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JOB SATISFACTION
IN
SUPPORTED AND SHELTERED EMPLOYMENT

A Project/Thesis presented to the
Faculty of
Lindenwood College

In partial fulfillment of the requirements
for the degree of Master of Science
in Human Services Agency Management

BY
Dana S. Rowland

May 1996

ACKNOWLEDGMENTS

The author wishes to extend thanks to the individuals working in supported and sheltered employment whose input made this project possible. Sincere gratitude is also expressed to Molly Scheiner for all her unselfish support and advice, to Missy Haskett for the use of her computer, to Bill Goings for his patience and understanding throughout this project, and to the author's parents who taught excellence and perseverance.

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CHAPTER I

Purpose of the Project

In the past, individuals with mental retardation were believed to have minimal potential for employment, and the job options available to them were primarily limited to day programs, activity centers, and sheltered workshops. The opinion of society was that these individuals needed to be cared for, and they were certainly not viewed as contributing members of communities. Society at least partially defines a person's worth based on his work. Therefore, those individuals who were perceived as limited by their disabilities and who were not in the competitive work force, were viewed as having decreased worth (Inge et al. 1988, 97).

Fortunately, the past decade has brought with it extensive changes in this attitude. Individuals who formerly required intensive support in sheltered work settings are now being given opportunities to receive similar supports in competitive places of employment in the community. With the support of a job coach, who is responsible for providing challenged workers the necessary individualized support and assuring employers of a consistent level of quality performance, many individuals are now successfully participating in supported employment

programs in communities across the United States (Ward et al. 1993, 36).

Having worked in the field of mental retardation and developmental disabilities for eight years, this researcher has become quite interested in employment opportunities for the individuals served and their resulting satisfaction with these jobs. Thus, this project assessed whether individuals who work in supported employment have a higher level of job satisfaction than those who work in sheltered employment. A tri-phasal evaluation was used which included: (1) employment questions from the Quality of Life Questionnaire, (2) observations in the subjects' workplaces by the researcher, and (3) interviews with staff or support people who work directly with the subjects. The results were evaluated by means of research and standardization data from the Quality of Life Questionnaire Manual (Schalock & Keith 1993). A statistical t-test was used to determine if there exists a significant difference in job satisfaction between the two groups of employees.

Reliability and validity tests are available, based on the data from the normative sample described in the manual.

Reliability tests provide evidence for a high degree of internal reliability for the Quality of Life Questionnaire. The data also provide evidence for a high

degree of agreement between self-report and externally rated versions of the questionnaire, as well as a high degree of test-retest reliability.

Questionnaire items were generated from a number of published sources on well-being, one of which was the 1986 version, the Quality of Life Preliminary Questionnaire (Keith et al. 1986). The revised questionnaire has been evaluated for face, construct, and concurrent validity, and is believed to be a valid instrument for purposes of this project.

Statement of the Problem

The main objective of this project was to determine whether individuals who work in supported employment are more satisfied with their jobs than those who work in sheltered employment. There is a need for continued and increased funding for both types of employment for individuals with mental retardation and developmental disabilities.

As casemanagers for the Missouri Department of Mental Health-Division of Mental Retardation and Developmental Disabilities often discover, there is a very real need for available and appropriate employment opportunities for consumers. Further, it has often been the experience of the Department that there generally exists a shortage of such "appropriate" jobs. Employers in the community are

frequently unwilling to accept an employee who has a handicap, despite studies that have concluded that supported employees often surpass their non-handicapped coworkers in dependability, low absenteeism, and consistent productivity (Pati & Adkins 1980; Pati & Morrison 1982). On the other hand, there is not always enough work available within sheltered workshops to employ all those individuals desiring to work there.

At the time of this writing, legislation is being considered which could eliminate many Division of Vocational Rehabilitation services. It is these state agencies that currently provide much of the funding for both sheltered workshops and supported employment programs. The focus of this project was to determine which area of employment provides the highest level of job satisfaction for individuals who are mentally challenged, and to provide some guidance as to which area the limited funds should be allocated to best meet the needs of these individuals.

Project Title, Location, and Duration

Title of Project - Job Satisfaction in Supported and Sheltered Employment.

Location - Sedalia, Missouri, is the location of the project/thesis. This city is located in central Missouri, and is within a few hours of the capitol of Jefferson

City, as well as major cities such as Kansas City and St. Louis.

Sedalia boasted a population of 19,800 in the 1990 census. Due to continuously emerging residential subdivisions outside the city limits, the population has gradually declined over the past ten years. Sedalia is located in Pettis County and serves as the county seat. The county had a 1990 population of 35,437. County distribution by race during the same year was as follows: White, 95.8%; Black, 3.3%; American Indian, Hispanic, Asian, and other nationalities making up the remainder of the population. Women comprise 51.8% of the county population, while men account for 48.1%.

The Center for Human Services is the primary agency providing both sheltered and supported employment services to individuals with developmental disabilities in the Pettis County area. It is fully accredited, and has provided a continuum of services to both children and adults since 1955. Not only does the Center for Human Services provide employment opportunities, but also such things as therapies, assessment, counseling, and housing in both group home and Individualized Supported Living settings. The Center has an affiliated community service provider (ACSP) agreement with the Missouri Department of Mental Health, and works closely with Central Missouri

Regional Center to meet the needs of individuals with mental retardation and developmental disabilities.

Duration - The duration of the project will be from May, 1995, to April, 1996.

Participants

A. Researcher - This individual will administer the employment or "competence/productivity" questions from the Quality of Life Questionnaire to subjects, observe them in their workplaces, and interview staff and support people who work directly with the subjects. From the results, the researcher will be able to determine, using statistics, whether individuals who work in supported employment have a higher level of job satisfaction than those who work in sheltered employment.

B. Employees - The subjects consist of two groups of individuals who are developmentally disabled: one group whose subjects are employed in a sheltered workshop setting, and another group whose subjects work in the community in supported employment. There are ten subjects in each group who possess various levels of work experience. The subjects range in age from 21 to 69 and are caucasian. Twelve of the twenty subjects (60%) are male, while eight (40%) are female. As much as is possible, subjects were selected who have comparable mental retardation/ developmental disability diagnoses.

Statement of Objectives

Objective #1 - From May 15 to September 30, the researcher studied assessment tools and selected the Quality of Life Questionnaire "competence/productivity" section to be administered to individuals with developmental disabilities who are employed in either a sheltered workshop or a supported employment program. As evidence of this objective, the questionnaire was produced for distribution. Preliminary research and a review of related literature was also completed during this time.

Objective #2 - From October 1 to December 31, the researcher selected a pool of subjects to evaluate, keeping in mind the need for comparable diagnoses. The completed Quality of Life Questionnaires are evidence that this objective was completed.

Objective #3 - From January 1 to January 31, the researcher administered the Quality of Life Questionnaire to the subjects. Completed questionnaires are evidence of this objective.

Objective #4 - From February 1 to February 29, a review of related literature and research was done to substantiate, validate, or dispute the hypothesis. Evidence of this objective can be found in Chapter 2 of the project.

Objective #5 - From March 1 to March 15, the raw data was examined, and the researcher utilized statistics to indicate either a significant or insignificant difference based on this data. Evidence of this objective can be located in Chapter 3 of the project.

Objective #6 - From March 16 to March 31, the researcher drew a conclusion based on both the research and the completed Quality of Life Questionnaires. Implications of the results and recommendations for further research were also made. Evidence of this objective can be found in the fourth and final chapter of this project.

Project Limitations

1. Geographical Location - The sample was taken from Sedalia, Missouri, and the area closely surrounding it. Taking into consideration Sedalia's population of under 20,000, it may not be appropriate to generalize the results to larger cities or metropolitan areas of the state or nation.

2. Number of Subjects - Twenty subjects with comparable mental retardation/developmental disabilities diagnoses were available as subjects in the Sedalia area. Despite the growing popularity of supported employment, there continues to exist a shortage of jobs in the

community for individuals with mental retardation and developmental disabilities.

3. Availability of Data - Because of the limited number of appropriate subjects, there is also a resulting shortage of data.

4. Race - The sample consisted of caucasian subjects. Persons of other races were not available.

Definition of Terms

Supported Employment - Paid employment in an integrated competitive work setting where ongoing, individualized training and support is provided to a person with a disability.

Job Coach - A staff member of the agency sponsoring the supported employee who is primarily responsible for training the supported employee in the needed job skills, for attending to the personal needs of the supported employee (e.g., transportation, medication), for facilitating communication between the employer and the supported employee, and for promoting relationships between the supported employee and his/her coworkers.

Enclave - A supported employment model; a small group of workers, of not more than eight, with severe disabilities who are employed in an industrial setting managed by a specially trained supervisor.

Within the enclave, payment for work performed is commensurate with pay to others within the host company doing the same type and amount of work.

Sheltered Employment - Segregated work settings for individuals with disabilities (e.g., adult day activity programs, work activity centers, or sheltered workshops) that are owned and operated by a sponsoring day habilitation, rehabilitation, or mental health service provider. These settings are non- or semi-competitive, and focus upon education and training with a therapeutic perspective.

Mental Retardation - As defined by the American Association on Mental Deficiency, a significantly subaverage intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period. The Association recognizes four levels of mental retardation, the distinctions made primarily by the obtained scores on intelligence tests. The four levels, with the identified IQ ranges on two well established intelligence tests are:

1. Mild. The IQ ranges are 52-68 on the Stanford-Binet Scale or 55-69 on the Wechsler Scales.

2. Moderate. The IQ ranges are 36-51 on the Stanford-Binet Scale or 40-54 on the Wechsler Scales.
3. Severe. The IQ ranges are 20-35 on the Stanford-Binet Scale or 25-39 on the Wechsler Scales.
4. Profound. The IQ ranges are 19 and below on the Stanford-Binet Scale or 24 and below on the Wechsler Scales.

Developmental Disability - As defined by Public Law 95-602

Rehabilitation, Comprehensive Services, and Developmental Disability Amendments of 1978, a severe, chronic disability of a person which: (A) is attributable to a mental or physical impairment, or combination of mental and physical impairments; (B) is manifested before the person attains age twenty-two; (C) is likely to continue indefinitely; (D) results in substantial functional limitations in three or more of the following areas of major life activity: (i) self-care, (ii) receptive and expressive language, (iii) learning, (iv) mobility, (v) self-direction, (vi) capacity for independent living, and (vii) economic self-sufficiency; and (E) reflects the person's need for a combination and sequence of special, interdisciplinary, or generic

care, treatment, or other services which are individually planned and coordinated.

Quality of Life Questionnaire - A 40-item rating scale

designed to measure the overall quality of life of a person with mental retardation. It is based on more than a decade of work and is among the most extensively researched instruments currently available for assessing the quality of life of people with mental retardation.

BUDGETEQUIPMENT/SUPPLIES

500 Sheets 25% Cotton Bond Typing Paper	\$ 7.25
Correctable Ribbons for Word Processor	<u>8.00</u>
TOTAL EQUIPMENT/SUPPLIES	\$ <u>15.25</u>

ASSESSMENT TOOL

Quality of Life Questionnaire and Manual	\$ <u>30.00</u>
TOTAL ASSESSMENT TOOL	\$ <u>30.00</u>

PRINTING SERVICE

Copy Fee at University of Missouri Library	\$ <u>4.50</u>
TOTAL PRINTING SERVICE	\$ <u>4.50</u>

MISCELLANEOUS ITEMS

Mileage, Postage, Envelopes, etc.	\$ <u>25.00</u>
TOTAL MISCELLANEOUS ITEMS	\$ <u>25.00</u>

TOTAL PROJECT BUDGET	\$ <u>74.75</u>
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Summary

Chapter I includes the purpose of the project, a statement of problem, and the project title, location, and duration. Chapter I also includes the project participants, six objectives, and four limitations of project/thesis findings. Definitions of terms are included, and are followed by a timeline of project steps and a budget.

Chapter II involves a review of literature related to sheltered and supported employment. Particular emphasis is placed on the level of job satisfaction individuals derive from both types of work settings. Humanistic, psychological, and sociological foundations are also included in Chapter II.

Chapter III presents the evaluation of the project, the project design, and the instrumentation and findings of the project in relation to the work section of the Quality of Life Questionnaire.

Chapter IV is comprised of the researcher's conclusions, implications, and recommendations for further research as a follow-up to the project. An appendix includes a copy of the Quality of Life Questionnaire, as well as documentation of correspondence and approval for using human subjects. An alphabetized bibliography list is included to substantiate research.

CHAPTER II

INTRODUCTION

The purpose of this project was to determine whether individuals who work in supported employment are more satisfied with their jobs than those who work in sheltered employment. There is a definite need for continued and increased funding for employment services for individuals with mental retardation and developmental disabilities (Faison et al. 1990, 11). It is the intent of this project to provide guidance to policy-makers in determining where the limited resources for such employment services should be directed to most effectively meet the needs of these individuals.

The following chapter of this thesis begins with a discussion of the backgrounds of both sheltered and supported employment. Definitions of each will be given, and benefits and concerns associated with both will be discussed.

Following the discussion of the two types of employment addressed in the project, is a section on Humanistic Foundations in relation to the field of mental health. Focus is on the vast changes that have occurred in this field through the years. The removal of mentally retarded individuals from institutions where they were kept segregated from the rest of society and their

placement into communities is discussed. More specifically, changes in work opportunities for individuals with mental retardation and developmental disabilities since this move toward "deinstitutionalization" are also included in the Humanistic Foundations section.

Following the Humanistic Foundations section is the Psychological Foundations section, where foundations of psychology are discussed in relation to the project. The effects of maintaining employment on individuals' overall mental well-being is addressed, along with the importance of job satisfaction. Also discussed is the fairly recent concept of "quality of life", and the fact that an individual's work life has a significant effect on one's overall quality of life (Pedlar et al. 1990, 87). This section will conclude with mention of the concept of "self-determination".

A section on the Sociological Foundations in relation to the population of workers with mental retardation who are employed in both sheltered and supported work settings will conclude this chapter. The importance of integration and socialization in the workplace are stressed, and transition from school to the world of work is discussed. Social competence, as it relates to vocational competence, is addressed. Finally, the cost-effectiveness of

supported employment is examined. Money and cost-effectiveness is an issue that society tends to take notice of.

BACKGROUND OF SHELTERED AND SUPPORTED EMPLOYMENT

In the 1960s, the general feeling of society was that sheltered workshops provided an appropriate environment for [vocational] training that would ultimately lead to employment for individuals with mental retardation (Bradley & Bersani 1990, 224). These individuals were viewed as needing to be cared for, and "job" options available to them were limited to adult day programs, activity centers, and sheltered workshops. Such settings were segregated from the general population and allowed for little, or in most cases, no integration. Bradley and Bersani (224) state that the value of integrated work had not yet become a part of the professional consciousness. Training and employment were both provided in the rehabilitation facility. Such values were common in relation to the mentally retarded population at that time. Thus, when the Commission on Accreditation of Rehabilitation Facilities (CARF) was founded in 1966, their first vocational standards were designed for sheltered workshops (Bradley & Bersani 224). The Commission on Accreditation of Rehabilitation Facilities has since become nationally recognized as one of the

premier accreditation agencies for services for the disabled, from birth to adult.

While sheltered workshops continue to play a very important role in the lives of many individuals with disabilities across the United States, there have been a number of concerns associated with these sheltered environments throughout the years. One can not argue that individuals working in workshops are isolated from the larger labor force. McCord (1982, 248), feeling so strongly about the segregation of individuals who were employed in sheltered settings, remarked that, rather than including people in society's mainstream, sheltered workshops were a "formal mechanism of control [for] removing, containing and isolating deviant people". A study of adults with mental retardation living semi-independently found that their weekly work schedule is often inconsistent, depending upon the number and size of work contracts obtained by the workshops. Complaints about "down time" (unpaid time spent waiting for work) were also common (Halpern et al. 1986, 75).

From this growing dissatisfaction with institutionalization and segregated work environments arose a metamorphosis of sorts. People began to realize that individuals with handicaps were being "warehoused", and it was felt perhaps they could be placed in jobs and

provided with the supports necessary for successful employment integration (Rusch & Hughes 1989, 353). A new model of employment for persons with disabilities evolved, which has come to be known as supported employment. Focus changed from training the individual to eventually be placed in a competitive job, to placing the individual and providing the needed training in the actual work setting, with ongoing supports for both employees and employers (NIDR 1994, 1). However, the reality is that many individuals never actually make the transition from sheltered work to integrated competitive work. In fact, Bellamy et al. (1986, 27) cited United States Department of Labor data revealing that only 3% of individuals employed in sheltered workshops for more than two years were successfully placed in competitive employment settings. Also of concern was the fact that the work and social skills acquired in sheltered environments often do not easily generalize to competitive work places (Sylvestre & Gottlieb 1992, 27).

The Developmental Disabilities Act of 1984 defined "supported employment" as:

Paid employment which (i) is for persons with developmental disabilities for whom competitive employment at or above the minimum wage is unlikely and who, because of their disabilities, need ongoing

support to perform in a work setting; (ii) is conducted in a variety of settings, particularly work sites in which persons without disabilities are employed; and (iii) is supported by any activity needed to sustain paid work by persons with disabilities, including supervision, training, and transportation. (Federal Register 1984, Section 102).

As Wehman states, supported employment should be reserved for only those individuals who truly need it-- persons who, due to the severity of their disability, have been unable to consistently maintain jobs (1988, 360). In reality, the majority of the individuals who are involved in supported employment have either mild or moderate mental retardation, as opposed to severe or profound. It has been suggested that attitudinal and political barriers might be responsible, at least in part, for the frequent failure to extend supported employment services to those persons with the most severe disabilities (Black & Meyer 1992, 464). There is much work to be done by human service professionals in convincing potential employers that individuals who have severe disabilities can indeed be productive employees.

Since its beginnings in 1984, supported employment has focused on both individual outcomes and systems change. There have been significant increases in the

number of people benefiting from supported employment, and changes in the systems that fund and regulate day programs across the country. Just as the trend in the human services field has been toward measurable "outcomes", so has it been specifically in employment services for individuals with mental retardation and developmental disabilities. An analysis of states' technical assistance needs completed by Mank et al. (1991, 19) determined that national supported employment policy has "focused on measurable and improved outcomes for individuals with severe disabilities and on changing the systems that define, fund, and control day and vocational services".

Perhaps one of the most significant pieces of legislation to date in the area of supported employment has been the Rehabilitation Act Amendments of 1986 (Public Law 99-506). These amendments authorized a new formula grant for the State Supported Employment Services Program, and also allowed state rehabilitation agencies the flexibility of purchasing supported employment-related services such as job placement, training, and situational assessment (Rusch et al. 1991, 146). Since that time, numerous federal initiatives and other legislation have resulted in increased allocation of federal and state resources for supported employment. In fact, it has been mandated by Public Law 99-508 that supported employment

must be provided by both vocational rehabilitation and mental health or mental retardation agencies.

Despite the rather obvious advantages of supported employment over sheltered employment (ie. integration, increased wages, and opportunities for severely disabled individuals that might not otherwise be possible), there are also a number of less apparent benefits. Supported employment programs yield powerful financial benefits both for the individual with mental retardation and for the taxpayer (Hill et al. 1987, 187). This savings to society is particularly significant in an era when every dollar assigned to human services must be scrutinized very closely. Also, the savings that accrue from reductions in supplemental Social Security payments once persons are placed in competitive jobs, should motivate individuals to do everything within their power to help individuals with mental retardation to be successful in supported employment.

Along with the benefits and positive outcomes associated with supported employment, there have also been concerns raised by employees themselves, parents, advocates, community-based providers, and other involved parties. Bradley and Bersani suggest that these concerns are not with the concept of supported employment per se, but for the "potential abuses inherent in the underlying

values of a capitalistic system--well known abuses that have manifested through time from the sweatshops of the 1880s to the questionable ethics of the inside traders of the 1980s" (225). Some employers take advantage of persons who are vulnerable, as individuals who are developmentally disabled often are.

Salzberg and associates conducted a study of the reasons why some supported employees lost their jobs. An actual decrease in spending money was cited as one possible reason that individuals were not motivated to maintain their competitive jobs (1988, 165). The salaries of such workers are often applied to living expenses that were previously borne by the state or by their parents. Some individuals are even required to give their paycheck directly to their parents or residential providers. Steps should be taken to explain to individuals who have become competitively employed that an increase in wages may mean that they will be responsible for part of their living costs, and as much attention as possible should be given to the handling of wages by group home operators, parents, and others who may potentially take advantage of persons who are vulnerable.

HUMANISTIC FOUNDATIONS

Drastic changes have taken place in the field of mental health through the years. As early as the 1840s,

individuals with mental retardation were identified and referred to by such degrading terms as "feebleminded", "simpletons", and "idiots" (Krishef 1983, 4). Mental retardation was misunderstood, and some persons believed it to be the work of evil spirits. Those who were mentally retarded were often abandoned, and quickly died when left to meet their own needs (Krishef 17). The advent of Christianity brought with it hope for those who had previously been outcasts. According to Krishef, a "more humanitarian and charitable approach developed" (18). This was only the beginning, however. Dr. Samuel Howe, in wondering what could be done to help a number of mentally retarded persons living in the state of Massachusetts, became the first person to initiate institutional care for the retarded in the United States (Krishef 24). While these early "institutions" were a marked improvement from being abandoned and left to die, they provided treatment that was far from humane.

Burton Blatt and Fred Kaplan undertook a rather bold project in 1965. In an effort to open Americans' eyes to the poor treatment many individuals received within large state-operated institutions, they created Christmas in Purgatory, a photographic essay on mental retardation (1974). Kaplan took photos with a hidden camera on these "tours" of some of the back wards of large institutions.

These photos revealed some of the most horrible scenes imaginable. In the Introduction to Christmas in Purgatory, Blatt referred to mentally retarded individuals in these state institutions being treated "less humanely, with less care, and under more deplorable conditions than animals" (v). While the photos were taken in only five state institutions, Blatt indicated that they had been in numerous others and found the five to be quite representative of institutions everywhere. He described these institutions for the mentally retarded as often being surrounded by fences, sometimes with barbed wire. The buildings were frequently massive brick structures with bars on the windows and many locks, much like in a prison (1). Blatt made reference to extreme overcrowding, with beds side by side and head to head. Many of the large state institutions in existence provided only a very low level of custodial care (Schmolling et al. 1993, 93).

While the treatment received in such institutions was indeed quite barbarous, a number of factors contributed to this inhumane behavior. Schmolling made reference to low salaries, which tended to attract marginal workers (93). Also contributing to the level of stress was the fact that these facilities were nearly always understaffed. It seemed there was an extreme shortage of trained, dedicated staff (Blatt v).

According to Krishef, the number of individuals residing in public institutions for the mentally retarded in the United States "peaked in 1969 and 1970, when it topped 200,000" (216). Society closed its eyes for years to avoid the problems within institutions that they did not know how to correct. People finally began to realize and admit that this segregation was not healthy, and the move toward "deinstitutionalization" began. Krishef defines deinstitutionalization as "a planned reduction in the number of residents of public institutional facilities" (217).

Most of the institutions had provided little or no opportunity for planned activities or work of any sort. Blatt and Kaplan observed one adult in a vocational training center playing "jacks". The courts stepped in and took action, ruling that mentally retarded individuals had to be provided with access to actual vocational training programs. They also upheld individuals' rights to equal employment opportunities and payment for work completed (Krishef 218). Along with the movement toward deinstitutionalization, the trend toward integrated work for persons with mental retardation was born.

Integrated work proved to be beneficial to individuals both financially and socially. In opposition to the segregation they had been accustomed to, the

mentally retarded began to develop friendships with their coworkers. People are more likely to form relationships with those individuals who share common interests and participate in similar activities. Such common interests often exist among coworkers. The opportunity for integration is one of the key components of the supported employment model. Non-disabled coworkers take on a variety of different roles in relation to supported employees. They may act as advocates or friends, they may evaluate performance and provide needed feedback, and they may assist in providing on-the-job training (Rusch et al. 1991, 207). After more than two decades of deinstitutionalization, general agreement continues to exist that employment opportunities are critical to successful community integration and membership of individuals with severe mental limitations (Tice 1994, 733).

PSYCHOLOGICAL FOUNDATIONS

It seems logical that a discussion of the value and importance of work should begin by defining precisely what "work" is. Webster (1970) provides more than a dozen different definitions for the term "work". Perhaps most fitting for this discussion, however, is Vroom's (1967) reference to five properties of work roles:

1. They provide financial remuneration.
2. They require the expenditure of energy.
3. They involve the production of goods and services.
4. They permit or require social interaction.
5. They affect the social status of the worker (43).

Vroom further contends that people work under two primary conditions--economic and motivational--and that the two vary independently from one another (29).

Work has always been a highly valued activity in American culture. Society tends to judge the worth of an individual by the level of productivity. It has been observed by this researcher that performing "real" work (i.e., supported, competitive employment) can actually enhance an individual's status and self-worth.

Participating in work also tends to somewhat decrease the stigma associated with being mentally handicapped. It offers individuals the opportunity to socialize after work-hours and develop relationships with non-disabled peers. Working and earning wages contributes to increased independence and improved overall quality of life. Tice states that "employment can mark the difference between social skill development and social isolation, self-

sufficiency and dependency, and a productive routine and boredom" (734).

Individuals with mental retardation continue to be overlooked when workers are needed. According to the Association for Retarded Citizens and a National Consumer Survey, 81% of adults with mental retardation are not working (1994, 2). Of the fortunate few who do hold jobs, statistics indicate that many persons with retardation or developmental disabilities are working in low-paying sheltered work settings (Halpern et al. 1986, 75). Much has been, and continues to be done in attempting to reverse this trend. The Americans With Disabilities Act (ADA), signed into law July 26, 1990, has been extremely instrumental in opening employment for people with disabilities, including those with mental retardation. The ADA prohibits discrimination based on disability (ARC 1994, 3).

In the general population, and more specifically in relation to mentally retarded and developmentally disabled individuals, there are a number of factors that influence employment. Among these, of course, is the overall economic climate. If the unemployment rate is high for non-disabled workers, it obviously follows that it will be high for disabled workers. The attitude of prospective employers toward persons with disabilities also plays an

important role in their employability. While this will be discussed further in Chapter 4, it seems pertinent to mention that there is much work that needs to be done on the part of human service professionals in educating the public about the benefits of hiring a worker with a disability. The effectiveness of training and placement programs is another factor that influences employment (Salzberg et al. 1988, 163). Without adequate training, it is difficult for anyone to secure and maintain an appropriate job.

There are a number of benefits afforded to businesses who hire persons with mental retardation. Hiring persons with disabilities that have traditionally been excluded from the work force may do much to improve the public image of a business. Many companies exert considerable effort and expense to generate such a positive image. Another benefit associated with hiring the disabled is increasing the cultural diversity of an organization. This helps demonstrate to workers that the company is truly interested in and supportive of all its employees. Hiring individuals with mental retardation is also beneficial in meeting an organization's affirmative action obligations (Rhodes & Valenta 1985, 18). Finally, Rhodes and Valenta made reference to taking advantage of certain tax credits such as the Federal Targeted Jobs Tax Credit

Program allowed to organizations that hire individuals who are disabled (18).

JOB SATISFACTION

Of particular importance to this project is the concept of "job satisfaction" in relation to employees with mental retardation. Halpern et al. indicated that a person's job satisfaction is likely to be related to that individual's overall satisfaction with life (80). Moreover, the way people view themselves--their "self-concept"--is influenced by job satisfaction (Pruitt 1). It seems quite obvious that an individual can not be fully content with life unless job satisfaction exists.

While few studies have actually been done on job satisfaction of workers who are severely disabled (McAfee 1986), evidence does exist indicating that the more satisfied a person is with a job, the more likely that person is to be successful (Lam & Chan 1988, 51). John Westbrook, director of the National Model for Supported Employment and Independent Living (NMSEIL), states that "allowing potential workers with disabilities to choose and plan their own career paths--as any other service consumers might--not only empowers employees, but satisfies employers and ensures longer lasting job placements" (NIDRR 1992, 5). This should be taken into

consideration when placing an individual in a particular supported employment job.

Test et al. conducted a study of job satisfaction of persons in supported employment. Of the individuals interviewed who had previously been employed in a workshop, 92.8% (26 of the 28 subjects) stated that they would rather have their present [supported employment] job than work in a workshop (43). These results may be interpreted as support for the trend toward supported employment for individuals with mental retardation and developmental disabilities, and alert service providers to areas that may need improvement or change.

On the other hand, Lam and Chan's 1988 study of job satisfaction of sheltered workshop clients found that, in general, most sheltered workshop employees were satisfied with their jobs, also (53). However, the study further revealed that persons with borderline-mild mental retardation had lower job satisfaction scores than those persons with moderate-severe mental retardation. Other studies have indicated that people like the "social aspects" and stability afforded by sheltered employment. In a 10-year study of individuals employed at a sheltered workshop, Turner (1983) found that over half of the individuals were "not afraid to leave" but instead "wanted to stay". Those findings may or may not be

representative of workshop employees throughout the nation. Regardless of whether a person works in sheltered employment or in supported employment, perhaps Lam and Chan summed it up best by saying that "job satisfaction should not be considered a luxury, but rather a necessity for disabled workers to have a healthy and productive work life" (54).

QUALITY OF LIFE

The concept of "quality of life" for individuals with mental retardation and developmental disabilities is one that has become quite popular in recent years. Schalock even referred to it as the "issue of the 1990s" (1990). A wider range of choices and a higher degree of community integration have become guiding principles in programs and services for persons with disabilities. One example of this is the "Certification Project" adopted by the Missouri Department of Mental Health, Division of Mental Retardation and Developmental Disabilities, in September, 1992. These value-centered, outcome-based certification principles encourage providers to focus on increased community membership, self-determination/choice-making, assuring human and legal rights, and meeting basic needs of individuals with disabilities. Provider agencies contracting with the Department are expected to adhere to

and embrace these guiding principles in the movement toward person-centered supports and services.

Vogelsberg broadly defined quality of life as including health, employment, leisure, membership in a community, and family relationships (1990). Schalock et al. (1989) contends that quality of life is a measure of "the degree of independence, productivity and community integration that a person experiences" (25). While no one definition of "quality of life" has emerged, many human service professionals seem to be in agreement that quality of life measures are needed to guide program planning and decision-making (Landesman 1986).

Schalock and Keith (1993) designed the Quality of Life Questionnaire to meet the need for an instrument to assess the quality of life in persons with mental retardation and developmental disabilities. It is a 40-item rating scale which measures overall quality of life, and is based on more than a decade of work and research. For purposes of this project, the researcher utilized only the "Competence/Productivity" section of the Quality of Life Questionnaire, which consists of ten items scored on a 3-point Likert scale reflecting income-producing work or work that contributes to a household or community. Raw scores are converted to percentiles, and statistics are used to

determine either a significant or insignificant difference based on this data.

Quality of life is significantly effected by the quality of an individual's work life, and the very fact of having a job is critical to most people's well-being (Pedlar et al. 1990, 79). The work environment itself and the relationships that are often formed with coworkers may be among the most important factors contributing to job satisfaction and success for individuals with mental retardation and developmental disabilities. Friendships and the opportunity to socialize with peers play important roles in the quality of work life. Also, if an individual who has a handicap is able to work successfully in a non-segregated community setting, then he is more apt to be accepted by non-disabled peers and viewed as a productive adult (Inge et al. 1988, 98). This acceptance in turn has a direct and positive effect on a person's overall quality of life.

SELF-DETERMINATION

Self-determination, as defined by The American College Dictionary (1968), is "determination by oneself or itself without outside influence". Wehmeyer (1994) conducted a study among individuals with cognitive and developmental disabilities which examined the relationship between employment status and individual perceptions of

control. The participants were 216 adults ranging in age from 19 to 64, belonging to self-advocacy groups in 23 states and 2 Canadian provinces. The results were in accordance with what the quality of life literature has suggested--individuals employed in sheltered environments perceived themselves as having less control [across various life domains] than did counterparts in competitive work settings (124). In general, people employed competitively through the supported employment model earn higher wages than people employed in sheltered workshops. These individuals also benefit more from being integrated in the work setting, allowing increased opportunities to achieve "positive personal goals" and to "experience greater self-determination" (NIDRR 2).

SOCIOLOGICAL FOUNDATIONS

No discussion of the organization and functioning of human society would be complete without mentioning socialization and integration. It is the nature of human beings to form relationships with others. Most people thrive on companionship, and individuals with mental retardation are certainly no exception. Because most individuals spend a large percentage of their waking hours at work, it seems logical that adults often name work colleagues among their closest friends (Rusch et al. 1991, 155). Work provides a variety of opportunities for

interactions including lunch, breaks, and company-sponsored events. Rusch et al. found that persons with mental retardation are as likely to be involved in job-related interactions as non-disabled persons, but less likely to be involved in non-work related interactions during lunch and break periods (156). The job coach is intended to be of help in encouraging this interaction, but is not always successful. People tend to gravitate toward people with similar interests, backgrounds, and attitudes (Rusch et al. 155). Unfortunately, individuals with mental retardation and developmental disabilities often lack the confidence to initiate interactions with their non-disabled coworkers. Educating employers and coworkers may be quite helpful in overcoming problems in this area, and the job coach should also be instrumental in advocating for the employee in meeting these social needs.

TRANSITION

Another topic worthy of discussion is the transition of individuals with mental retardation and developmental disabilities from school into the work place. It seems that many parents of children who attend special education classes assume that after graduation from state school or high school, adult services such as work will be readily available. They often become frustrated when they are

placed on a waiting list for services. Unlike the legal mandate that children be provided with an education, there is no entitlement for training, services, or supports for adults. Due to limited resources, waiting lists are quite common. Transition planning should begin early, and should be individualized to accommodate each person's values and preferences. Hill et al. indicated that the advocacy efforts of parents concerned about employment opportunities for their children after they leave special education have had a dramatic impact on the adult service system for persons with severe disabilities (1987, 182). If possible, interagency collaboration is helpful in preventing a break in services. In the Missouri Department of Mental Health system, case managers often begin meeting with the family and the teacher early in the Sophomore year to ensure that the transition from school to work occurs smoothly and with little interruption.

SOCIAL COMPETENCE

Salzberg et al. (1988) completed a study of reasons for job loss among mentally retarded workers. They proposed that vocational competence may be conceptualized as the product of three interacting domains: "(a) job responsibility; (b) task production competence; and (c) social-vocational competence" (155). Thus, it is believed that there are social skills that are not directly related

to the performance of job tasks, but may be important for successful employment (Salzberg et al. 1955). Among these social skills which may cause an individual with mental retardation to be terminated from a job are the following: emotional, bizarre, or aggressive behavior; inappropriate or excessive talking; obscene or offensive language; poor grooming, appearance, or hygiene; and lack of social awareness. In the supported employment model, these are areas that the job coach is expected to address on a daily basis in the work setting. Modeling by co-workers is also beneficial in helping the disabled person to learn acceptable social skills.

COST-EFFECTIVENESS

As mentioned previously, earning a wage is a measure of one's worth in our society. Rusch et al. (1991) refer to evidence suggesting that supported employment is "a cost-effective alternative to traditional adult service programs" (149). While the costs initially associated with supported employment may be greater than the benefits, this generally changes within the first two-three years. The cost of sheltered employment remains reasonably constant over time, while supported employees require less and less support as individuals adapt to their jobs. Once the resources have been redirected from sheltered employment to supported employment, the benefits

can be demonstrated from all three perspectives: the supported employee, the taxpayer, and society (McCaughrin et al. 1993, 47).

CONCLUSIONS

It is rather inspiring to look back on the changes that have occurred within the field of mental health through the years. While there is still undoubtedly much progress to be made, society has come a long way in its views of individuals with mental retardation. From being looked upon as evil and demon-possessed, to becoming productive employees who contribute to communities and neighborhoods everywhere, persons with mental retardation are proving that they are indeed quite capable.

As in the general population, work plays an integral role in the lives of many individuals who possess mental retardation and developmental disabilities. The opportunity to earn wages increases a person's independence, as well as their worth in the eyes of society.

Through the implementation of supported employment programs, individuals with disabilities are being integrated in competitive work settings and earning wages that are greater than ever before. Resources for such employment services are limited, however, and dollars are closely scrutinized. It is the hope of the researcher

that the project undertaken will provide some useful information in determining where the limited resources should be allocated to best meet the employment needs of individuals with mental retardation and developmental disabilities.

CHAPTER III

INTRODUCTION

The purpose of this project was to determine whether individuals who work in supported employment have a higher level of job satisfaction than those who work in supported employment. A tri-phasal method of evaluation was utilized, which included observation by the researcher in the subjects' workplaces, interviews or discussions with staff or support people who supervise the subjects, and administration of the Quality of Life Questionnaire "competency/productivity" section.

The following chapter includes a historical review of the project in its entirety. The setting of the project will be described, which will include demographic information about Sedalia, Missouri. Focus will also be on the history of the Center for Human Services, the primary agency in Sedalia that provides both sheltered and supported employment services for individuals with mental retardation and developmental disabilities. The project researcher and subjects will be identified according to experience, interests, training, and characteristics. The hypothesis will be stated, along with the original evaluation objectives and questions. Finally, reference will be made to the expected outcomes, and a brief overview of steps taken to complete the project will be presented.

Following the "Historical Review" section is the "Presentation of Findings". The evaluation design will be described, and the findings for the evaluation questions will be discussed. The project findings will then be summarized.

HISTORICAL REVIEW

Identifying the Problem

Although much progress has been made in improving employment services and opportunities available to persons with mental retardation and developmental disabilities, there is still much work to be done. Many individuals have been moved out of large state institutions and are living in the community. This move away from segregation and the trend toward integration has been evidenced in employment opportunities for persons with disabilities, also. No longer are day programs and sheltered workshops the only "work" available for such individuals; the advent of supported employment has brought about job opportunities for persons throughout the United States that were only dreamed of in the past.

The project was completed in Sedalia, Missouri, a community with a 1990 census population of 19,800. Sedalia has a highly diversified industrial base, with manufacturing employment representing 16% of all jobs in Sedalia/Pettis County (Sedalia Area Chamber of Commerce 1995). Agriculture also plays an important role in

Sedalia's economy, and retail trade represents a vital portion of the area's overall economic base.

Sedalia was established in 1860 by George R. Smith, and was a federal military post during the Civil War. The railroad played a major role in Sedalia's development, serving as the end of cattle drives bringing long horns from Texas to be shipped by rail to the packing plants of the East (Downtown Sedalia, Inc. 1995). Sedalia was hard-hit by the Depression, forcing three banks to close, two others to limit withdrawals, and two bankers to commit suicide.

In 1955, the "Crippled Children's Center" was established in Sedalia in response to the need for services for individuals with mental retardation and developmental disabilities. It was sponsored by United Cerebral Palsy, and began with nine children and one teacher. Eleven years later, the first Senate Bill 52 sheltered workshop in Missouri was established in Sedalia. By 1983, the Cooperative Sheltered Workshop had grown to the point that sales exceeded one million dollars. The following year, the Pettis County workshop procured their first government contract manufacturing metal file card boxes (The Center for Human Services Milestones 1995).

Sedalia's supported employment program was started in 1987, with a \$54,249 grant from the Missouri Division of Vocational Rehabilitation and the Pettis County Senate Bill 40 Board. In 1994, a full-time Job Developer was

hired to increase job placements in the competitive market. As of October 30, 1995, sixty-two individuals with mental retardation and/or developmental disabilities had been hired by local employers; fifty-four of those placements continue to be successful. In fact, some of the individuals are in their seventh year of supported employment. The Center for Human Services works closely with the Division of Vocational Rehabilitation to develop these job placements. There are various government incentives available to the approximately twenty-five employers who participate in supported employment in Sedalia at the present time.

The Center for Human Services is fully accredited by the Commission on Accreditation of Rehabilitation Facilities (CARF), and provides a continuum of services to persons with disabilities, from birth to adult. Their "Mission" is "to assist children and adults with disabilities and their families by providing high-quality programs, support services, and community education so they can achieve their desired level of independence, self-satisfaction, and inclusion in the community" (Center for Human Services 1994 Annual Report). The Center remains the primary agency in the Sedalia area that provides employment, both sheltered and supported, for individuals with mental retardation and developmental disabilities.

In undertaking this project, the researcher hypothesized that individuals who work in supported employment would have a higher level of job satisfaction than those working in sheltered work settings. It was hoped that this would lead to increased awareness of the benefits of supported employment, not only to individuals with disabilities, but also to employers. It is also the intent of this project to provide guidance to policy-makers in determining where the limited resources for such employment services should be directed to most effectively meet the needs of these individuals.

Participants

The researcher received a Bachelor of Science degree in Rehabilitation Psychology in 1988 from Central Missouri State University in Warrensburg, Missouri. Employment since that time has included one year of experience as a Program Assistant in the Work Adjustment Program of the Center for Human Services in Sedalia; two years as a Habilitation Specialist at Marshall Habilitation Center in Marshall, Missouri, working primarily in the day program center with individuals with severe and profound mental retardation; and the past five years as a Case Manager for Central Missouri Regional Center, an agency of the Missouri Department of Mental Health, Division of Mental Retardation and Developmental Disabilities. One of the many varied duties of a Case Manager is to assist persons with disabilities in locating appropriate employment. As

an advocate for these individuals, a strong interest in and desire to increase employment opportunities led the researcher to choosing this project. The researcher was responsible for administering all Quality of Life Questionnaires, interviewing staff or support persons who work with the subjects, and observing subjects in their actual workplaces.

Subjects were selected who work either at the Cooperative Sheltered Workshop or are participants in the local supported employment program. As much as possible, subjects were chosen who possessed comparable IQ or disability levels. Unfortunately, there were no subjects available of any race other than caucasian; this project limitation has been noted. Table 1 provides a summary of chief characteristics of subjects participating in the study.

TABLE 1

DEMOGRAPHIC INFORMATION

	%	n
Gender		
Male	60	12
Female	40	8
Age		
21-30	25	5
31-40	35	7
41-50	15	3
51-60	20	4
60+	5	1
Race		
Caucasian	100	20
Disability Level		
Borderline	30	6
Mild MR	55	11
Moderate MR	10	2
Severe MR	5	1

Once the project concept was established, the search began for an appropriate assessment tool to assist in determining which group of subjects has a higher level of job satisfaction, those in supported or those in sheltered employment. The Quality of Life Questionnaire was

selected, which is an instrument designed to assess the quality of life in persons with mental retardation and developmental disabilities (1993). Schalock and Keith note that the Quality of Life Questionnaire may be used as a standardized measure of the following: 1.) Consumer empowerment; 2.) Perceived independence; 3.) Social belonging; 4.) Community integration; 5.) Consumer satisfaction.

The Quality of Life Questionnaire was also selected because it is standardized. All factor analysis, reliability, and validity tests were based on data from the normative sample described in the Quality of Life Questionnaire Manual. The questionnaire is intended for administration by users who have at least one year of experience working in a professional, educational, or administrative capacity with individuals with mental retardation or a closely related condition. Detailed instructions are provided in the manual for administration, scoring, and interpretation of the questionnaire, and were followed closely in undertaking this project.

Before the Quality of Life Questionnaire was administered to the subjects, permission to conduct research among Department of Mental Health clients was sought from Niels C. Beck, Ph.D., Professor of Psychiatry at the University of Missouri-Columbia School of Medicine and consultant to the Department. Dr. Beck reviewed the

proposal and indicated that no formal review by committee was necessary.

Next, a pool of subjects was selected from individuals working at the sheltered workshop in Sedalia, Missouri, and those individuals who are working in the community through the supported employment program. Mr. Art Flowers, Program Manager-Center for Human Services Jobs, and Gerald Harrelson, Job Supervisor/Trainer, were contacted and provided much appreciated assistance in identifying individuals working in supported employment. As much as possible, subjects were chosen with similar IQs or disability levels. Mr. Flowers and Mr. Harrelson also provided information regarding how wages are determined for the two groups of employees.

Time was then spent both at the sheltered workshop and at various supported employment job sites in the community observing the subjects in their actual work settings. During this observation time, discussions were also held with floor supervisors, job coaches, and other support staff who work with the subjects. Staff appeared to be quite familiar with the individuals they work with, and were able to provide much information about employees' work performance and productivity. Job coaches consistently reported that the companies who employ these individuals with mental retardation and developmental disabilities through the supported employment program are quite satisfied with their work traits. Written reports

of progress are completed monthly by the job coach during the initial stages of employment, with input from both the employee and the employer. It was noted that those individuals who were working competitively through supported employment often appeared to be less distractible than those persons working in the workshop. Most employees at the sheltered workshop seemed anxious to talk with the researcher and often did not hesitate to stop working on a task in order to do so. Many seemed aware that they were sacrificing little in wages by stopping momentarily to visit, and perhaps felt the opportunity to socialize was a more worthwhile investment.

Conducting the Survey

Subjects were then administered the "competence/productivity" section of the Quality of Life Questionnaire. Schalock and Keith indicate in the manual that the questionnaire may be used as a standardized consumer outcome measure (6). A 3-point Likert scale is used to rate each of the ten items, which includes such questions as, "How satisfied are you with the skills and experience you have gained or are gaining from your job?", "Do you feel you receive fair pay for your work?", and "How satisfied are you with the benefits you receive at the workplace?". The completed Quality of Life Questionnaires were scored, and the raw scores were compared to percent equivalents using a conversion table included in the questionnaire manual. The manual also

indicates that the norm sample of 552 individuals with disabilities showed no meaningful differences in scores for males versus females. Moreover, no correlations were found between questionnaire score and age in a sample of 312 persons between the ages of 15 and 55 (19).

Finally, a one-tailed t-test was used to determine if the null hypothesis should be rejected. From this result, it can be concluded which group of employees has a higher level of job satisfaction, those who work in sheltered employment or those who work in supported employment.

While the largest percentage of the subjects participating in the study possessed IQs which met AAMR criteria for mild mental retardation (55%), some subjects possessed borderline intellectual functioning, moderate mental retardation, or severe mental retardation. The Quality of Life Manual indicates that the questionnaire scores are associated with the severity of mental retardation. The higher the IQ, and the less severe the mental retardation, the higher the questionnaire scores tend to be. However, this is less significant with the "competence/productivity" section (r square = 15.2 percent variance overlap) than with other sections of the questionnaire.

PRESENTATION OF FINDINGS

In order to test the hypothesis, a statistical tool must be used. For purposes of this study, a one-tailed t-test was selected. The t-test is one of the more popular

and widely used statistical tests, which determines whether there is a significant difference between the means of two samples. Following is the evaluation question and the resulting findings. The raw data obtained from administration of the Quality of Life Questionnaire can be found in the Appendices.

Question 1:

Do individuals with mental retardation and/or developmental disabilities who work in supported employment have a higher level of job satisfaction than those individuals who work in sheltered employment?

The means and variances must first be calculated.

$$N_1 = 10$$

$$N_2 = 10$$

$$x_1 = \Sigma X_1 / N$$

$$x_2 = \Sigma X_2 / N$$

$$= 285/10 = 28.5$$

$$= 235/10 = 23.5$$

$$s_1 = \frac{\Sigma X_1 - \frac{\Sigma X_1^2}{N}}{N - 1}$$

$$s_2 = \frac{\Sigma X_2 - \frac{\Sigma X_2^2}{N}}{N - 1}$$

$$s_1 = \frac{8157 - \frac{285^2}{10}}{9}$$

$$s_2 = \frac{5783 - \frac{235^2}{10}}{9}$$

$$= \frac{8157 - 8122.5}{9}$$

$$= \frac{5783 - 5522.5}{9}$$

$$= 3.833$$

$$= 28.94$$

Formula for pooled variances:

$$\begin{aligned}
 s_p &= \frac{(N_1 - 1) (s_1)^2 + (N_2 - 1) (s_2)^2}{N_1 + N_2 - 2} \\
 &= \frac{9 (3.833)^2 + 9 (28.94)^2}{18} = \frac{34.497 + 260.46}{18} \\
 &= \frac{329.454}{18} = 18.303
 \end{aligned}$$

Finally, the t can be calculated using the pooled variance estimate.

$$\begin{aligned}
 t &= \frac{(\bar{x}_1 - \bar{x}_2)}{\sqrt{\frac{s_p}{N_1} + \frac{s_p}{N_2}}} \\
 t &= \frac{28.5 - 23.5}{\sqrt{\frac{18.303}{10} + \frac{18.303}{10}}} = \frac{5.000}{\sqrt{3.661}} = 2.61
 \end{aligned}$$

Using the degree of freedom of 18 ($N_1 + N_2 - 2$) and the t distribution table for a one-tailed t-test, it can be determined that t at the .05 level is 1.734. Because the obtained value of 2.61 is greater than the critical value of 1.734, the null hypothesis is rejected. Thus, it can be concluded that the group of individuals with disabilities working in supported employment do possess a higher level of job satisfaction.

Question 2:

Which group of individuals has a higher level of job satisfaction, females working in supported employment or females working in sheltered employment?

$$N_1 = 3$$

$$N_2 = 5$$

$$x_1 = 87 / 3 = 29$$

$$x_2 = 120 / 5 = 24$$

$$\begin{aligned}
 s_1 &= \frac{2529 - \frac{87^2}{3}}{2} & s_2 &= \frac{2958 - \frac{120^2}{5}}{4} \\
 &= \frac{2529 - 2523}{2} = 3 & &= \frac{2958 - 2880}{4} = 19.5 \\
 s_p &= \frac{2(3) + 4(19.5)}{3 + 5 - 2} = \frac{6 + 78}{6} = \frac{84}{6} = 14 \\
 t &= \frac{(x_1 - x_2)}{\frac{s_p + s_p}{N + N}} = \frac{29 - 24}{\frac{14 + 14}{3 + 5}} \\
 &= \frac{5}{\sqrt{4.67+2.8}} = \frac{5}{\sqrt{7.47}} = \frac{5}{2.73} = 1.83
 \end{aligned}$$

Using the degree of freedom of 6 and the t-distribution table for a two-tailed t-test, it can be determined that t at the .05 level is 2.447. Because the obtained value of 1.83 is less than the critical value of 2.447, the null hypothesis is accepted. Thus, it can be concluded that there is no significant difference between the two groups.

Question 3:

Which group of individuals has a higher level of job satisfaction, males working in supported employment or males working in sheltered employment?

$$\begin{aligned}
 N_1 &= 7 & N_2 &= 5 \\
 x_1 &= 198 / 7 = 28.3 & x_2 &= 115 / 5 = 23.0 \\
 s_1 &= \frac{5628 - \frac{198^2}{7}}{6} & s_2 &= \frac{2825 - \frac{115^2}{5}}{4} \\
 &= \frac{5628 - 5601}{6} = 4.5 & &= \frac{2825 - 2645}{4} = 45
 \end{aligned}$$

$$s_p = \frac{6(4.5) + 4(45)}{7 + 5 - 2} = \frac{27 + 180}{10} = \frac{207}{10} = 20.7$$

$$t = \frac{28.3 - 23.0}{\frac{20.7 + 20.7}{7 + 5}} = \frac{5.3}{\sqrt{2.96 + 4.14}}$$

$$= \frac{5.3}{\sqrt{7.1}} = \frac{5.3}{2.66} = 1.99$$

Using the degree of freedom of 10, it can be determined that t at the .05 level for a two-tailed t -test is 2.228. Because the obtained value of 1.99 is less than the critical value of 2.228, the null hypothesis is accepted. Thus, it can be concluded that there is no significant difference between the two groups.

Question 4:

Which group of individuals has a higher level of job satisfaction, younger employees with mental retardation or older employees with mental retardation?

$$N_1 = 12$$

$$N_2 = 8$$

$$x_1 = 307 / 12 = 25.6$$

$$x_2 = 213 / 8 = 26.6$$

$$s_1 = \frac{8213 - \frac{307^2}{12}}{11}$$

$$s_2 = \frac{5727 - \frac{213^2}{8}}{7}$$

$$= \frac{8213 - 7854}{11} = 32.6$$

$$= \frac{5727 - 5671}{7} = 8.0$$

$$s_p = \frac{11(32.6) + 7(8.0)}{12 + 8 - 2} = \frac{358.6 + 56.0}{18}$$

$$= \frac{414.6}{18} = 23.0$$

$$t = \frac{25.6 - 26.6}{\frac{23.0 + 23.0}{12 + 8}} = \frac{-1}{\sqrt{1.92 + 2.88}}$$

$$= \frac{-1}{\sqrt{4.8}} = \frac{-1}{2.19} = -0.46$$

Using the degree of freedom of 18, it can be determined that t at the .05 level for a two-tailed t -test is 2.101. Because the obtained value of -0.46 is less than the critical value of 2.101, the null hypothesis is accepted. Thus, it can be concluded that there is no significant difference between the two groups.

CHAPTER IV

Summary of the Project

The purpose of this project was to determine whether individuals with mental retardation or developmental disabilities working in supported employment have a higher level of job satisfaction than those working in sheltered employment. In order to determine this, a tri-phasal method of evaluation was used which included: (1) employment questions from the "competence/productivity" section of the Quality of Life Questionnaire, (2) observations in the subjects' workplaces by the researcher, and (3) informal interviews with staff or support people who work with the subjects and are familiar with their work performance. Much research focused on the backgrounds and development of both the sheltered workshop and the supported employment program in Sedalia, Missouri. A wealth of information regarding both was also gained from Mr. Arthur Flowers, Program Manager-Center for Human Services Jobs, and Mr. Gerald Harrelson, Job Supervisor/Trainer. Both men have been employed by the Center for Human Services for a number of years and are quite knowledgeable about the services the agency provides. The agency is the primary provider of employment services for individuals with mental retardation and developmental disabilities in Sedalia. The results of the evaluation will be addressed in this chapter, along with implications of this research and

recommendations for further research and changes in this area.

Conclusions

Evaluation Question 1:

- A. Do individuals with mental retardation and/or developmental disabilities who work in supported employment have a higher level of job satisfaction than those individuals who work in sheltered employment?
- B. A one-tailed t-test determined an obtained t value of 2.61. Given the degree of freedom of 18, the critical value of t at the .05 level is 1.734.
- C. There is a significant difference between the two scores. Thus, the null hypothesis can be rejected, and it can be concluded that individuals working in supported employment do in fact have a higher level of job satisfaction than those working in sheltered employment.

Evaluation Question 2:

- A. Which group of individuals has a higher level of job satisfaction, females working in supported employment or females working in sheltered employment?
- B. A two-tailed t-test determined an obtained t value of 1.83. Given the degree of freedom of 6, the critical value of t at the .05 level is 2.477.
- C. There is no significant difference between the two scores. Thus, the null hypothesis can be accepted,

and it can be concluded from the results of this project that females working in both supported and sheltered employment possess comparable levels of job satisfaction.

Evaluation Question 3:

- A. Which group of individuals has a higher level of job satisfaction, males working in supported employment or males working in sheltered employment?
- B. A two-tailed t-test determined an obtained t value of 1.99. Given the degree of freedom of 10, the critical value of t at the .05 level is 2.228.
- C. There is no significant difference between the two scores. Thus, the null hypothesis is accepted, and it can be concluded that males working in both supported and sheltered employment possess comparable levels of job satisfaction.

Evaluation Question 4:

- A. Which group of individuals has a higher level of job satisfaction, younger employees with disabilities or older employees with disabilities?
- B. A two-tailed t-test determined an obtained t value of -0.46. Given the degree of freedom of 18, the critical value of t at the .05 level is 2.101.
- C. There is no significant difference between the two scores. Thus, the null hypothesis is accepted, and it can be concluded that older and younger employees with mental retardation/developmental

possess comparable levels of job satisfaction.

Implications

The results of the comparison between the two groups of workers with mental retardation suggest that persons working in non-segregated settings through the supported employment program are more satisfied with their jobs than persons working in a segregated sheltered workshop. Although this finding is in compliance with the original hypothesis, it should be noted again that these results were obtained from a sample of twenty subjects. While the results are representative of the population with mental retardation and/or developmental disabilities in Sedalia, Missouri, it may not be accurate to generalize these results to a larger city.

It was also determined that there is no significant difference in job satisfaction between either females or males working in supported employment versus sheltered employment. Again, it should be noted that the data obtained are representative of a somewhat small sample. Finally, subjects were grouped into younger employees (ages 21-40) and older employees (ages 41-60+). There was no significant difference in job satisfaction between the two groups of employees.

The Quality of Life Questionnaire appeared to be an appropriate assessment tool for purposes of this project. Subjects were given the option of having the questions and

possible answers read to them, and in most cases, chose this arrangement. All questions were answered, and the subjects had little difficulty understanding what they were being asked. Subjects were quite cooperative and seemed to appreciate being given the opportunity to provide information about their jobs. The job coaches and other staff were also quite helpful in providing valuable input.

Recommendations

The conclusion of this study lays the groundwork for a number of recommendations and suggestions aimed toward improving employment services for individuals with mental retardation and developmental disabilities. First, it is strongly recommended that human service professionals and other persons working with individuals with disabilities continue to work toward increasing public awareness of the benefits of hiring persons with mental retardation. Not only does this awareness need to be heightened among industry, but also among parents, educators, human service providers, and most importantly, among individuals with disabilities themselves. It is difficult for one to aspire for something better in life if there is no awareness of what options exist. The public must be educated about supported employment in general and what it has to offer.

Along with this increased public awareness, there is a need for the establishment of forward-looking policies that emphasize integrated employment of adults with disabilities. These policies should be implemented at all levels including federal, state, and local government, as well as the private sector. It is hoped that these policies will allow for individual choice and flexibility. Inter-agency agreements have begun to evolve in order to ensure that persons receive the needed long-term supports once the responsibility of the state agency providing vocational follow-along has ended. Consideration should also be given to the technologies available today that assist in ensuring job success for individuals with mental retardation and developmental disabilities. In order for supported employment to continue to grow and prosper, future attention must be focused on both service expansion and service quality.

Another recommendation is that human service professionals work toward eliminating the barriers to supported employment that exist. These barriers may be attitudinal or environmental in nature, and may exist among organizations and industry or in federal and state systems. Many potential employers believe that individuals with disabilities are not capable of working competitively in a full-time position. Despite the obvious benefits, there are also a number of disincentives that discourage persons from working in supported

employment. In the event of job loss, it is often extremely difficult to regain Supplemental Security Income (SSI) benefits. Many persons with disabilities depend on SSI and other benefits in order to meet living expenses. Another barrier is the lack of available and affordable transportation to and from work. Often in a small community such as Sedalia, there is no bus service or public transportation system available, making it even more difficult to get to a job if individuals are unable to drive. Finally, an amazing number of people exist that are not yet familiar with the Americans with Disabilities Act (ADA) and its provision that persons with disabilities not be discriminated against in the work setting. The ADA should be enforced, and employers forced to meet its guidelines.

It is strongly recommended that increased funding be directed toward supported employment programs, and away from segregated sheltered work settings. In a time when resources are quite limited and closely scrutinized, money should be spent where it will most effectively benefit persons with mental retardation and developmental disabilities--in supported employment. As all individuals do, persons with disabilities possess a need to have some control in their lives and to make decisions. Supported employment allows for increased independence, productivity, community integration, and socialization. Maintaining gainful employment leads toward improved

overall quality of life. While much progress has been made toward this goal, continued focus should be on changing over from sheltered employment to supported employment. This changeover will not occur overnight, but will require substantial time, investment, and commitment on the part of human service professionals and those persons working in the field of employment for individuals with disabilities. Individuals should not be placed on a waiting list for supported employment that may extend to months or even years. Perhaps funding that is currently being invested in segregated day programs should be redirected to supported employment.

As a final recommendation, increased use of natural supports is encouraged. Natural supports may include any relationships or assistance that is normally present in the workplace. Natural supports are becoming an increasingly popular option for persons working in supported employment, and are less costly than traditional supported employment models. Again, this savings should be particularly attractive given the current limited resources. Coworkers can be utilized to provide follow-along at the work site on a daily basis, providing a possible solution to the frequent staffing problems associated with long-term maintenance in supported employment. The use of natural supports also allows the individual with a disability to be less dependent on a job coach or other paid staff person. Such supports may

alleviate problems in securing transportation to and from work, may provide moral support, and may increase opportunities for socialization. The employee is able to develop relationships in the workplace without the stigma of being viewed as a "client".

A challenge exists to all society to continue working toward improved and increased employment opportunities for individuals with mental retardation and developmental disabilities. The Rehabilitation Services Administration's Supported Employment Panel of Experts provided the following quite valuable food for thought: "A measure of life's opportunities is built on the visions one has of possibilities. For people with disabilities, the visions have been painfully acquired over years of hardship, repression and segregation" (Faison et al. 1990, 11).

APPENDIX

INDEX

The first volume of the series is devoted to the history of the subject, and the second to the present state of the subject. The third volume is devoted to the future of the subject, and the fourth to the conclusion of the series.

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INSTRUCTIONS

The QOLQ may be administered to persons with mental retardation who have adequate receptive and expressive language. The examiner needs to be sensitive to the possibility that the respondent may not understand some of the items or the meaning of some of the words. If this happens, it is okay to paraphrase the item to improve understanding. If this happens frequently, or if the person is known not to have adequate receptive or expressive skills, it is acceptable to have two persons who know the individual well complete the Questionnaire.

Instructions for Respondents

Read the following instructions to the respondent:

I want you to think about where you live, work, and have fun, and the family, friends, and staff that you know. Together, let's answer some questions that express how you feel about these things. If you like, you can check the choices given for each item; if you like, I can check them for you after reading and discussing each of the three alternatives for each item. Please try to answer each of the items and we will take as much time as you need. There are no right or wrong answers. We want only to know how you feel about where you live, work, and have fun and the family, friends and staff that you know. Do you have any questions?

If the respondent consents, the examiner proceeds to administer the 40 items. When reading the items, pay close attention to the exact wording. You may paraphrase items and repeat them as often as necessary to ensure the respondent's understanding of the item content.

Instructions for Raters

Raters should know the person well and should complete the Questionnaire "as if they were the person" (that is, rate how the person is perceiving things).

Raters should complete the Questionnaire independently and without any discussion of the items or the individual.

* Special Instructions for Employment Items

If the person is unemployed, do not ask Questions 13-20 and assign to each question the score "1".

Sheltered workshop programs should be considered as jobs when responding to the Questionnaire.



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April 12, 1995

Dana S. Rowland
905 South Arlingtrou Avenue
Sedalia, MO 65301

Dear Dana:

Thanks for your letter of April 10th. As soon as you have a draft of your proposal that has been approved by your thesis committee, I will need to review it. Most of the proposals we review are passed without too many problems, but I will need to look at the proposal before you get started with data collection.

Sincerely,

Niels C. Beck, Ph.D.
Professor of Psychiatry
Chairman, DMH PRC Committee

NCB/bdh



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May 5, 1995

Dana S. Rowland
905 South Arlington Avenue
Sedalia, MO 65301

Dear Dana:

Thanks for your letter of April 28th. I do not believe that your project requires a formal review by our committee. Good luck with your project.

Sincerely,

Niels C. Beck, Ph.D., MD

Niels C. Beck, Ph.D.
Professor of Psychiatry
Chairman, DMH PRC Committee

NCB/bdh

cc: Elaine Brandt, PRC-DMH

		RAW DATA	
SUPPORTED EMPLOYMENT		SHELTERED EMPLOYMENT	
	24		12
	30		26
	29		23
	27		30
	30		24
	29		23
	30		20
	27		27
	30		20
	29		30

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