ASSERTIVENESS AND ACCEPTANCE OF DISABILITY AMONG REHABILITATION COUNSELING CLIENTS

BY

PAULA LOVETT

A DISSERTATION PRESENTED TO THE GRADUATE COUNCIL OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

1982

Dedicated lovingly to

My Parents
Paul and Josie Lovett

for life, love and laughter

ACKNOWLEDGEMENTS

This dissertation was accomplished through personal interest and endurance supported by many fine individuals. My colleagues, friends and family have all played special parts in this project and my love and thanks are with you.

TABLE OF CONTENTS

Abstract of Dissertation Presented to the Graduate Council of the University of Florida in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

ASSERTIVENESS AND ACCEPTANCE OF DISABILITY AMONG REHABILITATION COUNSELING CLIENTS

By

Paula Lovett

May, 1982

Chairman: Dr. Paul Fitzgerald

Major Department: Counselor Education

The purpose of this study was to investigate the relationship between assertion and acceptance of disability in rehabilitation counseling. The study also determined if there were differences in the degrees of assertive behavior and acceptance of disability among disabled persons based on age, sex, race, education, marital status, metropolitan or non-metropolitan residence, type of disability and length of time disabled. The Adult Self Expression (ASES), the Acceptance of Disability Scale (AD), and a descriptive data form were administered to 160 disabled adults in North Florida who were receiving rehabilitation counseling services.

The results of Pearson product moment correlation, analysis of variance (ANOVA) and regression analysis indicated a positive relationship between assertive behavior and acceptance of disability.

Results of *t*-tests determined that there are no differences in assertion among disabled persons on the bases of sex, race, and residence. ANOVA found no differences in marital status and assertion. No correlation was found between age and assertion. A positive relationship was found between assertion and education.

ANOVA indicated that there are differences in assertion and acceptance of disability on the basis of disability type. No correlation was found between assertion or acceptance of disability and length of time disabled.

Results of *t*-tests determined that no differences existed between AD scores and sex or residence. Results of ANOVA found a difference between AD and race and marital status. Positive correlations were found between AD and age and education.

Predictor variables for assertiveness and acceptance of disability were determined by multiple regression analyses. Predictor variables for ASES were AD, length of time disabled and education. Predictor variables for AD were ASES, age and education level.

Results of *t*-tests indicated a difference between the sample and the non-disabled ASES norm group, and no difference between the study sample and the AD norm group.

Based on the results of this study there is a need for assertion and acceptance of disability training with certain groups of disabled individuals. Since a positive relationship exists between assertion and acceptance of disability, providing one of those services may increase both levels and decrease duplication of services.

CHAPTER ONE
INTRODUCTION

One in every six persons in the United States is presently disabled (Health Systems Plan, 1980). Historically, Americans' willingness to attend to the needs of the disabled has been greatly determined by prevailing economic conditions. When the economy is stable, the needs of minority groups such as the disabled are more likely to be met than when economic conditions are unstable.

Currently a conservative political atmosphere is developing in response to an unstable economy and promises to impact government interventions, regulations, and funds for groups like the disabled. With this political atmosphere there is increased emphasis on rehabilitation services rather than human maintenance services. Rehabilitation counselors and disabled persons must be aware of this political shift and be prepared to facilitate expedient rehabilitation through provision of relevant services.

Statement of the Problem

The positive acceptance of disabilities by disabled persons is a crucial variable in the rehabilitation process because it enables these persons to accept the realities of their disabilities, reorder their values and priorities and continue productive lives (Dembo, Leviton & Wright, 1956;

Wright, 1960). The goal of the rehabilitation counseling process is the facilitation of the adjustment and successful re-entry of disabled persons into society at a functioning level as close as possible to their previous functioning level (Levine, 1959; Smith-Hanen, 1976).

Disability onset is a traumatic and stressful time for people according to Rubin and Roessler (1978) and it can affect the degrees of individuals' personal adjustments and rehabilitations. Although individuals differ in their responses to losses of abilities, many people experience (to varying degrees) feelings of denial, mourning, depression, and anger before reaching acceptance of their disabilities (Dembo, Leviton & Wright, 1956). One function of rehabilitation counselors is identifying disabled individuals having difficulty accepting their disabilities, and then providing counseling to facilitate their eventual acceptance.

Recently, there has been an increased emphasis on the importance of assertiveness in adjustment and rehabilitation. Assertive behaviors may be perceived as interpersonal responses involving direct, honest and appropriate verbal and nonverbal expressions of thoughts, feelings, and beliefs in ways that do not violate other persons' rights (Lange & Jakubowski, 1976). A number of variables appear to be related to assertion. These variables include locus of control, self confidence, personal adjustment, anxiety, appropriate expression of anger, and acceptance of disability.

Research by Percell, Berwick and Beigel (1974) indicates that as individuals become more assertive, manifest anxiety decreases, while self confidence (Gay, Hollandsworth & Galassi, 1975), personal adjustment (Galassi & Galassi, 1974), appropriate expression of anger (Doyle & Biaggio, 1981), and acceptance of disability (Morgan & Leung, 1980) increase.

During periods of adjustment, disabled persons, along with having difficulties accepting losses of abilities, may experience losses of self confidence along with increased anger and anxiety. These problems may result in reactive or passive stances toward their disabilities and rehabilitation, and therefore impede the adjustment process (Cull & Hardy, 1972; Siller, 1969). In addition, disabled persons may need higher levels of assertion to facilitate their successful re-entry into competitive society. Identifying individuals using reactive or passive behaviors and facilitating more constructive assertive, coping behaviors are therefore other challenges for rehabilitation personnel.

Need for the Study

The theoretical needs for acceptance of disability counseling and assertive behavior training for disabled persons have been assumed by counselors providing those services to their rehabilitation clients. There is, however, limited empirical research indicating that disabled persons have difficulties accepting their disabilities. Research conducted to investigate the need for acceptance of disability counseling has only explored some of the demographic variables that may be

related to low levels of acceptance of disability (Safilios-Rothschild, 1970). Safilios-Rothschild (1970) and Thomas, Davis, and Hochman (1976), therefore, express the need for research to identify demographic factors significantly related to acceptance of disability levels.

Assertive behavior training has been provided by counselors in the rehabilitation process of disabled persons with little support of empirical research to substantiate the need for this service. Joiner, Lovett, and Hague (1981) found evidence to support the contention that disabled persons are less assertive than nondisabled persons but the sample for this study was small. Joiner et al. (1981) also identified demographic factors of disabled individuals that may be related to their assertive behavior levels and stated the need for more empirical research to identify potentially low assertive groups.

Research suggests that a positive relationship may exist between acceptance of disability level and level of assertive behavior (Morgan & Leung, 1980). The limited amount of empirical research, however, indicates a need for further study to clarify the relationship between level of acceptance of disability and assertive behavior.

Purpose of the Study

The purpose of this study was to investigate the relationship between assertive behavior levels and acceptance of

disability in the rehabilitation counseling process of disabled persons. The study also determined if there were differences in the degrees of assertive behavior and acceptance of disability among disabled persons based on age, sex, race, educational level, marital status, metropolitan or nonmetropolitan residence, type of disability and length of time disabled. The Adult Self Expression Scale (ASES) (Gay, 1974), the scale of Acceptance of Disability (AD) (Linkowski, 1974), and a descriptive data form were administered to a sample of disabled adults in the North Florida area who were receiving rehabilitation counseling services.

Rationale

This study focused on a sample of disabled individuals. In the review of literature, it will be shown that little empirical research in this area has been done. In order to determine the assertive behavior levels, the ASES (Gay, 1974) was chosen because of its use with adults and its reliability and validity. The AD Scale (Linkowski, 1974) was chosen as it is the only scale available to measure acceptance of disability with disabled adults. Demographic variables were collected due to the lack of information in this area. Questionnaires were utilized (instead of case studies or interviews) as they could be administered using identical instructions by rehabilitation personnel and thereby reduce personnel and time and increase sample size.

This study provided data on the level of acceptance of disability and assertive behavior of disabled persons. Selected demographic factors were also investigated to provide information to assist rehabilitation counselors in identifying disabled persons in need of acceptance of disability counseling or assertive behavior training. This information may be helpful for the provision of relevant services in the rehabilitation counseling process with disabled clients and also increase efficiency by focusing on areas in which clients need assistance. In addition, rehabilitation counselors may be encouraged to assess service needs with their own clients using similar methods.

Clarifying the relationship between acceptance of disability and assertive behavior may be useful to the rehabilitation counselor in providing services for disabled individuals. Since a positive relationship does exist between disabled persons' acceptance of disabilities and assertive behavior levels, it may be possible to increase persons' acceptance of disabilities through assertive behavior training. Likewise, facilitating persons' acceptance of disabilities may ennance their assertive behavior levels. Rehabilitation counselors trained in teaching assertion skills and facilitating acceptance of disability may be able to decrease duplication of services by providing only one of those counseling techniques instead of both, and therefore increase the economy of the rehabilitation counseling process.

Hypotheses

This study tested the following null hypotheses:

1. There is no relationship between degree of assertive behavior and degree of acceptance of disability among disabled persons.
2. There are no differences in degrees of assertive behavior among disabled persons on the bases of sex, race, metropolitan/nonmetropolitan residence, marital status, age and educational level.
3. There are no differences in degrees of assertive behavior among disabled persons on the bases of type of disability and length of time disabled.
4. There are no differences in the acceptance of disability among disabled persons on the bases of sex, race, metropolitan/nonmetropolitan residence, marital status, age and educational level.
5. There are no differences in the acceptance of disability among disabled persons on the bases of type of disability and length of time disabled.

Definition of Terms

The following rehabilitation terms were used in this study:

Acceptance of Disability—a perceptual process based on Dembo, Leviton and Wright's (1956) concept of acceptance of loss whereby individuals undergo a series of value changes including (a) enlargement of scope of values, (b) subordination of physique, (c) containment of disability effects, and (d) transformation from comparative to asset values (Wright, 1960; Linkowski, 1971, p. 236).

Adjustment of Disability—matching current abilities to the demands of everyday living (Grasha & Kirshenbaum, 1980, p. 50).

Assertive Behavior—assertion is the direct and appropriate communication of persons' needs, wants, and opinions without punishing, threatening, or putting down others and doing this without fear during the process (Galassi & Galassi, 1977, p. 3).

Disability—a condition of impairment, physical or mental, having an objective aspect that can be medically described (Hamilton, 1950, p. 17).

Types of Disability

Cardiovascular—disability due to heart disease or dysfunction. The disease or dysfunction is usually caused by birth defect (congenital abnormality), inflamation and subsequent scarring (rheumatic fever), high blood pressure (hypertension), or hardening of the arteries (athrosclerosis) (Cobb, 1973, p. 8-63).

Hearing Impairment—disease or dysfunction of the outer, middle or inner ear usually caused by birth defect, injuries, infection, lack of development, tumors, or degeneration (Cobb, 1973, p. 297).

Mental Retardation (mild or borderline)—mild retardation is characterized by an I.Q. measure between 51 and 65 (Educable). Borderline retardation is characterized by an I.Q. measure between 66 and 80 (Suran & Rizzo, 1979, p. 249).

Neurologic—disability as a result of disease or dysfunction of the nervous system, i.e., seizure disorder (Cobb, 1973, p. 258).

Orthopedic—disability related to disease or dysfunction of the bones or joints, i.e., arthritis.

Spinal Cord Injury—resultant paralysis due to disease or trauma to the spinal cord.

Substance Abuse—loss of ability as a result of habitual overuse of drugs or alcohol.

Visual Impairment—disease or dysfunction of the eye usually caused by birth defect, injury, cloudy lens (cataract), elevated pressure of fluid in the eye (glaucoma), inappropriate lens focus (far-sightedness, near-sightedness, and astigmatism) (Cobb, 1973, p. 329-347).

Handicap—the cumulative result of the obstacles which disability interposes between individuals and their maximum functional level. The handicap is the measure of the loss of individuals' capacities wherever evident (Hamilton, 1950, p. 17).

Rehabilitation—a process of restoring disabled individuals to the fullest physical, mental, social, vocational and economic usefulness of which they are capable (McGowan & Porter, 1967, p. 4).

Rehabilitation Process—a four phased process in order of implementation: the evaluation of the client, planning with the client a course of action, implementing the planned treatment and termination after successful completion of all phases (Rubin & Roessler, 1978, p. 123).

Rehabilitation Service—the coordinated provision of assistance to disabled persons to facilitate their physical, personal-social or work adjustment (Rubin & Roessler, 1978, p. 250).

Self Advocacy—exhibiting intense and emotional commitment to furthering the rights and interests of oneself and other disabled individuals and taking action when these rights and interests are not being met (Kurtz, 1975, p. 7).

Stigma—human depreciation and devaluation of the disabled (English, 1977, p. 19).

Organization of the Study

The remainder of this dissertation is organized into four chapters. Chapter Two includes a review of related literature on positive acceptance of disability by disabled individuals in the rehabilitation counseling process, assertive behavior and assertion training in the rehabilitation counseling process, and the relationship of assertive behavior and acceptance of disability with disabled persons. Literature pertaining to practical application and factors related to disabled persons' assertive behavior levels and acceptance of disability levels is also reviewed. The population, sampling procedures, sample instruments, data collection procedures, and analyses of the data are described in Chapter Three. The results are presented in Chapter Four. Chapter Five contains discussion of the results, implications and conclusions.

CHAPTER TWO
REVIEW OF RELATED LITERATURE

Introduction

In order to explore the research on the levels of acceptance of disability and assertive behavior among disabled persons, an in-depth literature review has been conducted in these two areas. Each area reviewed has been defined with its relevance to the rehabilitation counseling process. Practical applications in the rehabilitation process of each area are delineated and the impact of variables in each area is discussed. Finally, research on the relationship between the levels of acceptance of disability and assertive behavior is investigated.

Positive Acceptance of Disability in the Rehabilitation Counseling Process

Definition

The positive acceptance of disabilities in rehabilitation is characterized by senses of certainty about the individuals' selves and the world defined by realistic goals. These senses of certainty require learning adaptive ways to cope with personal, sexual, vocational, and family role demands (Levine, 1959; Smith-Hanen, 1976). Acceptance of disabilities is perceived as a tolerance of disabling conditions that realizes the inevitable pain and suffering that goes with chronic

disability, but, at the same time stresses the intrinsic value and ability of individuals (Thorenson & Kerr, 1978). The acceptance of disability by persons according to Rubin and Roessler (1978) provides a new self-perception that gives individuals with disabilities the strength to take a more active role in their rehabilitation process.

The concept of acceptance of disability (Linkowski, 1971) was based on the concept of acceptance of loss (Dembo, Leviton & Wright, 1956). The literature on loss in general embodies several orientations. Philosophic and poetic interpretations appear throughout history. Early this century psychoanalytic theory addressed the topic of loss and in particular, the process of mourning (Freud, 1957). Since then, literature on loss has been generated by the psychophysiologic (Selye, 1956), cognitive (Lazarus, 1966) and behavioral (Wolpe, 1974) traditions.

Emotions and behaviors related to a loss process have been delineated by people examining the experience with different groups. Bowley (1973) based his model of loss on observations of infants; Engel (1971) on the chronically ill; Parkes (1972) on widows and Lindemann (1944) on survivors of catastrophe. Kubler-Ross (1969) depicted the distinguishing characteristics between mourning the loss and acceptance of loss in the dying process. The stages of denial, anger, bargaining depression and acceptance were conceptualized by her to depict this flexible process.

The concept of loss in rehabilitation emerged with Dembo, Leviton and Wright's (1956) theory of acceptance of loss and

evolved into a concept of acceptance of disability with impaired clients. Although several theories of acceptance of disability have been delineated (Blank, 1961; Grayson, 1950), Dembo, Leviton and Wright's (1956) concept of acceptance of loss was used by Linkowski (1971) to develop a scale to measure acceptance of disability. Consistent with other concepts of acceptance is the emphasis Dembo, Leviton and Wright (1956) placed on the subjective meaning of the disability to the impaired individual and the associated emotions and values. Wright (1960) summarized the process of acceptance of loss in rehabilitation as a series of value changes. The nature of these shifts characteristic of individuals with physical disabilities who have come to accept their loss is

1. Enlargement of Scope of Values: The extent to which persons are able to see values other than those that are in direct conflict with their disabilities.
2. Subordination of Physique: The extent to which persons are able to de-emphasize aspects of physical ability and appearance that contradict their disabled situation.
3. Containment of Disability Effects: The extent to which persons do not spread their handicaps beyond their actual physical impairment to other aspects of their functioning selves.
4. Transformation from Comparative Values to Asset Values: The extent to which persons do not compare themselves to others in terms of the areas of limitations and abilities, but rather emphasize their own assets and abilities (p. 134).

Practical Application in Rehabilitation

Rehabilitation counselors facilitate acceptance of disability with rehabilitation clients in a number of ways. Levine (1959) suggests that skilled rehabilitation personnels' early contact with individuals following the onset of disability is vital. He indicates the importance of counselors permitting the persons to express the concerns which they have and assisting the disabled persons in planning and implementing their treatment, training and entry into employment. These rehabilitation activities serve as catalysts for individuals' acceptance of disabilities.

Research has shown that those who respond better to rehabilitation have the capacity to develop new realistic life goals (Kemp & Vash, 1971). Boone, Roessler and Cooper (1978) described the importance of rehabilitation counselors helping clients accept their disabilities by moderating levels of hope and anxiety through setting realistic goals which give meaning and direction to the future, desensitization with relaxation training, role playing and vicarious learning techniques. Alexy (1980) describes the importance of the counselor helping the disabled identify substantive issues and isolate and order their "themes" so that they range in intensity from most disturbing to least disturbing. When these concerns or "themes" are ranked, the counselor and client set a goal to attend to only the subsequent principal theme to facilitate acceptance of loss and eventual acceptance of his disabilities (p. 67).

Related Variables

The effects of demographic factors on acceptance of disability have been explored to a limited degree. Results of a study by Thomas, Davis and Hochman (1976) reveal that acceptance of disability was unrelated to amputees' age, age at disability onset, years of work experience, annual income before disability, current annual income, type of amputation, presence of secondary disability, race, marital status, current employment status, referral source, source of support before disability or incidence of specialized training. Positive correlation was found between the amputees' Acceptance of Disability scores (Linkowski, 1971) and their years of education which provides support for Safilios-Rothschild's (1970) hypothesis that the more resources (including education) people have at their disposal, the less threatened they are by the functional limitations of a disability. Another notable result of the study with amputees by Thomas, Davis and Hochman (1976) was the difference in acceptance between persons with different religious backgrounds. Catholics were found to be most accepting, followed by Protestants and persons reporting no religious preference.

Severity of disability has not been found to be related to acceptance of disability. Rather, the extent of the psychological impact experienced by each individual seems more related to the significance the disability possesses for the person (Larson & Spreitzer, 1970; Levine, 1959; Starr & Heiserman, 1977). People are dependent on their bodies as

sources of self esteem, self confidence, pride and pleasure. Different parts of the body are valued to different degrees by each individual. The higher the emotional investment the greater the reaction to the loss of that part (Schoenbert, Carr, Peretz & Kutscher, 1970).

Comer and Piliavin (1975) found that length of time disabled may not be related to self acceptance or acceptance of disability. Although time does heal many physical and psychological wounds, the passage of time does not necessarily create the conditions to insure persons' acceptance of their disabilities.

The relationship of other demographic factors and acceptance of disability have not been explored. Especially lacking is research in the area of level of individuals' acceptance of disabilities with different types of disabilities.

Assertive Behavior and Assertive Behavior Training in the Rehabilitation Counseling Process

Definition

Assertive behavior may be perceived as any interpersonal response involving the direct honest and appropriate verbal and nonverbal expression of one's feelings, beliefs, and personal rights without violating the rights of others (Rimm, Hill, Brown, & Stewart, 1974).

Assertiveness is further defined as

1. The ability to express all manner of emotions both pleasant and unpleasant in an open, direct and honest way.

2. The capacity to exercise rights without denying the rights of others.
3. The confidence to stand up for oneself without undue anxiety.
4. The freedom to be able to make a choice as to whether assertive behavior is appropriate (Shelton, 1977, p. 465).

"Assertive individuals are expressive, spontaneous, well defined, confident and able to influence and lead others while non-assertive persons more often feel inadequate and inferior, have marked tendencies to be over solicitous of emotional support from others and exhibit excessive interpersonal anxiety" (Galassi, DeLo, Galassi, & Bastien, 1974, p. 1965).

Practical Application in Rehabilitation

Recently there has been an increased emphasis on the use of assertiveness in rehabilitation settings (Luck & Lassiter, 1978). The use of assertion training in rehabilitation is an outgrowth of the traditional rehabilitation process of adjustment counseling which emphasizes sociocultural factors such as the development of interpersonal relationships. The literature suggests that physically disabled persons need to receive training in social and interaction skills to prepare for social, vocational and emotional adjustment (Siller, 1970; Wright, 1960).

Research indicates that personal adjustment is related to assertiveness. Galassi and Galassi (1974) found that students who sought personal adjustment counseling were

significantly less assertive than both non-counselees and students who sought only vocational counseling. Gay, Hollandsworth and Galassi (1975) supported this when their assertiveness inventory for adults showed that individuals seeking personal adjustment counseling scored significantly lower on the ASES than adults in general. One method of developing interpersonal skills and increasing personal adjustment is through human relations training. A recent popular alternative to human relations training in rehabilitation counseling is assertion training (Grimes, 1980).

Assertion training is a generic behavioral counseling procedure involving a number of specific techniques such as behavioral rehearsal (McFall & Marstan, 1970) or various forms of modeling (Eisler, Hersen & Miller, 1973; Kazdin, 1974; Serber, 1972) all directed toward enabling individuals to engage in appropriate behavior. Assertion training promotes socially appropriate expression of personal rights and feelings (McFall & Marstan, 1970; Wolpe, 1969). In rehabilitation settings, assertive behavior counseling is usually applied during the vocational evaluation and training phases though future research may explore the use of assertion training in other phases of the rehabilitation process; e.g. counseling, job placement, and post employment service (Grimes, 1980).

Assertive behavior training has been used to increase assertive behavior with disabled rehabilitation clients. Mishel (1978) found, in his study of 14 disabled persons, that assertion training was helpful in increasing assertiveness and

lessening anxiety in his sample. A study by Grimes (1980) used assertion training with severely disabled persons. His results indicated that assertion training increased the assertive behavior levels of his subjects. Page, Holland, Rand, Gartin and Dowling (1981) observed increased assertion in a group of 8 disabled persons who had received assertive behavior training. In another study, Morgan and Leung (1980) found that assertion training seems to increase self concepts and enhance social interaction skills of disabled university students.

Assertion training has been used by rehabilitation counselors to increase assertive behavior in mentally retarded clients. Zisfein and Rosen (1973) briefly described the incorporation of assertiveness training into personal adjustment training programs for the mentally retarded. In addition, Granat (1978) proposed an outline for the use of assertive behavior training in the rehabilitation of mentally retarded clients. Straker (1978) used a similar assertion training outline and found evidence to support the use of assertive behavior training with educably retarded clients.

Assertion training has been reported to be a therapeutic modality in substance abusing clients. Martorano (1974) suggests the use of assertive behavior training to increase social skills of substance abusers. More recently, Lindquist, Lindsay and White (1979) found that substance abusing subjects were less assertive, less socially assertive and more socially anxious than non-substance abusing subjects in a sample of 114 adults.

Related Variables

A number of variables have been investigated and seem to be related to assertion. These variables include locus of control, self confidence, personal adjustment, anxiety and the appropriate expression of anger. Percell et al. (1974) found that there was significant negative correlation between measures of assertiveness and anxiety. Their findings were supported by Orenstein, Orenstein and Carr (1975), in a study using 450 college students. Gay, Hollandsworth and Galassi (1975), using 464 subjects ranging in age from 18 to 60 years, administered the ASES (Gay, 1974) and the Taylor Manifest Anxiety Scale as one of the validation studies for the ASES. They found that the measure of anxiety clearly differentiated low from high assertiveness as identified by the ASES.

Gay, Hollandsworth and Galassi (1975) found that the subjects scoring high on the ASES described themselves as more confident than low scorers. Correlation data for the ASES with the Adjective Check List needs scales indicated that high scorers are more achievement oriented, more often seek leadership roles in groups and individual relationships, more independent, less likely to express feelings of inferiority through self-depreciation, and are less deferential in relationships.

Bates and Zimmerman (1971) used the Rotter I-E Scale, a measure of generalized expectancy for internal versus external locus of control, to test the idea that non-assertive subjects are more likely than assertive subjects to perceive reinforcements as externally controlled. Their results confirmed this

idea and were significant. Appelbaum, Luma, and Johnson (1975) also found that internals are significantly more assertive than externals. Rimm, Hill, Brown and Stewart (1974) and Gay, Hollandsworth and Galassi (1975) found no significant differences in locus of control and assertiveness level.

Doyle and Biaggio (1981) examined the differences between asserters and non-asserters on anger expression. Asserters were found to express significantly more verbal anger than non-asserters. High asserters did not, however, score higher on physical expression of anger than non-asserters. Results also supported the contention that non-asserters experience more anger than do high asserters.

Joiner et al. (1981) considered demographic factors that may be related to assertive behavior level in disabled adults. In the study, 91 disabled clients were given the ASES (Gay, 1974) and a demographic data sheet requesting age, sex, race, marital status, metropolitan/non-metropolitan residence, education level, disability and length of time disabled. Significant differences were found between male and female assertive behavior scores and between residence of metropolitan and non-metropolitan areas. No significant differences were found between scores on the ASES and other demographic variables. Although no statistically significant differences were found to exist between ASES scores and other demographic variables, certain trends were apparent. High and low mean assertive behavior levels were observed among specific disability groups, age groups, level of education groups and marital status groups.

The Relationship of Assertive Behavior and Acceptance of Disability with Disabled Persons

Research suggests that nearly all disabled persons are confronted with negative societal attitudes (Gellman, 1974; Safilios-Rothschild, 1970; Siller, 1976; Smith-Hanen, 1976; Yuker, Block & Younng, 1966). Stigmatizing attitudes exist which can influence persons' acceptance of their disabilities and create further limiting factors in vocational, personal, and social adjustment. Smith-Hanen (1976) notes that most societies view disability as a deviation from the norm that leads to negative attitudes, labeling, and stigmatizing on the part of the non-disabled. In addition, society presents other significant barriers to adjustment to disability in the form of inaccessible buildings and public modes of transportation (Rubin & Roessler, 1978). Research indicates that acceptance of disability and assertive behavior may strengthen persons' self concepts and encourage forthright and determined stances toward these sociological barriers toward the disabled. (Linkowski & Dunn, 1974; Morgan & Leung, 1980; Starr & Heiserman, 1977).

As a result of negative attitudes toward the disabled Safilios-Rothschild (1970) noted that interpersonal relations between non-disabled and disabled follow a superior-inferior model of social interaction or ten to be nonexistent (English, 1977; Stewart & Rossier, 1978; Ziller & Smith, 1977). Wright (1960) cites accounts by numerous disabled persons who have remarked that non-disabled persons treat them as if they were disabled in every way.

Results of research by Kleck, Onan and Hastorf (1966) support the contention that non-disabled persons tend to be more emotionally incongruent with disabled persons than with non-disabled persons. They discovered that non-disabled persons demonstrated stereotyped inhibited and over controlled behavior with the disabled. Kleck (1968) found that non-disabled persons interacting with a confederate playing an amputee showed less spontaneous movement by the non-disabled person, an overly positive attitude toward the disabled and over emphasized agreement with the person acting disabled.

Disabled persons and rehabilitation professionals are seeking to positively change attitudes toward the disabled through education and increased positive interaction between disabled and non-disabled in society. Disabled persons are increasingly taking self advocating stances on improving communication with non-disabled and asserting themselves to gain recognition for their needs and interests. The disabled and rehabilitation counselors are finding that assertive behavior on the part of the disabled can be an effective way to increase acceptance of disability, promote self advocacy and improve the quality of interaction between disabled and non-disabled. Enhanced quality of communication between disabled and non-disabled may insure that the needs and interests of the disabled are considered by society (Granat, 1978; Grimes, 1980; Mishel, 1978; Morgan & Leung, 1980).

The results of a study by Morgan and Leung (1980) to test the relationship between assertive behavior and acceptance of

disability and the effects of assertion training on acceptance of disability with physically disabled university students indicated that a positive relationship may exist between assertive behavior and acceptance of disability. Results also indicated that assertion training may be effective in increasing acceptance of disability with disabled university students. No studies have tested the effect of assertion training on acceptance of disability with other groups of disabled individuals.

Summary

The review of the literature supports the contention that acceptance of disability and assertive behavior are important factors in the rehabilitation process. It also supports the effective use of acceptance of disability counseling and assertive behavior training with disabled clients. Although these methods are being used in rehabilitation counseling, there are few empirical studies identifying demographic factors to support the need for the use of these techniques with different groups of disabled persons. Further, limited research suggests that there may be a positive relationship between acceptance of disability and assertive behavior.

CHAPTER THREE
METHODOLOGY

The purpose of this study was to investigate the relationship between assertive behavior levels and acceptance of disability in the rehabilitation counseling process of disabled persons. The study also determined if there were differences in degrees of assertive behavior and acceptance of disability among disabled groups based on age, sex, race, educational level, marital status, metropolitan or non-metropolitan residence, type of disability and length of time disabled. The ASES (Gay, 1974), the AD Scale (Linkowski, 1971), and a descriptive data form were administered to a sample of disabled adults in the North Florida area who were receiving rehabilitation counseling services. The population, sampling procedures, sample, instruments, data collection procedures, and analysis of data are described in this chapter.

Population

Approximately one in every six persons in the United States is disabled. According to the 1974 National Health Interview Survey about 20 percent of those persons at age 45 to 64 experience some limitation of activity due to chronic conditions. Although all people are possible victims of disabling conditions and older persons are affected severely and at higher rates, the largest number is under 65 years of age. The Florida Office of Vocational Rehabilitation estimated

Florida's disabled population between the ages of 18 and 64 in 1976 as 13 percent of the total in that age group (Health Systems Plan, 1980). Florida's population according to the 1980 census is 9,739,922. There are approximately 6,300,800 persons in Florida between 18 and 64. Thirteen percent of this age group or 826,904 are estimated to be disabled (Florida Statistical Abstracts, 1980).

The Commission of Chronic Illness in the Health Systems Plan (1980, p. G-1) defines a chronic condition as, "an impairment or deviation from normal which has one or more of the following characteristics: permanency of residual disability; a requirement of special client training for rehabilitation; and a long period of medical supervision, observation or care." As this definition implies, chronic disabilities and disabling conditions are associated with a wide range of factors: trauma, heredity, the aging process, metabolic disorders, diseases, allergies, environmental conditions, psychological conditions and personal habits.

Categories for disability include medical, sensory, mental and psychological. Major groupings for disabling conditions include those related to cardiovascular disease, spinal cord injury, orthopedic conditions, neurologic conditions, visual and hearing impairments, mental retardation, psychological disability and substance abuse.

Sampling Procedures

Rehabilitation service agencies in the North Florida area were selected for the study according to the following criteria:

1. Provided rehabilitation services
2. Clients served were between the ages of 18 to 64
3. Agency clients were representative of the disability categories of neurologic, cardiovascular, spinal cord injured, orthopedic, visually impaired, hearing impaired, borderline and educable mentally retarded and substance abusers
4. State and private agencies
5. Accessible to researcher
6. Were located in one of the North Florida counties of Alachua, Bradford, Citrus, Columbia, Dixie, Gilchrist, Hamilton, Hernando, Lafayette, Lake, Levy, Marion, Putnam, Sumter, Suwanee, Union, Baker, Clay, Duval, Flagler, Nassau, St. Johns, or Volusia

The agencies were contacted by phone call and/or personal visit. A list of the agencies that were contacted may be found in Appendix B. The agencies were asked if they would grant permission to use their clients in the study. Letters of intended participation were solicited from each of the agencies. In addition, a rehabilitation practitioner was identified in each agency and he was requested to administer the Informed Consent Forms (Appendix D) and the instruments.

The University of Florida Human Subjects Committee was contacted to seek permission to conduct the study. This was done to insure that the University of Florida Human Subjects Committee approved of the project and its goals and was aware of its existence.

Instructions to rehabilitation practitioners (Appendix C) were developed for personnel administering the instruments. It was important that each person in the study received identical instructions as there were many agencies and rehabilitation practitioners involved. The researcher met and instructed all participating rehabilitation practitioners in the procedures for administering the instruments. They were advised to

1. Use only voluntary participants and obtain Informed Consent Forms from all subjects
2. Read or sign the instructions verbatim to the subjects from Appendix C

After permission was granted by the various agencies and the University of Florida Human Subjects Committee, the Informed Consent Forms, the data forms and instruments were taken to each of the agencies. At the time of delivery of the instruments, the rehabilitation practitioners were asked to obtain Informed Consent Forms for all participants. In addition, they were instructed in the administration procedures. The rehabilitation practitioners were asked to use cassette recordings of the instruments for the administration of the instruments to all but the deaf subjects. The practitioners administering the instruments to the blind subjects agreed to this procedure; all others refused to use the tapes. They reported that it took too long to administer the instruments using the tapes. Therefore, the tapes were not used for any subjects except the blind. The researcher read the questions from the instruments to the mentally retarded individuals and they responded as they thought appropriate. Other subjects were read identical instructions and left to respond to the questionnaires.

Sample

The sample for this study consisted of 160 disabled adults in the North Florida area receiving rehabilitation counseling services. The subjects for the sample were chosen from the North Florida area because of their availability and representativeness.

In a study conducted to assess the assertive behavior levels of disabled adults, twenty-two disability categories were investigated for differences in assertive behavior levels (Joiner et al., 1981). Differences in levels of assertiveness were found to exist between the disabilities. However, there were too few individuals represented within each disability category to produce statistically meaningful results. Therefore, the sample for this study was selected from eight primary disability categories: cardiovascular, spinal cord injured, neurologic, orthopedic, visually impaired, hearing impaired, borderline and educably mentally retarded and substance abusers.

Each participant chosen on the bases of disability type was selected on a voluntary basis. Persons were selected for the sample until there were 20 persons in each of the eight primary disability categories.

Instruments

The three instruments that were used in this study are the Adult Self Expression Scale (ASES) (Gay, 1974), the scale of Acceptance of Disability (AD) (Linkowski, 1971), and a descriptive data form. The ASES was used to measure level of

assertive behavior and the AD was used to determine level of acceptance of disability by the disabled adult. The descriptive data form was used to procure demographic information about participants.

The ASES (Gay, 1974) is a 48 item, self report measure of assertiveness designed to be used with adults. It is based on a two-dimensional model of assertiveness. One dimension specifies interpersonal situations in which assertive behavior might occur, such as interactions with family, public or friends. The second dimension specifies the assertive behaviors that may occur in these situations, such as expressing feelings or asking favors.

The ASES uses a five-point Likert format (0-4). Respondents are asked to answer the questions by indicating how they generally express themselves in a variety of situations. The choices for responses are (0) "Almost Always" or "Always," (1) "Usually," (2) "Sometimes," (3) "Seldom," or (4) "Never" or "Rarely." The respondents are told their answers should not reflect how they feel they <u>ought</u> to act or how they would <u>like</u> to act but rather how they generally <u>do</u> act. It takes approximately 15 minutes to complete the ASES (Gay, 1974).

Scores for the ASES range from 0 to 192. The mean ASES score obtained from 640 adults between the ages of 18 to 60 was 115, with a standard deviation of approximately 20. ASES scores falling about 135 or higher are considered as high scores and scores falling below 95 are considered to be low (Gay, 1974).

Subjects for reliability and validity studies were selected from a large community college. Test-retest reliabilities over two week and five week intervals conducted with two samples of subjects resulted in high reliability coefficients. A Pearson product moment correlation computed after two week and five week intervals produced reliability coefficients of .88 and .91 respectively. Internal consistency was determined by correlating the odd-even scores for 464 subjects. A Pearson product moment correlation resulted in a .79 reliability coefficients (Gay, 1974; Gay, Hollandsworth & Galassi, 1975).

Several validity studies have been conducted for the ASES (Gay, 1974; Hollandsworth, Galassi & Gay, 1977). Construct validity was established by correlating the total scores of individuals taking the ASES with their scores on the 24 scales of the Adjective Check List (ACL). The ASES was found to correlate positively and significantly ($p<.001$) with the Number of Adjectives Checked, and the Self-Confidence, Lability, Achievement, Dominance, Affiliation, Heterosexuality, Exhibition, Autonomy, Aggression and Change Scales. A negative correlation was found ($p<.001$) with ASES and the Succorance, Abasement, and Deference Scales of the ACL.

The method of contrasting groups was used to establish construct validity for the ASES. Thirty-two clients seeking personal adjustment counseling scored significantly ($p<.05$) lower ($\bar{x}=101.81$) on the ASES than did subjects who were not counseled ($\bar{x}=114.20$). Discriminant validity was established

for the ASES by examining the relationship between assertiveness and anxiety, self confidence and locus of control. Anxiety was measured by the Taylor Manifest Anxiety Scale. Self confidence was measured by the Self Confidence Scale of the Adjective Check List. Locus of control was measured by Rotter's I-E which is a measure of generalized expectancy for internal versus external control of reinforcement. A discriminant analysis resulted in a significant F value ($F(3,54))= 9.56$, $p<.001$). The variate tests for the three variables revealed that anxiety ($F(1,56)=17.86$, $p<.291$) did not discriminate between low and high assertive groups (Hollandsworth, Galassi & Gay, 1977).

Convergent and discriminant validity was established by the Campbell-Fiske multitrait-multimethod procedures. Convergent validity was established in terms of ASES' relationship with the constructs of dominance and abasement as measured by a self-report method. Discriminant validity via different assessment methods is only moderate in strength. The inconsistency of discriminant validity findings may be due to the fact that the ASES assesses assertiveness responses in terms of frequency of response instead of verbal content of the situation (Hollandsworth, Galassi & Gay, 1977).

The Acceptance of Disability (Linkowski, 1971) is a 50 item self-report measure of acceptance to disability. It is based on the process of acceptance of loss as a series of value changes. Disabled persons who are able to accept their loss are those who 1) enlarge their scope of values, i.e., the ability to feel self worth in activities, 2) subordinate

their physique, i.e., the extent the person is able to de-emphasize the aspects of physical ability and appearance, 3) containment of disability effects, i.e., the extent that the person does not spread his/her disability beyond its actual physical impairment and 4) transformation from comparative values to asset values, i.e., the ability to not compare her/himself to others, but emphasizes own assets and abilities.

The AD uses a six-point format (1-6). Respondents are asked to answer the items by indicating how much they agree or disagree with the statements. The choices for responses range from "I disagree very much" to "I agree very much." Some items are stated positively and others negatively in order to prevent the operation of a possible response set. It takes approximately 15 minutes to complete the AD (Linkowski, 1971).

The scores for the AD range from 50 to 300. The mean AD score obtained from rehabilitation clients was 217, with a standard deviation of approximately 37. AD scores falling about 254 or higher are considered high scores and scores below 180 are considered to be low (Linkowski, 1971).

The validity and reliability for the AD have been investigated. Content validity was determined by expert opinion. Individuals with doctorates in rehabilitation counseling assisted in the process. Split-half reliability for the AD was established by using the odd-even method of correlation from a sample of 46 disabled individuals. Internal consistency reliability was computed to be r=.86 and the application of the Spearman-Brown prophesy formula estimated the full scale reliability to be .93 (Linkowski, 1971).

The AD and the Attitudes Toward Disabled Persons Scale (ATDP) were administered to a sample of 101 disabled persons. The ATDP, when administered to disabled persons, purportedly measures the attitudes that disabled persons have toward themselves. The correlation coefficient was .81 and was significant at the $p<.001$ level (Linkowski, 1971).

A descriptive data form was devised for the purposes of this study (Appendix A). Demographic variables of age, sex, race, marital status, residence, educational level, primary disability, length of time having primary disability, multiple disabilities and total time disabled were ascertained from this form.

Data Collection Procedure

After the collection of data, by the rehabilitation personnel in the agencies, the researcher contacted each agency once a week to determine how many individuals in each disability category had been tested. When a minimum of 160 participants, 20 in each disability category, was reached, the researcher advised each agency to stop the collection of data. The researcher then retrieved all data for analysis.

Analyses of Data

Parametric statistics were used to analyze the data for this study. A sample of disabled individuals was selected from the population of disabled individuals receiving rehabilitation services from agencies in the North Florida area. Discrete data variables were sex, race, marital status, residence, type of primary disability and multiple disabilities.

Continuous data variables were age, educational level, length of primary disability, total length of time disabled, AS score and ASES score.

In this study *t*-tests were used to determine if significant differences existed among the mean ASES scores of disabled persons due to sex, race, and residence. Analysis of variance was used to determine if significant differences existed among ASES score due to marital status and type of disability. Additional *t*-tests were used to determine if significant differences existed among the mean AD score of disabled persons due to sex, race, and residence. Analysis of variance was used to determine significance between AD score due to marital status and type of disability.

Pearson product moment correlations and regression analysis were used to determine significance of relationships between the ASES scores and the AD scores for disabled persons. Age, educational level, and total time disabled and their relationship and significance to the ASES and AD were analyzed by Pearson product moment correlations and multiple regression analysis. A Pearson product moment correlation and regression analysis were chosen because of their ability to measure the relationship between two variables using continuous data. A .05 level of significance will be used for all data analysis in this study.

Limitations

Limitations are apparent in the procedures for this study. The selection of subjects was not random. Rather, the sample

was based on subjects availability and willingness to participate in this research. In addition, the instruments used in this study are self-report measures. Self reported responses may be enhanced when compared to in vivo responses. One must use caution in generalizing from self-report to natural behavior (Gorecki, Dickson, Anderson, & Jones, 1981). Finally, there are limitations in the administration of the instruments. Rehabilitation personnel administered the instruments to individuals with different types of disabilities. Cassette tapes were made of the instruments and rehabilitation personnel proficient in sign language were used to accommodate the visually and hearing impaired subjects. The instruments were read by the researcher to all mentally retarded subjects. These modifications in the administration of the instruments may have influenced subjects' responses.

CHAPTER FOUR
RESULTS

The purpose of this study was to investigate the relationship between assertive behavior levels and acceptance of disability within the rehabilitation counseling process of disabled persons. The study also examined for differences in the degree of assertive behavior and acceptance of disability among disabled persons based on age, sex, race, educational level, marital status, metropolitan or nonmetropolitan residence, type of disability and length of time disabled. The Adult Self Expression Scale (ASES) (Gay, 1974), the scale of Acceptance of Disability (AD) (Linkowski, 1974), and a descriptive data form were administered to a sample of 160 disabled adults in the North Florida area who were receiving rehabilitation counseling services. The results of the study are reported in the chapter. The results of each hypothesis tested are observed first; additional analyses relating to the hypotheses are discussed in the end of the chapter.

Hypothesis 1

The first hypothesis tested was that there is no relationship between degree of assertive behavior and degree of acceptance of disability among disabled persons. Computation of Pearson product moment correlations, analyses of variance and regression analyses were used to determine significance of

relationships between the ASES scores and the AD scores for disabled persons. The Pearson product moment correlation (Table 1) indicates that there was a significant positive relationship between degree of assertive behavior and degree of acceptance of disability. Table 2 presents the results of the regression analysis which indicated that there was a significant relationship between ASES and AD scores. Acceptance of disability is a significant predictor of assertiveness and conversely, assertiveness level is a predictor of acceptance of disability. Therefore the first hypothesis was rejected.

Hypothesis 2

The second hypothesis tested was that there are no differences in degree of assertive behavior among disabled persons on the bases of sex, race, metropolitan/nonmetropolitan residence, marital status, age and educational level. To determine if significant differences existed in ASES scores of disabled persons due to sex, race and metropolitan/nonmetropolitan residence, t-tests were used. Analysis of variance was used to determine if significant differences existed in ASES scores on the bases of marital status. Pearson product moment correlation was used to determine significance of relationships between the ASES scores and age and educational level. Results in Tables 1, 3 and 4 indicate that there are no differences in degrees of assertive behavior among disabled persons on the bases of sex, race, metropolitan/nonmetropolitan residence, marital status or age. However, a significant positive relationship does exist between ASES and educational level. Although one of the analyses suggests a difference, most of the

analyses suggest no differences. Therefore, the second hypothesis was not rejected.

Table 1
Pearson Product Moment Correlation Coefficients

	ASES	AD	Age	Education Level	Length of Primary Disability	Total Time Disabled
ASES	1.00000 0.0000	0.48155* 0.0001 (.481)[2]	0.09694 0.2227	0.19120 0.0151	0.14427 0.0687	0.07893 0.3211
AD	0.48155 0.0001	1.00000 0.0000	0.22196 0.0048	0.22732* 0.0038 (.227)[2]	0.02140 0.7882	-0.02945 0.7116
Age	0.09694 0.2227	0.22196* 0.0048 (.221)[2]	1.00000 0.0000	-0.19978* 0.0113 (.199)[2]	0.11234 0.1199	0.07891 0.3212
Education Level	0.19120* 0.0154 (.191)[2]	0.22732* 0.0038 (.227)[2]	-0.19978 0.0113 (.199)[2]	1.00000 0.0000	-0.18651 0.0182	-0.17373 0.0280
Length of Primary Disability	0.14427 0.0687	0.02140 0.7882	0.12345 0.1199	-0.18651* 0.0182 (.186)[2]	1.00000 0.0000	0.91468 0.0001
Total Time Disabled	0.07893 0.3211	-0.02945 0.7116	0.07891 0.3213	-0.17373* 0.0280 (.173)[2]	0.91468* 0.0001 (.914)[2]	1.00000 0.0000

←Pearson
←Probability
←R^2

*P<.05
R^2 is included for significant correlations

Table 2
Regression Analysis and ANOVA Summary

Dependent Variable: ASES Source of Variation	SS	df	MS	F
AD	60911.09	158	385.51	47.70*
Dependent Variable: AD Source of Variation	**SS**	**df**	**MS**	**F**
ASES	148947.42	158	942.7	47.70*

*P<.05

Table 3
Means, Standard Deviations and t-values for Sex, Race, and Residence on ASES Scores

Dependent Variable: ASES

Variable	Group	N	Mean	S.D.	t-value
Sex	Males	82	112.81	22.32	.67
	Females	78	110.43	22.41	
Race	White	121	112.42	22.71	.76
	Black	38	109.28	21.22	
Residence	Metropolitan	103	112.92	22.08	.96
	Non-Metropolitan	57	109.36	22.78	

Table 4
Marital Status and Assertiveness Analysis of Variance Summary

Dependent Variable: ASES Source of Variation	SS	df	MS	F
Marital Status	76547.25	154	497.06	1.33

Hypothesis 3

The third hypothesis tested was that there are no differences in degrees of assertive behavior among disabled persons on the bases of type of disability and length of time disabled. Analysis of variance was used to determine if there were differences in assertive behavior among disabled persons on the basis of type of disability. The results shown in Table 5 indicate that there are significant differences on the basis of disability type. Results of Duncan's Multiple Range test (Table 6) indicate that the group of blind individuals in the sample were significantly more assertive than the rest of the sample. In addition, the results (Table 6) indicate that the individuals with neurologic disabilities in the sample were significantly less assertive than the substance abusers as well as the blind persons in the sample. There were no differences in degrees of assertive behavior among the other disability groups.

The results in Table 1 indicate that length of disability is not a significant factor in degree of assertive behavior. However, without the data from the mentally retarded group, all of whom had been disabled for life, length of primary disability and total time disabled were significant factors (See Table E-1 in Appendix E). Since there were differences in degrees of assertiveness among disabled persons on the basis of type of disability, hypothesis three was rejected.

Table 5
ASES by Disability Group

Dependent Variable: ASES Source of Variation	SS	df	MS	F
Disability	61762.95	152	406.33	6.17*

*P<.05

Table 6
Duncan's Multiple Range Test for Variable ASES and Disability Groups

Means with the same letter are not significantly different

Grouping		Mean	N	Disability
	A	135.80	20	Blind
	B	114.80	20	Substance Abuse
C	B	114.05	20	Deaf
C	B	111.45	20	Spinal Cord Injury
C	B	108.90	20	Cardiac Disability
C	B	107.35	20	Orthopedic Disability
C	B	101.15	20	Mentally Retarded
C		99.75	20	Neurologic Disability

*P<.05

Hypothesis 4

The fourth hypothesis tested was that there are no differences in the acceptance of disability among disabled persons on the basis of sex, race, metropolitan residence, marital status, age, and educational level. In this study *t*-tests were used to determine if significant differences existed among the AD scores of disabled persons due to sex, race, and metropolitan/nonmetropolitan residence. Analysis of variance was used to determine

if significant differences existed in AD scores on the basis of marital status. Pearson product moment correlations were used to determine if there were significant relationships between AD scores and age and educational level. Results in Tables 1 and 7 indicate that there are no significant differences in the acceptance of disability among disabled persons on the bases of sex or residence. However, results in Tables 1, 7, 8 and 9 do indicate significant differences between AD scores and race, marital status, age and educational levels. White persons are more accepting of their disabilities than Black persons. Disabled divorced persons are significantly more accepting of their disabilities than single, married, separated or widowed disabled persons. As a person's educational level increases, their acceptance of disability also increases. Therefore hypothesis four was rejected.

Table 7
Means, Standard Deviations, and t-values for Sex, Race and Residence on AD Scores

Dependent Variable: AD

Variable	Group	N	Mean	SD	t-value
Sex	Males	82	205.87	31.87	-0.80
	Females	78	210.34	37.94	
Race	White	121	211.30	34.52	-2.09*
	Black	39	197.97	34.66	
Residence	Metropolitan	103	207.88	35.05	-0.08
	Nonmetropolitan	57	208.36	34.98	

*P<.05

Table 8
Marital Status and Acceptance of Disability

Dependent Variable: AD Source of Variation	SS	df	MS	F
Marital Status	177238.81	154	1150.90	3.60*

*P<.05

Table 9
Duncan's Multiple Range Test for Variable AD and Marital Status Groups

Means with the same letter are not significantly different

Grouping	Mean	N	Marital Status
A	137.53	15	Divorced
B	208.85	62	Married
B	208.00	2	Widowed
B	202.74	75	Single
B	191.40	5	Separated

Hypothesis 5

The fifth hypothesis tested was that there are no differences in the acceptance of disability among disabled persons on the bases of type of disability and length of time disabled. Analysis of variance was used to determine differences in acceptance of disability among disabled persons on the basis of disability type.

The results in Table 10 indicate that there are significant differences in degrees of acceptance of disability on the basis of disability type. The results of Duncan's Multiple Range test (Table 11) indicates that the deaf and blind group of people in

the sample had significantly higher levels of acceptance of their disability than those people in the sample with cardiac, substance abuse, or orthopedic disability and the sample group of mentally retarded individuals. The spinal cord injured group was significantly more accepting of their disability than the orthopedic disability group and the mentally retarded group. In addition, the neurologic, cardiac disability and the substance abuser groups were significantly more accepting of their disabilities than the mentally retarded group.

Table 10
AD by Disability Group

Dependent Variable: AD Source of Variation	SS	df	MS	F
Disability	150837.15	152	992.34	620*

*P<.05

Table 11
Duncan's Multiple Range Test for Variable AD

Means with the same letter are not significantly different

Grouping			Mean	N	Disability
	A		229.50	20	Deaf
	A		228.00	20	Blind
B	A		217.90	20	Spinal Cord Injury
B	A	C	209.40	20	Neurologic Disability
B		C	206.60	20	Cardiac Disability
B		C	200.95	20	Substance Abuse
	D	C	195.60	20	Orthopedic Disability
	D		176.60	20	Mentally Retarded

*P<.05

Results from Table 1 indicate that neither length of primary disability nor total time disabled is a significant factor in degree of acceptance of disability. Without the data from the mentally retarded group, all of whom had had their disability for life, length of primary disability and total time disabled became significant factors in acceptance of disability (See Table E-1 in Appendix E). Because there were differences in degrees of acceptance of disability among disabled persons on the basis of type of disability, hypothesis five was rejected.

Additional Analyses of the Data

The results of the Pearson product moment correlation coefficient in Table 1 indicate positive relationships between ASES and AD, ASES and educational level, AD and age, and AD and educational level. Negative correlations were found between age and educational level, length of primary disability and educational level, and total time disabled and educational level. The results of correlations on all disability types except the mentally retarded (Table E-1, Appendix E) indicate the same positive correlations as above plus positive correlations with both ASES and AD and length of primary disability and total time disabled. No significant negative correlations were observed.

A multiple regression analysis was performed to determine the best set of predictor variables from among AD, age, educational level, length of primary disability and total time disabled for those disabled individuals in need of assertiveness

counseling. The best set of predictor variables for the dependent variable of assertiveness is level of acceptance of disability, length of time with primary disability and educational level. With information from the coefficients of determination in Table 1 it can be determined that these variables account for, respectively, 23%, 2% and 3% of the variation in the ASES score. These three variables together therefore explain approximately 25% of the variation in the ASES score. The results in Table 12 present the R-square values and the summary table for these significant predictor variables.

A multiple regression analysis was performed to determine the best set of predictor variables for assertiveness for all disability groups sampled except the mentally retarded. The mentally retarded group, unlike all other disability groups, had had their disability for life. Results in Table E-2, Appendix E indicate that total time disabled becomes a significant predictor of ASES for all other disability groups sampled.

Table 12
Multiple Regression Analysis to Determine the Best Predictor Variables for the ASES

Dependent Variable: ASES		R Square = 0.2624
Predictor Variables	Sum of Squares	F*
AD	15256.84	40.70
Length of Time with Primary Disability	1868.10	4.98
Educational Level	1003.04	2.68

*P<.05

A multiple regression analysis was performed for the variables of ASES, age, educational level, length of primary disability and total time disabled to determine the best set of predictor variables for those individuals in need of acceptance of disability counseling. The bset set is level of assertive behavior, age, and educational level. With information from the coefficients of determination, it can be determined that these variables account for, respectively, 23%, 4% and 5% of the variation of AD scores. These variables therefore explain 29% of the variation in the AD score. The results in Table 13 present the R-square values and the ANOVA summary table for these significant variables.

A multiple regression analysis was performed to determine the best set of predictor variables for acceptance of disability for all disability groups sampled except mentally retarded. The mentally retarded group, unlike all other disability groups, had had their disability for life. Results in Table E-3, Appendix E, indicate that length of primary disability and total time disabled became significant predictors of AD for all other disability groups sampled.

A _t_-test for independent samples was used to determine if there was a significant difference in the level of assertive behavior between this disabled sample and the non-disabled norm group for the ASES. Results in Table 14 indicate a significant difference between the disabled sample group and the norm group for the ASES.

A t-test for independent samples was also used to determine if there was a significant difference between disabled rehabilitation counseling clients and the disabled AD norm group. The results in Table 14 indicate that there is no difference between disabled rehabilitation counseling clients and the AD norm group.

Table 13
Multiple Regression Analysis to Determine the Best Predictor Variables for AD

Dependent Variable: AD		R Square = 0.2959
Predictor Variables	Sum of Squares	F*
ASES	32926.65	37.62
Age	8737.44	9.98
Educational Level	6404.85	7.32

*P<.05

Table 14
Norm Group Comparison for ASES and AD Scales

ASES	N	Mean	S.D.	t-value
Sample	160	111	22.33	2.068*
Norm Group	640	115	20	
AD				
Sample	160	208.05	34.92	1.402
Norm Group	46	217.00	37.97	

*P<.05

CHAPTER FIVE
DISCUSSION, IMPLICATIONS AND CONCLUSIONS

Discussion

The results of this study indicate that there is a positive relationship between assertive behavior and degree of acceptance of disability among disabled persons. These results therefore also support the findings of Morgan and Leung (1980) who reported that a positive relationship exists between assertive behavior and acceptance of disability. Persons whose thoughts and feelings are more assertively expressed may move through the rehabilitation counseling process quicker and achieve positive acceptance of their disabilities.

There were no differences found in degrees of assertive behavior among disabled persons on the bases of sex, race, metropolitan/nonmetropolitan residence, marital status, age or educational level. These results support some, and contradict other, findings of Joiner et al. (1981). In their research, Joiner et al. (1981) found significant differences between male and female assertive behavior scores and between metropolitan and nonmetropolitan residents. This study contradicts those findings. The sample size for this study was larger than the sample in the study by Joiner et al. (1981). In addition, both state and private rehabilitation clients were used in this study while only state clients were used in the other study.

Further, Joiner et al. (1981) found no significant differences between assertive behavior and age, race, marital status or educational level. Those findings are supported by the results of this study. Assertive behavior levels are lower for disabled persons than for nondisabled persons according to the results of this study but are no affected by these variables.

This study also investigated the differences in acceptance of disability on the bases of sex, race, metropolitan/nonmetropolitan residence, marital status, age and educational level. No significant differences were found in the acceptance of disability level among disabled persons on the bases of sex, residence or age. Significant differences were found between AD scores and race, marital status and educational level. These results support some of the findings by Thomas et al. (1976) who also found no relationship between disabled persons' acceptance of their disability and their age. Significant differences between education level and acceptance of disability found in this study support similar contentions by Thomas et al. (1976) and Safilios-Rothschild (1970). However, this study also found significant differences between AD and race and marital status which contradicts the findings of Thomas et al. (1976). They found no significant differences between acceptance of disability and these variables. The results indicate that White persons are more positively accepting of their disabilities than Black persons. White persons with disabilities may be able to identify more community support systems and opportunities for readjustment into society than Black persons. In addition, disabled divorced persons are significantly more

positively accepting of their disabilities than single, married, separated or widowed disabled persons. Divorced persons may have more experience with the realities of personal acceptance and adjustment after personal trauma.

Type of disability was found to be a significant predictor of assertiveness. These results seem to clarify contentions made by Joiner et al. (1981) who found no significant differences in ASES scores among disability groups. However, they noted high and low scores between the disability groups and suggested that more research was needed to clarify the relationship of disability type and assertive behavior. The blind group of individuals were found to be significantly more assertive than the other disability groups: substance abuse, deaf, spinal cord injury, cardiac disability, orthopedic disability, mentally retarded, and neurologic disability. Blind persons and others have advocated for legislation and resultant money for the benefit of blind persons. The educational opportunities and assistance provided by programs for blind persons may enhance blind persons assertion levels. Persons with neurologic disabilities were found to be significantly less assertive than the rest of the sample. Persons with neurologic disabilities may have complicating lesions in the brain which may effect mood and behavior.

Type of disability was also found to be a significant predictor of acceptance of disability. The deaf group and the blind group of people in the sample were significantly more accepting of their disabilities than the people in the cardiac, substance abuse, orthopedic or mentally retarded groups.

Educational and support systems exist for blind persons and for deaf persons and may contribute to their positive acceptance of their disabilities. The spinal cord injured group was significantly more accepting of their disability than the orthopedic disability group and the mentally retarded group. Legislation, and resultant economic support, is currently focused on the rehabilitation of the spinal cord injured. The programs provided with this economic support may be facilitating the positive acceptance of disability among this group. In addition, the neurologic, the cardiac disability groups and the substance abuser group were significantly more accepting of their disability than the mentally retarded group. The mentally retarded group of individuals in this study were classified mild or borderline and had relatively high I.Q. levels. These persons expressed frustration with their condition and were aware but unsatisfied with their limitations. This awareness and frustration may contribute to their relatively low level of positive acceptance of their disability.

Length of time disabled was not found to be a significant variable for assertiveness or acceptance of disability in this study. These results support similar findings by Joiner et al. (1981) who found that the length of time that a person was disabled was not a significant factor in their assertiveness level. Likewise, these results support Comer and Piliavin (1975) whose study suggest that length of time disabled may not be related to acceptance of disability.

The best predictor variables for assertiveness and for acceptance of disability were determined by multiple regression analyses. The best predictor variables for assertiveness were acceptance of disability, length of time with primary disability and educational level. The best predictor variables for acceptance of disability were assertiveness, age and educational level. These results agree with the findings of significant positive correlations between the ASES and AD, the ASES and level of education, the AD and level of education and the AD and age.

There were negative correlations found between age and educational level, length of primary disability and educational level, and total time disabled and educational level. As age, length of primary disability and total time disabled increased, educational level decreased.

In order to compare the study with the ASES and AD with the norm groups for each instrument, *t*-tests were performed. The results indicated that there was a significant difference between the study sample of disabled individuals and the ASES norm group of non-disabled persons. This result supports the findings of Joiner et al. (1981) that disabled persons are less assertive than non-disabled persons. Disabled persons may be less confident of themselves and less able to assert their thoughts and feelings. They may also have communication skills that may hinder their assertion levels. In addition, society may restrict the opportunities of the disabled to assert themselves through social and vocational barriers.

Further, the study sample of disabled individuals was not significantly different from the AD norm group of disabled persons. This result lends support to the representativeness of this sample for the disabled persons in the rehabilitation counseling process.

Implications

One implication of this study is that there is an empirically identified need for assertive behavior training and acceptance of disability counseling with certain groups of disabled individuals. In addition, there are demographic factors that may be helpful to rehabilitation counselors and program administrators for predicting low assertive and low accepting groups. These groups of people may be targeted for assertion training thus increasing relevant services to clients. Further, rehabilitation counselors and program administrators may be encouraged to periodically assess service needs of their clients with the instruments used in this study or similar instruments, to ensure relevant service provision.

Another implication of this study is that since a positive relationship appears to exist between disabled persons' acceptance of disabilities and assertive behavior levels, it may be possible to increase persons acceptance of disabilities through assertive behavior training. Likewise, facilitating persons' acceptance of disability may enhance their assertive behavior levels. Rehabilitation counselors trained in teaching assertion skills and facilitating acceptance of disability may be

able to decrease duplication of services by providing only one of those counseling techniques and therefore increase the economy and efficiency of services.

Implications for further research include rehabilitation counselors and program administrators conducting studies to clarify the effects of assertion training on acceptance of disability level. Likewise, the effects of acceptance of disability counseling on assertion levels could be investigated. Additional studies could clarify the role and function of assertive behavior and acceptance of disability on the successful rehabilitation of disabled persons. Finally, the need, role and function of other rehabilitation counseling techniques could be assessed to increase accountability for rehabilitation counseling program funding. The results of these studies could be shared with other rehabilitation counselors through staff meetings, workshops, professional journals and the regional and national conventions for rehabilitation counselors.

Conclusions

Assertion training and acceptance of disability facilitation are two counseling techniques used in rehabilitation counseling. The purpose of this study was to investigate the relationship between assertive behavior levels and acceptance of disability in the rehabilitation counseling process of disabled persons. The study also determined if there were differences in the degrees of assertive behavior and acceptance of disability among disabled persons based on age, sex, race,

educational level, marital status, metropolitan/nonmetropolitan residence, type of disability and length of time disabled.

The results indicate that there is a positive relationship between assertion and acceptance of disability and that there is a need for assertion training and acceptance of disability counseling with disabled persons. In addition, there are identifying variables that can assist rehabilitation counselors in targeting groups for one of these counseling services.

These counseling services have been used effectively to facilitate disabled persons' rehabilitation counseling processes and contribute to their successful re-entry into society. Assertive behavior training is a short term behaviorally oriented counseling technique that may be the most expedient way to increase levels of assertion and acceptance of disability. During these times of economic shortage the importance of relevant rehabilitation services and lack of duplication is even more in focus. The support of successful rehabilitation, rather than maintenance, of disabled individuals to productive lives is sound social and economic policy.

APPENDIX A

DESCRIPTIVE DATA FORM

1. Age_____.
2. Sex_____.
3. Race_____.
4. Highest grade completed in school_____.
5. Marital Status:
   a) single_____.
   b) married_____.
   c) separated_____.
   d) divorced_____.
   e) widowed_____.
6. What is your primary disability?_____.
7. How long have you had this disability?_____Years _____Months.
8. Have you had other disabilities? ___Yes ___No.

   Answer number 9 if you answered yes to number 8.
9. Considering your primary disability and all other how long have you been disabled?_____Years_____ Months.
10. What city do you live in?_____.

    or do you live outside the city?_____.

APPENDIX B

REHABILITATION SERVICE AGENCIES

Department of Vocational Rehabilitation, Florida Districts II and IV*

Developmental Services, Florida Districts II and IV*

Blind Services, Gainesville and Jacksonville, Florida

Corner Drug Store, Gainesville, Florida

Disability Awareness Now, Gainesville, Florida

American Association of Retarded Citizens, Gainesville, Starke, Orange Park and Jacksonville, Florida

Rehabilitation Counseling Resource and Research Center, Gainesville, Florida

Epilepsy Services, Gainesville, Florida

Shands Teaching Hospital, Gainesville, Florida

St. John's Hospital, Jacksonville, Florida

Rehabilitation Consultants, Gainesville, Florida

---

*District II counties are Alachua, Bradford, Citrus, Columbia, Dixie, Gilchrist, Hamilton, Hernando, Lafayette, Lake, Levy, Marion, Putnam, Sumter, Suwanee and Union. District IV counties are Baker, Clay, Duval, Flagler, Nassau, St. Johns and Volusia.

APPENDIX C

INSTRUCTIONS TO REHABILITATION PRACTITIONER

I. (to be read or signed for hearing impaired by counselor to client after obtaining signatures on Informed Consent Forms)

This information is for research purposes only. Your participation is entirely voluntary. All information that you give is strictly confidential. The entire process will take about 45 minutes. Your participation is greatly appreciated.

II. A. Give client Adult Self Expression Scale and answer sheet.

B. Read (or sign for hearing impaired) instructions:

"The following inventory is designed to provide information about the way you express yourself. Please answer the questions by blackening the appropriate box from 0 to 4 on the answer sheet. Your answer should indicate how you generally express yourself in a variety of situations. If a particular situation does not apply to you, answer as you think you would respond in that situation. Your answer should not reflect how you feel you ought to act or how you would like to act. Do not deliberate over any individual question. Please work quickly. Your first response is probably your most accurate one" (Gay, 1974).

C. Play tape of instrument for visually impaired.

D. When client completes ASES, collect instrument.

III. A. Give client Acceptance to Disability Scale.

B. Read (or sign for hearing impaired) instructions:

"The following instrument is designed to provide information about your feelings toward your disability. Please read each statement and mark the appropriate response to the statement."

C. Play tape of instrument for visually impaired.

D. When client completes AD, collect materials.

IV. A. Give client descriptive data form and ask client to complete it in full.

B. Please read descriptive data form to visually impaired clients and ask them to write down their responses on a piece of paper.

C. When client finishes, collect all materials from client.

D. Thank the client for his/her time and cooperation.

E. PLEASE WRITE CLIENT'S TYPE OF PRIMARY DISABILITY ON THE TOP OF THE DESCRIPTIVE DATA SHEET.

F. Staple or clip all materials for one client together. Please include Informed Consent Form.

THANK YOU FOR YOUR TIME AND PARTICIPATION.

APPENDIX D

INFORMED CONSENT FORM

This information is for research peuposes only. Your participation is entirely voluntary. All information that you give is strictly confidential. The entire process will take about 45 minutes. Thank you for participating.

You will be given three (3) questionnaires to fill out. The orange questionnaire is designed to provide information about the way you express yourself. The yellow one is designed to provide information about your feelings toward your disability. The blue sheet asks for information about you to be used for this research project.

There will be no monetary compensation.

Please read the following statement and sign at the bottom.

> I have read and I understand the procedure described above. I agree to participate in the procedure and I have received a copy of this description.

Subject Date	Witness Date
Paula Lovett Principal Investigator	740 N.W. 23rd Ave., Gainesville Address City Florida State Date

APPENDIX E

TABLES

In order to investigate fully the relationship between length of time disabled and assertiveness and acceptance of disability a Pearson product moment correlation coefficient was analyzed on all disability groups except the mentally retarded. All of the twenty subjects in the mentally retarded disability group, unlike any other disability group sampled, had been disabled for life. Results in Table 1 indicate positive correlations for assertiveness and acceptance of disability were found with length of primary disability and total time disabled when the data from the mentally retarded group was not included. All other positive correlations remained the same; ASES and AD, ASES and educational level, AD and age, and AD and educational level. However, the negative correlations reported in Chapter Four; age and educational level, length of primary disability and educational level, and total time disabled and education were not significant when the data from the mentally retarded group were not included (See Table E-1, Appendix E).

Without the data from the mentally retarded group, although the correlation is negative, the educational level does not significantly decrease as age increases. In addition, educational level does not significantly decrease as length of

Primary disability and total time disabled increase. Further, the results of multiple regression analyses in Table E-2 and E-3 support the relationship of length of primary disability and total time disabled with assertiveness and acceptance of disability with all disability groups except the mentally retarded. The other predictor variables remain the same for assertiveness and acceptance of disability as reported in Chapter Four.

Table E-1
Pearson Product Moment Correlation Coefficient with all Disability Groups
Except Mentally Retarded

	ASES	AD	Age	Education Level	Primary Disability	Total Time Disabled	
ASES	1.00000	0.45356*	0.09018	0.22783	0.24886	0.21312	←Pearson r
	0.0000	0.0001	0.2893	0.0068	0.0030	0.0115	←Probability
AD	0.45356*	1.00000	0.20506	0.24720	0.20751	0.21766	
	0.0001	0.0000	0.0151	0.0032	0.0139	0.0098	
Age	0.09018	0.20506*	1.00000	-0.10857	0.04007	0.03401	
	0.2893	0.0151	0.0000	0.2016	0.6388	0.6900	
Education Level	0.22783*	0.24720*	-0.10857	1.00000	0.08828	0.06885	
	0.0068	0.0032	0.2016	0.0000	0.2996	0.4189	
Length of Primary Disability	0.24886*	0.20751*	0.04007	0.08828	1.00000	0.98002	
	0.0030	0.0139	0.6383	0.2996	0.0000	0.0001	
Total Time Disabled	0.21312*	0.21766*	0.03401	0.06885	0.98002	1.00000	
	0.0115	0.0098	0.6900	0.4189	0.0001	0.0000	

*P<.05

Table E-2
Multiple Regression Analysis to Determine the Best Predictor Variables for ASES Including all Disability Groups Except Mentally Retarded

Dependent Variable: ASES		R Square = 0.2738
Predictor Variables	Sum of Squares	F*
AD	10572.40	27.98
Length of Time with Primary Disability	2850.52	7.54
Educational Level	614.64	1.63
Total Time Disabled	2126.44	5.63

*P<.05

Table E-3
Multiple Regression Analysis to Determine the Best Predictor Variables for AD Including all Disability Groups Except Mentally Retarded

Dependent Variables: AD		R Square = 0.2932
Predictor Variables	Sum of Squares	F*
ASES	21755.65	25.96
Age	5573.04	6.65
Length of Primary Disability	2749.29	3.28
Educational Level	4958.84	5.92
Total Time Disabled	3691.04	4.40

*P<.05

BIBLIOGRAPHY

Alexy, W. D. Coping with loss: The principal theme postulate. Rehabilitation Literature, March-April, 1980, 4(3-4), 66-71.

Appelbaum, A. S., Luma, J. M., & Johnson, J. H. Internal-external control and assertiveness of subjects high and low in social desirability. Psychological Reports, 1975, 37, 319-322.

Bates, H. D., & Zimmerman, S. F. Toward the development of a screening scale for assertive training. Psychological Reports, 1971, 28, 99-107.

Blank, H. R. Helping the client accept his disability. In A. Jacobs, J. P. Jorden, & S. C. DiMichael, Counseling in the rehabilitation process. New York: Columbus University, Bureau of Publications, 1961.

Boone, S. E., Roessler, R. T., & Cooper, P. G. Hope and manifest anxiety: Motivational dynamics of acceptance of disability. Journal of Counseling Psychology, 1978, 25 (6), 551-556.

Bowley, J. Attachment and loss: Separation. New York: Basic Books, 1973.

Bureau of Economic and Business Research, College of Business. Florida Statistical Abstracts. Gainesville, Florida: University Press, 1980.

Cobb, A. B. Medical and psychological aspects of disability. Springfield, Illinois: Charles C. Thomas, 1973.

Comer, R. C., & Piliavan, J. A. As others see us: Attitudes of physically handicapped and normals toward own and other groups. Rehabilitation Literature, July 1975, 36 (7), 206-225.

Cull, J. G., & Hardy, R. E. Vocational rehabilitation: Profession and process. Springfield, Illinois: Charles C. Thomas, 1972.

Dembo, T., Leviton, G. L., & Wright, B. A. Adjustment to misfortune: A problem of social-psychological rehabilitation. Artificial Limbs, autumn, 1956, 3(2), 4-6. Reprinted in Rehabilitation Psychology, 1975, 22(1), 1-100.

Doyle, M. A., & Biaggio, M. K. Expression of anger as a function of assertiveness and sex. Journal of Clinical Psychology, 1981, 37(1), 154-157.

Eisler, R. M., Hersen, M., & Miller, P. M. Effects of modeling on components of assertive behavior. Journal of Behavior Therapy and Experimental Psychiatry, 1973, 4, 1-6.

Engel, G. L. Sudden and rapid death during psychological stress. Annals of Internal Medicine, 1971, 74, 771-782.

English, R. W. Correlates of stigma towards physically disabled persons. Rehabilitation Research Practice Review, Fall 1977, 2(4), 1-15.

Freud, S. Mourning and melancholia. Standard Edition, 14, 237-258. London: Hogarth Press, 1957.

Galassi, J. P., DeLo, J. S., Galassi, M. P., & Bastien, S. The college self expression scale: A measure of assertiveness. Behavior Therapy, 1974, 5, 1965-1971.

Galassi, J. P., & Galassi, M. D. Validity of a measure of assertiveness. Journal of Counseling Psychology, 1974, 21, 248-250.

Galassi, M. D., & Galassi, J. P. Assert yourself! New York: Human Science Press, 1977.

Gay, M. L. The development of an assertiveness inventory for adults in a community college setting. (Doctoral Dissertation, University of North Carolina, 1974), Dissertation Abstracts International, 1974, 36, 128A. (University Microfilms No. 75-15, 637).

Gay, M. L., Hollandsworth, J. G., & Galassi, J. P. An assertiveness inventory for adults. Journal of Counseling Psychology, 1975, 22, 340-344.

Gellman, W. Projections in the field of physical disability, Rehabilitation Literature, 1974, 35, 2-9.

Gorecki, P. R., Dickson, A. L., Anderson, H. N., & Jones, G. E. Relationship between contrived in vivo and roleplay assertive behavior. Journal of Clinical Psychology, 1981, 37(1), 104-107.

Granat, J. P. Assertiveness training and the mentally retarded. Rehabilitation Counseling Bulletin, December 1978, 22(2), 100-107.

Grasha, A. F., & Kirschenbaum, D. S. Psychology of adjustment and competence: An applied approach. Cambridge, Massachusetts: Winthrop, 1980.

Grayson, M. The concept of acceptance in physical rehabilitation. Military Surgeon, 1950, 107, 221-226.

Grimes, J. W. The effects of assertion training on severely disabled student/clients. The Journal of Applied Rehabilitation Counseling, Spring, 1980, 11(1), 36-39.

Hamilton, K. Counseling the handicapped in the rehabilitation process. New York: Ronald Press, 1950.

Hollandsworth, J. G., Galassi, J. P., & Gay, M. L. The adult self expression scale: Validation by the multitrait-Multimethod procedure. Journal of Clinical Psychology, 1977, 33(2), 407-415.

Joiner, J. G., Lovett, P. S., & Hague, L. K. Evaluation of assertiveness of disabled individuals in the rehabilitation process. Manuscript submitted for publication, 1981.

Kazdin, A. E. Effects of covert modeling and model reinforcement on assertive behavior. Journal of Abnormal Psychology, 1974, 83, 240-252.

Kemp, B. J., & Vash, C. L. A compairson between two placement programs for hard-core unemployed persons. Journal of Employment Counseling, September 1971, ,109-115.

Kleck, R. Physical stigma and nonverbal cues emitted in face to face interaction. Human Relations, 1968, 21(11), 19-28.

Kleck, R., Onan, H., & Hastorf, A. N. The effects of physical deviance upon face to face interaction. Human Relations, 1966, 19(4), 425-436.

Kubler-Ross, E. On death and dying. New York: Macmillan, 1969.

Kurtz, R. A. Advocacy for the mentally retarded: The development of a new social role. In M. J. Begab & S. A. Richardson, The mentally retarded and society: A social science perspective. Baltimore, Maryland: University Park Press, 1975.

Lange, A., & Jakubowski, P. Responsible assertive behavior, Champagne, Illinois: Research Press, 1976.

Larson, D., & Spreitzer, M. The disabled role, affluence, and the meaning of work. Journal of Rehabilitation, 1970, 36(4), 29-32.

Lazarus, R. S. Psychological stress and the coping process. New York: McGraw-Hill, 1966.

Levine, L. The impact of disability. Journal of Rehabilitation, 1959, 25(6), 10-12.

Lindemann, E. Symptomatology and the management of acute grief. American Journal of Psychiatry, September, 1944, 101, 141-148.

Lindquist, C. U., Lindsay, J. S., & White, G. D. Assessment of assertiveness in drug abusers. Journal of Clinical Psychology, 1979, 35(3), 676-679.

Linkowski, D. C. A scale to measure acceptance of disability. Rehabilitation Counseling Bulletin, 1971, 14(4), 236-244.

Linkowski, D. C., & Dunn, M. A. Self concept and acceptance of disability. Rehabilitation Counseling Bulletin, 1974, 17(1), 28-32.

Luck, R. S., & Lassiter, R. Assertive behavior development for rehabilitation personnel. The Journal of Applied Rehabilitation Counseling, 1978, 9(2), 6-9.

Martorano, R. D. Mood and social perception in four alcoholics: Effects of drinking and assertion training. Quarterly Journal of Studies on Alcohol, 1974, 35, 445-457.

McFall, R. M., & Marston, A. R. An experimental investigation of behavioral rehearsal in assertive training. Journal of Abnormal Psychiatry, 1970, 76, 295-303.

McGowan, J. P., & Porter, T. L. An introduction to the vocational rehabilitation process. United States Department of health, Education and Welfare, Vocational Rehabilitation Administration, Washington, D. C., 1967.

Mishel, M. H. Assertion training with handicapped persons. Journal of Counseling Psychology, 1978, 25(3), 238-241.

Morgan, B., & Leung, P. Effects of assertion training on acceptance of disability by physically disabled university students. Journal of Counseling Psychology, 1980, 27(2), 209-212.

North Central Florida Health Planning Council, Inc. Health Systems Plan. Newberry, Florida: New Image Printing, 1980.

Orenstein, H., Orenstein, E., & Carr, J. E. Assertiveness and anxiety, a correlational study. Journal of Behavioral Therapy and Experimental Psychiatry, 1975, 6, 203-207.

Page, R. C., Holland, B., Rand, M. E., Gartin, B. C., & Dowling, D. A. Assertiveness training groups with the disabled, a pilot study. Journal of Rehabilitation, 1981, 47(2), 52-55.

Parkes, C. M. Bereavement: Studies of grief in adult life. New York: International Universities Press, 1972.

Percell, L. P., Berwick, P. T., & Beigel, A. The effects of assertive training on self concept and anxiety. Archives of General Psychiatry, 1974, 31, 502-504.

Rimm, D. C., Hill, G. A., Brown, N. N., & Stewart, J. E. Group assertive training in treatment of expression of inappropriate anger. Psychological Reports, 1974, 34, 791-798.

Rubin, S. E., & Roessler, R. T. Foundations of the vocational rehabilitation process. Baltimore: University Park Press, 1978.

Safilios-Rothschild, C. The sociology and social psychology of disability and rehabilitation. New York: Random House, 1970.

Schoenbert, B., Carr, S. C., Peretz, D., & Kutscher, A. K. Loss and grief: Psychological management in medical practice. New York: Columbia University Press, 1970.

Selye, H. The stress of life. New York: McGraw-Hill, 1956.

Serber, M. Teaching the non-verbal component of assertive training. Journal of Behavior Therapy and Experimental Psychiatry, 1972, 3, 179-183.

Shelton, R. L. Assertive training: Consumer-beware. Personnel and Guidance Journal, 1977, 55(8), 465-468.

Siller, J. The psychological situation of the disabled with spinal cord injuries. Rehabilitation Literature, 1969, 30, 290-296.

Siller, J. The structure of attitudes toward the disabled (U.S. Public Health Service Publication No. RD-707-1967). Washington, D. C.: U.S. Government Printing Office, 1970.

Siller, J. Attitudes toward disabled. In H. Rusalem & D. Malikin, Contemporary vocational rehabilitation. New York: New York Press, 1976, 63-82.

Smith-Hanen, S. Socialization of the physically handicapped. Journal of Rehabilitation Counseling, 1976, 7(3), 131-139.

Starr, P., & Heiserman, K. Acceptance of disability by teenagers with oral facial clefts. Rehabilitation Counseling Bulletin, 1977, 20(3), 198-201.

Stewart, T. D., & Rossier, A. B. Psychological consideration in the adjustment to spinal cord injury. Rehabilitation Literature, 1978, 39(3), 75-80.

Straker, P. D. Effects of assertion training and social skills training on self-esteem and self-assertion in educable and trainable noninstitutionalized mentally retarded adults (Doctoral Dissertation, Hofstra University, 1978). Dissertation Abstracts International, 1979, 39, 6103B (University Microfilm No. 79-12, 471).

Suran, B. G., & Rizzo, J. V. Special children: An integrated approach. Glenville, Illinois: Scott Foresman and Company, 1979.

Thomas, K. R., Davis, R. M., & Hochman, M. E. Correlates of disability acceptance in amputee. Rehabilitation Counseling Bulletin, 1976, 19(3), 508-511.

Thorenson, W. T., & Kerr, B. A. The stigmatizing aspects of severe disability: Strategies for change. Journal of Applied Rehabilitation Counseling, 1978, 9(2), 21-26.

Wolpe, J. The practice of behavior therapy. New York: Pergamon Press, 1969.

Wolpe, J. The practice of behavior therapy (second edition). New York: Pergamon Press, 1974.

Wright, B. A. Physical disability--A psychological approach. New York: Harper and Row, 1960.

Yuker, H. E., Block, J. R., & Younng, J. H. The measurement of attitudes toward disabled persons. Albertson, New York: Human Resources Center, 1966.

Ziller, R. C., & Smith, D. E. A phenomenological utilization of photographs. Journal of phenomenological psychology, Spring, 1977, 1(2), 172-183.

Zisfein, L., & Rosen, M. Personal adjustment training: A group counseling program for institutionalized mentally retarded persons. Mental Retardation, 1973, 4, 16-20.

BIOGRAPHICAL DATA

Paula Susan Lovett was born in Miami, Florida, on August 24, 1950. She lived in Miami for eighteen tropical years where she graduated from Edison High School. She then attended the University of Florida where she received her B. A. in psychology in June, 1972, and her master's in rehabilitation counseling in December, 1973. After graduation she began working as a counselor for the Florida Department of Corrections at Florida Correctional Institute.

In May, 1975, Paula married Jack Derovanssian and they moved to Mobile, Alabama, for one year for Jack to complete a medical internship. At the end of that year, Paula and Jack moved back to Florida where she worked as a counselor in Clearwater, Florida.

Paula moved to Orange Park, Florida, with Jack and began commuting to Gainesville to work on her specialist degree in counselor education at the University of Florida. She became a candidate for the Doctor of Philosophy program in 1980.

Paula has been the director of the Rehabilitation Counseling, Resource and Research Center in Gainesville, Florida, for the past two years.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Paul Fitzgerald
Professor of Counselor
Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Larry Loesch
Professor of Counselor
Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, ad a dissertation for the degree of Doctor of Philosophy.

James Joiner
Associate Professor of
Rehabilitation Counseling

This dissertation was submitted to the Graduate Faculty of the Department of Counselor Education in the College of Education and to the Graduate Council, and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

May, 1982

F. G. Stehli
Dean for Graduate Studies and
Research