

NATIONAL FORUM

REVIEW OF THE NEEDS OF PHYSICALLY HANDICAPPED PERSONS IN THE VOCATIONAL COUNSELING PROCESS AND A POSSIBLE SOLUTION

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Abstract

A review of the literature concerning the vocational assessment and career planning needs of physically handicapped individuals resulted in the conclusion that this population needs detailed physical demands information and a systematic way to search for assistive devices for problem physical demands. Isabel, a software program, is a useful tool in meeting these needs. Isabel compared the physical capacities of the individual to the physical demands of a wide range of occupations, using 95 physical and environmental factors. The system also allows the user to search for assistive devices for problem physical demands.

Introduction

This paper will describe the results of a study and literature review concerning the specialized needs of physically handicapped persons in the vocational counseling process; a concept that was developed to address these needs; and a computer software program based on that concept that is now available to help address these needs.

Background/Literature Review

In 1979, the National Occupational Information Coordinating Committee (NOICC) funded a study through the Florida Occupational Information Coordinating Committee and the Florida Association of Rehabilitation Facilities to examine the special needs of physically handicapped individuals in the vocational counseling process. NOICC has been responsible for assisting states to develop and make available a broad range of career information. Private companies are also offering computerized and hard copy systems that allow an individual to select careers based on their interests, educational level, desired income, etc. NOICC's interest, however, in 1979, was to examine the special vocational needs of persons with physical disabilities.

This one year study and literature review resulted in the following conclusions: persons with physical disabilities have a need for 1.) occupational information which includes detailed and accurate data on the physical requirements of jobs; 2.) a method to obtain detailed information about the physical capacities of the individual; 3.) a systematic and comprehensive way to compare the physical capacities of the individual with the physical requirements of occupations of interest; 4.) and lastly, a method to consider assistive devices information if there is a discrepancy between what the individual can do and what the occupation requires (Seigel et al., 1980).

This study found that these needs are not met in existing vocational information resources because they use either the disability method or the rating method to compare an individual's physical capacities to the physical requirements of occupations (Seigel et al., 1980).

In the disability method, disabled people are classified into various disability groups such as the spinal-cord injured, the visually impaired, and so on (Hanman, 1958). An individual with a particular disability reviews only those occupations feasible for persons with that disability. Using this method can overly restrict and stereotype persons with physical disabilities. This approach also fails to take into account the differences between people. Persons with the same physical disability can differ widely in their capacity to perform the physical demands of occupations.

In the rating method, an individual's physical capacities are compared to the physical demands of jobs using general or aggregate terms like "light" lifting (Hanman, 1958). Many existing systems use this approach. The use of these general or aggregate terms makes it difficult to determine the feasibility of

occupations of interest. Using the computer further exacerbates this problem in that entering data like "light" lifting can automatically eliminate a large number of occupations, many of which the individual could potentially do. The computer can very rapidly reduce an individual's choices using this aggregate approach.

Development of Isabel

Isabel (as in is-able) is a software package that attempts to address the needs identified in the NOICC study. It is a revised and updated version of the Job Related Physical Capacities system originally made available by the Florida Association of Rehabilitation Facilities (F.A.R.F.) (Morgenthau, Ranson, Stevens & deMarsh-Mathues, 1984).

The system is based on the concept that physically disabled individuals should select occupations in the same manner as able bodied individuals; that is, based on their interests, educational level, desired income, etc.; on what they can do, not on what they cannot do. Further, that if physically disabled individuals select occupations in this manner and have access to: 1.) detailed physical demands information on occupations of interest; 2.) a way to compare their physical capacities to the physical demands of these occupations; and 3.) a logical way to search for assistive devices to eliminate problem physical demands, it should increase their occupational choices. (Morgenthau, Ranson, Stevens & deMarsh-Mathues, 1984).

The Isabel Approach

The Isabel system uses a step-by-step approach to assist the individual with a physical disability to determine the feasibility of occupations of interest. The system uses ninety-five (95)+ physical and environmental factors to describe both the occupation and the career seeker. These factors represent a detailed extension of the physical and environmental factors used in the Dictionary of Occupational Titles (Peterson & Buchanan, 1985). The system compares the individual's profile to occupations of interest and reports possible discrepancies between the job requirements and the individual's physical capacities.

The step-by-step process includes:

- A. Register the client
- B. Collect biographical information
- C. Describe client's physical condition (capacities)
- D. Designate occupation of interest to be analyzed
- E. Compare client's physical capacities to occupation's requirements
- F. Define keywords to search for aids pertinent to a requirement
- G. Review available aids which match keywords
- H. Select possible aids for requirement being analyzed
- I. Print occupational interview results for client.

A short description of what each step entails is included next.

Step A and B. Register the client and collect biographical information. Steps A and B enable the user to register and collect biographical information on the counselee. This information is stored for future retrieval and/or to print the summary report listed as the last step.

Step C. Describe client's physical condition. Step C involves filling out the 95+ physical and environmental factors as they relate to the counselee. This information

may be collected by the counselor and client, by the vocational evaluator, physical or occupational therapist, or another qualified professional. Such instruments as the Functional Capacities Assessment instrument developed by Polinsky Memorial Rehabilitation Center staff of Duluth, Minnesota, are particularly helpful in filling in these data.

Step D. Designate occupation of interest to be analyzed. This step requires the user to fill in a DOT occupation that meets his interest, educational level, desired income, etc. from the list of occupations in Isabel. It is assumed that vocational counseling has occurred prior to this step which enabled the individual to select an occupation, disregarding physical demand factors.

Step E. Compare client's physical capacities to occupation's requirements. In this step the ninety-five (95) physical and environmental requirements of the occupation of interest are compared to the physical capacities of the counselee. If there are discrepancies between what the individual can do and what the occupation of interest requires, these appear on the screen as "possible discrepancies." The counselor and counselee review these possible discrepancies and determine if an assistive device review is required or if the occupation seems feasible as is.

Step F. Define keywords to search for aids pertinent to a requirement. If a determination is made that an assistive devices search is needed, this step begins the process of locating an appropriate aid. Each assistive device in the Isabel system is paired to a physical and/or environmental factor(s) and a limited number of keywords. This step enables the user to search for assistive devices by physical/environmental factor and key words.

Step G. Review available aids which match keywords. Once a physical or environmental factor and a keyword(s) have been selected, step G provides a listing of aid names which match the selected factor and keyword(s). The task at this step is to review the names of the assistive devices to determine the counselee's interest in the assistive devices listed. If an assistive device is of interest, the user moves to the next step to review the description of the device.

Step H. Select possible aids for requirement being analyzed. Assistive devices of interest to the user are described at this step. A brief description of the product, distributor(s) information, a cost range, and when the information was last updated is included. The user reviews the description and selects the assistive device if he would like to see it printed on the summary report provided at the end of the session.

Step I. Print occupational interview results for client. At the end of the session, Isabel prints a summary report that includes what occupations were reviewed, possible discrepancies between what the counselee can do and what the occupation requires, and any assistive devices that were selected for further review.

Uses of Isabel

The original purpose of the Isabel system was to provide needed information to career seekers who have a physical disability. However, Isabel is also useful in the vocational evaluation, vocational training, job placement,

and expert testimony aspects of the rehabilitation process (Peterson & Buchanan, 1985).

In the vocational evaluation process Isabel provides needed physical demands and assistive devices information. It allows the evaluator to consider the feasibility of occupations of interest and take into account the usefulness of a wide range of assistive devices. Using Isabel in the vocational evaluation process should enable the evaluator to make more specific recommendations regarding occupations of interest to the counselee (Peterson & Buchanan, 1985).

Similarly the information contained in Isabel can be useful in vocational training and job placement. In both instances, consideration of physical demands and assistive devices information is essential (Peterson & Buchanan, 1985).

Providing expert testimony requires a detailed assessment of an individual's capacities versus the requirements of occupations. The detailed nature of the physical demands data in Isabel and the linkage it makes between physical factors and assistive devices, enables the vocational expert to provide specific and targeted recommendations regarding vocational options for the individual in question.

Lastly, the process used in Isabel can be applied in all these aspects of the rehabilitation process, for occupations not currently contained in the system. The Rehabilitation Professional can utilize the job analysis approach used in Isabel to analyze an occupation of interest. He can manually compare the results of the job analysis and the counselee's profile. It is then possible to search for assistive devices using Isabel by entering information on physical demands that the counselee may have difficulty performing.

Conclusion

Isabel is a software package that was developed to resolve some of the needs physically handicapped individuals have in the career exploration process. The system includes detailed physical demands data, a method to compare a counselee to the physical demands of an occupation, and a systematic approach to searching for assistive devices. The system is potentially useful in the career exploration, vocational evaluation, and job placement processes and in the provision of vocational training and expert testimony.

For further information on Isabel contact the Magellan Corporation, P.O. Box 10405, Tallahassee, Florida, 32302 or call 904/681-6520.

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