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THE HUMAN SERVICE SCALE:
A BETTER MEASURE OF SUCCESS

A Project
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
Rehabilitation Counseling

by
Ina Joyce Miller

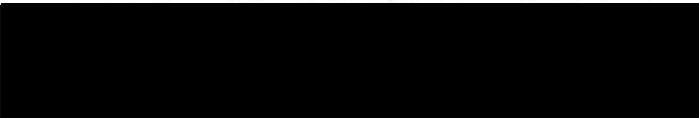
June 1999

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ABSTRACT

Because of a greater awareness among Rehabilitation Counseling Professionals that success for individuals is more than finding a job, researchers have been recommending a variety of other methods to obtain better indicators of life satisfaction or quality of life (QOL). In order to be effective a QOL measure must be generalized, validated, and pertain to as broad a spectrum as possible of individuals with disabilities. Based upon the research conducted in this project, there are no present or emerging QOL assessment measures that meet this criteria available within the current Rehabilitation Counseling literature or databases. The Human Service Scale, a twenty-five year old QOL assessment tool, fits these criteria and more. It has the capability of measuring many of life's domains. It is based on Maslow's's hierarchy of human needs and has the capability of measuring client change in various areas of need. It also can serve as a program evaluation tool for the rehabilitation counselor. It is the conclusion of this study that the HSS would fill an existing gap within the current repertoire of rehabilitation counseling research tools. Therefore, it is considered vital to revalidate the HSS for use in the years to come.

ACKNOWLEDGMENTS

I want to acknowledge the assistance and dedication of my faculty and thesis advisor, Dr. Joseph Turpin, and thank him for the time he spent assisting me with this project.

I also want to express my appreciation to Dr. Wiest for volunteering to review my work. Also, thank you, Dr. Greg Garske for forwarding the information on the Human Service Scale that was essential to complete this project.

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INTRODUCTION

Success in Rehabilitation Counseling has been defined and analyzed through the years from a variety of perspectives. Therefore, researchers have used a vast array of measurements and assessment tools to define and measure both obtaining and maintaining success. These success criteria have included simple job offers or job placements, counselor education and performance related to job placement, client satisfaction with the rehabilitation process, measurements of client motivation and personality types, job satisfaction studies, quality rehabilitation counseling assessments, and various quality of life measures.

The purpose of this paper is to emphasize the importance of viewing success from a comprehensive and inclusive perspective. The Human Services Scale provides such a perspective and offers a more uniform method of success measurement and a measure of overall success in various life domains.

Job placement as a measure of success has been dominant among these perspectives and is often seen as an end in itself. Job offers or successful closures, defined in the Vocational Rehabilitation (VR) system as status code 26 (26s or closures) are often a simple and easy method of

determining success.

In addition, the importance of employment outcomes measured, through closures, was strongly underscored and validated in the 1992 Amendments to the Rehabilitation Act. However, there has been an ongoing emphasis upon elaborating on the definition of what is successful in rehabilitation "beyond merely counting the number of Status Code 26 closures and salary level" (PSI, 1990; Szymanski, Parker & Butler, 1990 in Gilbride, Thomas & Stensrud, 1998).

Nonetheless, placement, or 26s, in the State-Federal rehabilitation system continue to be the criteria by which case managers are measured and by which the funding for both the for-profit and not-for-profit sector is measured and allocated (Shiro-Geist, Walker & Nunex, 1992). Consequently, there have been numerous studies and textbooks written that describe the vital importance of job placement and counselor performance.

Many other studies have proclaimed that job satisfaction and counselor satisfaction from the clients' perspective is a more accurate measure of success. Yet other researchers have looked at the client to determine methods of client motivation, proper case management skills, and assessment tools used from a more humanistic manner as a better way to achieve and measure success. However, the most

comprehensive overall measures of success may be considered the quality of life studies that view an individual's success from a variety of perspective and in a variety of life's domains. The Human Service Scale (HSS) is one of the most comprehensive, well founded, and validated of the quality of life studies. In addition, the HSS is based upon the well-established theoretical model of Maslow's hierarchy of needs.

In short, researchers in the field of rehabilitation counseling have been looking at success and methods to achieve success from a variety of viewpoints. Several of these methods of measurements and the findings of several landmark studies will be discussed below. The second section of this paper considers the history and background of QOL research. The Human Service Scale is then presented and reviewed. Various QOL assessments are compared and analyzed in the review and discussion section that follows with the rationale for strongly recommending a new, revised, state-of-the-art Human Service Scale.

THE HISTORY OF OUTCOME MEASUREMENTS

Most of the earliest measures of success were determined by closure rates. Researchers studied the rehabilitation counselor to decide whether education or level of experience affected those closure rates. Szymanski and her associates took this process a step further by recommending careful study of the methodological limitation of previous research on counselor education level and job performance in terms of closures (Szymanski, Parker, & Borrick, 1990; Szymanski, Parker, & Butler, 1990 in Cook & Bolton, 1992). They recommended research on statistical power levels, outcome measurement, and research design. Further, they stressed the importance of separating outcomes of clients with severe disabilities from those of clients with less severe disabilities.

Szymanski followed through with a series of studies concerning the interactive relationship of counselor education and experience to client outcomes (Szymanski, 1991; Szymanski & Danek, 1992; Szymanski & Parker, 1989). The studies were conducted in New York, Maryland, and Wisconsin Vocational Rehabilitation agencies. In 1992, Cook and Bolton replicated the study in the Arkansas Division of Rehabilitation Services.

All of the findings suggest that, using Status Code 26

as a competitive client closure rate, rehabilitation counselors with at least a master's degree and between two and twelve years of counseling experience have better client outcomes. In addition, the average length of experience to achieve the same level of closure rates as a counselor with a master's degree was consistently between six and seven years.

Caseload management performance and educational level have also been studied (Wheaton & Berven, 1994). Again, counselors with masters' degrees, in state rehabilitation agencies, were found to have better caseload management skills in terms of efficiency and knowledge of severe disabilities as well as higher closure rates than counselors without masters' degrees (Bolton, Neath, Bellini, & Cook, 1995). Rehabilitation counselors were also found to have better preparedness in counseling knowledge areas if they were certified or had higher levels of education (Symascki, Leahy, & Linkowski, 1993). Counselor performance has also been developed into a planned action model using a social cognitive perspective (Rosseler & Mullins, 1995).

The above studies were significant in stressing the importance of education in rehabilitation counseling. However, they also demonstrated that successful closures could be addressed, assessed, measured, and thus improved,

from a variety of perspectives.

Since then, the importance of education and training to better client outcomes has been recommended by a variety of authors (Akridge & Means, 1982 in Bolton & Akridge, 1995). A recent article, written in 1998, recommends the use of distance, or video education, for professionals in the field of supported work. The authors suggest graduate level training offered over long-distance systems wherever distance is a problem in education or training. This type of program is being offered in various areas throughout the country (Wood, Miller, & Test, 1998). Thus, frequently professionals are becoming aware of the necessity of training and education as the most viable and reliable method of reaching rehabilitation success through higher outcome success rates.

Researchers are also examining effective use of education and training for the client population, viewed in terms of successful closure rates (Akridge & Means, 1982 in Bolton & Akridge, 1995). For example, Bolton & Akridge examined fifteen skills training areas through the use of meta-analysis (1995). They found that training interventions were most likely to produce change on behavioral performance such as acquiring interview skills that include listening or empathetic responses. Further,

attrition from rehabilitation programs was reduced because of the participation (Farley, 1984b; Farley, & Hinman, 1987; Farley, Schriener, & Rosesler, 1988 in Bolton & Akridge, 1995).

In addition, self-improvement models have been developed to encourage clients to achieve higher level positions through job training. However, this approach is only recommended for clients with previous work histories (Allaire, Anderson, & Meenan, 1997).

For many years, rehabilitation professionals have also been aware of the benefits of humanistic approaches to rehabilitation counseling (Arons, 1994; Livneh & Sherwood, 1995 in Garske & Soriano, 1997). Successful job placement outcomes appear to be related to such approaches through positive and effective therapeutic relationships that aid in client motivation (Bolton, 1979 in Garske & Soriano, 1997).

Thus, the relationship between client satisfaction and success became a strong consideration in Rehabilitation Counseling. Many researchers became aware of the need to supplant or extend the traditional measures of vocational rehabilitation counselor performance from case closure rates to a broader definition (Bolton, 1987, Emener, 1980, Emener, Mars & Schmidt, 1984; Emener & Placido, 1982; Jankowski, Bordieri, & Musgrave, 1991; Patterson & Leach, 1982; Parker,

Parham, Brady, & Brown, 1988; Leahy & Shapson, 1987 in Tucker, Abrams, Cehnnault, Stanger & Herman, 1997). There has been an on going search for other measures and assessments of rehabilitation counselor success. According to Tucker et al., the "Increased societal concern for the rights and opinions of consumers and growing questions about the validity of traditional measures "has been the driving force behind this exploration (Schwab, Smith, & DiNitto, 1993; West & Parent, 1992 in Tucker, Abrams, Chennault, Stanger, & Herman, 1997).

Further research has been conducted to find the "perceptions" of consumers regarding the most important "case managers' characteristics" (Nufer, Rosenberg, & Smith, 1998). In a recent study, researchers explored the methods of eleven "exemplary vocational rehabilitation counselors" to determine counselor predispositions that increase service delivery as well as "relationship building, assessment, goal-setting and planning and intervention" (Roessler, Schriener, Brown & Bellini, 1997). They called this methodolgy "Quality Rehabilitation Counseling" and used closure rates, or 26s, as part of the determination of what constituted an "exemplary" counselor.

Other studies examined the consumers' satisfaction level regarding vocational services as a whole. This was related

to the concept of empowerment and the fact that with empowerment individuals can gain control over their lives. In this way individuals with disabilities may also improve the quality of their employment experience (Kosciulek, Vessell, Rosenthal, Accardo, & Merz, 1997).

As a response to the awareness of the need to improve outcome measures and to respond to questions directed toward the effectiveness of the Vocational Rehabilitation system, Gilbride, Thomas, & Stensrud developed the Rehabilitation Success Survey (1998). The authors also state that there has been considerable awareness in the rehabilitation counseling profession regarding the importance of Vocational Rehabilitation in improvements in the lives of individuals (Rubin & Roessler, 1995 in Gilbride, Thomas, Stensrud, 1998). They note the lack of research on the quality of placements and quote Szymanski and Parker (1995) as finding that rehabilitation counselors who themselves valued challenge, the nature of their jobs and autonomy were more satisfied than the rehabilitation counselors who remained on the job due to income and benefits. The researchers did find that extending the definition of employment outcomes to a more comprehensive perspective does help in the understanding of the effectiveness of the Vocational Rehabilitation system (Gilbride, Thomas, Stensrud, 1998).

Job satisfaction is another area of study that emerged as a result of the dissatisfaction with closures as the sole measure of success for rehabilitation counseling. Job satisfaction has been described as one of the most important goals of career counseling (Jagger, Neukrug & NcAuliffe, 1992).

According to Jagger et al., "the most comprehensive and well-researched theory explaining job satisfaction has been the Theory of Work Adjustment (TWA)" (Dawis & Lofquist, 1984 in Jagger et al., 1992). The authors are quoted as stating that the theory "provides a model for conceptualizing the interaction between individuals and the work environment" (Dawis & Loquist, 1976, p. 55, in Jagger et al., 1992). This theory utilizes two sets of variables are used to predict work satisfaction and job tenure in a job. Work personality is specified as abilities and needs and the second variable, work environment is specified as the ability requirements and reinforcer systems provider in a job. One of the major "tenets of TWA states that "satisfaction is a function of the correspondence between the reinforcer pattern of the work environment and the individual's needs" (Dawis & Lofquist, 1984, p.60 in Jagger et al., 1992). The Minnesota Satisfaction Questionnaire was designed to test this proposition and to assess satisfaction

in terms of various psychological needs (Weiss, Dawis, England & Lofquist, 1984, p.60 in Jagger et al. 1992).

Finally, quality of life (QOL) measurement concepts are often referred to as the "ultimate objective of rehabilitation treatment" (Pain, Dunn, Anderson, Darrah, & Kratochvil, 1998). Quality of life has been researched and applied in many ways in various settings for different groups of individuals with disabilities as discussed below. There has been no general accepted definition of what constitutes quality of life, but there has been some agreement on the concept itself.

QUALITY OF LIFE LITERATURE REVIEW

According to Roessler, quality of life (QOL) began as a political slogan in the 1950s and was quickly adopted by the medical community (Vash, 1987, p.13, in Roessler, 1990). In the 1960s QOL was referred to as an "outcome criterion" in *The Report of the President's Commission on National Goals* (Schuessler & Fisher, 1985 in Roessler, 1990). QOL began to spark an interest as an assessment tool to use with individuals with long-term mental illness during the 1970s with the Community Support Program initiatives of the National Institute of Mental Health (Lehman, 1988 in Roessler, 1990).

Research in measuring QOL began with studies by Andrews and Withey, 1976 and Campbell et al., 1976 (in Vanden Boom & Lustig, 1997). The studies emphasized two main points. According to Vanden Boom and Lustig, 1990, "First, these studies provided evidence that quality of life can be assessed both globally in terms of how a person feels about their life as a whole and at more specific levels in several life domains. Second, these studies provided evidence that there is a marginal relationship between objective life conditions and the person's subjective experiences (Andrews & Withey, 1976; Campbell et al., 1976; Lehman, 1983). Subjective quality of life has been described as the

individual's own internal determination of what constitutes the "good life" (Campbell et al., 1976 in Vanden Boom & Lustig, 1997).

Roessler (1990), views quality as "synonymous with grade or level which may vary from high to low. 'Life' generally refers to mental life, even though environmental conditions are included in some definitions". Roessler also states that QOL is usually assessed in three ways, through "(1) subjective estimates of satisfaction with general life domains (well-being or happiness): (2) subjective estimates of satisfaction with specific life domains (work, finances, health, and relationships with others): and (3) sociodemographic data on life quality (social indicators) reflective of environmental opportunities, barriers, and resources (Baird, Adams, Ausman & Diaz, 1985; Schuessler & Firsher, 1985 in Roessler, 1990).

Thus, there does seem to be a consensus that QOL is a multi-dimensional concept (Pain, et al., 1998). In addition, it is agreed that QOL attempts to give meaning to an individual's overall life situation and has been recognized as "highly relevant in examining disability and rehabilitation issues"(Fabian, 1991, in Cubon, Clayton & Vandergriff, 1995). There is also an overall widespread agreement that QOL relates to the physical and psychological

well-being of individuals (Campbell, 1976 in Chubon et al., 1995).

According to Fabian (1992), although the assessments tools are different to determine adaptive functioning versus life satisfaction, QOL research on these two different approaches have resulted in several conclusions. One such conclusion is "that there seems to be an overlap between measures of adaptive functioning and measures of well-being or life satisfaction. This finding has implications for the relationship between competitive employment and QOL (Andrews & Withey, 1976; Franklin, Simmons, Solovitz, Clemons & Miller,, 1986 in Fabian, 1992). Second, it was found that researchers can "elicit useful information on measures of quality of life even with individuals with the most severe disabilities (e.g., HeaL & Chadsey-Rush, 1985; Klonof, Kosta, & Snow, 1986, in Fabian, 1995).

Roessler (1995) states that QOL is determined by both inner and outer forces. He quotes Campbell (1981, p.23) as stating that " one's sense of global well-being is 'always dependent on the subjective characteristics of the person and the objective charactersistics of the situation'"

Therefore, the inner, or subjective, factors that influence QOL include such characteristics as "aspiration level, past experience, personal expectations, and

perceptions of current conditions" (Lehman, 1983 in Roessler, 1990). QOL is also affected by "a variety of social indicators" (Schalock et al., 1989 in Roessler, 1990).

Thus, in order to raise QOL for individuals with disabilities, environmental and personal conditions must both be part of the equation. Roessler (1990) gives the example that "attributes and perceptions of individuals related to QOL may be influenced by person-oriented interventions such as counseling, medical therapies, and skills training. To counter negative external forces, rehabilitaiton interventions must also change the situation, that is, eliminate environmental barriers (physical and social) and other adversities that limit participation in community and labor force roles".

The objective factors, or social indicators, of QOL are determined by "sociodemographic data regarding environmental conditions" (Roessler, 1990). These indicators include measurable variables such as employment records or health records (Lehman, 1983 in Roessler, 1990). According to Roessler, (1990) Johnson (1988) identified nine "social indicators" or sources of data that cumulatively estimate QOL which include "health, public safety education, employment, earnings and income, poverty, housing, family

stability, and equality." Further, Johnson defined examples of how to calculate QOL components for groups. For example, "he defined health status as the function of life expectancy at birth, infant mortality, and days of disability. Public safety may be gauged by combining rates of violent crime and property crime (Roessler, 1990).

Some studies have only found small relationships between objective indicators and subjective ratings or personal perceived satisfaction ratings of QOL (Lehman, 1983; Ramund & Stensman, 1988). However, other studies found that social indicators such as the amount of money earned, satisfaction with personal relationships, and economic security have strong relationships to subjective QOL ratings including global satisfaction and domain satisfaction (Lehman, 1983; Lehman, Ward, & Linn, 1982; Scheussler & Fisher, 1985 in Roessler, 1990).

Thus, studies that consider the relationship between QOL and employment status have focused on subjective perceptions of quality of life. Studies with general population samples have provided evidence that the contribution of a job to overall subjective quality of life can explain a moderate amount of the variance behind other domains such as housing and family life (Andrews & Withey, 1976; Campbell et al., 1976 in Vanden Boom & Lustig, 1997).

Thus, subjective QOL may be global or reflect satisfaction levels in a specific life domain. Global satisfaction may be considered "well-being" or "happiness" and may be measured globally by asking how a person feels about life in general. Formats differ as do the areas of life measured (the domains). A format may use several different "adjective pairs (Boring-interesting, useless-worthwhile) for rating. I think my life is....may also be used (Lehman, 1983 in Roessler, 1990).

Therefore, QOL has been seen in rehabilitation counseling as a "greater commitment to a holistic approach. QOL is a wellness construct with multiple dimensions" (Roessler, 1990). Vandergriff and Chubon agree and state that "the overriding appeal of quality of life assessment is that it is conceptually consistent with the holistic orientation of rehabilitation (1994).

CURRENT QUALITY OF LIFE ASSESSMENTS

In the field of rehabilitation since the inception of the concept of QOL, assessments and research have branched out and become somewhat fragmented among the specialties. For example, Lehman developed an objective measure of QOL called the Quality of Life Interview. It is designed for individual's with long term mental illness (Lehman, 1988 in Roessler, 1990). This assessment tool measures daily activities in a variety of life domains including "living situations, family relationships, social relationships, leisure activities, work, finances, personal safety, and Health. Indicator scores were generated from information such as weekly wage, number of hours worked, number of visits with family, number of days of illness, use of health care services, and experience as a victim of property or personal crime (Rossler, 1990).

Another measure, designed by Schalock et al. (1989) is the Quality of Life Questionnaire. It is comprised of objective indicators and is specifically designed for people with mental retardation. It includes 28 criterion-referenced items that when combined produce estimates of the respondents levels of environmental control, social interaction and community utilization. The questions include topics such as 'who plans your meals' (environmental

control), 'how often do you use public transportation' (community involvement' and "how often do you talk with the neighbors' (social relations) (Schalock et al., 1989; Schalock et al., 1989 in Roessler, 1990).

Another area of specialization within the QOL framework is the specialty in regard to specific disabilities. For example, articles have been written addressing QOL for individuals with Arthritis using the Arthritis Impact Scales (AIMS2) and Rapid Assessment of Disease Activity in Rheumatology (RADAR) (Allaire, Anderson & Meenan, 1997).

Other health related QOL measures exist that have been used to study health related QOL. One such measure is the Sickness Impact Profile (SIP) which is a 136 item questionnaire with self-reported perception of an individuals functional limitations. Such areas include "sleep and rest, emotional behavior, body care and movement, home management, social interaction, ambulation, mobility, alertness behavior, communication, work, recreation and eating. This produces an overall SIP score and two dimension scores of the physical and psychosocial dimensions" (Konstam, Surman, Hijjazi, Donstam, Fierstein, Turett, Dec, Keck, Mudge, Flavel, McCormak, & Hurley, 1997).

THE HUMAN SERVICE SCALE

The Human Service Scale (HSS) was developed to meet the need for a comprehensive instrument to measure client change and client outcome. It was first developed in the 1970s by rehabilitation professionals at the University of Wisconsin Regional Rehabilitation Research Institute (UW-RRI) with much of the effort being provided by Dr. Shlomo Kravetz (Reagles & Butler, 1976).

The rationale behind the development of the HSS was that client outcomes as Status Code 26s alone did not provide a complete measure of the extent to which client goals are met and the degree to which agencies are "fulfilling their purpose" (Reagles & Butler, 1976).

Maslow's (1954) hierarchy of basic human needs was selected as the underlying theoretical basis for the measurement of client outcome (in Reagles & Butler, 1976).

According to Maslow (1970) human needs are defined as biosocial tendencies that direct persons to engage in activities and have experiences that "the healthy organism tends to chose, and strives toward conditions that permit it to choose" (Maslow, 1970, p. 30 in Kravetz, Florian, & Wright, 1985). In addition, Maslow contends that individuals who are "limited in their ability to engage in such activities and to have such experiences

suffer" (Kravetz, Florian & Wright, 1985). Analyzing the rehabilitation client's problems within this theory's framework is based upon the assumption that both able-bodied persons and those with disabilities have the same basic needs; what differentiate the former from the latter are the disabling conditions, which may constitute a barrier to gratifying these needs" (Kravetz, Florian & Wright, 1985). It was, of course, felt that rehabilitation clients come to the VR system to seek aid in fulfilling these needs through developing their own social, economic, or personal resources.

Maslow contends that basic human needs fall into specific categories that can be quantified and which can be built upon. One category of needs tends to "dominate" another category when both are satisfied. Maslow's need categories "in order of their prepotency, are as follows: physiological needs, safety and security needs, love and belongingness needs, self-esteem needs, and self-actualization needs." In terms of this hierarchical theory, when two categories of needs are not gratified, individuals will strive to gratify the more basic of the two (Maslow, 1970 in Kravetz, Florian & Wright, 1985).

This theory was chosen as the basis for developing a holistic and multifaceted measure of rehabilitation

counseling effectiveness. There are a variety of advantages in using Maslow's theory for measurement in rehabilitation. "First, the use of this theory directly relates the measurement of rehabilitation effectiveness to a general theory of normal psychosocial well-being. A second facet is the degree of prepotency with which each of these categories can be characterized" (in Kravetz, Florian & Wright, 1985).

Since the categories of human needs that correspond to these activities and experiences can be ordered along a single continuum of prepotency, psychosocial well-being can be considered essentially unidimensional. Thus, the issue of the primacy of economic and vocational measures of rehabilitation outcome is partially resolvable in terms of the prepotency of the category of human needs to which economic and vocational activities belong. Secondly, if a multifaceted measure of need satisfaction representative of Maslow's hierarchy can be constructed, it should be sufficiently comprehensive to apply to various rehabilitation systems and services. Finally, the choice of Maslow's theory of basic human needs is the explicit expression of a professional value judgement that view the person with the disability or handicap as the client of the rehabilitation system. Empirical questions as of the structure of the rehabilitation clients' self-reports of the

quality of their activities and experience become especially meaningful once such a value judgement has been made (Kravetz, Florian, & Wright, 1985).

The HSS originally was developed with 300 multiple choice items which represented Maslow's need categories; physiological, safety and security, lovingness and belongness, self-esteem and self-actualization. After some items were eliminated and others combined, the preliminary scale consisted of 150 items. These were put into an appropriate format of a scale and administered to a sample of 1018 individuals in 29 states who were clients of the state vocational rehabilitation system. The demographics of the group showed that they were representative of the clientele of the VR system except that individuals with severe disabilities or mental retardation were not included (Reagles & Butler, 1976).

When the data was reviewed and analyzed, seven distinct need categories were apparent instead of the five that Maslow had postulated. The need categories were given the labels "Physiological, Emotional, Economic Security, Family, Social, Economic-Self-esteem, and Vocational Self-Actualization Needs: the labels reflect as closely as possible their relationship to Maslow's original need categories" (see Table 1) (Reagles & Butler, 1976). The

scale did have several limitations in addition to requiring a 5th grade reading level. The other limitations were that there were no audio recordings available for individuals with visual disabilities. In addition, clients with severe limitations of their arms would need assistance in completing the form. Many of the above concerns will be eliminated through modern technology assuming that the HSS is brought up to current levels of re-examination and re-validation.

TABLE 1
RELATED MASLOW NEED CATEGORIES AND
HOYT RELIABILITY COEFFICIENTS OF THE HSS SUBSCALES

HSS Subscale Title	Related Maslow Need Category	Hoyt Reliability Coefficient
Physiological Needs	Physiological Needs	0.86
Emotional-Security Needs	Safety and Security Needs	0.90
Economic-Security Needs	Safety and Security Needs	0.69
Family Needs	Lovingness and Belongingness	0.84
Social Needs	Lovingness and Belongingness	0.77
Economic Self-Esteem Needs	Self-Esteem Needs	0.86
Vocational Self-Actualization	Self-Actualization Needs	0.97

Table from Reagles & Butler, 1976

The HSS has a variety of critical uses which are important to program evaluators, case managers, researchers and administrators. Reagles and Butler (1976) list 10 potential uses of the HSS, (1) as a program evaluation tool, (2) for assistance in dealing with the whole person, (3) as

a problem check list, (4) as an entree to the counseling relationship, (5) in team planning of rehabilitation services, (6) as a screening device for diagnostic evaluations, (7) in assisting with client involvement in planning services, (8) as feedback to counselors, (9) as an aid in identifying individuals with severe disabilities, and (10) as a clinical tool.

The HSS and Program Evaluation

Client change can be obtained through measuring the scores of the subscales (Reagles & Butler, 1976). Therefore the HSS has great potential for used as an outcome criterion measure for program evaluators. It can be used as a powerful tool to measure the relationship between the rehabilitation process and outcome (Reagles & Butler, 1976). In addition, the HSS also has the capability of reporting on one to all of the subscales as they relate to the rehabilitation process. It can stand alone or be used with other criteria, such as code 26 placements, as a criterion of success.

The HSS as a Holistic Tool

Vocational success is of necessity viewed through achieving employment as a primary result in the Vocational Rehabilitation systems. This often results in too much concern on the part of the counselor with the vocational

objective leading to neglect of the client problems in other life areas, jeopardizing the success of rehabilitation (Reagles & Butler, 1976). Research has demonstrated that rehabilitation clients who have many problems have the greatest likelihood of failure (i.e. not sustaining themselves after the termination of services" (Gay, Reagles, & Wright, 1971 in Reagles & Butler, 1976). It is obvious that the HSS provides the opportunity to review a much broader range of "potential client problems in a number of life areas (Reagles & Butler, 1976)". When utilizing the scale in this manner, each of the subscales are made known to the client so that "relative need satisfaction is revealed in detail. The counselor may then act upon this information either within the counseling context or that of rehabilitation planning" (Reagles & Butler, 1976).

The HSS as an Entrance As A Problem Check List and an Entrance into the counseling relationship

The scale is considered to be very helpful in the early stages of the rehabilitation process. It's use as a problem checklist is through the analysis of the various subsections of the scale. It may also be used to establish rapport with the client by discussing various concerns that emerge through the subscale. The counselor may address the problems through a discussion of areas in which the client's needs appear to be unmet. For example, a client may have a

low emotional need satisfaction or low economic-security need satisfaction. Therefore, potentially sensitive or emotionally charged areas for the client may be addressed with greater sensitivity (Reagles & Butler, 1976).

The HSS As a Rehabilitation Team-Planning Tool

The rehabilitation plan is often developed using a team approach. A rehabilitation counselor, social workers, psychiatrists, psychologists, physicians and a variety of other professionals may be involved in the planning sessions. The HSS may be used as a center point of discussion to bring a variety of needs into focus. The professionals may then provide a variety of perspectives on the client's perceptions of need satisfaction. "The physician is most intimately familiar with the Psychological Needs, the psychologist with the Emotional Needs, the social worker with the Family and Social needs areas, the rehabilitation counselor with the Economic Security, Economic, Self-Esteem and Vocational Self-Actualization needs areas, and so on" (Reagles & Butler, 1976).

The HSS as a Screening Tool for Diagnostic Referrals and Evaluations

Because the HSS evaluates the client's perceptions of needs in various life areas it also becomes a tool for possible referrals and evaluations. It can provide assistance in determining which clients would benefit from

psychological, psychiatric, social work, or other evaluations. Thus, it not only provides "not only a potential screening device for special evaluations but--also importantly--documentation of the need for such evaluations (Reagles and Butler, 1976)".

The HSS as an Aid in Encouraging Client Involvement in Rehabilitation and Feedback for the Counselor

The scales in the HSS are all completed by the client. Thus the client is automatically involved in the rehabilitation process. Thus, the scale offers clients the opportunity to identify areas to be addressed in the rehabilitation process. The Rehabilitation Act of 1973 mandates an Individualized Written Rehabilitation Program for each client that must be developed and reviewed annually (PL 93-12-HR 8070 in Reagles & Butler, 1976). The HSS may offer assistance in writing and reviewing this plan because of intrinsically identifying the clients "problems (needs) requiring resolution (satisfaction) by rehabilitative services" (Reagles & Butler, 1976). Also, changes in the need satisfaction "profile" may indicate changes in the rehabilitation plan or become, in essence, a monitoring device to measure progress or success (Reagles & Butler, 1976).

The HSS as an Aid in Identifying Individuals with Severe Disabilities

The Rehabilitation Act of 1973 also mandated that individuals with severe disabilities be given primary consideration by the State and Federal rehabilitation agencies (Reagles & Butler, 1976). The HSS may assist in identifying individuals with severity of needs of rehabilitation services rather than looking solely at functional limitations (Reagles & Butler, 1976).

The HSS as a Clinical Instrument

The need categories may simply be interpreted as a diagnostic tool or instrument. It would assist in identifying the need categories which lead to referrals to appropriate specialists. Changes in needs can then be measured as the client progresses through the rehabilitation process and upon completion of rehabilitation as a measure of success (Reagles & Butler, 1976).

The Human Service Scale was developed at the University of Wisconsin Regional Rehabilitation Research Institute (UW-RRRI) starting in 1970. Dr. Schlomo Kravetz was a major contributor to the development of the HSS and he used it as the basis for his doctoral dissertation (Reagles & Butler, 1976). Dr. Kravetz was employed part-time by the UW-RRRI and his original research was supervised, in part by Dr. Reagles and Dr. Butler of the UWRRI who state that they

"take full responsibility for the content of the present manuscript" in their 1976 article titled The Human Service Scale: A New Measure for Evaluation (Reagles & Butler, 1976).

The scale was tested and administered to 1018 clients from vocational rehabilitation agencies in the United States. In addition, 32 rehabilitation counselors were asked to rate the degree to which each of the 150 items were related to each of Maslow's five categories of basic human needs. This information was used later to determine the content validity of the scale. The data were subjected to appropriate factor and item analyses. The result was the elimination of 70 items which left 80 items and the division of these items into seven the sub-scales (Kravetz, Floria & Wright, 1985).

An overall percentile scale is given for each of the subscales which indicates the level of a person's need by comparing a client's's raw score to those of a norm group. Any score that is significantly below the averages is considered an area of discussion and possible resource allocation. Thus, the value of the subscales is that they indicate to the counselor and to the client the areas that need attention. The subscales and their relevance is discussed below. The information was obtained from the Human

Service Scale including introductory information from the UW-RRRI which was written by George N. Wright, Ph.D. from the University of Wisconsin-Madison (1973). See Appendix C.

Physiological Subscale

The percentile score in this subscale indicates the client's perception of their health. Therefore, it indicates the degree to which the clients thinks that they are free of disease or in poor health.

Emotional Security Subscale

Low scores on this subscale indicate factors of poor emotional adjustment including feeling of insecurity, inadequacy, and inferiority. High scores reflect the client's perception of a sense of security, adequacy and, thus, good emotional health.

Economic Security Subscale

Low scores indicate that the client has concern about economic problems. High scores indicate that the client has a sense of economic security.

Family Need Subscale

Low scores indicate that the client perceives family problems. Average scores indicate an average level of family interaction. Higher scores indicate a higher level of interaction with other family members.

Social Need Subscale

Low scores indicate that the client perceives a low level of social interaction. There may be problems in the use of social skills or social opportunities. High scores that the client perceives high levels of interaction in the community and with friends.

Economic Self-Esteem Subscale

High scores indicate that the client perceives a high level of economic success, status, stability or independence. Low scores indicate that the client perceives problems in coping with the economic necessities of life.

Vocational Self-Actualization Subscale

According to Dr. Wright:

This scale has a build-in mechanism to give those persons who are unemployed a score of zero. This Scale reflects a theoretical view of the clients' present condition which emphasizes the immediate problem of unemployment; without a job or training, the client's personality has a severe deficit in the area of vocational self-expression.

Low scores indicate varying degrees of vocational problems (Wright, 1973).

Since the validity studies and other statistical research conducted on the HSS is more than 25 years old, it

is highly recommended that present day evaluations be conducted. During the last 25 years a variety of new instruments have been developed that might pertain to statistical analysis. For this reason alone, new research appears mandatory to determine current validity and reliability of data. Therefore, an extensive description of the original research is not included here. However, a copy of the data collection from the 1018 individuals issued the 158 item questionnaire is located in the appendix. In addition, the appendix contains a copy the HSS in final format and a copy of the subscale item classifications.

REVIEW AND ANALYSES OF REHABILITATION RESEARCH

For the purposes of this project, three different sources were used to collect data regarding the prevalence of outcome studies in the rehabilitation literature. The first was a ten year review of four prominent rehabilitation counseling journals. All of the articles from 1988 to 1998 were reviewed and analyzed to determine the number of outcome studies that had been conducted and the type of assessment tools that had been used to determine success.

The second source was the Educational Resources Information Center (ERIC). This database contains information regarding current research in education and rehabilitation counseling. It also contains both a current and historical literature review. ERIC was accessed to obtain current research. It was also utilized to verify that all pertinent documents on outcome studies had been analyzed from the literature review.

The third information source used was the National Rehabilitation Information Center (NARIC). This database is very similar to ERIC. It also contains information on current rehabilitation counseling research and has a database of current and historical journal articles. It was used to obtain more information regarding outcome studies and as a second check to determine that as many

rehabilitation counseling articles as possible were reviewed and analyzed.

Rehabilitation Counseling Journal Articles

Rehabilitation Counseling research, in the form of rehabilitation counseling journal articles, was reviewed and analyzed from 1988 to 1998 in order to determine the number of outcome studies conducted in which measurement instruments were used. The results were then tabulated and classified as to the number of studies conducted using quality of life instruments or other outcome measurements.

The journals surveyed included The Journal of Rehabilitation, The Canadian Journal of Rehabilitation, the Journal of Rehabilitation Administration, and the Journal of Applied Rehabilitation Counseling. All articles published from 1988 through 1998 were reviewed in this analysis of outcome measurements. See Appendix B for the complete list of references for each category included below.

A total of eight hundred eighty journal articles were examined and ninety-six were determined to be articles in which an outcome measure was utilized to determine level of success. Of the one hundred four articles, thirty-seven had status code 26s, or case closures alone, as the criteria of success. Eleven used an extra measure of success, such as longevity on the job or a criteria of financial success,

along with "26s" to determine success. Two of the eleven used used "26's" with another measure such as the Work Personality Profile or the WAIS-R subtest with results after testing calculated using closure rates (Faas, 1992; William, 1997). Thus, forty-eight of the studies were based primarily on the Status Code 26 closure criteria.

The authors of eleven of the studies used a variety of quality of life assessments. One of the studies was specific to individuals with cancer, four to spinal cord injury, two to traumatic brain injury, one to aphasia, one to lower back pain, one to mental retardation, one to mental illness, and in one the clients determined their own QOL survey. In the study specific to individuals with mental illness Lehman's Quality of Life Interview was used (Fabian, 1992; Vanden Boom & Lustig, 1997)

The authors of fifteen studies used a variety of functional assessments. Functional improvement was viewed as the primary success criteria in all of these articles. The Functional Assessment Inventory (FAI) was used in two studies to measure outcomes (Vogel, Bishop, & Wong, 1998; Wallner, & Clark, 1989). Most of the studies related to outcomes in clinics or other health-care environments.

The authors of fourteen studies developed their own survey for that particular outcome study. This fact alone

supports the concept that a generalized, universally accepted, quality of life assessment tool would standardize outcome assessments in the field of rehabilitation.

Five of the studies related solely to job satisfaction. In one the authors determined success by self-employment (Arnold, Seekins, & Ravesloot, 1995). The results of this review of the research can be found in Table 2 below:

TABLE 2

RESEARCH ANALYSIS FROM 1988 TO 1998

<u>Research Method</u>	<u>Number of Articles</u>
Closures (26s).....	37
Closures, and Second Measure.....	11
Own Survey	14
Functional Ability	15
QOL Assessments.....	13
Job Satisfaction.....	05
Self-Employment.....	01
	Total: 96

Education Resources Information Center (ERIC)

A total of eight quality of life assessments were located on the ERIC database. The information on this database is obtained by the Library and Reference Services Division of the Educational testing Service. The formatting of the page and the computer search interface were developed by the ERIC Clearinghouse on Assessment and Evaluation (1999)

The Quality of Life Questionnaire by Robert L Schalock and others is the only quality of life assessment that also appears in the rehabilitation counseling literature (Schalock, Robert L., 1991). The Job Satisfaction Survey has also been used to measure satisfaction and dissatisfaction with work (Spector, 1994). The seven assessment tools included:

1. The Quality of Life Stress Survey by Charles W. Nelson (1985). This instrument is used to measure stress patterns. It also provides methods to change "environmental stressors". The most recent update to the database was December, 1991.
2. The Job Satisfaction and Dissatisfaction Assessment by The Princeton Training House (1989). It is used inside organizations to measure satisfaction and dissatisfaction with work. The most recent update on the database was April, 1992.
3. The Quality of Life Questionnaire by David R. Evans and Wendy E. Cope (1989), This measure assesses the quality of a person's life across life domains. The domains include (1) general well-being, (2) occupational activity, (3) interpersonal relations, (4) leisure and recreational activity, and (5) organizational activity and a social desirability scale. It is based upon the belief that

certain responses can be matched to represent a good quality of life. The most recent update on the database was April, 1992.

4. The Quality of Life Questionnaire by Robert L. Schalock et al. (1990). This assessment is designed to measure the quality of life of individuals with mental retardation. It measures life satisfaction, competence, environmental control, community involvement, and social relations. There is a three-point scale that is answered by the individual. It may be used to measure the individual's quality of life, their responses to the rehabilitation process, and as a criterion of the "goodness-of-fit between individuals and their environment." The last update to the database was on April, 1991.

5. The Job Satisfaction Survey by Paul E. Spector (1994). The survey measures job satisfaction. It is based upon a nine-subscales measure which includes (1) pay, (2) promotion, (3) supervision, (4) benefits, (5) rewards/appreciation (contingent rewards), (6) work conditions, (7) coworkers, (8) nature of work, and (9) communication. A total satisfaction score is also measured. The last update to the database was on April, 1996.

6. The Level of Satisfaction of Basic Needs Questionnaire by David Lester (1983). This assessment measures the level of

satisfaction in the five basic need areas of life as described by Abraham Maslow. There is a six-point scale of the degree of agreement used by the subjects which includes with statements about themselves. It was used to test Maslow's hypothesis that the " persona who is more psychologically healthy has a higher level of satisfaction of the five basic needs". The most recent update to the database was on February, 1988.

7. The Quality of Life Index by Philip R. Harris (1984). This assessment measures an individuals' "well" life stye by measuring effectiveness in the areas of self-care, psychological, philosophical and social well being and life style. It may be used by managers in a work environment or by well and health management staff as well as for stress management. The most recent update to the database was November, 1989.

8. The Quality of Life Inventory by Michael B. Firsh (1994). This is a brief assessment tool that measures how well an individual meets their goals and wishes in life. There are 16 life areas measured such as health, self-esteem, money, work, play, learning, creativity, helping, love, and friends. It weighs the importance that a person attaches to an area of life. The last update to the database was in June, 1995.

The above are the assessment tools from the ERIC database that were written to measure life satisfaction or quality of life. All of the measurements were developed in the 1980 to 1990 time period with the exception of the Quality of Life Inventory by Michael B. Frisch ((1994)the the Job Satisfaction Survey by Paul E. Spector (1994) has been used in the Rehabilitation Counseling journal literature during the last ten years.

National Rehabilitation Information Center

A review of this database confirmed that the pertinent articles on outcome studies had been reviewed. The two assessment tools that emerged from NARIC were, The Quality of Life Questionnaire (QOLQ) by Robert L. Schalock, 1990 and Lehman's Quality of Life Interview (QOLI),1988. The QOLQ has been discussed above in the section on ERIC. It appears in ERIC under the research category and in NARIC in one article (Schalock, Keith, Hoffman, & Karan, 1989).

Lehman's QOLI (1988) appears two times in the Rehabilitation Counseling literature (Fabian, 1992; Vanden Boom & Lustig, 1997). It also appears in two articles in NARIC (Fabian, 1989; Sullivan, Well, & Leake, 1992). This assessment is designed for individuals with long-term mental illness. It measures daily activities in a variety of life domains including living situations, family relationships,

social relationships, leisure activities, work, finances, personal safety, and health. Scores are generated from information including number of hours work, weekly wages, number of visits with family members, number of days of illness, use of health care facilities, and experience as a victim of property or personal crime (Lehman, 1988 in Roseler, 1990).

In addition, three studies involving quality of life and life satisfaction were located in NARIC's current research project database. The three projects included:

1. Community Reintegration and Quality of Life Following Traumatic Brain Injury by Marcel Dijkers. The purpose of this project is to re-develop the Community Integration Questionnaire and add a life-satisfaction measure which is specific to individual's with traumatic brain injury. The research has been on-going from 1992 to the present.
2. Quality of Life for Persons with a Spinal Cord Injury: A Qualitative and Quantitative Study by Marcel Dijkers. This project develops various versions of the SCI-QLI (Quality of Life Index) for people with spinal cord injury. It includes unstructured interviews used to collect a list of significant life domains. It has been researched from 1992 to the present.
3. This project is being investigated by Nadine Fisher and

has been researched since 1992. The purpose of the project is to develop a Research and Training Center on Functional Assessment and Evaluation of Rehabilitation Outcomes.

The goals of the center are to develop measures of functional abilities, clinical interventions, and rehabilitation medical outcomes. It includes developing measures of disability and well-being such as quality of life, employment, and community integration. The results will be evaluated to determine the usefulness of the measures in assessing the effect of different rehabilitation interventions on level of disability.

Thus, no generalized QOL assessment tools were located in the NARIC database. In addition, the research project section of NARIC included one QOL measure that was also included in the rehabilitation counseling literature, Lehman's Quality of Life Interview (1988).

DISCUSSION

The ten year literature review conducted for this project, in addition to research conducted upon the NARIC and ERIC databases, yielded very similar information. There were no general quality of life measures found that were based upon a solid theoretical base. In addition, no assessments are currently available, or in development, pertaining to rehabilitation counseling success relating to the entire population of individuals with disabilities.

A total of eight measures of quality of life, life satisfaction, and job satisfaction were located on the ERIC database. Three of the assessments related primarily to job satisfaction; one was specific to individual's with mental retardation; one was specific to stress, one included an assessment of life domains; two related to mental illness; and one measured the importance that an individual attaches to a life domain.

The research on the NARIC database did not find any additional, current, quality of life assessments. Three assessments being researched included one specific to Traumatic Brain Injury, one specific to Spinal Cord Injuries, and one to develop a center for assistance with functional limitations and medical issues.

The ten year literature review yielded the same

assessments mentioned above, see Table 2. Of the sixteen quality of life measures, nine were medically oriented and related to functional limitations, three measures related to mental illness, two were utilized for individual's with mental retardation, and two were apparently developed for that one study. Sixteen other authors also developed their own survey to be used only in the one particular outcome study.

CONCLUSION

Because of a greater awareness among Rehabilitation Counseling professionals that success for individuals is indicated by more than finding a job, researchers have been recommending a variety of other methods to obtain better indicators of life satisfaction or quality of life. Unfortunately, based upon the above research, no current or emerging QOL assessments are currently available. Such a QOL must be generalized, validated, and pertain to the entire population of individuals with disabilities.

The HSS can fill this gap within the repertoire of research tools available to the rehabilitation professional. The HSS has many advantages for the rehabilitation counselor. It has a sound theoretical base, utilizing Maslow's theory. It can be given to any individual with a disability prior to and after the rehabilitation process in order to determine success in one or all of the subscales. It also can indicate areas of life that need to be addressed and improved for each individual. It is a tool that has many uses for the rehabilitation counselor such as an overall evaluation tool to be used to gather information during intake. It yields considerably more data than the existence of a job can yield about a person's overall growth and development. Therefore, it can be used as a measurement

tool to analyze and evaluate both client progress and program evaluation.

Thus, it is obvious that there is a definite need in the rehabilitation field for an instrument such as the HSS. Unfortunately, the HSS was developed and validated over twenty-five years ago. Therefore, it is strongly recommended that the HSS be reconsidered, restructured if necessary, and revalidated for use in the years to come.

APPENDIX A
THE HUMAN SERVICE SCALE
COVER LETTER
AND
VALIDATION CRITERIA

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REHABILITATION RESEARCH INSTITUTE
UNIVERSITY OF WISCONSIN

Dear Colleagues:

I am pleased to be able to inform you of the Human Service Scale. This 80 item Scale measures the satisfaction of human needs in seven life areas. Its potential as the only instrument of its kind has attracted the attention of program evaluators, administrators, researchers, practitioners, and others. It is published by this Institute which offers a machine scoring service and continuing research consultation.

The Human Service Scale was based on the following rationale: it was reasoned that if agency services are provided on the basis of client needs, then the success of agency programs and the progress of individual clients ought to be based on the extent to which client needs are satisfied. This assumption led to Maslow's hierarchy of basic human needs as an underlying theoretical rationale for the construction of an instrument to measure client need satisfaction. The development of the Scale followed sound measurement techniques. Over 300 items were generated initially that appeared to be related to Maslow's five need categories: physiological, safety and security, love and belongingness, self-esteem and self-actualization. Later the items were inspected for redundancy and appropriateness of content, reducing the number of items to 150. These items were then administered in scale form to 1018 clients of vocational rehabilitation agencies across the U.S. In addition, 32 rehabilitation counselors were asked to rate the degree to which each of the 150 items were related to each of Maslow's five categories of basic human needs. This information was later used to determine the content validity of the scale. This data was subjected to appropriate factor and item analyses, and the result was elimination of 70 more items (leaving the present 80 items) and the division of items into seven sub-scales. These procedures are detailed in the enclosed background material.

The Human Service Scale is used as an evaluative instrument (administered prior to and following services, with changes in each sub-scale as well as overall need satisfaction documenting improvement). The Scale also has potential as a "diagnostic" instrument; areas of low need satisfaction at the time of intake may be translated into needed human services and, thus, service planning is much more efficient. The use of machine-scored answer sheets of the Scale: (1) reduces the cost of administration since the intricacies of hand-scoring are prohibitively time consuming, and (2) makes it possible to have the Scale scored and the results returned rapidly. A free profile form is provided with each Scale. The cost and time for scoring is comparable to that of other test scoring services.

The Human Service Scale and scoring service is available from the Institute. The cost per Scale — including scoring — is \$4.00 each. The Scales will be scored at any time within one year of purchase without extra charge if purchased and scored in quantities of ten or more. A \$10.00 surcharge per package is made for either purchasing and/or scoring Scales in lots of less than ten.

Please examine these materials and let us learn of your reaction. Enclosed are the following materials:

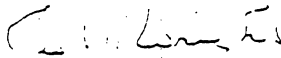
- 1) A copy of the Human Service Scale,
- 2) The background of the construction and validation of the Scale,
- 3) A copy of the Profile used for presenting the results of the scoring of the Scale,
- 4) Exemplary profiles illustrating possible interpretations of two,
- 5) A sheet showing which items belong to each sub-scale of the Scale,
- 6) A sample page of computer output of scoring results (these are used for completing the profile),
- 7) A generic list of human service resources (these are used for translating areas of low need satisfaction into needed services).

The Human Service Scale is available to all who want to measure client change empirically. The Scale is an excellent dependent variable for research purposes, an innovative evaluation tool for the program evaluator, and a practical means of increasing the efficiency of planning services by counselors, social workers, and others charged with the provision of human services to disadvantaged, disabled, or otherwise dependent persons.

The Scale is presently being used successfully in VA hospitals, mental health clinics, social service agencies, vocational education programs, rehabilitation agencies, as well as research and demonstration projects for alcoholics, drug abusers, delinquents, ex-offenders, and others.

Thank you for your interest in the Human Service Scale and if you have any questions regarding the Scale, please do not hesitate to contact us.

Sincerely,



George N. Wright, Ph.D.
Professor and Director

GNW:bin
enclosures

FUNCTIONAL INTERPRETATION OF HUMAN SERVICE SCALE

Percentile Score

The percentile score given for each of the subscales indicates the level of a person's need by comparing your client's raw score to those of a norm group. There are two norm groups listed on the computer printout. The first consists of 2-3,000 DVR clients who have completed the HSS and the second is a sub-group of a single disability, either cerebral palsy or epilepsy. If your client's scores are all average in comparison to the norm group, they would all be about 50%. If one regards the percentile score as a measure of need fulfillment, then a score of 25% is below average, while a score of 75% is above average. A score of 100% would indicate a situation of total need.

Any score on a subscale that is significantly below average should be regarded as a warning that indicates where resources need to be allocated: any area of the personality that is severely deprived will affect the potential for successful rehabilitation. The value of the subscales is that they indicate to both client and counselor the areas of the personality that need attention. A second administration, following closure, may be administered to indicate those areas in which improvement has occurred — should the counselor or administrator find this information desirable.

Physiological Subscale

The percentile score for this subscale indicates the client's perception of his/her physical health. Hence, it indicates the degree to which the client thinks he/she is free from disease or poor health. A high percentile score indicates a favorable perception of physical health. A low score indicates a perception of poor health.

Emotional Security Subscale

High scores on this subscale indicate the client's perception of a sense of security and adequacy, and hence, good emotional health. Low scores indicate feelings of insecurity, inadequacy, inferiority, or poor emotional health.

Economic Security Subscale

High scores indicate the sense of economic security; low scores indicate increasing concern about economic problems.

If the client has a job or is in training, high scores represent sound vocational or educational adjustment, and the degree to which the client's situation allows him/her to engage responsibly in enjoyable and creative vocational activities. Low scores indicate varying degrees of vocational problems.

This scale has a built-in mechanism to give those persons who are unemployed a score of zero. This reflects a theoretical view of the client's present condition which emphasizes the immediate problem of unemployment: without a job or training, the client's personality has a severe deficit in the area of vocational self-expression.

Vocational Self-Actualization Subscale

High scores indicate a high level of economic success, economic stability, status, or independence. Low scores indicate a problem in coping with economic necessities of life.

Economic Self-Esteem Subscale

High scores indicate comparatively high levels of interaction with friends and participation in community affairs. Low scores indicate low levels of social interaction and the possible existence of problems in the use of social skills or opportunities.

Social Need Subscale

Higher scores indicate a comparatively higher level of interaction with other family members. An average score, around the 50th percentile, indicates an average level of family interaction. Low scores indicate the presence of family problems.

Family Need Subscale

Background Information on the
Construction and Validation of
the Human Service Scale

Sample. 1018 persons who had been accepted for rehabilitation services by the state-federal vocational rehabilitation agencies of 29 states and the territory of Guam, but who had not as yet received these services, responded to the 158-item questionnaire from which the 80-item Human Service Scale was finally derived. The following is a break down of the demographic characteristics of this sample:

<u>Sex</u>	<u>Age</u>
Males - 59.6%	Under 20 - 23.4%
Females - 40.1%	20 - 54 - 73.3%
N.A. - 0.3%	55 and over 3.3%
	Median age = 30

<u>Race</u>	<u>Marital Status</u>
White - 82%	Never married - 44%
Black - 16%	Married - 30%
Other - 2%	Separated - 7%
	Divorced - 15%
	Widowed - 3%

Primary Disability

Visual impairments	3.1%
Hearing impairments	3.0%
Orthopedic deformity or functional impairment	27.6%
Amputation	2.8%
Psychotic disorder	6.8%
Psychoneurotic disorder	5.4%
Other behavioral problems	30.6%
Mental retardation	1.2%
Neoplasms	0.6%
Allergies, endocrine, metabolic, and nutritional diseases	3.4%
Diseases of blood and blood forming organs	0.7%
Epilepsy and other unspecified diseases of nervous system	3.2%
Cardiac and circulatory conditions	3.6%
Respiratory diseases	2.1%
Disorders of digestive system	2.8%
Conditions of genito-urinary system	1.0%
Speech impairments	1.1%
Other disabling diseases and conditions	0.4%
No answer	0.6%

Secondary Disability

Yes - 33%
No - 65%
N.A. - 2%

Area of Residence

Over one million - 8%
100,000 to one million - 24%
10,000 to 100,000 - 43%
Less than 10,000 - 17%
Farm - 6%

Main Source of Support

Own earnings - 25%
Earnings someone else in family - 31%
Social security or pension payments - 13%
Unemployment or compensation payments - 8%
Public assistance or welfare payments - 22%

Present Occupational Status

Employed for wages or salary - 16%
Self-employed or own business - 2%
Work in workshop or at home - 4%
Student or job training - 33%
Unemployed - 45%

Referral Source

Educational institution 10%
Hospital and sanatorium 8%
Physician 9%
Welfare agency 8%
Other individual 13%
Self-referred 12%
Other 36%
No answer 4%

Scale construction and validation. Eight of the 158 questionnaire items were concerned with demographic variables. The remaining 150 items asked the client to report on his experiences, activities, and condition.

Thirty-two vocational rehabilitation counselors were asked to rate (independently) the degree to which each of the latter 150 items were related to each of Maslow's five categories of basic human needs. These categories are: a) Physiological Needs; b) Safety and Security Needs; c) Love and Belongingness Needs; d) Self-Esteem Needs; and e) Self-Actualization Needs. Each category of need was defined for the raters both connotatively and denotatively within the framework of Maslow's theory of a hierarchy of basic human needs.

A three-way analysis of variance was applied to the counselors' ratings to determine the inter-rater reliability across both the 150 items and the five dimensions. The three factors were the items, the dimensions, and the raters. The inter-rater reliability was estimated from the analysis of variance summary table. The inter-rater reliability across items and dimensions was estimated to be 0.91.

Mean ratings were used to divide the 150 item into five groups. Each group predominately represented one of the five need categories. Item-to-total sub-scale scores were used to select 98 items that were meaningfully related to the five sub-scales.

Factor analysis and orthogonal rotation of the factors was used to arrive at the final partitioning of the items into sub-scales. Eight items had loadings of 0.30 or higher on seven interpretable factors. These factors can be considered to represent the following scales: 1) Physiological Need Scale, which measures the absence of symptoms, restrictions, and problems associated with poor health and which consists mostly of items that the raters assigned to Maslow's category of Physiological Needs; 2) Emotional-Security Need Scale, which measures the absence of feelings of insecurity, inadequacy, and inferiority and the presence of emotional stability and which consists mostly of items that the raters assigned to Maslow's categories of safety and security, self-esteem and self-actualization needs; 3) Economic-Security Need Scale, which measures the absence of worry about economic problems and the sense of economic security and which consists mostly of items that the raters assigned to Maslow's category of safety and security needs; 4) Family Need Scale, which measures the absence of family problems and the extent of interaction with the family and which consists mostly of items that the raters assigned to Maslow's category of love and belongingness needs; 5) Social Need Scale, which measures the absence of social problems and the extent of social interaction and which consists mostly of items that the raters assigned to Maslow's category of love and belongingness needs; 6) Economic Self-Esteem Need Scale, which measures economic stability, independence, and improvement and which consists mostly of items that the raters assigned to Maslow's categories of self-esteem and self-actualization needs; and 7) Vocational Self-Actualization Need Scale, which measures vocational and educational adjustment, development, and autonomy and which consists mostly of items that the raters assigned to Maslow's categories of self-esteem and self-actualization needs.

Each of the above sub-scales, individually, and all the 80 items of the total Human Service Scale were subjected to reciprocal averaging (RAVE) analysis. This analysis is a reiterative process that weighs scale items so as to maximize simultaneously a scale's homogeneity and discriminative power. The Hoyt reliability coefficients produced by this analysis for each sub-scale and the total Human Service Scale are:

1) Physiological Need Scale -	0.86
2) Emotional-Security Need Scale -	0.90
3) Economic-Security Need Scale -	0.69
4) Family Need Scale -	0.84
5) Social Need Scale -	0.77
6) Economic Self-Esteem Need Scale -	0.86
7) Vocational Self-Actualization Need Scale -	0.97
8) Human Service Scale - TOTAL	0.93

Factor scores were computed from the 80-variable-by-seven-factor matrix for each subject on each factor. These factor scores were correlated with 17 client demographic variables. Qualitative variables were dichotomized before they were correlated with the factor scores. The dichotomization of these variables transformed the 17 variables into 31 variables which were correlated with the seven factor scores. Table I portrays the resulting correlation matrix. Each row represents the correlations of the 31 demographic variables with each of the factors. The first seven correlation coefficients of each row are the correlations between factors. Since the factor scores were calculated after orthogonal rotation of the factor matrix, these first seven correlations are zero, except for the correlation of the factor

with itself which is one. The following is the order in which the factors appear in this matrix:

- Row 1 - Vocational Self-Actualization Need Factor
- Row 2 - Emotional Security Need Factor
- Row 3 - Physiological Need Factor
- Row 4 - Economic Self-Esteem Need Factor
- Row 5 - Family Need Factor
- Row 6 - Social Need Factor
- Row 7 - Economic Security Need Factor

The following is the order in which the demographic variables appear in this Matrix, together with the respective scale of each variable:

- A. Race -
 - 1. White (yes = 1; no = 0)
 - 2. Black (yes = 1; no = 0)
 - 3. Other (yes = 1; no = 0)
- B. Secondary Disability -
 - 4. Presence (yes = 1; no = 0)
- C. Primary Disability -
 - 5. Orthopedic (yes = 1; no = 0)
 - 6. Emotional (yes = 1; no = 0)
 - 7. Other (yes = 1; no = 0)
- D. Sex -
 - 8. Sex (male = 1; female = 2)
- E. Number of Dependents -
 - 9. None (yes = 1; no = 0)
 - 10. 1 to 3 (yes = 1; no = 0)
 - 11. 4 or more (yes = 1; no = 0)
- F. Age -
 - 12. 20 or younger (yes = 1; no = 0)
 - 13. 21 to 25 (yes = 1; no = 0)
 - 14. 26 to 40 (yes = 1; no = 0)
 - 15. 41 or older (yes = 1; no = 0)
- G. Counselors' Ratings of Degree of Handicap -
 - 16. Physical (none = 1 to very severe = 6)
 - 17. Intellectual (none = 1 to very severe = 6)
 - 18. Emotional (none = 1 to very severe = 6)
 - 19. Social (none = 1 to very severe = 6)
 - 20. Economic (none = 1 to very severe = 6)
 - 21. Motivation (none = 1 to very severe = 6)
 - 22. Job Skills (none = 1 to very severe = 6)
 - 23. Appearance (none = 1 to very severe = 6)

H. Socio-Economic Status of Parental Home -

24. Socio-Economic Status (very good = 1 to very poor = 5)

I. Father's Educational Level -

25. Father's Educational Level (eighth grade or less = 1 to college graduate or more = 5)

J. Marital Status -

- 26. Never Married (yes = 1; no = 0)
- 27. Married (yes = 1; no = 0)
- 28. Married but husband/wife absent (yes = 1; no = 0)
- 29. Divorced (yes = 1; no = 0)
- 30. Widowed (yes = 1; no = 0)

K. Father's Occupational Level -

31. Father's Occupational Level (professional practice for fees or salary = 1; self-employed = 2; wage or salaried = 3; worked at home = 4; and unemployed = 5)

With a sample size as large as the one used for the construction of this scale (1018), correlations of quite small magnitudes will be significant at the conventional levels of significance. Looking for patterns of relationships is more useful than testing individual correlations for significance. When looking for these patterns, the direction in which each variable was scaled must be kept in mind. Factor scores are measures of the satisfaction of needs in seven areas. A high score represents more need satisfaction than a low score. A high score on most of the demographic variables represents a larger magnitude of the variable while a low score represents a smaller magnitude of the variable (e.g., for "degree of handicap," the higher the value, the greater the degree of handicap). However, with regard to Socio-Economic Status of Parental Home and Father's Occupational Level, the scoring procedure is reversed with low scores representing high magnitudes of the characteristics and high scores representing low magnitudes. Asterisks have been placed next to correlations on Table I that might shed light on the construct which each factor is measuring.

For the purpose of exploring the relationship between the Need scales, overlapping items were assigned to the one scale on which they have the highest factor loading and scores on each of the scales were computed for each of the 1018 clients by means of RAVE analysis. Correlations between all of the variables were calculated. Table II depicts these correlations.

Table II
Correlation Matrix: Need Factors

Variable and Number	1	2	3	4	5	6	7
1 - Vocational Self-Actualization	1.000						
2 - Economic Self-Esteem	.444	1.000					
3 - Social	.167	.048	1.000				
4 - Family	.089	-.066	.312	1.000			
5 - Economic Security	.153	.086	.235	.121	1.000		
6 - Emotional Security	.098	-.017	.353	.399	.366	1.000	
7 - Physiological	.083	.016	.091	.067	.268	.506	1.000

The correlations in Table II are listed in the order of the hypothesized dependence structure of the relationship between the Need scales. Since the construction of these scales was intentionally based on Maslow's theory of a hierarchy of human needs; a natural hierarchical ordering was predicted for the scales. If these scales correspond to Maslow's categories of basic human needs, the gratification of the more prepotent needs should free individuals to gratify their less prepotent needs. The relationships between the scales would then reflect this linear ordering with scales' being correlated to the extent that they are similar with regard to prepotency. The scales in Table II are presented in the assumed order of ascending prepotency (Variable No. 1 = Vocational Self-Actualization Need Scale; Variable No. 2 = Economic Self-Esteem Need Scale; Variable No. 3 = Social Need Scale; Variable No. 4 = Family Need Scale; Variable No. 5 = Economic Security Need Scale; Variable No. 6 = Emotional Need Scale; and Variable No. 7 = Physiological Need Scale). If this hypothetical ordering of the scales were correct, the pattern of the correlations between the scales should assume a specific form. When these correlations are examined by column, they should show a consistent increase in magnitude the closer they are located to the main diagonal. When they are examined by row, they should show a consistent decrease in magnitude the closer they are located to the main diagonal. Inspection of Table II indicates that this is obviously not the case with regard to the correlations between the ordered need scales.

To check for an alternative dependence structure, Smallest Space Analysis (SSA) was applied to the correlations between the need scales. SSA is a re-scaling technique that utilizes the ordinal information inherent in one half of a square correlation matrix to determine the most consistent ordering of the variables that produced the Matrix. The outcome of this analysis of the Matrix between scale correlations led to the circular manner of presenting the categories to show their contiguity to one another. The dependence relationship between the scales appears to be circular rather than linear. On one side of this circle, needs seem to go from the family to social to economic to economic, while on the other side of this circle needs seem to go from the personal family to emotional to physiological to economic. The more prepotent needs appear to be the more personal and social needs, while the less prepotent needs appear to be the environmental and individual needs. This finding has a corollary for practice; the more prepotent needs are indicative of psychotherapeutic intervention, while the less prepotent needs appear amenable to solution by intervention exemplified by vocational rehabilitation.

HUMAN SERVICE SCALE

SUBSCALE ITEM CLASSIFICATIONS

I. PHYSIOLOGICAL NEEDS

5. How often are you bothered by rapid heartbeat?
10. How often are you bothered by shortness of breath when not exercising?
11. How often do you feel depressed, down, or very unhappy?
13. How often do you become so sick you have to cut down on your usual activities?
19. How often do you tend to go to pieces under pressure?
26. How often are you bothered by muscle twitches, trembling, or shakes?
28. How often do you have headaches?
31. How often do you feel dizzy?
36. How often in the past year have you seen a doctor or been hospitalized for your physical problems?
37. How often do you have general aches and pains?
39. How often do you have a common cold or the flu?
40. How often do you have skin rashes?
41. How often have you felt that you are going to have a nervous breakdown?
47. How often are you bothered by an upset stomach?
52. How often do you worry about your health?
57. During the last six months, about how many days have your major problems kept you in bed all or most of the day?

II. EMOTIONAL NEEDS

6. How often are you uncertain about decisions you make?
8. How often do you worry about growing old?
9. How often do you have trouble showing your feelings to your family?
11. How often do you feel depressed, down, or unhappy?
12. How often do you feel down or discouraged because your major problems cause you to waste time?
14. How often do you feel restless?
16. How often do you worry about the future?
19. How often do you tend to go to pieces under pressure?
20. How often are you able to solve your own problems?
21. How often do you worry about getting ahead in the world?
22. How often do you worry about getting along with your family?
24. How often do you treat other people badly?
25. How often have you felt that you are not the kind of family member that you would like to be?
29. How often do things happen to make you angry?
33. In general, how often do you feel helpless?
34. How often have you consulted a doctor, psychiatrist, psychologist, or anyone else about a nervous problem?
35. How often do your major problems make you feel inferior?
38. How often do your major problems make it difficult for you to make friends?

41. How often have you felt that you are going to have a nervous breakdown?
44. How often do you feel bored?
50. How often do your major problems keep you from making use of your abilities?
59. How satisfied are you with your social life?
62. Taking all things together, how would you describe your family life?

III. ECONOMIC SECURITY NEEDS

16. How often do you worry about the future?
18. How often do you worry about your family having enough money?
21. How often do you worry about getting ahead in the world?
48. How often do you worry about not having enough money?
60. Which of the following statements best describes your present financial situation?
61. Apart from any mortgages on your house, how many debts could you pay off in the next two months?

IV. FAMILY NEEDS

7. How often, when you need help, can you find someone to help you?
9. How often do you have trouble showing your feelings to your family?
17. How often has your family failed to help you when you needed help?
27. How often does your family accept you as you are?
30. How often do other members of the family talk to you about what went on during the day?
32. Generally speaking, how often do you talk to your family about what went on during the day?
42. About how much time a week do you spend doing things together with your family?
45. Number of activities family does together?
49. How often do you like spending time with your family?
62. Taking all things together, how would you describe your family life?

V. SOCIAL NEEDS

15. How often do you get together with friends (going out together or visiting in each others' homes)?
23. How often do you become interested in something new?
43. Number of clubs and organizations in which active part taken?
46. In the last year, how many new friends have you made?
51. About how many people did you meet during the last year, other than those you meet where you work, that you never met before?
53. About how many friends do you usually keep in touch with?
54. Number of activities taken part in with other people in your community?
55. Number of hours each week spent on activities with other people in the community?
58. How many people do you know whom you feel free to talk to about personal things and problems?
59. How satisfied are you with your social life?

VI. ECONOMIC SELF-ESTEEM NEEDS

1. What is your main source of support?
2. How much Public Assistance or welfare payments (but not earnings, Social Security, Pension Payments, or unemployment compensation payments) are you receiving each month?
3. How much do you earn (wages, workshop payments, income from own business, savings, property or other investments) per week (nearest dollar)?
4. How many jobs (either paid or unpaid work) have you had in the last six months?
56. How many weeks during the last six months were you unemployed?
78. How steady is your present job or the work you do?
79. What do other people think of your job?
80. How does your present job (work) compare with jobs you've had in the past?

VII. VOCATIONAL SELF-ACTUALIZATION NEEDS

63. Which of the following best describes what you are presently doing?
64. How often does your present work let you make decisions on your own?
65. How often does your present work give you enough to do?
66. During the last two weeks, how many days of work did you miss due to a minor sickness such as a cold or sore throat?
67. How many hours do you now work each week?
68. How often do you learn new things from your present work?
69. Read this list of activities that you may take part in where you work. What is the total number of hours you spend each week on the above activities? Choose one of the following.
71. How often do you find it hard to make friends with your present co-workers or people who are doing what you do?
72. How often are you treated fairly in your present work?
73. How often does your present work let you do something new each day?
74. How often does your present work let you try out your own ideas?
75. How often do you find that you really enjoy your present work?
76. How often are you told in your present work that you have done a good job?
77. How often does your present work give you a chance to make use of your abilities?
78. How steady is your present job or the work you do?
79. What do other people think of your job?
80. How does your present job (work) compare with jobs you've had in the past?

Family Need Subscale

Higher scores indicate a comparatively higher level of interaction with other family members. An average score, around the 50th percentile, indicates an average level of family interaction. Low scores indicate the presence of family problems.

Social Need Subscale

High scores indicate comparatively high levels of interaction with friends and participation in community affairs. Low scores indicate low levels of social interaction and the possible existence of problems in the use of social skills or opportunities.

Economic Self-Esteem Subscale

High scores indicate a high level of economic success, economic stability, status, or independence. Low scores indicate a problem in coping with economic necessities of life.

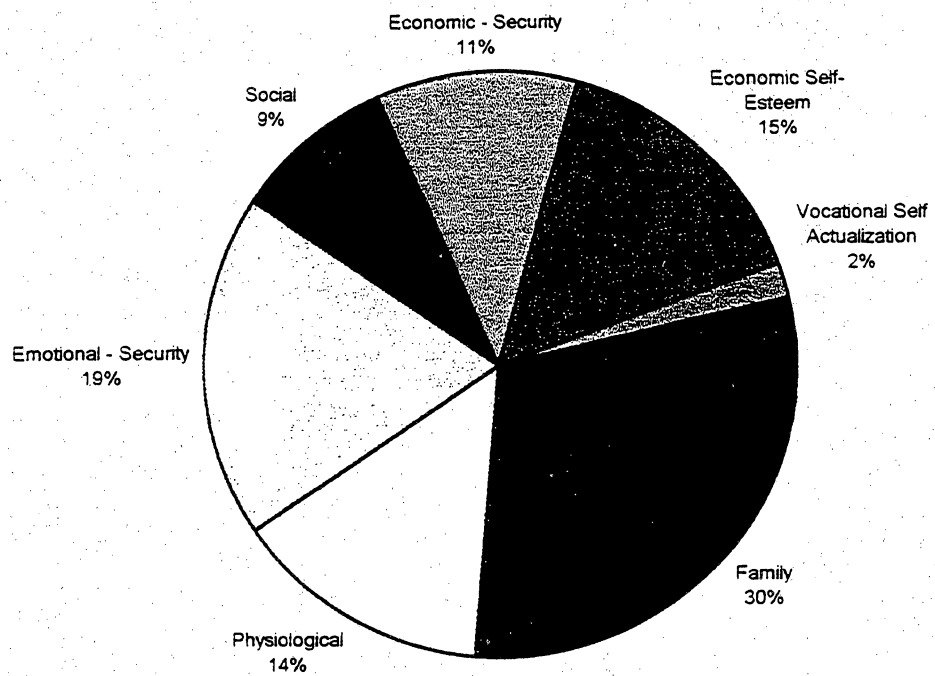
Vocational Self-Actualization Subscale

This scale has a built-in mechanism to give those persons who are unemployed a score of zero. This reflects a theoretical view of the client's present condition which emphasizes the immediate problem of unemployment: without a job or training, the client's personality has a severe deficit in the area of vocational self-expression.

If the client has a job or is in training, high scores represent sound vocational or educational adjustment, and the degree to which the client's situation allows him/her to engage responsibly in enjoyable and creative vocational activities. Low scores indicate varying degrees of vocational problems.

APPENDIX B
SAMPLE
HUMAN SERVICE SCALE PROFILE

The Human Service Scale Profile



APPENDIX C
REFERENCE LIST
OF
REHABILITATION COUNSELING
JOURNAL ARTICLES
1988 TO 1998

APPENDIX C: JOURNAL ARTICLES

STATUS CODE 26 JOURNAL ARTICLES

Beck, R.J. (1989). A survey of injured worker outcomes in Wisconsin. Journal of Applied Rehabilitation Counseling, 20(1), 20-24.

Bose, J.L., Geist, G. O., Lam, C.S., Staby, M., & Arens, M. (1998). Factors affecting job placement success in proprietary rehabilitation. Journal of Applied Rehabilitation Counseling, 29(3), 19-24.

Caufield, M., Carey, C.S., & Mason, C. Y. (1994). Project employ: Rehabilitation services facilitating employment of individuals with HIV/Aids. Journal of Applied Rehabilitation Counseling, 20(3), 12-16.

Chow, S. L., Bose, J. L., & Geist, G. O. (1989). Employment outcomes of private rehabilitation clients: Rehabilitation Counseling Bulletin, 32(4), 300-311.

Cook, J. A., & Rosenberg, H. (1994) Predicting Community employment among persons with psychiatric disability: A logistic regression analysis. Journal of Rehabilitation Administration, 18(1), 6-25.

DeLoach, C.P. (1989). Gender choice and occupational outcomes among college alumni with disabilities. Journal of Applied Rehabilitation Counseling, 20(4), 8-12.

DeLoach, C.P. (1992). Career outcomes for college graduates with severe physical and sensory disabilities. Journal of rehabilitation, 58(!), 57-63.

Dunham, M. D., Holliday, G. A., Douget, R. M., Koller, J. R., Presberry, & R. Wooderson, S. (1998). Vocational rehabilitation outcomes of African American adults with specific learning disabilities. Journal of Rehabilitation, 64(3), 36-41.

Edgley, K., Sullivan, M.J. L., & Deboux, E. (1991). A survey of multiple sclerosis, part 2. Determinants of employment status. Journal of Rehabilitation, 4(3), 127-132.

Ellerd, D. A., & Moore, S. C. (1992). Follow-up at

twelve and thirty months of persons with traumatic brain injury engages in supported employment placements. Journal of Applied Rehabilitation Counseling, 23(3), 48-50.

Enright, M. S. (1997). The impact of a short-term career development program on people with disabilities. Rehabilitation Counseling Bulletin, 40(4), 285-300.

Ericson, G. D., & Riodan R. J. (1993). Effects of a psychosocial and vocational intervention on the rehabilitation potential of young adults with end-stage renal disease. Rehabilitation Counseling Bulletin, 37(1), 25-36.

Fabino, R. J., Crewe, N. & Goran, D. A. (1995). Differences between elapsed time to employment and employer selection in vocational outcome following severe traumatic brain injury. Journal of Applied Rehabilitation Counseling, 26(4), 17-20.

Flynn, R. J. (1991). Matching job-search training interventions with client characteristics: Employment outcomes. Journal of Rehabilitation, 4(3), 133-143.

Frank, K., Karst, R., & Boles, C. (1989). After graduation: The quest for employment by disabled College graduates. Journal of Applied Rehabilitation Counseling, 20(4), 3-7.

Geyer, P. D., & Schroedel, J. G. (1998). Early career job satisfaction for full-time workers who are deaf or hard of hearing. Journal of Rehabilitation, 64(1), 33-37.

Hall, R. (1007). California's workers' compensation vocational rehabilitation program: Client factors related to outcomes and costs. Journal of Rehabilitation Administration, 21(3), 191-206.

Harvey, R. B. (1994). Enhancing employment outcomes for individuals with serious and persistent mental illness. Rehabilitation Counseling Bulletin, 20(2), 2-8.

Hedback, Perk, J., & Engvall, J. (1992). Predictive factors for return to work after coronary artery bypass grafting: The role of cardiac rehabilitation, Journal of Rehabilitation 15(2), 148-153.

Hill, M. A., (1989). Work status outcomes of vocational

rehabilitation clients who are blind or visually impaired. Rehabilitation Counseling Bulletin, 32(3), 219-230.

Horn, J. R., Trach, J. S., & Haworth, S. L. (1998). Employment outcomes from a collaborative work study program. Journal of Rehabilitation, 64(3), 30-35.

Kambar, M., & Tenney, Fred (1991). Factors affecting SSDI beneficiaries' return to work. Journal of Rehabilitation 15(1), 143-4-147.

Kelley, S. D.M., & Satcher, J. (1992). An organizational support model for rehabilitation agencies. Journal of Rehabilitation Administration, 16(4), 117-123.

Leahy, M. J., Szymanski, E. M., & Linkowski, D. C. (1993). Knowledge importance in rehabilitation counseling. Rehabilitation Counseling Bulletin 37(2), 130-145.

Lysaght, R., Townsend, E., & Orser, C.L. (1994). The use of work schedule modification to enhance employment outcomes for persons with severe disability. Journal of Rehabilitation, 60(4), 26-29.

Marshak, L. E., Bostick, D., & Turton, L.J. (1990). Closure outcomes for clients with psychiatric disabilities served by the vocational rehabilitation system. Rehabilitation Counseling Bulletin, 33(3), 247-250.

May, L. (1997). The challenge of measuring change: Responsiveness of outcome measurements. Canadian Journal of Rehabilitation 10(1), 15-24.

Mitchell, L. K., Brodwin, M. G., & Benoit, R. B. (1990). Strengthening the workers' compensation system by increasing client efficacy. Journal of Applied Rehabilitation Counseling, 21(4), 22-26.

Preston, B., Ulicny G., & Evans, R. (1992). Vocational placement outcomes using a transitional job coaching model with persons with sever acquire brain injury. Rehabilitation Counseling Bulletin, 35(3), 230-237.

Razzano, L., & Cook., J. A. (1994). Gender and vocational assessment of people with mental illness: What works for men may not work for women. Journal of Applied Rehabilitation Counseling, 25(3), 22-31.

Roessler, R. T., (1989). Motivational factors influencing return to work. Journal of Applied Rehabilitation Counseling, 20(2), 14-17.

Rogers, E. S., Anthony, W. A., & Danley, K. S. (1989). The impact of interagency collaboration on system and client outcomes. Rehabilitation Counseling Bulletin, 33 (2), 100-109.

Syzmanski, E. M., & Parker, R. M. (1989). Relationship of rehabilitation client outcome to level of rehabilitation counselor education. The Journal of Rehabilitation, 55(4), 32-36.

Syzmanski, E. M., & Parker, R. M. (1989) Competitive closure rate of rehabilitation clients with severe disabilities as a function of counselor education and experience. Rehabilitation Counseling Bulletin, 32(4), 292-299.

Vander Kolk, C. J. (1989). Visually impaired client characteristics associated with vocational success. Journal of Applied Rehabilitation Counseling, 20(1), 29-32.

Weed, R. O., & Hernandez, A. M. (1990). Multimodal rehabilitation counseling. Journal of Applied Rehabilitation Counseling, 21(4), 27-30.

Wells, R. T., & Fullmer, S. L. (1997). Competitive employment: Occupations after vocational rehabilitation. Rehabilitation Counseling Bulletin, 41(1), 15-25.

STATUS CODE 26 ARTICLES PLUS ANOTHER MEASURE

Botuck, S., Levy, J. M. & Rimmerman, A. (1998). Post-placement outcomes in competitive employment: How do urban young adults with developmental disabilities fare over time? Journal of Rehabilitation 64(3), 42-47.

Faas, L. A. (1992). WAIS-R subtest regroupings as predictors of employment success and failure among adults with learning disabilities. Journal of Rehabilitation, 58(4), 47-50.

King, P. M. (1998). Predicting outcomes in return-to-work programs. Journal of Rehabilitation, 2(4), 55-62.

Martin, K. J., Eisenberg, C., McDonald, G., & Shortridge, L. A. (1994). Application of the Menniger return-to-work scale among injured workers in a production plant. Journal of Rehabilitation, 60(2), 42-46.

Mason, C. Y., & Stukey, T. (1991). Adapting TQM to vocational rehabilitation. Canadian Journal of Rehabilitation, 4(4), 199-209.

Mueller, H. H., & Wolgosh, L. (1991). Employment survival skills: Frequency and seriousness of skill deficit occurrences for job loss. Canadian Journal of Rehabilitation, 4(4), 213-228.

Vogel, L. L. (1995). A follow-up on earnings after service at a comprehensive rehabilitation center. Journal of Rehabilitation Administration, 19(1), 19-30.

Wallace, G. C. M., Carlin, R. M., & Nordin, D. M. (1991). The vocational ability quotient system: A new approach in predicting vocational rehabilitation potential. Canadian Journal of Rehabilitation, 4(4), 239-245.

Weber, D., Dennis, S., & Bevan, D. J. (1991). Staying employed: An evaluation of a successful job retention strategy. Canadian Journal of Rehabilitation, 5(2), 97-105.

Williams, E. R. (1997). Work Personality Profile: Validation within the supported employment environment. Journal of Rehabilitation 63(2), 26-30.

Xie, H., Dain, B. J., Becker, D. R., & Drake, R. E. (1997). Job tenure among persons with severe mental illness. Rehabilitation Counseling Bulletin, 40(4), 230-239.

JOURNAL ARTICLES WITH THEIR OWN SURVEY

Arella, L. R., Deren, S., Randell, J. & Brewington, V. (1990). Vocational functioning of clients in drug treatment: Exploring some myths and realities. Journal of Applied Rehabilitation Counseling, 21(2), 7-18.

Boschen, K. A. (1990). Life satisfaction, housing satisfaction, and locus of control: A comparison between spinal cord injured and non-disabled individuals. Canadian Journal of Rehabilitation, 4(2), 75-85.

Boswell, B. B., Dawson, M., & Heininger, E. (1998).

Quality of life as defined by adults with spinal cord injuries. Journal of Rehabilitation, 64(1), 27-32.

Cook, C., & Kaplan, S. (1998). Enhancing value of outcomes management in outpatient rehabilitation. Journal of Rehabilitation, 2(2), 62-65.

Day, H. & Alon, E. (1993). Work, leisure, and quality of life of vocational rehabilitation consumers. Canadian Journal of Rehabilitation, 7(2), 119-125.

Gilbride, D. D., Thomas J. R., & Stensrud, R. (1998). Beyond status code 26: Development of an instrument to measure the quality of placements in the State-Federal program. Journal of Applied Rehabilitation Counseling, 29(1), 3-11.

Mullins, J. A., & Roessler, R. T. (1998). Improving employment outcomes: Perspectives of experienced counselors regarding the importance of counseling tasks. Journal of Rehabilitation, 64(2), 12-18.

Pain, K., Dunn, M., Anderson, G., Darrah, J. & Kratochvil, M. (1998). Quality of life: What does it mean in rehabilitation? Journal of Rehabilitation 64(2), 5-10.

Roessler, R. T., & Rumrill, P. D. Jr. (1995). The relationship of perceived work site barriers to job mastery and job satisfaction for employed people with multiple sclerosis. Rehabilitation Counseling Bulletin, 39(1), 2-14.

Schunk, C., & Rutt, R. (1998). Taos functional index: Orthopaedic rehabilitation outcomes Tool. Journal of Rehabilitation, 2(2), 55-81.

Sullivan, M J.L., Ware, M. G., Guisitni, I., Lascelles, M., & Deboux, E. (1990). Perceived impact of an out-reach rehabilitation program: A step toward program evaluation. Canadian Journal of Rehabilitation, 4 (2), 67-74.

Szymanski, E. M., & Parker, R. M. (1995). Rehabilitation counselor work motivation, job performance, and job satisfaction: An exploratory study. Journal of Rehabilitation Administration, 19 (1), 51-64.

Vandergriff, D. V., & Chubon, R. A. (1994). Quality of life experienced by persons with mental retardation various residential settings. Journal of Rehabilitation, 60(4), 30-

37.

Wise, S. A. (1989). Service equity and program effectiveness in the rehabilitation process. Journal of Rehabilitation, 54(4), 68-72.

QUALITY OF LIFE ARTICLES

Beaulieu, S., Wood-Dauphinee, S., Abenheim, L, & Abrahamowicz, M. (1997). Development and preliminary testing of a low back pain module. Canadian Journal of Rehabilitation, 10(3), 167-183.

Boschen, K. A. (1996). Correlates of life satisfaction, residential satisfaction, and locus of control among adults with spinal cord injuries. Rehabilitation Counseling Bulletin, 39(4), 75-85.

Boswell, B. B., Dawson, M., & Heininger, E. (1998). Quality of life as defined by adults with spinal cord injuries. Journal of Rehabilitation, 64(1), 27-32.

Burton, L. A., & Volpe, B. (1993). Social adjustment scale assessments in traumatic brain injury. Journal of Rehabilitation 59(4), 34-37.

Dijkers, M. (1996). Quality of life after spinal cord injury. American Rehabilitation, 22 (3), 18-24.

Fabian E. S. (1992). Supported employment and the quality of life: Does a job make a difference? Rehabilitation Counseling Bulletin, 36(2), 84-97.

Frazer, G. H., Brown, III, C. H., & Graves, T. K. (1998). A longitudinal outcome assessment of quality of life indicators among selected cancer patients. Journal of Rehabilitation 2(2), 40-47.

Moore, A. D., Stambrook, M., Gill, D. D., & Lubusko, A. A. (1992). Differences in long-term quality of life in married and single traumatic brain injury patients. Canadian Journal of Rehabilitation, 6(2), 89-98.

Pain, K., Dunn, M., Anderson, Darrah, J., & Kratochvil (1998). Quality of life: What does it mean in rehabilitation? Journal of Rehabilitation, 64(2), 5-10.

Scherer, M. J. (1990). Assistive device utilization and quality of life in adults with spinal cord injuries or cerebral palsy two years later. Journal of Applied Rehabilitation Counseling, 21 (4), 26-44.

Taylor-Sarno, M. (1992). Preliminary findings in a study of age, linguistic evolution and quality of life in recovery from aphasia. Journal of Rehabilitation, 26(3), 55-59.

Vanden Boom, D. C., & Lustig, D. C. (1997). The relationship between employment status and quality of life for individuals with severe and persistent mental illness. Journal of Applied Rehabilitation Counseling, 28(4), 4-8.

Vandergriff, D. V., & Chubon, R. A. (1994). Quality of life experienced by persons with mental retardation in various residential settings. Journal of Rehabilitation, 60 (4), 30-37.

ARTICLES RELATING TO JOB SATISFACTION

Geyer, P. D., & Schroddel, J. JG. (1998). Early career job satisfaction for full-time workers who are deaf or hard of hearing. Journal of Rehabilitation, 64(1), 33-37.

Jagger, L. & Neukrug, E., (1992). Congruence between personality traits and chosen occupation as a predictor of job satisfaction for people with disabilities. Rehabilitation Counseling Bulletin, 36 (1), 53-60.

Lam, C. S., & Chan, F. (1988). Job satisfaction of sheltered workshop clients. Journal of Rehabilitation, 54 (3), 51-54.

Patterson, J. B., & Marks, C. (1992). The client as customer: Achieving service quality and customer satisfaction in rehabilitation. Journal of Rehabilitation, 58(4), 16-24.

Roessler, R. T. & Rumrill, P. D. Jr. (1995) The relationship of perceived work site barriers to job mastery and job satisfaction for employed people with multiple sclerosis. Rehabilitation Counseling Bulletin, 39(1), 2-14.

ARTICLES RELATING TO SELF-EMPLOYMENT

Arnold, N. L., Seekings, T., Raveloot, C. (1995). Self-

employment as a vocational rehabilitation employment outcome in rural and urban areas. Rehabilitation Counseling Bulletin, 39(2), 94-106.

ARTICLES RELATING TO FUNCTIONAL OUTCOMES

Anderson, J. Nangle, M., & Alexander, W. A. (1998). Cardiovascular outcomes management and managed care contracting: Experience from St. Luke's Episcopal Hospital and the Texas Heart Institute. Journal of Rehabilitation, 2(1), 57-62.

Bellini, J., Bolton, B., & Neath, J. (1998). Rehabilitation counselors' assessments of applicants' functional limitations as predictors of rehabilitation services provided. Rehabilitation Counseling Bulletin, 41(4), 242-258.

Boschen, K. A. (1996). Correlates of life satisfaction, residential satisfaction, and locus of control among g adults with spinal cord injuries. Rehabilitation Counseling Bulletin, 39(4), 75-85.

Cook, C., & Kaplan, S. (1998). Enchanting value of outcomes management in outpatient rehabilitation. Journal of Rehabilitation, 2(2), 62-65.

Dobrzykowski, E. A. (1998). Outcome and assessment information set. (OASIS-B). Journal of Rehabilitation, 2(4), 78.

Dobrzykowski, E. A. & Pfohl, R. (1998). The FOTO(TM) CADI(TM) tool: Moving toward prospective outcomes management. Journal of Rehabilitation, 2(4). 69-77.

Ericsson, M. B., Stowere, S. M. Watts, J., Cash, S. H., Henry, N., & Chmela, J. (1998). Construct validity of the functional autonomy rating scale: A factor analysis study. Journal of Rehabilitation, 2(2), 47-54.

Formisano, R., Pratesi, L, Modarelli, R. T., Bonifati, V. & Mecc. G. (1992). Rehabilitation and Parkinsons's Disease. Journal of Rehabilitation, 24(3), 157-160.

Fox, S. W., Anderson, B. J., & McKinley, W. O. (1996). Case management and critical pathways: Links to quality care for persons with spinal cord injury. American Rehabilitation, 22(4), 20-25.

Krause, J., Stuart, A., & Carol A. (1997). Adjustment after spinal cord injury: Relationship to participation in employment or educational activities. Rehabilitation Counseling Bulletin, 40 (3), 202-214.

Schlund, M. W. & Pace, G. (1998). An individualized rehabilitation outcome planning and outcome measurement methodology. Journal of Rehabilitation, 2(4), 1-9.

Vogel, L., Bishop E., Wong, M. (1998). Using the functional assessment inventory (FAI) to measure vocational rehabilitation outcomes. Journal of Rehabilitation 2(2), 48-54.

Wallner, R. J. & Clark, D. W. (1989). The functional assessment inventory and job tenure for persons with severe and persistent mental health problems. Journal of Applied Rehabilitation Counseling, 20(4), 13-15.

Wood-Dauphinee, S., Arensault, A. B. & Richards, C. L. (1994). Outcome assessment I rehabilitation: Overview of the 2nd National Rehabilitation Research Conference. Canadian Journal of Rehabilitation, 7(3), 171-184.

Worrell T. W., Geunin, J., Huse, L., Rutter, S., Wruble, C., Fritz, J., & Farr, J. (1998). Health outcomes in subjects with patellofemoral pain. Journal of Rehabilitation, 2(4), 10-19.

REFERENCES

- Allaire, S., Anderson, J., & Meenan, R. (1997). Outcomes from the job-raising program, a self-improvement model of vocational rehabilitation, among persons with arthritis. Journal of Rehabilitation Counseling, 28(2), 26-31.
- Bellini, J., Bolton, B., & Neath, J. (1998). Rehabilitation counselors' assessments of applicants' functional limitations as predictors of rehabilitation services provided. Rehabilitation Counseling Bulletin, 41(4), 242-258.
- Bolton, B., & Akridge, R.L. (1996). A meta-analysis of skills training programs for rehabilitation clients. Rehabilitation Counseling Bulletin, 37(2), 159-169.
- Bose, J.L., Geist, G. E., Lam, C. S., Slaby, M., & Arens, M. (1998). Factors affecting job placement success in proprietary rehabilitation. Journal of Applied Rehabilitation Counseling, 29(3), 19-24.
- Botuck, S. & Levy, J. M. (1998). Post-placement outcomes in competitive employment. How do urban young adults with developmental disabilities fare over time? Journal of Rehabilitation, 64(3), 42-47.
- Buchanan, R. J. (1998). How are we doing? Developing outcome measures for vocational rehabilitation. Journal of Rehabilitation Administration, 22(2), 98-113.
- Chubon, R. A., Clayton, K. S., & Vandergriff (1995). An exploratory study comparing the quality of life of South Carolinians with mental retardation and spinal cord injury. Rehabilitation Counseling Bulletin, 38(2), 110-116.
- Cook, D. W. & Bolton, B. (1992). Rehabilitation counselor education and case performance: An independent replication. Rehabilitation Counseling Bulletin, 36(1), 37-43.
- Corrigan, P. W. (1995). Correlates of participation and completion in a job club for clients with psychiatric disability. Rehabilitation Counseling Bulletin, 39(1), 43-52.
- Dijkers, M. (1992). Community Reintegration and Quality

of Life Following Traumatic Brain Injury. (On-line).
Abstract from: National Rehabilitation Information Center:
<http://www.naric.com/naric/search>.

Dijkers, M. (1992). Quality of Life for Persons with a Spinal Cord Injury: A Qualitative and Quantitative Study. (On-line). Abstract from : National Rehabilitation Information Center: <http://www.naric.com/naric/search>.

Dunham, M., Holliday, G. A., Douget, R. M., Koller, J. R., Presberry, R., & Wooderson, S. (1998). Vocational rehabilitation outcomes of African American adults with specific learning disabilities. Journal of Rehabilitation, 64(3), 36-41.

Education Resources Information Center ERIC (Electronic datafile). (1999). Library and Reference Services Division of the Educational testing Service (Producer). ERIC Clearinghouse on Assessment and Evaluation (Distributor).

Evans, D. R., & Cope, W. E. (1989). The Quality of Life Questionnaire. Abstract from: Educational Resources Information Center: <http://ericae.net/tc2.htm>.

Fabian, E. S. (1989). Work and the quality of life. Psychosocial Rehabilitation Journal, 12(4), 39-49.

Fabian, E. S. (1992). Supported employment and the quality of life: Does a job make a difference? Rehabilitation Counseling Bulletin, 36(2), 84-96.

Firsh, M. G. (1994). The Quality of Life Inventory. (On-line). Abstract from: Educational Resources Information Center: <http://ericae.net/tc2.htm>.

Fisher, N. (1992). Research and Training Center on Functional Assessment and Evaluation of Rehabilitation Outcomes. (On-line). Abstract from: National Rehabilitation Information Center: <http://www.naric.com/naric/search>.

Garske, G. G., & Soriano, M. (1997). Client perceptions of the rehabilitation counseling relationship: Humanistic approaches and related outcomes. Journal of Applied Rehabilitation Counseling, 28(2), 10-25.

Gervey, R. (1995). Job development strategies for placing persons with psychiatric disabilities into supported

employment jobs in a large city. Psychosocial Rehabilitation Journal, 18(4), 94-101.

Geyer, P. D., & Johnson, V.A. (1998). Empowering career decision-making: A practical strategy for using occupational information. Journal of Rehabilitation, 64(4), 23-35.

Gilbride, D.D., Thomas, J. R., & Stensrud, R. (1998). Beyond Status Code 26: Development of an instrument to measure quality of placements in the State and Federal Program. Journal of Applied Rehabilitation Counseling(1), 3-11.

Hall, R. (1997). California's workers' compensation vocational rehabilitation program: Client factors related to outcome and costs. Journal of Rehabilitation Administration, 21(3), 191-207.

Harris, P. R. (1984). The Quality of Life Index. (Online). Abstract from: Educational Resources Information Center: <http://ericae.net/tc2.htm>.

Horn, Jennifer, R, Trach, J. S. & Haworth, S. L. (1998). Employment outcomes from a collaborative work study program. Journal of Rehabilitation, 64 (3), 30-35.

Jagger, L. (1992). Congruence between personality traits and chosen occupation as a predictor of job satisfaction, Rehabilitation Counseling Bulletin, 36(1), 53-59.

Jones, W., P., & Markos, P. A. (1997). Client rating of counselor effectiveness: A call for caution. Journal of Applied Rehabilitation Counseling, 28(3), 23-29.

Konstam, V., Surman, W. Hijjazi, K. H., Konstam, M. A., Fierstein, J., Turbett, Dec, G. W., Keck, S., Mudge, G., Flavel, C., McCormack, M., & Hurley, L. (1997). A longitudinal study of health-related quality of life in recipients of heart transplantations. Journal of Applied Rehabilitation Counseling 28(3), 51-57.

Kosciulek, J. F., Vessell, L. R., Rosenthal, D.A., Accardo, C. M., & Merz, M. (1997). Consumers satisfaction with vocational rehabilitation services. Journal of Rehabilitation, 63(2), 5-9.

Kravetz, S., Loriean, V., & Wright, G. N. (1985). The development of a multifaceted measure of rehabilitation effectiveness: Theoretical rationale and scale construction. Rehabilitation Psychology, 30 (4), 195-208.

Kunce, J.T. (1990). Personality characteristics of counselors: Implications for rehabilitation counselor roles and functions. Rehabilitation Counseling Bulletin, 34 (1), 4-16.

Leahy, M. J. (1993). Knowledge importance in rehabilitation counseling. Rehabilitation Counseling Bulletin, 37(2), 130-146.

Lehman, A.F. (1988) A quality of life interview for the chronically mentally ill. Evaluation and Program Planning 11, 51-62.

Lester, David (1983). The Level of Satisfaction of Basic Needs Questionnaire. (On-line). Abstract from: Educational Resources Information Center: <http://ericae.net/tc2.htm>.

Marshak, L. E. (1990). Closure outcomes for clients with psychiatric disabilities served by the vocational rehabilitation system. Rehabilitation Counseling Bulletin, 33(3), 274-278.

Merz, M. A., & Symanski, E. M. (1997). Effects of a vocational rehabilitation-based career workshop on commitment to career choice. Rehabilitation Counseling Bulletin 41(2), 88-104.

Mullins, J. A., & Roessler, R. T. (1998). Improving employment outcomes: Perspectives of experienced counselor regarding the importance of counseling tasks. Journal of Rehabilitation 64(2) 12-19.

Mullins, J. A., Roessler, R., Schriener, K., Brown, P. & Bellini, J. (1997). Improving employment outcomes through quality rehabilitation counseling (QRC). Journal of Rehabilitation, 63(4), 21-31.

National Rehabilitation Information Center-REHABDATA (Database). (1998). REHABDATA Document Delivery, Silver Spring, MD: National Rehabilitation Information Center (Distributors).

Nelson, C. W. (1985). The Quality of Life Stress

Survey. (On-line). Abstract from: Educational Resources Information Center: <http://ericae.net/tc2/htm>.

Nufer, Y., Rosenberg, H. & Smith D. H. (1998). Consumer and case manager perceptions of important case manager characteristics. Journal of Rehabilitation, 64 (4), 40-45.

Pain, K, Dunn, M, Anderson, G, Darrah, J., & Kratochvil, M. (1998). Quality of life: What does it mean in rehabilitation? Journal of Rehabilitation, 64(2), 5-11.

Princeton Training House (1989). The Job Satisfaction and Dissatisfaction Assessment. (On-line). Abstract from: Educational Resources Information Center: <http://ericae.net/tc2.htm>.

Ravesloot, C. (1996). Vocational rehabilitation Counselors: Attitudes towards self-employment outcomes. Rehabilitation Counseling Bulletin, 39(3), 23-27.

Reagles, K. W., & Butler, A. S. (1976). The Human Service Scale: A new measure for evaluation. Journal of Rehabilitation, 42, 34-38.

Roessler, R. T. (1990). A quality of life perspective on rehabilitation counseling. Rehabilitation Counseling Bulletin, 34(2), 90.

Roessler, R. T., & Mullins, J. A. Jr. (1995). Factors affecting rehabilitation counselor performance: A social cognitive perspective. Rehabilitation Education, 9(1), 21-35.

Rumrill, P. D. Jr., & Kock, L. C. (1998). The career maintenance specialist: Broadening the scope of successful rehabilitation. Journal of Rehabilitation Administration, 22(2), 113-117.

Schalock, R.L., Keith, K. D., Hoffman, K., & Karan, O.C. (1989). Quality of life, its measurement and use. Mental Rehabilitation, 27(1), 25-31.

Spector, R. (1994). The Job Satisfaction Survey. (On-line). Abstract from: Educational Resources Information Center: <http://ericae.net/tc2.htm>.

Sullivan, G., Weel, K. B., & Leake, B. (1992). Clinical Factors associated with better quality of life in a

seriously mentally ill population. Hospital and Community Psychiatry, 43(8).

Symanski, E. M. (1991). Relationship of level of rehabilitation counselor education to rehabilitation client outcome in the Wisconsin division of vocational rehabilitation. Rehabilitation Counseling Bulletin, 35(1), 23-37.

Symanski, E. M., & Parker, R. M. (1996). Work and disability: Issues and strategies in career development and job placement. Austin, TX: Pro-Ed.

Tucker, C.M., Abrams, J. M., Chennault, S. A., Stanger, T., & Herman, K. C. (1997). The relationship between client satisfaction and rehabilitation success as measures of VR counselor performance. Journal of Rehabilitation, 63(2), 49-53.

Vanden Boom D. C., & Lustig, D. C. (1997). The relationship between employment status and quality of life for individuals with severe and persistent mental illness. Journal of Applied Rehabilitation Counseling, 28(4), 4-8.

Vandergriff, D. V., & Chubon, R. A. (1994). Quality of life experienced by persons with mental retardation in various residential settings. Journal of Rehabilitation 60(4).

Wheaton, J. E., & Berven, R. L. (1994). Education, experience, and caseload management practices of counselors in a state vocational rehabilitation agency. Rehabilitation Counseling Bulletin, 38(1), 44-58.

Wheaton, J. E., Finch, J. R., Wilson, D. B., & Granello, D. H. (1997). Patterns of services to vocational rehabilitation consumers based upon sex, race, and closure status. Journal of Rehabilitation Administration, 21(2), 209-229.

Williams, E. R. (1997). Work personality profile: Validation within the supported employment environment. Journal of Rehabilitation 63(2), 26-30.

Wood, W. M., Miller, K., & Test, D. W. (1998). Using distance learning to prepare supported employment professionals. Journal of Rehabilitation, 64(3), 48-63.