and the creation of new jobs.

Other strategic measures could be implemented that would benefit vocationally rehabilitated adults (Hansen, 1986). These are the following:

1. Providing public financial incentives to encourage investment in Recife. This effort could involve concentrating public outlays (disabled and/or able-bodied) in the Recife and Pernambuco areas designated as "problem areas" that would become eligible for grant programs.
2. Extending financial aid to enterprises facing cutbacks to encourage them to find alternate products.
3. Creating jobs in the public sector.
4. Giving subsidies to private firms to create new jobs or encourage relocation of disabled workers to new jobs.
5. Encouraging private firms to initiate and implement programs to create jobs for disabled persons using their own resources.

Thus, for the fostering of job creations and economic development that could benefit rehabilitated adult persons, the legislative policies presented above could be important ways of achieving and improving job opportunities for rehabilitated adults at the Recife Vocational Rehabilitation Center. Therefore, job placement training needs were in agreement with the Recife Vocational Rehabilitation Service components where service components related with job placement were the lowest ranked in terms of service effectiveness. Thus, the interest for continuing education in employers' relations and job placement skills is a manifestation of cost-benefit analysis for vocational rehabilitation services.

Problems perception. How serious do vocational rehabilitation workers, administrators, coordinators, and supervising staff members perceive problems to be at the Recife Vocational Rehabilitation Center?

Problems that were ranked as most serious related most directly to the lack of national legislation which gave employers incentives to create job opportunities for disabled persons (tax deduction, credit money, etc.). Of the top 11 problem statements identified, seven (64%) were related to the legislative aspect of the job placement process. The seven problem statements were:

1. Lack of national legislation which provides incentives to employers to create job opportunities for disabled persons (tax deduction, credit money, etc.).
2. Lack of a national rehabilitation policy planned and coordinated in collaboration with all interested governmental and non-governmental agencies and in consultation with employers and workers' organizations and disabled people themselves.
3. Current national economic conditions (e.g., surplus offer of laborers) creating problems for the absorption of disabled persons into a competitive labor market.
4. Lack of periodic revision of the national rehabilitation policy to examine the relevance of services provided in a broader context of national development.
5. National policy limitations to enforce quota schemes of disabled persons in the labor market.
6. Prejudice and stigma of employers and public toward disabled persons' skills.
7. Lack of cooperation and support from employers to develop job opportunities for qualified disabled persons.

The perceptions of the problems reflect the need to overcome the high unemployment of rehabilitated adults. Crucial problems perceived by vocational rehabilitation workers, administrators, coordinators, and supervising staff members concerned with the job placement of adult disabled persons may provide the solutions to the problems. For example, the passage of new and/or the enforcement of existing rehabilitation and employment legislative policy are

both problems and solutions, since such policies would be powerful tools in helping rehabilitation workers perform job placement activities and obtain the cooperation of employers because incentives, tax deductions, etc., would be available to employers. Second, the creation of alternative solutions to the employment of adult rehabilitated disabled persons such as cooperatives, pilot projects with industries, selective placement, etc., would be solutions to the problems created by the actual economic conditions of Brazil. Third, as a result of training programs for rehabilitation workers in areas most needed such as job placement skills, legislation, employers' relations, etc., rehabilitation workers and personnel would assume a much more active role in job placement activities.

Job placement training needs perception. In what job placement competencies do vocational rehabilitation workers, administrators, coordinators, and supervising staff members presently working with industrially-injured workers at the Recife Vocational Rehabilitation Center feel a need for professional development?

Of the top five competencies for which training is needed, three relate to the placement process and are ways of negotiating with employers for job opportunities for disabled persons. The item ranked second in the list below relates to job analysis, and that ranked fourth relates to occupational information. The top five job placement competency needs were the following:

1. Visit employers to elicit their cooperation in hiring the handicapped.
2. Analyze the tasks of a job and the corresponding abilities and training needs for the job.
3. Discuss a client's work skills with an employer in order to meet training needs.
4. Use sources of occupational information to assist client planning for training and placement.

5. Negotiate training agreements with employers including on-the-job training and other programs to meet training needs.

There were 10 job placement competencies on the instrument to measure perceptions about training needs in vocational placement. The analysis showed that vocational rehabilitation professionals were in need of improving their skills relating to the placement process as it relates to relationship with employers, developing job analysis, and using sources of occupational information. Thus respondents felt a high need for professional development training in competencies which would allow them to improve their job placement skills.

The provision of training programs in job placement skills to rehabilitation workers would allow them to shift from a clinical role approach to a more job placement (market-oriented) role approach. Second, as a result of training in job placement skills, rehabilitation workers would play a more active role in job placement activities.

Training needs perception. If training courses were available on an inservice basis, how much interest would vocational rehabilitation workers, administrators, coordinators, and supervising staff members have in participating in selected professional development practices?

This part of the questionnaire was a list of hypothetical courses for rehabilitation professionals. It was included to obtain data pertaining to course content of training. Course titles indicated content areas and were organized into knowledge, skills, and values training components.

The results of this part of the survey questionnaire indicated that all 13 courses would be of interest to those professionals who improve their knowledge in vocational rehabilitation. The mean ratings of the need for these courses ranged from 3.02 to 4.10 on a five-point scale. The respondents selected "Employment legislations which benefit job opportunities for disabled persons" as

the course of most interest (mean rating of 4.10). The next five courses with high mean ratings were "Job development skills" (mean of 3.90), "Psycho-social aspects of disability" (mean of 3.90), "Assessment of residual working capacity" (mean of 3.68), "Visit employers to elicit their cooperation in hiring the handicapped" (mean of 3.65), and "Job placement skills" (mean of 3.63). Thus, respondents indicated a high interest in all aspects of training that would increase their knowledge and skills and facilitate their tasks as rehabilitation workers.

Changes' perceptions. What are the perceptions of vocational rehabilitation workers, administrators, coordinators, and supervising staff members at the Recife Vocational Rehabilitation Center with regard to the importance of changes needed to increase the participation of vocational rehabilitation workers in the job placement activities of their clients into competitive labor markets?

Those changes identified as being needed related most directly to legislation, modifications of internal organizational priorities of the Center, and training services for professionals. Of the top four changes identified, one was related to legislation, another to internal policies at the Center, and two to training services for professionals. These four changes were the following:

1. New legislation to provide incentives to employers.
2. Change in priorities at the Center.
3. Long term training in job placement for counselors (Master's degrees).
4. Short term training in job placement for counselors (conferences, inservice training, etc.).

The desire for changes in vocational rehabilitation to improve participation of professionals in job placement activities showed that legislation that provides

incentives to employers would be the most important change. Changes in priorities at the Center was ranked as the second most important strategy. It indicates that the Recife Vocational Rehabilitation Center should undergo an evaluation of its goals to see if job placement is the main priority of the philosophy of the Center. Desire for training in job placement, either as long term programs (Master's degrees) or short term developmental programs (seminars, conferences, inservices) are manifestations of job placement training needs for professionals. In addition, these changes are positive strategies to increase professionals' autonomy, competence, motivation, and participation in job placement tasks. On the other hand, the changes would decrease feelings of lack of competence and unsuccessful achievements known as characteristics of job stress and burnout.

Research Hypotheses

There were six hypotheses under consideration in this study. They were tested using a one-way analysis of variance (ANOVA). The hypotheses were stated as follows.

- H₁ There will be no significant differences between rehabilitation workers and administrative staff members regarding their perceptions of the effectiveness of vocational rehabilitation service components provided at the Recife Vocational Rehabilitation Center
- H₂ There will be no significant differences between rehabilitation workers and administrative staff members regarding their perceptions of the importance of hypothetical vocational rehabilitation legislative policies.
- H₃ There will be no significant differences between rehabilitation workers and administrative staff members of the seriousness of problems faced by the Recife Vocational Rehabilitation Center.
- H₄ There will be no significant differences between rehabilitation workers and administrative staff members of the training needs in job placement competencies.

- H₅ There will be no significant differences between rehabilitation workers and administrative staff members in their interest in participating in vocational rehabilitation courses.
- H₆ There will be no significant differences between rehabilitation workers and administrative staff members in their perceptions of the importance of changes needed to increase the participation of rehabilitation workers in job placement activities.

Hypotheses one, three, four, and five were rejected, based on the results of an analysis of variance of mean ratings, since it was observed that a significant difference did exist in the perceptions of rehabilitation workers and those of rehabilitation administrative personnel staff members with regard to service components, problems, job placement training needs, and interest in vocational rehabilitation courses.

Hypothesis number two and six were not rejected. There was no significant difference in the mean rating perceptions of rehabilitation workers and those of rehabilitation administrative personnel staff members concerning hypothetical vocational rehabilitation legislative policies and of the changes needed to increase the participation of rehabilitation workers in job placement activities.

In the survey of written responses, participants wrote their own perceptions of service components, other problem statements, and other vocational rehabilitation courses.

Socio-Demographic Characteristics

Educational degree. Fifty-one (91%) of the vocational rehabilitation respondents had attained Bachelor's degrees or higher degrees and four (8.97%) percent held high school degrees.

Age. Over 78% of the respondents were in the 25-44 year age group. About 20% of the respondents were in the 45-69 year age group, and one respondent (2%) was below the age of 25 years.

Gender. Thirteen percent of respondents were men, and 87% were women.

Field of study. Participants' undergraduate degrees were in psychology (33.3%), occupational therapy (13.3%), social work (11.1%), physiotherapy (11.1%), sociology (8.9%), education (8.9%), and human medicine (6.7%). The degrees of 6.7% of the participants were in other areas.

Conclusions

The findings of this research suggested that the staff of the Recife Vocational Rehabilitation Center has a high interest in inservice training and continuing education. An analysis of perceptions of respondents also led the investigator to the following conclusions:

1. A large majority of respondents perceive that lack of employment legislation is a barrier to job placement.
2. The inadequate job placement competencies of rehabilitation workers are significantly affecting vocational placement of disabled persons.
3. External factors, such as enactment of new employment legislation that encourages employers to hire disabled persons, and increased cooperation from employers are the most important changes needed to increase rehabilitation workers' involvement in job placement activities and successful outcomes.
4. The lack of trained personnel can be alleviated by staff training programs in such a way that short, intensive courses (inservice) or degree work (Master's) can be planned in the training department of the agency in cooperation with local universities.
5. One of the biggest constraints to the integration of work-injured workers is a lack of employment opportunities in the area. Such expansion could be accomplished through (1) greater use of general vocational training facilities for training the disabled, (2) providing incentive schemes to employers to offer training and work for the disabled, and (3) the development of cooperatives of and for the disabled.

Discussion

The goal of the vocational rehabilitation program provided by the National Social Insurance Institute (INPS) in Brazil is the gainful integration of working age injured adults into productive community life. The results of this survey of Recife Center personnel revealed that vocational rehabilitation and employment status of working age injured adults is not encouraging, at least in Recife, the capital city of the state of Pernambuco, Brazil.

The Impact of Socio-Economic Problems

In Brazil, many socio-economic problems remain to be solved: the country faces a very serious economic problem with the largest foreign debts in South America (\$104 billion) and remarkable variation in the rate of inflation (Evans, 1986; Yasuski, 1986). Infant mortality is very high with an increase of 25% from 1982 to 1984, changing from 93 deaths per 1000 births to 116 per 1000. The Northeast has 29% of the 135 million of the Brazilian population, 52% of the deaths in the country, and one-quarter of the deaths in all of South America (Guaraciaba, 1986). Guaraciaba states that the decrease in consumer power of the population is the principal cause of the increase in mortality. While the index of infant mortality between 1977 and 1981 was considered average, it is estimated that it will increase to 130 deaths per 1000 by the year 2000.

Recife, the surveyed city in Brazil, is facing the highest unemployment rate in the country. Unemployment is estimated to be 44.9%, meaning that almost half of the 1.3 million inhabitants do not have the minimal income to survive (Costa, 1986).

Data from the Instituto Brasileiro de Estudos Geograficos (IBGE) shows that 11% of the economically active population of Recife is unemployed. Among those with jobs, 9.9% receive less than half a minimal wage (in September, 1986,

around \$60), 26% receive up to two times the minimal wage, and only 7.5% receive more than five times the minimal wage. All of this is aggravated by the high incidence of infant mortality (76.1 per 1000 births), the presence of malnutrition (60% of all children), and by the high incidence of transmissible diseases (Costa, 1986).

What impact will Recife's many socio-economic problems have on the typical working age industrially-injured adults without basic literacy education or vocational skills? What are the alternatives to increasing the proportion of disabled persons in the labor market? The following discussion focuses on findings that might have particular relevance in the search for answers to these questions. The results supported some findings of previous research and contradicted others. A lack of effective and efficient services to disabled persons is caused in part by the priority given other problems facing the country. For these and other reasons, adequate rehabilitation services have not been provided, and this neglect is afforded in the findings of the present study.

Inadequacies of the Vocational Rehabilitation Center

State vocational rehabilitation centers lack specially trained rehabilitation personnel with skills in job development and job placement. This finding agrees with those of Matta (1985) and Ostroski (1983). If these data are accurate, then two conclusions are indicated: (1) professionals in vocational rehabilitation are not fully prepared to actively assist disabled persons in the employment process, and (2) professionals performing the tasks of rehabilitation workers have educational backgrounds, mainly in psychology and social work, where the philosophy of training is in counseling issues rather than the economic integration of the disabled person. This means that continuing education in long-term (degree) or short-term (inservice) programs should be established in the

utilization of different economic and marketing-oriented techniques. Similarly, job development, job seeking skills, job placement, and lifelong follow-up techniques should be part of a core curriculum to prepare professionals in the tasks of job placement.

For industrially-injured rehabilitated workers to respond positively and effectively to the opportunities presented by a labor-short market, rehabilitation workers, administrators, policy makers, supervisors, coordinators, and disabled consumer groups will have to act decisively in the coming years to alleviate problems associated with attitudinal, social, economic, educational, and physical barriers. These conclusions are supported by Acton's (1984) study. Acton said that barriers are removed through the use of legislative policies. This means that better educationally-rehabilitated clients and utilization of legislative policies as affirmative action tools will increase the opportunity of integration for disabled persons.

For the successful job placement of rehabilitated clients into a competitive labor market, a better liaison system needs to be developed among centers such as Recife and community social service agencies such as adult public education, vocational apprenticeship programs, public employment services, private employment services, and disabled consumer groups. This coordination of services needs to be implemented to provide a better quality of services to disabled persons from agencies that already have successful experience with able bodied persons and to avoid duplication of services.

Rehabilitation center professionals need to acquaint employers with the potential of disabled workers. They must actively work on employers' relations and activities to make employers comfortable with the concepts of hiring and working with disabled persons. This means that rehabilitation professions must shift their perceptions of mainly providing counseling support to a more direct

participation on the job placement activity of the disabled person. For this objective to be successfully accomplished, professionals need to be prepared with knowledge about employment legislative policies that can be used to enforce equal opportunity rights to disabled persons. The legislation also needs to provide incentives to employers because the current quota scheme legislation is not effective, since a fine is not imposed on employers that do not follow the law.

Perceptions of Rehabilitation Personnel

The perceptions of rehabilitation workers, administrators, coordinators, and supervising staff members at the Recife Vocational Center support the conclusions that have been suggested. Participants rated all of the service components surveyed either as "not provided/not effective" or as "not very effective." Such ratings by respondents suggest that all of these service components should be improved in the Recife Center. Specifically, services such as those dealing with intake orientation, job placement skills, referrals, life skills training, follow-up activities, pre-employment preparation, and outreach services need immediate action. Improvements of these critical service components should offer disabled persons increased opportunities for job placement.

Seventeen services not listed in the survey form components were suggested by respondents and should be viewed as the basis for a revision of the instrument. Such inputs from the research participants need to be taken into consideration for further research. Some services that are considered important for the economic integration of disabled persons in countries such as the United States may not be equally important to similar groups in Brazil where a greater variety of basic social, medical, and educational needs must also be met. For

example, the great majority of industrially-injured persons in Recife are illiterate and unskilled workers. Therefore, work on basic literacy skills, school completion, and vocational apprenticeship training may be needed before assistance on how to prepare for a job interview or other higher performance skills can be effective. Liaison with local public adult education systems, and a better utilization of the vocational apprenticeship programs could be implemented.

Service components must meet the specific needs of the clients served, without forgetting that the final goal is the economic gainful reintegration into the competitive labor market. These conclusions are warranted: (1) rehabilitation workers face a hard task in rehabilitating injured workers in Recife because, added to the acquired disability through work injury, there exists the long-term disability of illiteracy; (2) it may be desirable to separate the vocational rehabilitation program from the medical and restoration rehabilitation programs. At Recife the 280 days allowed for total rehabilitation may not be sufficient. An evaluation of the philosophy of the comprehensive vocational rehabilitation program should be examined through research to investigate what would be the most cost-effective way to provide quality service, financial benefits, and gainful re-integration of disabled workers into a competitive labor market; and (3) the disadvantage of dealing with less educationally-qualified clients challenges the rehabilitation system to better utilize community resources to develop creative alternatives to its problems.

Use and Knowledge of Legislative Policies

Only two percent of the research participants were aware of the availability of legislative policies. There might be several reasons for this lack of knowledge. First, the rehabilitating organization as a system is not informing

the 19 centers of existing legislative policies. Second, rehabilitation personnel may never have received any training with respect to legislative policies--their existence, use, value, and limitations. Whatever the reasons, this lack of knowledge about legislative policy may be detrimental to rehabilitation workers in the performance of job placement activities because this lack of awareness denies rehabilitation personnel the opportunity to use legislative policies as affirmative action tools when negotiating employment opportunities for disabled persons with employers.

Employment Rates for the Disabled

The results of the study indicated that the employment rate of industrially-injured persons is far from satisfactorily, although Brazilian law (Article 212 of the National Social Insurance Institute, Decree 72.771, September 6, 1973) states that private establishments who have 20 or more workers must hire from two to five percent handicapped employees. Several reasons are suggested for the failure to implement this legislation.

First, the legislative policy may not be effective because the legislation does not impose an obligation on all private employers to hire the quota of two to five percent of registered disabled persons in their establishments.

Second, the legislation does not require that monthly fines be paid by employers who do not meet the requirements of the law. In the Federal Republic of Germany, employers who do not meet the requirements of the law in this respect have to pay such a monthly fine for every unfilled vacancy of their quota. The funds accumulated from these fines are used for the vocational rehabilitation of handicapped persons (United Nations, 1977). On the other hand, several countries reject such a compulsory measure because they fear that the

application of such systems would result in categorizing individuals as inferior workers and in restricting the range of occupations open to handicapped persons.

Third, while rehabilitation workers try to fill the quotas employers may choose to employ only able bodied persons because there's a surplus of non-disabled laborers.

The lack of enforcement of the Article 212 of the National Social Insurance Institute (September 6, 1973) is denying rehabilitation workers a chance to be an effective force in employer relations activities.

Proposed New Legislation

An analysis of respondents' perceptions of the probable importance of hypothetical legislative policies were perceived to be potentially important by rehabilitation personnel. For all nine hypothetical legislative policy statement items, the overall mean rating average was 4.13. This might suggest that rehabilitation personnel see these policies as important measures for creating job opportunities for disabled persons. These findings also suggest that incentive legislation is seen to be more important than compulsory quota schemes. The findings offer support to the studies that advocate incentive legislation rather than quota schemes.

It seems reasonable to conclude that if workers were able to make use of enacted incentive legislative policies, their relations with employers would not be one of requesting favors from employers, but one of using equal opportunity tools to negotiate with employers. Among the incentives that might be offered employers who meet the requirements of the law are tax deductions, credits, and consultation and follow-up activities.

Perceived Problems

For all 25 problem statement items, the mean ratings suggest that Recife Center's personnel experience medium to serious problems in placing rehabilitated injured workers into competitive jobs. This result warrants further investigation of the causal factors and remedial solutions. The results are consistent with those of previous studies that have examined the problems encountered in vocational rehabilitation in the United States (Soloman, 1980). While the research method of this Brazilian study cannot solve broader economic problems facing the country, it nevertheless can serve as feedback for the organizations trying to find solutions to problems that can have an impact on the outcomes of the agency.

Participants identified 33 other problems not anticipated by the researcher. These need to be further analyzed so solutions to these problems can also be sought. This finding is consistent with the conclusions of Rubin and Rice (1986) that there is a need for increasing positive collaboration among researchers, practitioners, and disabled consumers in the planning, designing, and implementation of research projects. Researchers tend to develop research problems and designs without sufficient input from practitioners (Glason & Taylor, 1973). A researcher must design research to fit the environment rather than wage quixotic battles to fit the environment of the research model (Boehm, 1980).

Need for Additional Training

An overall mean rating of 4.05 in a five-point scale for 10 job placement competencies suggests that these rehabilitation professionals are experiencing high job placement training needs. This finding warrants further investigation to examine if other job placement competencies would be more relevant than the

ones used for the present study of rehabilitation workers who are providing services to low skills, illiterate, or unskilled workers. The findings of this section do not seem to support the results of Matta's (1985) investigation that rehabilitation workers in Israel are not interested in training in job placement skills. It seems that Recife Center's training department should use this information as a curriculum idea for implementation of professional development programs for rehabilitation professionals after an assessment of clients' needs. The overall mean rating of 3.61 in a five-point scale of interest for the 13 rehabilitation courses listed also suggests a desire for additional training.

The results of this section indicate an interest in rehabilitation professional development programs among Recife Center personnel. This finding is in accordance with Ostrowski (1983). The present finding offers support to researchers who have used a needs assessment approach to vocational rehabilitation program development or a job task analysis for professional development. In view of the continuing education objective of the organization in providing manpower development for its personnel, it seems that the findings might be used to develop a core curriculum for organizations' use in continuing education for personnel.

Proposed Changes

The ratings of possible changes by respondents suggest that rehabilitation personnel perceived the changes from somewhat important to important. Thus the changes appear desirable. If adopted, they should increase the participation of rehabilitation workers in job placement activities.

Administration and Staff Differences

The study revealed differences in the perceptions of vocational rehabilitation workers and vocational rehabilitation administrative personnel. Four hypotheses were confirmed at the .05 level and two were not rejected.

Interviews

An analysis of the 23 interviews conducted with research participants indicated that personal interviews allowed the researcher to make more meaningful contacts and break down any barriers between the researcher and the professionals surveyed. The results of the interviews also helped to validate the content of questionnaires.

The finding that personal interview is a useful research method to be utilized in rehabilitation research is supported by the following conclusions: (1) the results indicated that indepth, information interviews are a productive research method; and (2) as a result of the interviews, a clearer picture of needs, problems, and changes emerged.

Socio-Demographic Characteristics

The subjects in this study were drawn from the rehabilitation professionals working at the National Social Insurance Institute (INPS) located at the regional office or at the Recife Vocational Rehabilitation Center. As a result, the research participants represented rehabilitation professionals residing in the northeast region of Brazil, an urban area of Recife, the capital of the state of Pernambuco.

The study examined rehabilitation professionals' educational background. More than three-quarters (41 persons, 91%) had attained Bachelors' or higher degrees, and four (8.9%) held high school degrees. The fields of study of respondents with college level degrees were psychology (33.3%), occupational

therapy (13.3%), physiotherapy (11.1%), sociology (11.1%), human medicine (6.7%), education (8.9%), and a variety of other areas (6.7%).

An employment profile of the 45 participants revealed that (1) 37.8% had worked in vocational rehabilitation for 10-14 years, (2) 24.4% had worked in the field for 5-9 years, (3) 15.6% had worked in vocational rehabilitation for 15-19 years, (4) 13.3% reported having worked in the field for 1-4 years, and (5) 8.9% reported having worked for over 20 years in vocational rehabilitation.

Based on the personal interviews, it might be assumed that the more years one has worked in vocational rehabilitation, the better s/he would perform the tasks. This bias needs to be further investigated because rehabilitation professionals disagree on this issue.

Methodological Limitations

Glaser and Taylor (1983), Bolton (1986), and Rubin and Rice (1986) have observed that administrative and practitioner input is relevant to the development of the research endeavor. A lack of consumer input was a serious limitation of the present study. As a result of logistical problems, the planning and design of this research were done without consulting practitioners in Brazil.

Thus, before any replication of this study, a revision of the instrument should be conducted. The purpose of this revision would be to integrate into the instrument the inputs and information provided by the research participants in the written section of the questionnaire. Then a pilot study should be performed with research practitioners, administrators, coordinators, and supervisors.

Another important limitation of this study is the omission of detailed analyses of the personal interviews conducted with research participants. The results of the interviews may provide further insights that can be utilized in rehabilitation at a time when professionals in the field are going through a

difficult period. A high level of dissatisfaction and feelings of frustration and burnout were perceived by the researcher.

Further research efforts should take into consideration the above observations so that the maximum use of research findings can be achieved.

After revision, the model for research used in this study will be a more valid model for analyses of the research field.

Implications and Recommendations

In Brazil today, the quality of vocational rehabilitation of disabled persons in general and industrially-injured persons in particular is a vital issue to many interested groups including policy makers, legislators, governments, administrators, practitioners, and researchers. Brazilian decision makers have expressed their concerns for improvement of the quality of services presently provided for industrially disabled persons as to be the means by which the injured worker can re-enter the competitive labor market.

It is the conviction of this writer and experts such as Acton (1984), Elder (1985), the United Nations (1977, 1981), and the International Labor Office's researchers (1960, 1982, 1984, 1985) that the improvement of vocational rehabilitation begins with (1) the enactment and enforcement of employment legislation that benefits disabled persons, (2) quality of professionals, and (3) public campaigns to overcome social, economic, attitudinal, and physical barriers that impede the integration of rehabilitated disabled persons into society.

Implications and recommendations drawn from the results of this study are presented in this section. Some of the implications concern factors that seem to lead toward the reasons for the unsuccessful job placement of rehabilitated working age injured adults, some pertain to feedback information to organization service components in need of improvement, and some pertain to the availability

of continuing education programs and inservice training for rehabilitation professionals.

Implications

The findings of the data presented in this study appear to have broad implications for the National Social Insurance Institute (INPS) in its attempt to deal with (1) improvement of its service components, (2) legislative measures which need to be enacted to increase job opportunities for disabled persons, (3) problems connected with vocational rehabilitation, (4) professional development of the staff of its 19 vocational rehabilitation centers, and (5) changes which need to be implemented so vocational rehabilitation in Brazil becomes a cost-benefit system in which the goal is the gainful integration of disabled persons into competitive labor markets. The results of this research provide information that can be used in the decision-making process for the improvement of the staff of Recife Vocational Rehabilitation Center. The study analyzed the content of training and the context of training along with (1) service components, (2) legislation, (3) problems, and (4) changes necessary so that professionals can be well trained, better perform their roles, and achieve the three primary objectives that should underlie vocational rehabilitation programs at the National Social Insurance Institute in Brazil (Ministry of Social Insurance and Assistance, 1981).

1. To facilitate the return of industrially injured persons to employment and independent living in communities.
2. To provide specialized resource/consultative services to expedite injured workers' return to employment.
3. To actively pursue and secure employment opportunities for injured workers.

Recommendations

It is hoped that recommendations drawn from the findings of this study will serve as a stimulus to others who have an interest in employment opportunities for disabled persons. Keeping in mind the limitation that only one state vocational rehabilitation center was used in the research, a number of recommendations are made for possible social policy actions, for practical applications, and for further research.

Social policy actions. The following recommendations for social action are indicated:

1. Policy legislation should be introduced to create more job opportunities for the disabled in Brazil.
2. The legislative provisions should be introduced to offer employers financial assistance in the adaptation of jobs to the needs of disabled persons. The financial assistance should apply to the costs of special tools and equipment, as well as to participation in other expenses connected with the employment of disabled persons.
3. Legislative provisions should provide disabled persons economic incentives to return to employment such as salary to cover extra expenses for transportation and job security in terms of not being fired by employers.
4. Placement services for disabled persons should be improved thorough a coordination between rehabilitation centers and national employment services. Individuals should obtain services under both.
5. A reexamination of employment opportunities outside the ordinary labor market such as self employment schemes should be conducted, since this is not an ideal form of rehabilitation for the handicapped. The reason for this concern is that achieved income levels are low and the incidence of business failure is high. Although the vocational rehabilitation system in Brazil provides the tools and equipment for self employment, the service fails to promote the marketing of goods, provide financial assistance for raw materials, and lifelong follow-up services to guarantee that the self-employed disabled worker continues in business. This should be changed.

6. Adopt legislation to guarantee the continuing assessment and improvement of rehabilitation professionals by promoting continuing education programs as inservice or as Master's degree study.
7. Establish better coordination of services among public adult education, vocational training programs, and public employment services as a way of achieving inter-agency cooperation.
8. There's a need for public campaigns through the mass media that could (1) create positive attitudes among the disabled and their families, (2) convince employers that vocationally rehabilitated disabled persons can compete on equal terms with other workers, and (3) convince state and federal employers to hire the disabled as a way of removing barriers and providing examples for private enterprise.
9. Brazil needs to review national legislation on vocational rehabilitation to guarantee the right to employment for disabled persons. In this way, the effectiveness of the Brazilian quota scheme should be controlled so as to ensure compliance with the law. In addition, the results indicated that incentive legislation was perceived to produce better employment opportunities than a quota scheme.
10. The analysis of the data indicated that disabled persons are not being vocationally trained toward employment tasks of the community. For achieving such community participation, employers and trade unions should have an important role in developing curriculum areas needed for employment.
11. The results of the data indicated that there is a lack of coordination in overall rehabilitation activity at Recife. The conclusion reached is that educational, medical, and vocational services for the disabled should have a better liaison system. For this to be accomplished, the Recife Center could improve its level of coordination in rehabilitation by developing an inter-agency rehabilitation advisory committee, and the INPS should promote an inter-ministerial advisory committee with the Ministry of Education and the Ministry of Labor.

The re-integration from a vocational rehabilitation center to work for adults is a complex process. It requires a coordinated, multidisciplinary approach. The National Social Insurance Institute in Brazil, through its 19 state vocational rehabilitation centers, has been involved in this approach since the 1960s.

The service delivery systems involved in this re-integration process has to change its approach. There is a need for the use of rehabilitation legislative policies, either enforcing existing ones or enacting policies that provide incentives to employers. There is a need for the improvement of the service components with job placement as a high priority. There is a need for further training for state rehabilitation workers, so they can take an active role in performing job placement activities but be supported by enacted rehabilitation legislative policies. There is a need for a better coordination of service delivery among agencies and communities in such a way that disabled persons might benefit from community agencies on the process of total re-integration.

Vocational rehabilitation in Brazil, with its multidisciplinary teams, is a crucial human service that can help working age injured adults bridge the transition from a vocational rehabilitation center to work.

As a result of this study, it was felt that professionals at the Recife Vocational Rehabilitation Center, under the National Social Insurance Institute, need a five-point approach to the economic re-integration of the working age injured worker as a gainful and productive member of the community: (1) the enforcement of existing employment vocational rehabilitation policies; (2) the enactment of new legislations that provide incentives to employers; (3) more inter-agency communication, cooperation, and coordination of service delivery systems between Recife Center and community agencies such as public adult education, vocational apprenticeship programs, public employment community services, etc.; (4) programs of professional development for the staff of state vocational rehabilitation centers; and (5) a need for organizations to recognize that it is more cost-effective to keep good, qualified people by rewarding them with professional development opportunities and time off for them to refurbish their knowledge and to renew their interest in the discipline.

The findings from this study provide information that can be used (1) by the Recife Center to improve the effectiveness of service components, (2) to provide legislators with insights about legislative measures that need to be put into action to increase employment opportunities for disabled persons, (3) by the organization to deal with a variety of internal and external problems, (4) in the decision making process aimed at professional development programs for the staff of the Recife Vocational Rehabilitation Center, and (5) to provide opportunities in a manner that contributes to the achievement of overall organizational objectives.

Practical applications. Based on the findings of this study, the following recommendations are made.

1. Provide additional inservice training for Recife vocational rehabilitation professionals in the areas of job placement, legislative measures, public relations sales techniques, communication skills, group works, coordination activities, and pre-employment skills.
2. Action by the Recife Vocational Rehabilitation Center to consider the role of staff development and agency administration from an organizational point of view.
3. Give continuing education a major role in efforts to transmit and maintain job placement skills for rehabilitation workers.
4. Consider released time for inservice activities.
5. Emphasize the greater use of workshops, seminars, or conferences for inservice staff development training, including group classroom activities and seminar discussions.
6. Provide rehabilitation counselors performing the tasks of job placement specialists with the opportunity to pursue further training toward Masters' degrees in other countries, since Brazil does not provide such training.
7. Agency promotion of better public relations with employers. For this, financial reimbursement for transportation should be provided for rehabilitation professionals. In addition, rehabilitation workers would benefit from training in employer

relations skills. Professionals should be considered agent-oriented rehabilitation practitioners which requires professional contacts with employers for the purpose of selling the work potential of disabled persons.

Further research. Based on the findings of this study, the following are recommended for future research:

1. Research to determine the feasibility of increasing the joint efforts between the vocational rehabilitation human resource department, universities, and other agencies for presenting long-term training (Master's degree) and inservice training.
2. Studies of why activities associated with job placement tasks, follow-up tasks, as well as other low-rated performance tasks were considered of less importance than other tasks by Recife professionals.
3. Studies to explore possible changes in the areas of incentives and reimbursements for participation in various inservice training which includes college/university courses, workshops, seminars, and conferences.
4. Replication of the present study with populations from different geographic locations.
5. Studies to determine if relationships exist between job placement competencies and related demographic factors such as years of experience, age, gender, and educational background.
6. Research to identify employers who are interested in and/or hiring individuals with work injuries and to reach those who are unfamiliar with this segment of the work force and the benefits employers can have from state vocational rehabilitation services.
7. Research to investigate the role of financial disincentives to competitive job placement for individual clients, rehabilitation centers, and employers. There is a need for better cooperation to reduce or eliminate these disincentives and to reshape public policy to support job placement.
8. Analysis of alternative forms of coverage to remove job placement disincentives such as lack of stability on the job, time away from work for maintenance of medical and physical therapy.
9. Research to determine the effectiveness of Brazilian quota schemes.

10. Research to investigate the cost-effectiveness of state vocational rehabilitation centers.
11. Research to determine the relationship between rehabilitation outcome variables and new variables such as philosophy of the school where a rehabilitation worker received his/her educational training. In other words, is the school oriented by clinical philosophy of rehabilitation or by a placement-market-oriented philosophy?
12. Research to determine the relationship between outcomes of rehabilitation centers in terms of job placement and the attitudes of rehabilitation professionals toward clients such as professional expectations and job commitment of rehabilitation workers to the goal of job placement.
13. Research to describe the nature and characteristics of job tasks and roles performed by each member of the multidisciplinary teams of the vocational rehabilitation system to better assess the achievements of such diversified manpower deployment within the state vocational rehabilitation system of INPS.

Further Reflections

In order to facilitate comprehensive professional development planning and program development, similar surveys can be done with other constituencies that are affected by vocational rehabilitation. Constituencies that should be surveyed are clients, business and industry people and vocational rehabilitation personnel working in the training sector of the National Social Insurance Institute (INPS).

Clients should be surveyed so that service becomes more congruent with the philosophy of adult education which views the client as the center of any system. Vocational rehabilitation needs to shift from an authoritarian approach to a more participatory approach.

Vocational rehabilitation policy makers, administrators, supervisors, and trainers need to be surveyed so their perspectives of organizational needs can be incorporated into the final program objectives adopted for providing vocational rehabilitation training for rehabilitation personnel.

Business and industry personnel could contribute their perspectives on labor market job opportunities, needs, latest techniques, and trends. Business and industry are recipients of vocational rehabilitation's products--clients.

By analyzing the perceptions of vocational rehabilitation personnel toward service components, legislation, problems, job placement training needs, interest in vocational rehabilitation courses, and changes at the Recife Vocational Rehabilitation Center, the researcher has found that there exist two major perception-actions with respect to the improvement of Recife job placement outcomes: (1) coordinated line of policy legislation and (2) inservice training for professionals.

The majority of perceptions support the implementation of legislative measures in order to improve vocational rehabilitation services and job placement outcomes. It is perceived that policies must require the removal of barriers--physical barriers of the workplace and transportation; attitudinal barriers of employers, professionals, and society; regulatory barriers; and economic barriers that, in times of high employment have excluded disabled people and in time of unemployment have compounded their disadvantage.

It is also perceived that vocational rehabilitation services are in a stage of quiet revolution, shifting its primary emphasis from one of counseling to one which has a responsibility to develop challenging employment opportunities for persons with disability. In addition, this group of perceptions supports the idea that continuing education and training should be provided to disabled persons to prepare them for work opportunities.

Through the perceptions of respondents, it was felt that employment policies and programs in Brazil need to be reviewed, enforced, and put into action. Respondents felt that the most important barriers to employment are the attitudes of employers and of the general public, lack of enactment of

employment legislation, and lack of qualifications and education of clients to further compete for better jobs in the labor market.

The researcher believes that the study could have a major influence on the planning and implementation of a professional development program for vocational rehabilitation workers at state vocational rehabilitation centers in Brazil.

It is further believed by the researcher that the implementation of actions as a result of this study could contribute to the better job placement outcomes of rehabilitated adult injured workers and the development of adult training programs for clients and for staff members on a continuing education approach. Both clients and staff members would benefit since further training for rehabilitation professionals in the area of job placement skills, employment relations, etc., would increase the competencies of professionals and consequently clients would receive effective and efficient services which would contribute to their successful program outcomes.

APPENDICES

APPENDIX A

CHAIRPERSON LETTER

MICHIGAN STATE UNIVERSITY

**COLLEGE OF EDUCATION
DEPARTMENT OF EDUCATIONAL ADMINISTRATION
ERICKSON HALL**

EAST LANSING • MICHIGAN • 48824-1034

March 9, 1986

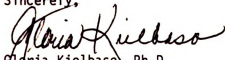
To Whom It May Concern:

Your participation in this survey will increase the importance of the research that my doctoral advisee Elza Nogueira De Souza Barros has undertaken in her study:

A STUDY OF PERCEPTIONS OF VOCATIONAL REHABILITATION WORKERS,
ADMINISTRATORS, COORDINATORS, AND SUPERVISING STAFF MEMBERS
CONCERNING SERVICES, LEGISLATION, PROBLEMS, TRAINING NEEDS,
AND CHANGES AT THE RECIFE VOCATIONAL REHABILITATION CENTER,
BRAZIL

Because of my interest in adult education and vocational rehabilitation in Brazil, I am pleased to join Elza Barros in making this request for your time and thoughtful response.

Sincerely,



Gloria Kielbaso, Ph.D.
Assistant Professor
Educational Administration

APPENDIX B

LETTER TO CENTER ADMINISTRATOR

February 1, 1986

Dear Administrator at Recife Vocational
Rehabilitation Center:

Obtaining suitable employment is considered by most people the most effective way they can become economically integrated into society. In order to help the disabled secure employment, one needs to study problems such as the educational level of disabled persons, training needs of personnel, attitudinal barriers of employers, characteristics of services provided by vocational rehabilitation services (training in employability skills, career assessment, etc.), national legislative provisions, and new measures to promote employment opportunities for disabled persons. Which of these are provided by Recife Vocational Rehabilitation Service seems extremely significant for both educational and vocational reasons.

I am planning to conduct a focused study of the present situation of employment opportunities for disabled persons at the Recife Vocational Rehabilitation Service, Brazil, by examining the perceptions of participants in the service (administrators, counselors, supervisors, placement officers). Attached is a summarized abstract statement of the research.

Qualitative and quantitative research methods will be employed, stressing techniques such as descriptive data collection through questionnaires and interviews with participants and data analysis.

Questionnaires will take approximately 45 minutes per person to answer, and interviews will take about 30 minutes per person. Your participation is voluntary, and all scheduled activities will take place at your convenience. I will telephone your office in the near future to see if you wish to participate in the project. Confidentiality of your responses in the interview is assured; no one will be identified by name.

This research is undertaken as part of a doctoral program directed by Dr. Gloria Kielbaso, Professor of Educational Administration at Michigan State University, and assisted by Drs. Cas Heilman, Donald Burke, and Gloria Smith.

Your cooperation will be deeply appreciated.

Sincerely yours,

Elza Nogueira DeSouza Barros

APPENDIX C

LETTER TO SURVEY PARTICIPANTS

March 1, 1986

Dear Survey Participant:

Vocational rehabilitation has as its ultimate goal assisting disabled persons to become socially and economically integrated into society. I am asking you to assist me in assessing the needs of clients, counselors, and the agency itself.

Would you please take 10-30 minutes to complete the attached questionnaire? Please return it to the director of the center who will return it to me in a pre-addressed envelope.

Thank you very much.

Sincerely yours,

Elza Barros
Ph.D. candidate in Educational Administration
(Adult and Continuing Education major)
929K Cherry Lane
East Lansing, Michigan 48823
USA

APPENDIX D

**RECIFE VOCATIONAL REHABILITATION WORKERS,
ADMINISTRATORS, COORDINATORS, AND
SUPERVISING STAFF MEMBERS' SURVEY**

ENGLISH VERSION

**RECIFE VOCATIONAL REHABILITATION WORKERS, ADMINISTRATORS,
COORDINATORS, AND SUPERVISING STAFF MEMBERS' SURVEY
OF PERCEPTIONS TOWARD SERVICE, LEGISLATION,
PROBLEMS, TRAINING NEEDS, AND CHANGES**

Introduction

It is believed that a comprehensive vocational rehabilitation program provides the following component services identified as meeting the unique needs of disabled persons. While every program may not have all of these components, it is an ideal to be worked toward. Job placement is a top priority and ultimate goal of vocational rehabilitation program services. The purpose of this survey is to obtain your perception about the actual program components and about the problems faced and competencies and training needed by rehabilitation workers.

PART I: VOCATIONAL REHABILITATION SERVICE COMPONENT

Research Question #1. To what extent are vocational rehabilitation services performed at Recife Vocational Rehabilitation Center perceived as being effective by vocational rehabilitation workers, administrators, coordinators, and supervising staff members? Please circle the number that corresponds to your view of each component, according to the following scale:

5 = very effective
4 = effective
3 = not very effective
2 = not effective
1 = not provided/ineffective

- | | | | | | | |
|----|--|---|---|---|---|---|
| 1. | The Service provides adequate outreach that specifically targets disabled persons. | 1 | 2 | 3 | 4 | 5 |
| 2. | The Service provides intake/orientation procedures that provide disabled persons with an introduction to the program and especially to other participants. | 1 | 2 | 3 | 4 | 5 |
| 3. | The Service provides personal counseling (individual/guided support). | 1 | 2 | 3 | 4 | 5 |
| 4. | The Service provides a balanced use of assessment and testing (e.g., interest inventories, educational assessment, employability, development plans). | 1 | 2 | 3 | 4 | 5 |

- | | | | | | | |
|-----|--|---|---|---|---|---|
| 5. | The Service provides career/educational counseling (activities and resources in the context of labor market data, including information about vocational training, basic education, etc.). | 1 | 2 | 3 | 4 | 5 |
| 6. | The Service provides life skill development (workshop on assertiveness training, goal setting, dressing for the labor force, etc.). | 1 | 2 | 3 | 4 | 5 |
| 7. | The Service provides access to skills training (including classroom training, internships, on-the-job training). | 1 | 2 | 3 | 4 | 5 |
| 8. | The Service provides pre-employment preparation (e.g., how to prepare a resume, filling out job applications, taking tests, etc.). | 1 | 2 | 3 | 4 | 5 |
| 9. | The Service provides supportive services (transportation allowance, books, etc.). | 1 | 2 | 3 | 4 | 5 |
| 10. | The Service provides referrals (to legal aid services, health care, etc.). | 1 | 2 | 3 | 4 | 5 |
| 11. | The Service assists with job development (outreach to potential employers, guided job clubs, etc.). | 1 | 2 | 3 | 4 | 5 |
| 12. | The Service assists clients with job placement (assisted self-placement, direct program placement, etc.). | 1 | 2 | 3 | 4 | 5 |
| 13. | The Service provides follow-up and continued support to clients and employers. | 1 | 2 | 3 | 4 | 5 |
| 14. | The Service provides program management information systems, including up-to-date identification and monthly compilation of data on client characteristics and program results. | 1 | 2 | 3 | 4 | 5 |
| 15. | Please identify other service components. | 1 | 2 | 3 | 4 | 5 |
| 16. | Please identify other service components. | 1 | 2 | 3 | 4 | 5 |
| 17. | Please identify other service components. | 1 | 2 | 3 | 4 | 5 |
| 18. | Please identify other service components. | 1 | 2 | 3 | 4 | 5 |

PART II: LEGISLATIVE PROVISIONS SURVEY

Research Question #2. What legislative provisions are available in Brazil for the vocational rehabilitation of disabled persons in the opinions of vocational rehabilitation workers, administrators, coordinators, and supervising staff members? Circle the appropriate response for each provision listed below.

	YES, we have used <u>it</u>	NO, we have not <u>used it</u>
1. Orders SPS-20 (1975) which deals with vocational rehabilitation	1	2
2. Orders SPS-5 (1980) which deals with vocational rehabilitation	1	2
3. Decree 77.077 (1976) which is consolidated text of social welfare acts relating to vocational rehabilitation	1	2
4. Other (please specify)	1	2
5. Other (please specify)	1	2
6. Other (please specify)	1	2
7. Other (please specify)	1	2

Research Question #3. The Brazilian government has not yet adopted these policies. If available, which of them would be important in creating job opportunities for disabled persons, in the perceptions of rehabilitation workers, administrators, coordinators, and supervising staff members? Circle the number that indicates degree of importance for you, according to the following scale:

- 1 = not important
- 2 = somewhat important
- 3 = moderately important
- 4 = important
- 5 = very important

1. Establishment of a Brazilian national system of employment offices for persons who are legally qualified to engage in gainful occupations with special services provided to handicapped persons.	1	2	3	4	5
2. The state employment service designates at least one staff member in local job service offices to ensure that handicapped job seekers receive all available special services.	1	2	3	4	5

3.	Creation of quota schemes	1	2	3	4	5
	What percentage? _____					
4.	Create projects with industry (a federal government program in agreement with individual employers to establish jointly-financed projects that deliver training and employment services to physically and mentally handicapped persons)	1	2	3	4	5
5.	Job tax credit program (an incentive measure for employers to employ disabled persons)	1	2	3	4	5
6.	Specifically designated jobs	1	2	3	4	5
7.	Cooperatives of disabled persons	1	2	3	4	5
8.	National education and information programs to help the handicapped help themselves	1	2	3	4	5
9.	Community service employment pilot program (to provide full- or part-time community employment to handicapped persons referred to by vocational rehabilitation agencies)	1	2	3	4	5
10.	Other (please specify)	1	2	3	4	5
11.	Other (please specify)	1	2	3	4	5
12.	Other (please specify)	1	2	3	4	5
13.	Other (please specify)	1	2	3	4	5

PART III: PROBLEMS OF VOCATIONAL REHABILITATION

Research Question #4. How serious do vocational rehabilitation workers, administrators, and supervising staff members perceive problems to be at the Recife Vocational Rehabilitation Center? Please circle the number at the right that shows your opinion of the seriousness of each problem according to the following scale:

- 5 = extremely serious problem
 4 = very serious problem
 3 = medium serious problem
 2 = low serious problem
 1 = not a serious problem
 0 = this problem does not exist at Recife

1.	Lack of literacy skills, basic education, vocational training among disabled persons	0	1	2	3	4	5
2.	Lack of job training in trade areas compatible with labor market	0	1	2	3	4	5
3.	Lack of participation of existing local institutions	0	1	2	3	4	5
4.	Lack of trained personnel to develop vocational evaluation	0	1	2	3	4	5
5.	Lack of follow-up services	0	1	2	3	4	5
6.	Prejudice and stigma of employers and the public	0	1	2	3	4	5
7.	Lack of national legislation which provides incentives to employers	0	1	2	3	4	5
8.	Lack of national policy to enforce quota scheme	0	1	2	3	4	5
9.	Lack of revisions of the national rehabilitation policy to examine the reluctance of services	0	1	2	3	4	5
10.	Lack of rehabilitation policy planned in cooperation with other agencies	0	1	2	3	4	5
11.	Lack of inter-ministerial rehabilitation committee	0	1	2	3	4	5
12.	Architectural barriers	0	1	2	3	4	5
13.	Lack of coordination of policies and programs	0	1	2	3	4	5

14.	Economic conditions (surplus offer of labors)	0	1	2	3	4	5
15.	Lack of cooperation and support from employers to develop job opportunities	0	1	2	3	4	5
16.	Lack of communication and public relations activities from rehabilitation workers	0	1	2	3	4	5
17.	Lack of support systems (legislators, professionals, unions)	0	1	2	3	4	5
18.	Negative attitudes of vocational rehabilitation workers in relation to job placement activity	0	1	2	3	4	5
19.	Job placement corresponds to a small percentage of time spent by rehabilitation workers	0	1	2	3	4	5
20.	Lack of motivation of disabled persons to be placed in competitive labor market	0	1	2	3	4	5
21.	Lack of work incentive and job security	0	1	2	3	4	5
22.	Insufficient number of vocational rehabilitation workers to develop job placement activity	0	1	2	3	4	5
23.	Lack of public relations skills and sales techniques of vocational rehabilitation workers	0	1	2	3	4	5
24.	Lack of skills of rehabilitation workers to assist disabled to find and keep jobs	0	1	2	3	4	5
25.	Lack of skills in job analysis and job placement by vocational rehabilitation workers	0	1	2	3	4	5

PART IV: COMPETENCY STATEMENT

Research Question #5. In what job placement competencies do vocational rehabilitation workers, administrators, coordinators, and supervising staff members presently working with work-injured persons at the Recife Vocational Rehabilitation Center feel a need for professional development? Please circle the number that corresponds to your view of each competency, according to the following scale:

- 5 = very high need
 4 = high need
 3 = medium need
 2 = low need
 1 = no need; I am completely functioning

- | | | | | | |
|--|---|---|---|---|---|
| 1. Assist the client to acquire standards of acceptable work behavior. | 1 | 2 | 3 | 4 | 5 |
| 2. Interpret vocational evaluation results to assist clients in self-appraisal and realistic vocational planning. | 1 | 2 | 3 | 4 | 5 |
| 3. Use sources of occupational information to assist client planning for training and placement. | 1 | 2 | 3 | 4 | 5 |
| 4. Visit employers to elicit their cooperation in hiring the handicapped. | 1 | 2 | 3 | 4 | 5 |
| 5. Analyze the tasks of a job and the corresponding abilities and training needs for jobs. | 1 | 2 | 3 | 4 | 5 |
| 6. Provide assistance in job modification and restructuring to accommodate clients' needs. | 1 | 2 | 3 | 4 | 5 |
| 7. Negotiate training agreements with employers, including on-the-job training, and other education programs to meet training needs. | 1 | 2 | 3 | 4 | 5 |
| 8. Discuss a client's work skills with an employer in order to meet training needs. | 1 | 2 | 3 | 4 | 5 |
| 9. Assist clients to acquire job seeking skills (e.g., obtain job leads, fill out applications, and develop interview skills). | 1 | 2 | 3 | 4 | 5 |
| 10. Provide post-employment services to assure adequate client performance and adjustment as well as employer satisfaction. | 1 | 2 | 3 | 4 | 5 |
| 11. Please identify other competency training needs. | 1 | 2 | 3 | 4 | 5 |
| 12. Please identify other competency training needs. | 1 | 2 | 3 | 4 | 5 |
| 13. Please identify other competency training needs. | 1 | 2 | 3 | 4 | 5 |
| 14. Please identify other competency training needs. | 1 | 2 | 3 | 4 | 5 |

PART V: INSERVICE TRAINING NEEDS

Research Question 6: If training courses were available on an inservice basis, how much interest would vocational rehabilitation workers, administrators, coordinators, and supervising staff members have in participating in selected professional development practices? Please indicate by circling the appropriate number how much interest you would have in each course.

- 5 = very interested
- 4 = interested
- 3 = fairly interested
- 2 = somewhat interested
- 1 = low interest
- 0 = not interested/I'm well trained

1. Vocational evaluation skills	0	1	2	3	4	5
2. Personal counseling	0	1	2	3	4	5
3. Assist clients to acquire job seeking skills (e.g., obtain job leads, fill out application forms, develop interview skills, etc.)	0	1	2	3	4	5
4. Visit employers to elicit their cooperation in job placement for the disabled	0	1	2	3	4	5
5. Job placement skills	0	1	2	3	4	5
6. Job analysis and job restructuring to accommodate clients' needs	0	1	2	3	4	5
7. Follow-up activities	0	1	2	3	4	5
8. Job development skills	0	1	2	3	4	5
9. Publications and sales techniques	0	1	2	3	4	5
10. Psycho-social aspects of disabilities	0	1	2	3	4	5
11. Medical aspects of disabilities	0	1	2	3	4	5
12. Assessment of residual work capacity	0	1	2	3	4	5
13. Employment legislation	0	1	2	3	4	5

PART VI: CHANGE ACTIONS

Research Question #7. What are the perceptions of vocational rehabilitation workers, administrators, coordinators, and supervising staff members at the Recife Vocational Rehabilitation Center with regard to the changes needed to increase the participation of vocational rehabilitation workers in the job placement activities of their clients into competitive labor markets? Please circle the letter of your answer according to the following scale:

5 = very important
 4 = important
 3 = medium importance
 2 = low importance
 1 = not important

1	Change priorities and policies at the Center.	1	2	3	4	5
2	Decrease number of clients per vocational rehabilitation team.	1	2	3	4	5
3	Reduction of bureaucratic work.	1	2	3	4	5
4	Long term training in job placement.	1	2	3	4	5
5	Short term training in job placement.	1	2	3	4	5
6	Financial reward by clients placed in competitive labor market.	1	2	3	4	5
7	New legislations providing incentives to employers.	1	2	3	4	5

PART VII: DEMOGRAPHIC INFORMATION

Answer only the questions and check only the items of information which apply to you. Please do not write your name on any sheet.

1. Gender
 - a. Male
 - b. Female
2. Please circle the letter that corresponds to your category
 - a. Client
 - b. Vocational rehabilitation counselor
 - c. Administrator
 - d. Policy maker
 - e. Coordinator
 - f. Other (specify) _____
3. Please circle the letter that corresponds to the number of years you have been in the above category
 - a. Up to one year
 - b. One-two years
 - c. Two-three years
 - d. Three-four years
 - e. Four-five years
 - f. Five to ten years
 - g. Ten to twenty years
 - h. Twenty-one years or more
4. Marital status
 - a. Married
 - b. Single
 - c. Other (specify) _____
5. Region of the Center
 - a. North
 - b. Northeast
 - c. Central
 - d. Southeast
 - e. South
6. What is the highest educational degree you have attained?
 - a. Illiterate
 - b. Elementary school
 - c. Less than high school diploma
 - d. High school diploma
 - e. Technical degree

- f. Bachelor's degree
 - g. Master's degree
 - h. Educational specialist degree
 - i. Doctoral degree
7. Present academic level
- a. BA
 - b. BA+
 - c. MA
 - d. MA+
 - e. PhD
8. Field of study
- a. Social work
 - b. Psychology
 - c. Sociology
 - d. Education
 - e. Rehabilitation counseling
 - f. Other (specify) _____
9. Work condition
- a. Full time**
 - b. 40 hours/week
 - c. 20 hours/week
 - d. Other (specify) _____
10. Occupation (administrators, policy makers, and counselors)
- a. Department chairperson
 - b. Coordinator of counselors
 - c. Supervisor
 - d. Director
 - e. Counselor
 - f. Placement specialist
 - g. Other (specify) _____
11. In which age group are you?
- a. Under 20 years
 - b. 20-29 years
 - c. 30-39 years
 - d. 40-49 years
 - e. 50-59 years
 - f. 60-69 years
 - g. Over 70 years

**Full time means that the employee may not accept job responsibilities in another enterprise.

10. Occupation (administrators, policy makers, and counselors)

- a. Department chairperson
- b. Coordinator of counselors
- c. Supervisor
- d. Director
- e. Counselor
- f. Placement specialist
- g. Other (specify) _____

11. In which age group are you?

- a. Under 20 years
- b. 20-29 years
- c. 30-39 years
- d. 40-49 years
- e. 50-59 years
- f. 60-69 years
- g. Over 70 years

APPENDIX E

**RECIFE VOCATIONAL REHABILITATION WORKERS,
ADMINISTRATORS, COORDINATORS, AND
SUPERVISING STAFF MEMBERS' SURVEY**

PORTUGUESE VERSION

Número _____

March 14, 1986.

Questionário

Prezado participante:

A reabilitação vocacional tem como sua meta final auxiliar as pessoas deficientes se tornarem socialmente e economicamente integradas na sociedade. Estou solicitando a sua cooperação na avaliação das necessidades da reabilitação vocacional, incluindo os serviços oferecidos, os problemas encontrados e os treinamento necessários na área.

Por favor, você tomaria 30 minutos para completar o questionário anexo? Favor retorná-lo para o diretor do centro de reabilitação que o entregará a mim. O tratamento dos dados obtidos obedecerá ao critério de estrita confidencialidade.

Muito obrigada,

Elza Barros
Candidata ao Doutorado em
Administração Educacional
(Adult and Continuing Education Major)

Parte I: Serviços da Reabilitação Vocacional

1. No Centro de Reabilitação Vocacional, qual é a eficiência de cada um dos componentes de serviços apresentados abaixo? Por favor, passe um circulo no número que corresponde a sua opinião, de acordo com a seguinte escala: 1 = não é oferecido; 2 = oferecido com pouca eficiência; 3 = oferecido com média eficiência; 4 = oferecido com grande eficiência; 5 = oferecido com excelente eficiência.

<u>Serviços</u>	<u>Eficiência</u>				
1. O serviço desenvolve atividades de recrutamento (outreach) que são especificamente objetivadas para pessoas deficientes	1	2	3	4	5
2. O serviço fornece atividades de orientação para oferecer as pessoas deficientes uma introdução ao programa e especialmente a outros participantes.	1	2	3	4	5
3. O serviço oferece orientação psicológica (individual, em grupo).	1	2	3	4	5
4. O serviço utiliza-se de avaliação e testes (e.g. inventários de interesse, avaliação educacional, transferência de habilidades)	1	2	3	4	5
5. O serviço oferece orientação profissional/educacional (atividades e recursos no contexto do mercado de trabalho incluindo informação sobre treinamento vocacional, educação básica, etc.	1	2	3	4	5
6. O serviço fornece desenvolvimento em habilidades de vida (como desenvolver objetivos profissionais, vestir-se apropriadamente para o trabalho, etc.).	1	2	3	4	5
7. O serviço fornece acesso para treinamento vocacional (incluindo treinamento em escolas técnicas, estágios, treinamento no trabalho)	1	2	3	4	5
8. O serviço oferece preparação de pré-emprego. (ex. preparar curriculum, preencher formulários de emprego, fazer testes, entrevistas).	1	2	3	4	5
9. O serviço oferece serviços de apoio (ajuda financeira para transportes, acomodação, livros, etc.)	1	2	3	4	5

10. O serviço fornece encaminhamento para outros serviços sociais (direitos trabalhistas, assistência social, etc).	1	2	3	4	5
11. O serviço auxilia com desenvolvimento de emprego (profissionais visitam empregadores em potencial)	1	2	3	4	5
12. O serviço auxilia os clientes com colocação no emprego (oficinas protegidas, autônomos, mercado de trabalho competitivo)	1	2	3	4	5
13. O serviço oferece atividades de seguimentos e apoio continuado para clientes e empregadores.	1	2	3	4	5
14. O serviço oferece sistemas de administração do programa, incluindo identificação atualizada e compilação de dados sobre as características dos clientes mensalmente	1	2	3	4	5
15. Por favor, indique outros serviços desenvolvidos.	1	2	3	4	5
16. Por favor, indique outros serviços desenvolvidos.	1	2	3	4	5
17. Por favor, indique outros serviços desenvolvidos.	1	2	3	4	5
18. Por favor, indique outros serviços desenvolvidos.	1	2	3	4	5
19. Por favor, indique outros serviços desenvolvidos.	1	2	3	4	5

Parte II: Medidas Legislativas

Que medidas legislativas existem para o beneficio dos serviços de reabilitação profissional e colocação do cliente no mercado de trabalho? Passe um circulo em volta dos números a esquerda para cada legislação existente. Indique se você usa ou nao a medida legislativa passando um circulo em volta do número a direita.

	Sim, nós a usamos -----	Nao, nós nao a usamos -----
1. Ordem SPS-20 (1975) que lida com reabilitação vocacional	1	2
2. Ordens SPS-5 (1980) que lida com reabilitação vocacional	1	2
3. Decreto 77.077 (1976) que é o tex- to consolidado dos atos dos serviço social relacionados a habilitação vocacional.	1	2
4. Outro (favor especificar)	1	2
5. Outro (favor especificar)	1	2
6. Outro (favor especificar)	1	2
7. Outro (favor especificar)	1	2
8. Outro (favor especificar)	1	2

O governo ainda não adota estas legislações. Se adotadas, qual delas seriam eficientes em criar oportunidades de emprego para as pessoas deficientes? Circule o número que indica o grau de eficiência para você, de acordo com a seguinte escala: 1 = de nenhuma eficiência; 2 = de pequena eficiência, 3 = de média eficiência; 4 = de grande eficiência; 5 = de eficiência extremamente grande.

Legislações

1. Estabelecimentos de um sistema nacional brasileiro de escritórios de emprego para pessoas que estão legalmente qualificadas para se envolver em ocupações remuneradas com serviços especiais oferecidos a pessoas deficientes. 1 2 3 4 5
2. O serviço estadual de emprego designa pelo menos um profissional nos escritórios de serviço de trabalho para assegurar que as pessoas deficientes procurando emprego recebam todos os serviços especiais disponíveis 1 2 3 4 5
3. Criações de esquemas de quota de trabalho.
Que percentagem? 1 2 3 4 5
4. Criações de projetos com indústrias (um programa do governo federal em acordo com empregadores individuais para estabelecer projetos financiados conjuntamente para oferecer serviços de treinamento e para pessoas deficientes físicas e mentais) 1 2 3 4 5
5. Programas de crédito, incentivos fiscais (medida de estímulo para empregadores abrirem vagas de trabalho para as pessoas deficientes 1 2 3 4 5
6. Empregos especificamente designados para pessoas deficientes 1 2 3 4 5
7. Criação de cooperativas para as pessoas deficientes. 1 2 3 4 5
8. Programas de educação e informação nacionais para ajudar as pessoas deficientes se auto-ajudarem . 1 2 3 4 5

9. Programa piloto de serviços na comunidade (para oferecer trabalho de tempo integral ou parcial nos empregos da comunidade para as pessoas deficientes encaminhadas pelas agências de reabilitação vocacionais 1 2 3 4 5

10. Outro, favor especificar

.....
 1 2 3 4 5

11. Outro, favor especificar

.....
 1 2 3 4 5

12. Outro, favor especificar

.....
 1 2 3 4 5

13. Outro, favor especificar

.....
 1 2 3 4 5

14. Outro, favor especificar

.....
 1 2 3 4 5

Parte III: Problemas da Reabilitação Vocacional

Qual grave é cada um dos problemas no serviço de reabilitação vocacional? Por favor, circule o número a direita que mostra a sua opinião da gravidade de cada problema de acordo com a seguinte escala: 0 = este problema não existe neste serviço; 1 = de nenhuma gravidade; 2 = de pouca gravidade; 3 = de média gravidade; 4 = de grande gravidade; 5 = de gravidade extremamente grande.

Problema

Gravidade

1. Ausência de alfabetização, educação primária e treinamento vocacional entre as pessoas deficientes . . . 0 1 2 3 4 5

2. Treinamento vocacional em áreas não compatíveis com as necessidades do mercado de trabalho local.	0	1	2	3	4	5
3. Ausência de participação direta das instituições existentes locais (empregadores, escolas técnicas, escolas vocacionais, etc...) em treinamento de emprego, colocação no mercado de trabalho, e desenvolvimentos de atividades de emprego no Centro de Reabilitação Profissional.	0	1	2	3	4	5
4. Ausência de profissionais treinados para avaliar as habilidades de treinamento vocacional e habilidades de pré-emprego das pessoas deficientes	0	1	2	3	4	5
5. Ausência de serviços de seguimento para auxiliar o empregado no processo de ajustamento ao emprego e garantir a satisfação do empregador para criar novas oportunidades de emprego.	0	1	2	3	4	5
6. Preconceito e estigmas dos empregadores e do público em relação as habilidades das pessoas deficientes	0	1	2	3	4	5
7. Ausência de medidas legislativas que incentivem os empregadores a abrirem vagas de trabalho para pessoas deficientes em suas empresas (incentivos fiscais, crédito, etc...)	0	1	2	3	4	5
8. Ausência na legislação nacional de medidas que obrigue a colocação no mercado de trabalho de quotas de pessoas deficientes . .	0	1	2	3	4	5
9. Ausência de revisões periódicas na legislação nacional de reabilitação para examinar a relevância dos serviços oferecidos num contexto mais amplo do desenvolvimento nacional.	0	1	2	3	4	5

10. Ausência de legislação de reabilitação nacional planejada e coordenada em colaboração com todas as agências governamentais e não governamentais e em consultoria com empregadores e organizações de pessoas deficientes e pessoas deficientes individualmente 0 1 2 3 4 5
11. Ausência de um comitê de reabilitação inter-ministerial (saúde, trabalho, serviços sociais e educação) que assegure que as orientações e recomendações do comitê sejam considerados e colocados em prática prontamente. 0 1 2 3 4 5
12. Barreiras arquitetônicas que restringem a pessoa deficiente de usar transporte público, entrar em ambientes de trabalho, e lazer, etc...). 0 1 2 3 4 5
13. Ausência de coordenação das legislações da reabilitação vocacional e programas sociais e econômicos do país. 0 1 2 3 4 5
14. As condições atuais da economia nacional (ex. excesso de mão de obra) dificultam a absorção do deficiente no mercado de trabalho 0 1 2 3 4 5
15. Falta de cooperação e apoio dos empregadores em criar oportunidades para deficientes qualificados . . 0 1 2 3 4 5
16. Falta de um trabalho de comunicações e relações públicas dos profissionais de reabilitação com os empregadores para criar oportunidades de trabalho para deficientes qualificados. 0 1 2 3 4 5
17. Sistemas de apoio necessários para desenvolver atividades de colocação no mercado de trabalho insuficientes (legislações trabalhistas, profissionais, empregadores, sindicatos. 0 1 2 3 4 5

18. Atitudes negativas dos
conselheiros profissionais
em relação a atividade de
colocação no mercado de trabalho
levando a resultados insuficientes 0 1 2 3 4 5
19. A atividade de colocação no mer-
cado de trabalho corresponde a uma
pequena percentagem do tempo de
trabalho do profissional de
reabilitação 0 1 2 3 4 5
20. Falta de motivação do deficiente
para ser colocado no mercado
de trabalho. 0 1 2 3 4 5
21. Falta de incentivo e segurança
para o deficiente adaptar-se e
manter no trabalho (salário,
insuficiente, barreiras,
transporte, ser despedido antes
de um determinado tempo de
serviço). 0 1 2 3 4 5
22. Numero insuficiente de
profissionais para desenvolver
atividades de colocação no mercado
de trabalho. 0 1 2 3 4 5
23. Ausência de habilidades em relações
públicas e técnicas de venda dos
conselheiros em reabilitação
profissional para lidar com
possíveis empregadores 0 1 2 3 4 5
24. Falta de qualificação do
profissional de reabilitação para
ajudar as pessoas deficientes
encontrarem e manterem seus
empregos 0 1 2 3 4 5
25. Ausência de habilidades em
análise de empregos e colocação no
mercado de trabalho pelos
conselheiros em reabilitação
profissional 0 1 2 3 4 5
26. Outro, favor especificar 0 1 2 3 4 5
-
-
-

27. Outro, favor especificar 0 1 2 3 4 5

.....

.....

.....

28. Outro, favor especificar 0 1 2 3 4 5

.....

.....

.....

29. Outro, favor especificar 0 1 2 3 4 5

.....

.....

.....

Parte IV: Competências

Para funcionar competentemente como um conselheiro em reabilitação vocacional; avalie a necessidade para atualizar ou melhorar nas áreas de competências abaixo. Por favor, passe um circulo em volta do número que corresponde a sua percepção de cada competência de acordo com a seguinte escala: 1 = de nenhuma necessidade; 2 = de pequena necessidade; 3 = de média necessidade; 4 = de grande necessidade; 5 = de necessidade extremamente grande.

Competências

Competências

1. Ajudar o cliente adquirir padroes de comportamentos aceitáveis para o trabalho 1 2 3 4 5

2. Interpretar os resultados da avaliação vocacional para ajudar o cliente em auto-avaliação e planejamento vocacional realistico.. . . . 1 2 3 4 5

3. Usar recursos de informação ocupacional para ajudar o cliente a planejar treinamento e colocação no mercado de trabalho. 1 2 3 4 5

- | | | | | | |
|--|---|---|---|---|---|
| 4. Visitar empregadores para obter cooperação em empregar o deficiente. | 1 | 2 | 3 | 4 | 5 |
| 5. Analisar as tarefas de um trabalho e as habilidades correspondentes e treinamentos necessários para o trabalho. | 1 | 2 | 3 | 4 | 5 |
| 6. Fornecer assistência em modificação de trabalho e para acomodar as necessidades dos clientes | 1 | 2 | 3 | 4 | 5 |
| 7. Negociar acordos de treinamento com empregadores (incluindo treinamento no emprego) e outros programas educacionais para satisfazer as necessidades do trabalho. | 1 | 2 | 3 | 4 | 5 |
| 8. Discutir as habilidades de trabalho dos clientes com um empregador a fim de obter uma oferta de emprego.. . . . | 1 | 2 | 3 | 4 | 5 |
| 9. Auxiliar os clientes a adquirir habilidades de procurar emprego (ex. obter anuncios de emprego, preencher formulários de emprego, e desenvolver habilidades de entrevista). | 1 | 2 | 3 | 4 | 5 |
| 10. Fornecer serviços de seguimento no minimo de 1 ano (follow-up) para garantir a segurança, desempenho e adaptação do empregado, como também a satisfação do empregador. | 1 | 2 | 3 | 4 | 5 |
| 11. Por favor, identifique outra necessidade de treinamento | 1 | 2 | 3 | 4 | 5 |
| 12. Por favor, identifique outra necessidade de treinamento | 1 | 2 | 3 | 4 | 5 |
| 13. Por favor, identifique outra necessidade de treinamento | 1 | 2 | 3 | 4 | 5 |
| 14. Por favor, identifique outra necessidade de treinamento | 1 | 2 | 3 | 4 | 5 |
| 15. Por favor, identifique outra necessidade de treinamento | 1 | 2 | 3 | 4 | 5 |

Parte V: Necessidades de Treinamento

Se cursos de treinamento e reciclagem fossem disponíveis para profissionais de reabilitação, indique passando um circulo no número apropriado que indica o seu interesse em tal curso. Marque de acordo com a seguinte escala: 0 = não há interesse, estou bem treinado na área; 1 = de nenhum interesse; 2 = de pouco interesse; 3 = de médio interesse; 4 = de grande interesse; 5 = de interesse extremamente grande.

Áreas de Treinamento**Interesse**

1. Técnicas de avaliação vocacional	0	1	2	3	4	5
2. Técnicas de aconselhamento (individual, em grupo)	0	1	2	3	4	5
3. Técnicas de prontidão para o emprego (preparar curriculum, entrevistas, etc...)	0	1	2	3	4	5
4. Técnicas de relacionamento com empregadores	0	1	2	3	4	5
5. Técnicas de colocação no mercado de trabalho.	0	1	2	3	4	5
6. Análise e reestruturação de trabalho.	0	1	2	3	4	5
7. Técnicas de adaptação ao emprego	0	1	2	3	4	5
8. Técnicas de desenvolvimento profissional	0	1	2	3	4	5
9. Técnicas em relações públicas técnicas de vendas para empregar o cliente	0	1	2	3	4	5
10. Aspectos psicológicos e sociais das deficiências.	0	1	2	3	4	5
11. Aspectos médicos das deficiências.	0	1	2	3	4	5
12. Técnicas de avaliação das capacidades funcionais.	0	1	2	3	4	5
13. Legislações que beneficie a oportunidade de empregos para clientes.	0	1	2	3	4	5

14. Outros (especificar)

..... 0 1 2 3 4 5

15. Outros (especificar)

..... 0 1 2 3 4 5

16. Outros (especificar)

..... 0 1 2 3 4 5

Parte VI: Mudanças

Na sua opinião, que mudanças são necessárias para aumentar o envolvimento do profissional de reabilitação na atividade de colocação do reabilitado no mercado de trabalho? Para cada mudança, circule o número representando sua resposta de acordo com a seguinte escala: 1 = de nenhuma eficiência; 2 = de pequena eficiência; 3 = de média eficiência; 4 = de grande eficiência; 5 = de eficiência extremamente grande.

<u>Mudanças</u>	<u>Eficiência</u>				
1. Mudança na política e prioridades do Centro de Reabilitação	1	2	3	4	5
2. Diminuição do número de clientes para cada profissional de reabilitação. .	1	2	3	4	5
3. Redução de trabalho burocrático . . .	1	2	3	4	5
4. Participação em treinamento em técnicas de colocação no mercado de trabalho (cursos de longo prazo, especialização, mestrado, etc.)	1	2	3	4	5
5. Participação em treinamento em técnicas de colocação no mercado de trabalho (seminários, conferências, cursos de curto prazo, etc.)	1	2	3	4	5
6. Modificação no sistema de recompensa (pagamentos de uma percentagem além do ordenado) para profissionais de reabilitação profissional para recompensá-los e motivá-los para atividades de colocação no mercado com sucesso.	1	2	3	4	5
7. Passagem de novas legislações que possam encorajar os empregadores a empregarem pessoas deficientes	1	2	3	4	5

8. Outro fator (favor especificar)

..... 1 2 3 4 5

9. Outro fator (favor especificar)

..... 1 2 3 4 5

10. Outro fator (favor especificar)

..... 1 2 3 4 5

11. Outro fator (favor especificar)

..... 1 2 3 4 5

Parte VII: Informações sobre o respondente

Favor responder as perguntas que sejam aplicáveis.

- A. Favor marcar com um círculo o número que corresponde a sua categoria:
1. cliente
 2. profissional de reabilitação
 3. administrador
 4. policy maker
 5. supervisão
 6. outro (especificar)
-

B. Numero de anos na categoria acima:

1. 1-4 anos
2. 5-9 anos
3. 10-14 anos
4. 15-19 anos
5. Acima de 20 anos

C. Sexo :

1. masculino
2. feminino

E. Região do Centro de Reabilitação

1. Norte do Brasil
2. Nordeste do Brasil
3. Centro do Brasil
4. Sudeste do Brasil
5. Sul do Brasil

F. Estado Civil

1. casado
 2. solteiro
 3. outro (especificar)
-

G. Nível acadêmico

1. analfabeto
 2. escola primária
 3. escola 1º grau
 4. escola 2º grau
 5. bacharelado
 6. mestrado
 7. doutorado
 8. outro (especificar)
-

D. Idade:

1. menos de 16 anos
2. 17-24 anos
3. 25-44 anos
4. 45-64 anos
5. Acima de 65 anos

H. Area de estudo

1. Assistência social
 2. Medicina
 3. Psicologia
 4. Sociologia
 5. Conselheiro em
Reabilitação
 6. Outro (especificar)
-

E. Condição de trabalho

1. horário integral
 2. 40 horas por semana
 3. 20 horas por semana
 4. outros (especificar)
-

F. Ocupação

1. coordenador de profissionais de habilitação.
 2. Administrador
 3. Diretor
 4. Especialista em colocação no mercado de trabalho.
 5. Outro (especificar)
-

Muito obrigada por ter tomado seu tempo para preencher este questionário. Será de muita ajuda na área de reabilitação vocacional no Brasil.

Por favor, retorne o questionário completo para o Diretor do Serviço ou para Elza Barros: 929-K Cherry Lane, East Lansing, Michigan - 48823 - USA.

APPENDIX F

INTERVIEW GUIDELINES

IN-DEPTH INTERVIEW QUESTIONS

Please complete this questionnaire prior to your interview which will focus on a discussion of the following areas.

National Legislative Provisions

1. What are the national legislative provisions for employment opportunities for disabled persons?

Service Components

2. What are the vocational rehabilitation service components provided?

Problems of Vocational Rehabilitation

3. What are the problems faced in providing vocational rehabilitation services?

Training Needs for Counselors

4. What training is needed for counselors so better services are provided to clients?

Purposes of In-Depth Interview

1. to be more knowledgeable about the questionnaires
2. to be able to interpret the results in terms of perceptions, validity, and reliability; to be able to do matching

INTERVIEW SCHEDULE

Name of individual _____

Position _____

Date _____ Time _____

Place _____

Tape number and side _____

APPENDIX G

MAP OF BRAZIL

APPENDIX H

MAP OF THE STATE OF PERNAMBUCO



BIBLIOGRAPHY

- Acton, N. (1984). Policies for the employment of disabled people. Paper presented at the 1984 International Symposium on Employment of Disabled People: Economics and Equity. East Lansing: Michigan State University, University Center for International Rehabilitation.
- Aihaider, K. (1986). A study of quality, importance, provisions, and effectiveness of student personnel services at King Faisal University, Saudi Arabia. Unpublished Ph.D. dissertation, Michigan State University.
- Aldridge, R. G. (1980). Sexuality in clinical practice: A continuing medical education program for family practice physicians. Unpublished Ph.D. dissertation, Michigan State University.
- Al-Zahrani, S. A. (1985). Institutional goals in Saudi universities: Current and preferred status of goals. Unpublished Ph.D. dissertation, Michigan State University.
- Androsen, G. I. (1971). The development of a tentative model for selected inservice experiences for supervising teachers of student teachers at Flint College, University of Michigan. Unpublished Ph.D. dissertation, Michigan State University.
- Armstrong, S. J. (1966). Introduction to statistical analysis and inference for psychology evaluation. New York: John Wiley & Sons.
- Ary, D., Jacobs, L. D., & Rozaviek, A. (1972). Introduction to research in education. New York: Holt, Rinehart and Winston.
- Atkinson, K. A. (1981). Michigan full- and part-time vocational instructors' perceptions toward their professional development relative to their occupational roles as public two-year college instructors. Unpublished Ph.D. dissertation, Michigan State University.
- Berkowitz, M. (1963). Rehabilitating the disabled worker: A platform for action. Washington, DC: HEW, VR Administration.
- Bernard, S., & Thompson, G. (1984). Job search strategies for college grads. _____: Bob Adams, Inc.
- Berven, N. C. (1979). Training needs of state agency rehabilitation counselors. Rehabilitation Counselling Bulletin, 22, 320-9.
- Bogden, R. C., & Biklen, S. K. (1982). Qualitative research for education: An introduction to theory and methods. Boston: Allyn and Bacon.

- Bohun, S. L. (1986). A needs assessment methodology for staff training and development. Unpublished Ed.D. dissertation, Columbia University Teachers College.
- Bolton, B. (1986). Comments on Rubin and Rice's recommendations for the improvement of rehabilitation research. Rehabilitation Counseling Bulletin, 30(1), 43-47.
- Carroll, J. D. (1984). Ontario Workers' Compensation Board, Vocational Rehabilitation Division: Service strategies. Paper presented at the 1986 International Symposium on Employment of Disabled People: Economics and Equity. East Lansing: Michigan State University, University Center for International Rehabilitation.
- Carroll, P. L. (1984). Problems and variables affecting mandatory special education legislation in Wisconsin. Unpublished Ph.D. dissertation, the University of Wisconsin-Madison.
- Cogswell, D. R. (1985). Assessing the training and staff development needs of mental health/mental retardation professions. A multi-method framework. Unpublished Ed.D. dissertation, Virginia Polytechnic Institute and State University.
- Cooper, B. S., & Rice, D. P. (1975, November). The economic cost of illness revisited. Washington, DC: Social Security Administration.
- Cornier, P. (1984). The future of work for people with disabilities: A view from Great Britain. Paper presented at the 1984 International Symposium on Employment of Disabled People: Economics and Equity. East Lansing: Michigan State University, University Center for International Rehabilitation.
- Costley, C. J. (1977). An evaluation of graduating community college students' perceptions and achievement levels of job applicant skills as measured at Kellogg Community College. Unpublished Ph.D. dissertation, Michigan State University.
- Council of Europe. (1960). Joint committee for the rehabilitation and resettlement of the disabled.
- Cross, R. C. (1984). The relationship of counselor attitudes to clients' outcomes in a rehabilitation setting. Ed.D. dissertation, Boston University.
- Department of Health and Human Services, Social Security Administration. (1981). Disability survey 72: Disabled and nondisabled adults—a monograph. Office of Policy/Office of Research and Statistics. Research Report No. 56.
- ECO Software. (1984). Microstatic package.

- Ehrenreich, M. (1985). The effect of vocational rehabilitation medical management and combined rehabilitation services on self-concept, hypochondriasis, and locus of control of disabled workers with low back injuries. Unpublished Ph.D. dissertation, New York University.
- Elder, J. K. (1985, Spring). Transition from school to employment: A new frontier in the work force. Rehabilitation World, 8-9, 43.
- Evans, J. (1986, July 1). Brazil battles prices. The Detroit News, 6A.
- Fox, G. C. (1966). The need of in-service education for community college trustees as perceived by presidents and trustees of community colleges. Unpublished Ph.D. dissertation, Michigan State University.
- Glaser, E. M., & Taylor, S. H. (1973). Factors influencing the success of applied research. American Psychologist, 28, 140-6.
- Gross, R. F. (1963). A study of inservice education programs for student personnel workers in selected colleges and universities in the United States. Unpublished Ph.D. dissertation, Michigan State University.
- Hamdan, A. I. (1980). Competencies needed for teachers of the mentally retarded in Saudi Arabia: A needs assessment. Unpublished Ph.D. dissertation, Michigan State University.
- Harb, M. T. (1985). A survey of the reading role as perceived by elementary school principals, classroom teachers, and reading coordinators. Unpublished Ph.D. dissertation, Michigan State University.
- Hansen, G. B. (1986). Preventing layoffs: Developing effective job security and economic adjustment programs. U.S. Department of Labor, Bureau of Labor-Management Relations and Cooperative Programs.
- Herbert, J. T., & Wright, G. N. (1985, March). Attitudes of state vocational rehabilitation agencies toward counselor education. Rehabilitation Counseling Bulletin, 28(3), 155-60.
- International association of Industrial Accident Boards and Commissions. (1977). Model medical care and rehabilitation program. Atlanta.
- International Business Machines. (1985). LOTUS 1, 2, 3. Computer graphic program.
- International Labor Office. (1984). Employment of disabled persons. Manual on selective placement. Geneva.
- International Labor Office. (1967). Report to the government of Brazil on the vocational rehabilitation and placement of the disabled. Geneva.
- International Labor Office. (1985). Vocational rehabilitation of disabled persons. Tenth Asian regional conference, Jakarta.

- International Labor Office. (1982). Vocational rehabilitation services for disabled persons: Legislative provisions. Geneva.
- INPS/Instituto Nacional de Previdencia Social. (1978). Reabilitacao profissional no INPS: Coordenadoria de Comunicacao Social.
- Interdepartmental Workers' Compensation Task Force. (1977). Workers' compensation: Is there a better way? Washington, DC: U.S. Government Printing Office.
- Isaac, S., & Michael, W. B. (1971). Handbook in research and evaluation. San Diego: Robert R. Knapp.
- Janes, M. E., & Emener, W. G. (1986, March). Rehabilitation counselor education graduates' perceptions of their employment and career satisfaction. Rehabilitation Counseling Bulletin, 182-9.
- Kundu, M. M. (1983). Developing a prediction model for vocational rehabilitation clients using demographic, locus of control, work motivation, and work history variables: An exploratory study. Unpublished Ph.D. dissertation, Michigan State University.
- Lando, M. E., & Drute, A. (1976, October). Disability insurance: Program issues and research. Social Security Bulletin, 4-5, 7-9.
- Libby, R. M. (1977). A study of occupational placement services provided by senior high schools in Iowa. Unpublished Ph.D. dissertation, Michigan State University.
- Luft, A. S. (1973, June). The impact of poor health on earnings in health care policy. Discussion paper series No. 1. Harvard University, Center for Community Health and Medical Care.
- Mateme, M. I. (1985). Perceptions of teachers, principals, subject advisers, and inspectors in a department of education in the Republic of South Africa concerning selected teaching, competency skills, in-service needs of black secondary school teachers. Unpublished Ph.D. dissertation, Michigan State University.
- Matta, G. A. (1985). A study of rehabilitation workers' perceived competencies, attitudes, and time spent on vocational placement tasks at the National Insurance Institute in Israel. Unpublished Ph.D. dissertation, Michigan State University.
- May, V. R. (1984). A microtraining model for the employer-counselor selective placement interview. Unpublished Ph.D. dissertation, Southern Illinois University at Carbondale.
- Mehan, H. (n.d.). Looking inside schools. In Learning lessons: Social organization in the classroom.

- Ministerio da Previdencia e assistencia social/MPAS. (1981). A politica nacional de previdencia e assistencia social. Brasilia: Coordenadoria de Comunicacao Social.
- Ministerio da Previdencia e assistencia social/MPAS. (1981). A previdencia social Brasileira. Brasilia: DATAPREV/Social Security Data Processing Company.
- Ministerio da Previdencia e assistencia social/MPAS—INPS/Instituto Nacional de Previdencia Social. (1980). Reabilitacao profissional.
- Ministerio da Previdencia e Assistencia Social. (1980). Relacao de Entidadeo de Reabilitacao, 1979-1980. INPS/Instituto Nacional de Previdencia Social SSP/Secretaria de Servicos Providenciarios.
- Morsh, J. E., Madden, J. M., & Christal, R. E. (1961). Job analysis in the United States Air Force. Lackland Air Force Base, TX: Personnel Research Laboratory.
- Muthard, J. E., & Salomone, P. R. (1968). The role and functions of the rehabilitation counselor. Rehabilitation Counseling Bulletin, 13, 81-168.
- National Commission on State Workmen's Compensation Laws. (1972). The report of the National Commission on State Workmen's Compensation Laws. Washington, DC: U.S. Government Printing Office.
- National Institutes on Rehabilitation and Health Services. (1972). Report of the National Workshop on Rehabilitation and Workmen's Compensation. Washington, D.C.
- Nie, N. H., et al. (1975). Statistical package for the social sciences (SPSS), 2nd ed. New York: McGraw-Hill.
- Ostrowski, L. S. (1983). A training needs' assessment of state agency vocational rehabilitation counselors. Unpublished Ph.D. dissertation, University of Pittsburgh.
- Peterson, G. E. (1968). The perceptions of student personnel administrators, faculty members, and students of the student personnel programs of the senior colleges of the American Lutheran church. Unpublished Ph.D. dissertation, Michigan State University.
- Roessler, R., & Bolton, B. (1983). Assessment and enhancement of functional vocational capabilities: A five-year research strategy. Richard J. Baker Memorial Monograph. Vocational Evaluation and Work Adjustment Association, 1(1).
- Roessler, R., & Bolton, B. (1984). Vocational rehabilitation of individuals with employability skill deficits: Problems and recommendations. Fayetteville: Arkansas Research and Training Center in Vocational Rehabilitation.

- Roessler, R., & Bolton, B. (1985). The work personality profile: An experimental rating instrument for assessing job maintenance skills. Vocational Evaluation and Work Adjustment Bulletin, 18, 8-11.
- Roessler, R., & Johnson, V. (1985). Vocational coping training. Fayetteville: Arkansas Research and Training Center in Vocational Rehabilitation.
- Rubin, S. E., & Rice, J. M. (1986, September). Quality and relevance of rehabilitation research: A critique and recommendations. Rehabilitation Counseling Bulletin, 30(1), 33-42.
- Saleme, W. (1985). The planning process at selected federal universities in Brazil. Unpublished Ph.D. dissertation, Michigan State University.
- Santos, B. M. (1961). An analysis of the in-service training needs and participation in in-service training programs by teachers of agricultural schools of the Philippines. Unpublished Ed.D. thesis, Michigan State University.
- Sax, G. (1968). Empirical foundations of educational research. Englewood Cliffs, NJ: Prentice-Hall.
- Schschatzman, L., & Strauss, A. L. (1973). Field research strategies for a natural sociology. Englewood Cliffs, NJ: Prentice-Hall.
- Self, E. A. (1985). The status and perceived role of the adult learner and continuing education programs in selected Nazarene colleges. Unpublished Ph.D. dissertation, Michigan State University.
- Selltiz, C., et al. (1981). Research methods in social relations. New York: Holt, Rinehart and Winston.
- Sink, J., & Field, T. (1979). Vocational assessment and jobs. Athens, GA: VDARE Service Bureau.
- Sloan, R. C. (1979). Opinions of Michigan vocational education administrators toward mainstreaming handicapped students in vocational instruction programs. Unpublished Ph.D. dissertation, Michigan State University.
- Smith, M. J. (1979). The development and study of competencies needed by teachers of students with autistic characteristics. Unpublished Ph.D. dissertation, Michigan State University.
- Sperry, R. E. (1978). Training needs assessment: A study of methods, approaches, and procedures used by government agencies. Philadelphia: U. S. Civil Service Commission.
- Szymanski, E. M., & Danek, M. M. (1985, December). School-to-work transition for students with disabilities: Historical, current, and conceptual issues. Rehabilitation Counseling Bulletin, 81-89.

- Taylor, B. M. (1984). Roles of vocational counselors in the public schools of Mississippi as perceived by school superintendents, vocational directors, and vocational counselors. Unpublished Ph.D. dissertation, Mississippi State University.
- United Nations Department of Economic and Social Affairs. (1977). Recent trends in legislation concerning rehabilitation for disabled persons in selected countries.
- United Nations Department of Economic and Social Welfare. (1977). Social barriers to the integration of disabled persons into the community life. Report of an expert group meeting, Geneva, 6/28-7/5/76.
- United Nations Educational, Scientific, and Cultural Organization. (1976). Comparative study on legislation, organization, and administration of rehabilitation services for the disabled. Prepared jointly by the United Nations, the International Labor Organization, and the World Health Organization. Department of Economic and Social Affairs, ST/ESA/28.
- United Nations Educational, Scientific, and Cultural Organization. (1977). Recent trends in legislation concerning rehabilitation services for disabled persons in selected countries. Department of Economic and Social Affairs, ST/ESA/73.
- United Nations Educational, Scientific, and Cultural Organization. (1977). Rehabilitation for the disabled. The social and economic implications on investments for this purpose. Department of Economic and Social Affairs, ST/ESA/65.
- United Nations Educational, Scientific, and Cultural Organization. (1983). World program of action concerning disabled persons. New York.
- U.S. Bureau of Education for the Handicapped. (1979). Disability: Our challenge. U.S. Office of Education.
- U.S. Congress, Office of Technology Assessment. (1985). Displaced homemakers: Programs and policy. An interim report.
- U.S. Department of Health, Education, and Welfare. (1975). Social security programs throughout the world.
- U.S. Department of Health and Human Services. (1985). Training child support enforcement personnel: Trainer guide. Office of Child Support Enforcement.
- U.S. Department of Labor. (1985). Employment programs for rural women. Office of the Secretary, Women's Bureau.
- U.S. Department of Labor, Employment Standards Administration. (1971). Survey of working conditions.
- U.S. Department of Labor, Employment Standard Administration. (1985). Vietnam veterans and disabled veterans in business and industry.

- U.S. Department of Labor. (1979). Sheltered workshop study. A nationwide report on sheltered workshops and their employment of handicapped individuals, vol. II: Employment Standard Administration, Employment and Training Administration.
- U.S. Office of Career Education/U.S. Office of Education. (1979). Profiles of career education projects: Fourth year's program, fiscal year 1978, funding.
- Ursprung, A. W. (1986, March). Burnout in the human services: A review of the literature. Rehabilitation Counseling Bulletin, 190-7.
- Van Dalen, D. B., & Meyer, W. J. (1962). Understanding educational research: An introduction. New York: McGraw-Hill.
- Vandergoot, D., Jacobson, R., & Warrall, J. (1979). New directions for placement practice in vocational rehabilitation. In D. Vandergoot & J. Warrall (Eds.), Placement in rehabilitation. Baltimore: University Park Press.
- Walker, G. W. (1984). Training mentally retarded persons in appropriate job seeking behaviors. Unpublished Ed.D. dissertation, Memphis State University.
- Warheit, G. J., Bell, R. A., & Schwab, J. L. (1977). Needs assessment approaches: concepts and methods. Rockville, MD: National Institute of Mental Health, Department of Health, Education, and Welfare publication No. (ADM) 72-472, U.S. Government Printing Office.
- Wehman, P., Kregel, J., & Seyforth, J. (1985, December). Employment outlook for young adults with mental retardation. Rehabilitation Counseling Bulletin, 90-99.
- Yasuski, T. (1986, August). Inflation and cumulative debt outstanding of less developed countries. Journal of International Economics, 21(1/2), 61-80.