

THE RELATIONSHIP BETWEEN DOGMATISM AND NEUROTICISM
IN SUPERVISORS OF SHELTERED WORKSHOPS AND
CHANGES IN THE SELF-CONCEPT OF
HANDICAPPED EMPLOYEES

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The problem with which this investigation is concerned is whether or not dogmatism and neuroticism in supervisors of sheltered workshops is related to changes in the self-concept of handicapped employees. The measurements of dogmatism and neuroticism were accomplished through the use of Rokeach's Dogmatism Scale, (form E) and Winne's Neuroticism Scale. Fitt's Tennessee Self Concept Scale was used to measure the self-concept of the handicapped employees.

The data were taken from a sample of ten sheltered workshops located in Texas, Louisiana, and Oklahoma. Ninety handicapped employees were administered the self-concept scale during April, 1970. Fifty-nine of these subjects were available for posttesting three months later. During the posttest activity, thirty-three supervisors in charge of the fifty-nine employees were also administered the dogmatism and neuroticism scales.

The dissertation is divided into five chapters. Chapter I contains an introduction, the purposes of the study, a statement of the problem, the hypotheses, significance of the

study, and basic assumptions. Chapter II contains the theoretical rationale for the three primary variables and numerous secondary (control) variables. Chapter III contains the methodology used to collect the data, the procedure for selecting the sample, and the step-wise regression technique used to analyze the data. Chapter IV contains the analysis of the data, and Chapter V contains a summary of the research effort, findings, interpretations and recommendations for future research.

The findings revealed small positive relationships between changes in the scores of two of the eleven subscales of the Tennessee Self Concept Scale and the dogmatism scores of the supervisors. Neuroticism scores of the supervisors were positively related to four of the eleven subscale scores of the Tennessee Self Concept Scale. All tests were made at the .05 level of significance. These findings were contrary to theoretical expectations as much support appears in the literature for the notion that dogmatism and neuroticism damage interpersonal relationships. It should be remembered, however, that the findings did not hold true for a significant number of the self-concept subscale measures. The data were also analyzed to determine if self-concept scores were related to whether or not the handicapped employees dropped out of their rehabilitation programs. No relationships were evident on any of the eleven subscales of the self-concept scale.

An analysis was also made to determine if a relationship was present between dogmatism and neuroticism in supervisors and whether or not the handicapped employees dropped out of their rehabilitation programs. No relationships were evident.

Because of the apparent difficulty of effecting self-concept change after an individual has reached maturity, the most apparent recommendations for future investigations of this type is to increase the pre-post time period to six months or longer.

A shorter period might be conducive to change if the researcher would interject an experimental variable. Apparently this is needed because the workshop experience by itself was, in this study, insufficient to bring about self-concept change.

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CHAPTER I

BACKGROUND AND SIGNIFICANCE

Introduction

As is true in other societies, the quality of interpersonal relationships in America is lessened by the tendency of its relatively homogeneous citizen majority to use a variety of labels and subtle behavior patterns to denigrate its minority groups. For example, skin color produces group stereotypy vis-a-vis intellectual achievement, sex habits, work motivation, ad infinitum. Distinctions are also made on the basis of socioeconomic achievement, religious beliefs, and a variety of other characteristics which allegedly reveal something distasteful about the individual or group in question.

Physical disability also creates stereotypy or discrimination. Invidious distinctions on the basis of physical disability can be attributed, at least in part, to the fact that Americans have tended to accept the human figure only when it is normal (10, p. 19). Finding themselves physically abnormal or socially unacceptable because of such problems as retardation, alcoholism, epilepsy, mental illness, or cultural deprivation, these persons incur discriminatory treatment from their peers at home, on the job, and in many other social relationships.

Disabilities, since they place the disabled person into a lower occupational category, are also likely to lead to a substantial loss in personal income. In a society which places maximum emphasis on upward movements in the socio-economic strata, such a disability is generally not viewed as acceptable. Other forms of psychological harrassments are experienced in terms of added expenses for special medical care and the "replacement costs" incurred by losing income which would normally have been earned had the disability not occurred.

For economic and moral reasons, programs have been developed whose purpose is to offset the consequences of disablement. Early attempts were mainly to serve the wounded of World War I, but these were later expanded to encompass the retarded (13, p. 222). These early movements endeavored primarily to repair the disability and to find work which the client could perform--however menial or dehumanizing it might have been.

The "rehabilitative" success of this unidimensional approach was especially poor in terms of the comprehensiveness and longevity of the cure. Giving a client a prothesis and finding him a job were discovered to be only a part of the total solution (14, p. 1). Much more is involved in successful rehabilitation, as Conley states: "Feelings of inadequacy, dependency, insecurity, inferiority and rejection are often

experienced by the disabled and frequently by their friends and relatives" (5, p. 15). It was precisely this human aspect of the rehabilitation process that was ignored for so long and which allegedly prevented many potential long-range "cures" from taking place.

Fortunately, the psychological and social implications of disability became more apparent at the same time that a commitment in the areas of public health and welfare was taking place during the 1960's. The combining of federal monies with the increasing awareness of the psychological aspect of being handicapped expanded the number and scope of organizations designed to assist disabled people. The main emphasis was the minimization of the psychological and sociological as well as economic problems which grew out of a particular type of disability. Currently, there are numerous public and private agencies established for the purpose of assisting the handicapped--for example, mental health hospitals, schools for the blind or deaf, and vocational schools.

More pertinent to this study, however, is a type of rehabilitation facility commonly known as a sheltered workshop. Its purpose is to "rehabilitate" disabled clients to some level of economic independence and personal and social adjustment. The word "sheltered" refers to employment conditions that allow for considerable variation in the work performance of vocationally handicapped individuals. That is to say, production efficiency is not the primary purpose of the

workshop; rather, the purpose is to move the individual from an insufficient level of vocational and personal adjustment to one that is more or less self-sufficient. The word "workshop" means that the organization actually produces some kind of salable product, the returns from which are used to cover part or all of the cost of operation and the wages for the employees.

The unique contribution of sheltered workshops is that they provide a work environment in which disabled clients possibly can overcome the psychological, sociological, and vocational hindrances of their disability; further, it is an environment which retains the monetary motive but which is void of the intense competitive atmosphere found in private employment. The importance of receiving pay is an extremely significant aspect since it has been estimated that approximately 80 per cent of the clients in any sheltered workshop are either on welfare or at a marginal income level close to the poverty line, or they would be in one of these categories if their earnings from the workshop's program were terminated (24, pp. 1-12).

The Rehabilitation Counselor

The increased awareness of and concern for non-economic aspects of the rehabilitation process initially suggested that the rehabilitation counselor was the person who could achieve a more complete and lasting recovery for the client. He was

considered capable of treating the psycho-social consequences of being handicapped. Findings which grew out of investigations in this area, however, indicated that the counselor was not as effective as had been expected. The most significant discovery was the fact that large amounts of professional training did not automatically imply that the counselor was capable of effecting therapeutic results (2, pp. 235-246) since he must first be capable of establishing the kind of relationship necessary for positive therapy to occur. In fact, some non-professional counselors were found to be more effective than professionals (7, p. 22).

Another factor which contributed to the lack of confidence in the ability of the vocational rehabilitation counselor was the general blight of the environment in which the counselor was forced to operate. The typical counselor was overwhelmed by large case loads, large amounts of paperwork, and limited case service funds. He was also usually under pressure to achieve rapid client closures, regardless of the relative difficulty of his case load.

The Rehabilitation Evaluator

Other staff personnel who are supposed to assist the client in moving toward rehabilitation, also are present in the sheltered workshop environment. Usually when the client initially enters the workshop, he is evaluated in an attempt to identify his potential ability, his present work ability,

and any preference he may have for a particular kind of work activity (14, p. 46).

As was true of the counselor, the evaluator was found to make only a limited contribution to a positive rehabilitation experience. His contribution was limited because of the infrequent contact most evaluators have with their clients. The general procedure is to engaged in extensive evaluation and interpersonal activity during the client's introduction into the workshop. But because of the expensive and time-consuming nature of maintaining a continual, personal evaluation of the client's progress, the frequency of contacts falls off drastically once he has been initially evaluated and has assumed his position in the workshop (22).

The Workshop Supervisor

A review of the rehabilitation literature reveals that considerable attention has been devoted to examining the various contributions which workshop staff members who are engaged in helping clients have made towards successful rehabilitation outcomes. The implications are that both counselors and evaluators have potential for improving the rehabilitation program; but, because extraneous environmental factors enter the relationship, positive results are anything but pervasive.

Only recently has attention been focused on the one person in the workshop who is in contact more frequently with the

client than any other staff member. This person is the workshop supervisor, who is constantly interacting with his clients in reference to their work performance, social relationships with peers, work habits, personal hygiene habits, and so forth.

As mentioned previously, the client seldom sees the counselor because of the time-demanding nature of the counselor's duties. And he, as a rule, interacts with his evaluator only during the early part of his entire stay in the workshop--generally, the first week or two of a program which may last for over a year.

On the other hand, the production or floor supervisor continuously interacts with the client each day the client is on the job. The production supervisor makes judgments about the client's progress, his abilities, his attitudes, and his shortcomings. In order for his task to be carried out with maximum rehabilitation gain for the client, the quality of the relationship developed is thought to be of considerable import for the client's growth and development (1, 11, 9, 6, 23, 3, 16, 4, 19, 12, 21).

The Relationship of the Study to Existing Theory

The theory set forth in Chapter II is pertinent to this study because it is the framework within which cogent client and supervisor variables will be explained and related to

client self-concept change. Furthermore, assuming that certain empirical findings are produced within the confines of this theory, certain predictions can be made and remedial action taken by the professional workshop staff.

The Purposes of the Study

The purposes of this study are twofold. First, the relationships between several client and supervisory variables and their influence on the rehabilitation client will be set forth. Second, hypotheses which are deduced from these relationships will be formulated and tested.

Statement of the Problems

The problems to which this research addresses itself are

1. Is there a relationship between changes in the rehabilitation client's self-concept and the degree to which his supervisor is dogmatic or neurotic?
2. Is there a relationship between dropping out of the rehabilitation program and the degree to which his supervisor is dogmatic or neurotic?
3. Is there a relationship between self-concept scores and whether or not the client drops out, for negative reasons, from his rehabilitation program?

The Hypothesis

The principal guiding hypothesis is that there is a relationship between the self-concept change scores of rehabilitation clients and certain personality characteristics found in the client's supervisor.

The Sub-Hypotheses

1. There is an inverse relationship between changes in the clients' self-concept scores and the degree to which the clients' supervisors are dogmatic.
2. There is an inverse relationship between the changes in the clients' self-concept scores and the degree to which the clients' supervisors are neurotic.
3. There is an inverse relationship between dogmatic and/or neurotic supervisors and clients who, for negative reasons,* drop out of their rehabilitation program.
4. There is an inverse relationship between clients who drop out of their rehabilitation program and their self-concept scores. That is, the dropout rate will be high for clients with low self-concept scores.

Definition of Terms

1. Dogmatism--This term refers to the degree to which a person's belief/disbelief system is opened or closed, as measured by the dogmatism scale (18). The extent to which a belief/disbelief system is open or closed is "the extent to which the person can receive, evaluate, and act on relevant information received from the outside on its own intrinsic merits, unencumbered by irrelevant factors in the situation arising from within the person or from the outside" (18, p. 57).
2. Neuroticism--This term will be used herein to refer to psychopathologic behavior disorders that have developed out of an individual's unsuccessful attempts to deal with stress,

*Negative reasons, as opposed to positive reasons, has reference to a general classification as to why a particular client has dropped out of his rehabilitation program. These judgments were made by the staff members in charge of the client in question.

an inability to respond accurately to the structural requirements of a given situation, and an unusual discrepancy between what he does and his potential for doing (8).

3. Self-Concept--Herein, this construct is defined in the Rogerian manner: "The self-concept . . . may be thought of as an organized configuration of perceptions of the self which are admissible to awareness. It is composed of such elements as the perception of one's characteristics and abilities; the percepts and concepts of the self in relations to others and to the environment" (17, p. 136).

4. Sheltered Workshop--Here, this term will be used in the following way: "A sheltered workshop is a work-oriented rehabilitation facility with a controlled work environment and individual vocational goals which utilizes work experience and related services for assisting the handicapped person to progress toward normal living and a productive status" (20, p. 1).

5. Rehabilitation Client--This is a person with some form of disability, who has entered the sheltered workshop for rehabilitation into gainful employment and restoration to a viable level of psycho-social adjustment.

Significance of the Study

If the hypotheses developed for this research effort are verified, several possible policy recommendations can be made.

First, sheltered workshop administrators could include in their selection criteria a concern for the degree to which applicants for supervisory positions are dogmatic or neurotic. Second, training programs could be conducted for workshop supervisors in an attempt to reduce their dogmatic or neurotic tendencies. Third, special concern by the workshop staff could be given to those clients whose self-concept condition indicates a tendency prematurely to leave the workshop. Fourth, the demographic variables found to be associated with client change could be used to identify those clients who are most likely to benefit from the workshop experience.

Basic Assumptions

These basic assumptions have been made

1. The Rokeach Dogmatism Scale is a valid and reliable device for measuring dogmatism as defined herein.
2. The Winn's Neuroticism Scale is a valid and reliable device for measuring neuroticism as defined herein.
3. The Tennessee Self-Concept Scale measures with adequate validity and reliability self-concept as defined herein.

Organization of the Dissertation

The purpose of Chapter I has been to set forth the problem and attendant hypotheses upon which this study is centered. Chapter II is a presentation of the empirical, descriptive,

and intuitive rationale for both the principal variables of interest (client self-concept change, supervisor dogmatism, and supervisor neuroticism) and the variables of secondary importance (demographic characteristics of the clients and the supervisors). The third chapter is a description of the population and the sampling procedures used, the instruments used to collect the data, and the statistical techniques used to analyze the data. The fourth chapter is a presentation of the analysis of the data while the fifth chapter is an interpretation of the findings and the recommendations for future research.

CHAPTER BIBLIOGRAPHY

1. Barton, E. H. and E. F. Barton, The Requirements of Effective Sheltered Workshop Supervision, San Jose, California, Goodwill Industries Co. Inc., 1965.
2. Bergin, A. E., "Some Implications of Psychotherapy Research for Therapeutic Practice," Journal of Abnormal Psychology, LXXI (August, 1966), 235-246.
3. Brent, S. Z., "Personality Interaction--A Concept of Rehabilitation of the Disabled," American Journal of Physical Medicine, XXXVII (February, 1958), 16-17.
4. Burke, R. J. and D. S. Wilcox, "Effects of Different Patterns and Degrees of Openness in Superior-Subordinate Communications on Subordinate Job Satisfaction," Academy of Management Journal, (September, 1969), 319-326.
5. Conley, R. W., The Economics of Vocational Rehabilitation, Baltimore, Maryland, John Hopkins Press, 1965.
6. Goldin, G. J. and S. L. Percy, Dependency and Its Implications for Rehabilitation, Monograph No. 1, Boston, New England Rehabilitation Research Institute, Northeastern University, 1967.
7. Goldstein, A. P., Relationship-Enhancement in Counseling and Psychotherapy, R. Leslie, Editor, Behavior Modification in Rehabilitation Facilities, Hot Springs, Arkansas, 1968.
8. Horney, K., The Neurotic Personality of Our Time, New York, W. W. Norton and Company, 1937.
9. Janzen, F., R. A. MacGuffie, D. A. Israe and W. M. McPhee, Inter-personal Relationships in Rehabilitation: A Five Year Summary, Bulletin No. 5, Salt Lake City, Regional Rehabilitation Research Institute, University of Utah, 1969.
10. Kessler, H., Rehabilitation of the Physically Handicapped, New York, Columbia University Press, 1953.

11. Kunce, J. T. and C. S. Cope, Rehabilitation and the Culturally Disadvantaged, Research Series No. 1, Columbia, Missouri, University of Missouri, 1960.
12. Lytle, H. G., "Standards for Sheltered Workshops," Journal of Rehabilitation, XXVII (November, December, 1969), 12.
13. Neff, W., Work and Human Behavior, New York, Atherton Press, 1968.
14. Report of the National Citizens Advisory Committee on Vocational Rehabilitation, Washington, D. C., A Report to the Secretary of Health, Education and Welfare, 1968.
15. Report of the Regional Conference of Workshop Managers, Auburn, Extension Division of the University of Alabama, University of Alabama, 1962.
16. Rogers, C. R., "The Interpersonal Relationship: The Core of Guidance," Harvard Education Review, XXXII (Fall, 1962), 416-429.
17. Rogers, C. R., Client-Centered Therapy, Boston, Massachusetts, Houghton Mifflin Company, 1951.
18. Rokeach, M., The Open and Closed Mind, New York, Russell Sage Foundation, 1969.
19. Rusalem, H. and R. Baxt, Emerging Patterns of Rehabilitation Service Delivery, Washington, D. C., National Citizens Conference on Rehabilitation of the Disabled and Disadvantaged, No. date.
20. Sheltered Workshops: A Handbook, Washington, D. C., National Association of Sheltered Workshops and Homebound Programs, Inc., 1966.
21. Truax, C. B., Effective Vocational Rehabilitation: Differential Agency Practice and Client Outcomes, Discussion Papers, II, No. 5, Fayetteville, Arkansas, Rehabilitation Research and Training Center, University of Arkansas, 1969.
22. Vocational Evaluation and Work Adjustment Bulletin, Quarterly Publication of the Vocational Evaluation and Work Adjustment Association, No. 2, (April, June, 1969), 3-5.
23. Waltman, M., "Techniques for Helping the Working Clients," Journal of Rehabilitation, XXIX (May, June, 1963), 16.

24. Workshops in a Changing World--The Three Faces of the Sheltered Workshop, Washington, D. C., National Association of Sheltered Workshops and Homebound Programs, Inc., 1965.

CHAPTER II

THE VARIABLES

Introduction

Most research activities in the social sciences unfortunately are confronted with the problem of controlling secondary variables which may have significant bearing on the principal hypothesized variables under study. For example, supervisor dogmatism may be found to account for some of the variations in client self-concept scores, but other factors, such as disability type or the sex of the client, may also contribute to variation.

The purpose of Chapter II, therefore, is twofold: (1) to provide the rationale for the secondary variables, and (2) to provide the rationale for the three primary variables--client self-concept change, supervisor dogmatism, and supervisor neuroticism.

Variables Peripherally Related to the Client-Supervisor Relationship

The variables and the order in which they will appear herein are as follows: client sex, client age, client education, client marital status, number of dependents, number of jobs held last year, client income during 1969,

length of disability, client disability type, and client racial and ethnic background.

The supervisor variables which may be related to client change are the following: sex of supervisor, age of supervisor, number of clients supervising, religious preference, education level attained, years of supervisory experience, military service, and the supervisor's annual salary.

Client, Sex, Age, Education

A case can certainly be made for a client's sex, age, and education having an influence on his success or failure in rehabilitation. The available evidence which points to the variable of sex as being related to the rehabilitation process appears incomplete and, at best, inconsistent. In general, sex may be substantiated from the position of social role expectations which affect personality development and growth (46, pp. 332-33). For example, in looking at the incidents of socio-economic deprivation, Kunce (43, p. 6) claims that women experience deprivation more than men since they tend to earn less than males when doing the same work and since they are less likely to obtain jobs in the top salary brackets than are men. Both Gellman and DeMann (26, p. 138; 17, pp. 340-343), however, report in their studies that sex was not found to be a significant factor in the rehabilitation process.

Further inconsistency as to the relevance of sex as an important variable for rehabilitation can be drawn from Perlman (62), who found that a significantly larger percentage of rehabilitation clients who had successfully completed their programs were women. Neff (58, pp. 71-77) also found the variable of sex to be related to employment success.

In reference to age, it is fairly well established that personality formation tends to solidify as one becomes older. Therefore, young rehabilitation clients may be more amenable to change than older clients. In fact, Mahoney et al. (50) found the aged, culturally deprived client less likely to adapt to the challenge of rehabilitation programs. Of course, this particular variable is intermingled with a host of other variables such as the previous education, work history, and financial condition. McPhee et al. (53) found that successful rehabilitation clients were generally under thirty years of age at acceptance into the rehabilitation program. Ehrle (19) and DeMall (17, pp. 340-343) also found age to be associated with predicting successful rehabilitation outcome. Such findings are further supported by Litman (47, pp. 249-257), Cheatham (11), Eber (18), and Kuncce et al. (43).

Here, too, the evidence is contradictory. Gellman (26, p. 138), for example, reports finding that age was not a significant factor in predicting successful rehabilitation outcome. Also, Parsons (61), Neff (58), and Litman (47, p. 256)

found little evidence to support the validity of age as being an important variable.

It is held that educational achievement increases the self-awareness and understanding an individual may have of his environment as well as his ability to adapt to work. In the Ehrle (19) report based on 200 successful rehabilitation cases, the level of formal education completed was found to be a predictor of successful rehabilitation outcome. In reference to cultural disabilities, educational attainment has been related to the ability to break the poverty cycle by Kunce (43), Grotberg (31, pp. 413-434), and Miller (56). Logic would imply that reading level, verbal fluency, and verbal comprehension provide enhancement of one's knowledge of his surroundings. Thus, a better adjustment, one which is likely to lead to a successful rehabilitation experience, is more likely to be present in the client with a higher education. Not unlike the first two variables, the evidence in support of the predictability of education is contradictory since Gellman (26) stated that education background--along with other variables such as sex, age, and intelligence--was not significant in the rehabilitation outcome.

Clients' Marital Status and Number of Dependents

The rationale for the inclusion of the clients' marital status and number of dependents is based on the notion that a

dependent marital partner and/or dependent children will prove to be a measure of motivation not likely to be found among single and solely self-dependent clients, assuming all else to be equal. Several objective reports were found to support this proposition. Kunce et al. (44, p. 20) found that a significantly higher proportion of clients with dependents were likely to secure jobs than were clients without dependents.

Conley (13, p. 20), in his highly recognized work involving more than four thousand rehabilitation clients in Maryland, found that positive attitudes toward work by new clients in rehabilitation agencies were related to marital status, number of dependents, and employment history. In trying to explain this finding, Conley pointed out that the desire to avoid the loss to prestige associated with being without a job was greater in the clients with dependents. Weiner (81, pp. 687-694) also found the number of dependents to be related to rehabilitation outcome.

In some studies, however, no significant relationships were found relating marital status and number of dependents to successful rehabilitation (4, pp. 631-637; 14).

Socioeconomic Variables: Number of Jobs Held
Last Year and Income During 1969

The rationale for the inclusion of such variables as the clients' income and number of jobs held the previous year is

that those clients who have had no previous work history or who have experienced considerable job turnover during the year before coming to the rehabilitation facility are more likely to have need of psychosocial adjustment than those who have a more stable work history. Moreover, a stable work history might indicate a more stable financial picture contrasted to the financial conditions of those who have had a high job turnover rate or no income generating activity at all.

Certainly the duress experienced from economic destitution or from improper work adjustment has an effect on the handicapped who experience these conditions. Hammond (32) found success in eventual job placement by the helping agency to be related to a record of having full employment, owning either a house or a car, having a higher job status, and not being dependent on welfare or disability insurance. Eber (18) also found client vocational success after leaving the helping agency to be related to the client's work history before entry into the agency.

A study completed at the University of Oregon found successfully closed rehabilitation cases to be related to the client's having earned an income within the three months before entry into the helping facility (11). In one of the earliest publications pertaining to the handicapped and their rehabilitation, these clients were found to

previous work experience were considered to be in need of different experiences from those for other clients (73, p. 445). The implication, of course, is that past work history is an important determinant of rehabilitation outcome.

Length of Disability and Client
Disability Type

The age at which disability occurs, whether at birth or later, would seem to have a certain degree of influence on the course of the client in the rehabilitation program. It may, for instance, be easier for a person suffering from a congenital disability to do more positive work and make a better personal adjustment than the adult who suddenly finds himself disabled after his self-concept has achieved some structure and stability. Such an event then requires that the new condition be integrated within the old and stable notions about the self.

The research in this area does not provide strong support for or against this variable. Brent (10, pp. 16-17) holds that treatment orientations should be different for clients who received their disability before or at birth or during adolescence from that for those clients who became disabled after adolescence. The implication is that therapeutic change after adolescence requires a different kind of approach.

Barker (5) reported on several studies which attempted to relate adjustment with the age at which deafness occurred.

Some of his findings indicated that deafness at a young age presented a more difficult problem of adjustment than if it had occurred later in life.

In a massive five-year project conducted in Wisconsin, Wright (84) found that clients who were disabled at an early age benefited more from rehabilitation services than did older clients. Glick (28), however, has reported that the type and extent of disability are only of minor significance in regard to client change throughout the entire rehabilitation process.

Evidence both for and against the influence that the disability type has on the rehabilitation outcome is available. For instance, Brent (10, pp. 7-17) claimed that the body image and personality adjustment were inseparable. He implied that the type or severity of disability influenced the amount of effort necessary to reintegrate the disability into a stable personality. In support of Brent, Sankovsky (69) noted that the mental-emotional disabilities of some clients led them to terminate the rehabilitation program before completion.

Again, as was true with other variables, the supporting evidence is often contradictory. Neff (58) found no relationship between the type of disability and rehabilitation success, nor did Cheatham (11) or Parsons (61).

Racial and Ethnic Background of the Client

The question of the influence of the client's racial and ethnic background on the general nature of the rehabilitation process has received considerable attention in the literature. In reference to Negro clients, for example, a general observation can be made about the mere fact of having dark skin. Every Negro, rehabilitation client or not, "is damaged by the overwhelming fact that the world he lives in says, 'white is right; black is bad. . . .'" Along the same lines, the "self concept of the Negro is contaminated by the central fact that it is based on a color-caste complex" (45, pp. 13, 15).

Because part of human behavior can be explained in terms of what the person perceives to be the role expected of him, it easily follows that the Negro has been expected to act inferior and consequently has done so. For other social minority groups, inferior status positions have been less severe.

Some authors have found that ethnic background affects the rehabilitation process. Kluckholm and Strodtbeck (41), for example, found that Mexican-American clients looked to the family head for counsel and were unwilling to accept assistance and guidance from other sources. Therefore, the influence which the rehabilitation environment has on this ethnic group may be different from that for other

In a study involving 600 ninth-grade students in New Mexico, DeBlassie (15) found ethnic-group membership to be an influential variable in terms of how the subjects perceived themselves. Further support of ethnic background as being a relevant variable in successful rehabilitation has been posited by Hammond (32), Parsons et al. (61), and Eber (18). However, no support for this variable was reported by DeMann (17) and Schor (70), who found that ethnic background did not significantly discriminate between the successful and unsuccessful rehabilitant.

Supervisor Variables: Sex, Age, Number of Clients
Religion, Education, Years of Work
Experience, and Military Service

The quality of the relationship between the supervisor and his clients is not solely determined by the myriad characteristics brought to the relationship by the client. The supervisor also brings certain characteristics to the relationship which theoretically can have an effect on it. In addition to the personality variables of dogmatism and neuroticism, other supervisor demographic characteristics may contribute to the kind of supervisor-client relationship which is to be established and thus to the degree to which change is effected and successful rehabilitation takes place.

Because of the novelty of the concept that the workshop supervisor plays a therapeutic role in the rehabilitation

process, little empirical work has been done concerning the influence of supervisor characteristics on the client in a rehabilitation program. The research support for including various supervisor characteristics in this study is found in studies of helping relationships in general as well as in workshop supervisor-client studies in particular.

Regardless of the types of adjustment problems presented, Fuller (25, pp. 463-467) found that college freshmen of both sexes generally preferred male counselors. Koiler and Bird (42, pp. 96-106) found that female clients preferred male counselors if a female counselor was not available. Daane and Schmidt (14, pp. 129-135) found that if counselor empathy were present, the sex of the counselor was unimportant. In a profession related to the vocational rehabilitation field, the importance of sex as a determinant of client outcome or progress is neither supported nor rejected by the literature.

Barton (7) in a survey made to determine the requirements of effective workshop supervision, reported that 42 per cent of the 322 study participants felt that a high school education was necessary in order for the supervisor to function effectively, while 50 per cent felt that a junior high level was adequate. Some respondents also felt that past military experience as well as previous supervisory work experience would contribute positively to one's ability to supervise and work with clients.

The rationale for the significance of the religious affiliation of the supervisor comes from Rokeach. In an attempt to understand the relationship between religious affiliation and dogmatism, Rokeach discovered that people measured to be high in dogmatism tend to reject more readily denominations other than their own; and the more dissimilar the other denominations are, the greater they are rejected (68, p. 300).

Support for the concept that the number of clients assigned to a particular supervisor is relevant can be established on the basis of time spent with each client. A supervisor in charge of a very small number of clients is more likely to have more frequent contacts than if the number of supervisees were very large. In the industrial management field, it was often reasoned that, as the number of subordinates increases arithmetically, the number of potential relationships for the manager to deal with increases geometrically. Because the client in a sheltered workshop requires considerably more assistance in becoming oriented to his work than an average industrial worker, the supervisor's time needed for each client is more demanding.

No research evidence was found to support the annual salary of the workshop supervisor as a variable related to client change or to the outcome of the rehabilitation process. Nevertheless, it has been included for control purposes.

The Three Principle Hypothesized Variables

Introduction

This study is centered upon the relationship between two personality variables present in workshop supervisors and the self-concept change of rehabilitation clients. Hypothetically, the presence of dogmatism or neuroticism in supervisors will have an influence on client self-concept change.

This section of the present chapter will be devoted to the following points: (1) describing the self-concept construct; (2) describing the importance of the self-concept in the field on vocational rehabilitation; and, (3) describing how dogmatic and neurotic supervisors can conceivably prevent or retard positive self-concept change in handicapped clients.

Client Self-Concept

In attempting to discover a theoretical basis for explaining human behavior, many psychologists have turned to the construct of the self as a viable model for interpreting the many facets of human activity.

Interest in the self-concept arose early in the history of psychology when one of its first proponents, William James, wrote in 1890 of the multidimensionality of the self. He felt that the self was divided into a dynamic self, which was the spiritual and social aspect, and the static self, which was unalterable and unchanging ego (36). Of more recent vintage, Allport (3, p. 40) articulated the idea of

the self as being a significant aspect of personality that makes for inward unity. He did not see the self as the sole determinant of personality growth or change but clearly an integral part of it. Certain aspects of the personality can move independently of self, but it is the self image which often acts as a guiding light for variations in the personality. Other writers, such as Mead (54), posited the importance of self theory by holding that people respond to themselves because of the way others respond to them.

Perhaps the best known contemporary self-concept theorists are Rogers (1951) and Combs and Snygg (1959). Combs and Snygg offered probably the most encompassing theory since they felt that all human behavior is in some way related to the need to maintain and enhance the self (12). Therefore, future behavior, personality differences, and personality growth and development can be understood by increasing the understanding of the nature of the self-concept.

Rogers offered a more limited view--one that will be utilized for the purpose of this investigation--by stating that,

The self-concept or self-structure may be thought of as an organized configuration of perceptions of the self which are admissable to awareness. It is composed of such elements as the perceptions of one's characteristics and abilities; the percepts and concepts of the self in relation to others and to the environment; the value qualities which are perceived as associated with experiences and objects; and goals and ideas which are perceived as having positive or negative valence (65, pp. 136-137).

Rogers restricted his theoretical construct by emphasizing only those items that are brought into conscious awareness. There is a propensity for the organism to engage in a perceptual filtering process: those perceptual items which are not either rejected or distorted to "fit" the self's characteristics are accepted. Those concepts of self which are based on objective experience will determine the "healthiness" of self.

Any experience inconsistent with the self-concept will be perceived as threatening, and defenses will be established that deny these threatening experiences to consciousness. In short, the self becomes less in tune with reality, and the individual is in conflict or maladjusted. Rogerian therapy permits the individual to perceive and accept into his self-awareness more of the conflicting experiences so as to permit positive growth of personality.

Rogers stated in reference to the client in therapy:

He moves from generalizations which have been found unsatisfactory for guiding his life, to an examination of the rich primary experiences upon which they are based, a movement which exposes the falsity of many of his generalizations, and provides a basis for new and more adequate abstractions (65, p. 143).

The Importance of the Self-Concept in Rehabilitation

It is a well-accepted fact that attempts to rehabilitate the majority of the clients seeking services must include, as

an integral part of the process, considerations designed to improve the psychological adjustment of the client. The evidence within the counseling professions as to the importance of improving or assisting the psycho-social development of the client is pervasive. Proceedings at the Psychological Research and Rehabilitation Conference indicate the self-concept problems of the disabled clients as follows:

Inferior status position . . . is something which virtually all disabled individuals experience. . . . If it does not come about as a result of thwarting due to the inability to achieve a desired goal, then it may result from the discriminating and negative attitudes of the non-handicapped majority The disabled are, by their disability, by their reactions to their disability, by social attitudes, and by their perceptions of social attitudes, cast into inferior status positions (63, pp. 124-125).

Baker and Wright contended that "the physically handicapped person is faced with greater uncertainty in building a consistent attitude towards himself" (6, p. 26). Gellman (27, pp. 34-38), in a report describing the first three years of operation of a vocational adjustment center, said that the worker's self-concept is a significant factor in the rehabilitation process. Gellman is supported by Westman, who stated that "attitudinal barriers are probably the most important barriers to vocational rehabilitation" (82, p. 24). One can assume that Westman is referring to attitudes towards self as well as attitudes towards work, peers, or superiors. Yuker went so far as to say that "disabled persons' attitudes

towards themselves are much more important than the nature or extent of their disabilities" (85, p. 16).

Super succinctly stated the importance of the self-concept in vocational rehabilitation as follows:

At the other extreme, the high school drop-out who never did well in his studies, who was never accepted by his classmates, and who is fired from the job that he finally got after a number of rejections, finds the occupational translations of his self-concept as ne'er-do-well confirmed and implemented. After a series of negative experiences, it takes a great deal of reeducation to help him develop a more positive self-concept (74, p. 205).

Other authors such as Hughes (35, p. 18), Waltman (79, p. 16), Tiffany (76, p. 77), Aiken (1), Oppenheimer (60, p. 197), and Snyder (72, p. 18), to mention a few, make general references to the importance of the self-concept in vocational rehabilitation.

Menninger (55, p. 10) claimed that one's body-image is extremely important to the work of psychologists and psychiatrists because how a person perceives his body affects how he perceives his total personality and his intercourse with others. Menninger is supported by Matthews (52, p. 1204), who stated that physical disability creates a special set of problems--the solutions to which are dependent on how the individual perceives his disability and reacts based on his perceptions. Wright (83), in her study of the psychological correlates of physical disability, added that the self-conception a client has is of extreme importance for the rehabilitation process.

Felton (22, p. 12), Block (8, pp. 803-810), Gellman (26), and Hughes (35) contended that successful rehabilitation and work adjustment in handicapped individuals depended on the degree to which the self-concept is positive and realistic. It was also felt that disenchantment with disability may oftentimes cause excessive preoccupation with consoling oneself rather than giving attention to the situation at hand. Self-remorse can pervade not only the work sphere, but all other aspects of behavior as well. For example, it may cause poor family adjustment through tensions created by the self-centered individual. Tensions such as these become tautological since they give rise to further poor adjustment for the handicapped person.

Although practicality in administering written instruments to blind and deaf individuals eliminates subjects of this kind for the present study, it is relevant to note that blindness, like any major disability, can be a traumatic experience. Scott wrote that the

loss of sight is a destructive blow to the self-image which a man has carefully, though unconsciously, constructed. . . . The social identity of a man, indeed his whole personality, is spoiled when he is blinded. That he is regarded as a different and lesser person than others is sharply brought home to him whenever he has dealings with the sighted (71, p. 81).

Wagner et al. (78) reported on a group of forty-two psychiatric patients who presented negative self-concepts during their first week of hospitalization. Upon discharge

three months later, posttest scores indicated a significant positive improvement. Two control groups of normal subjects indicated normal self-concept scores which changed little as revealed by pretest and posttest scores. Massimo (57, pp. 634-642), in a program designed to assist delinquent youths, found that successful treatment was associated in part, with a positive change in self-concept. Similarly, Joplin (38), in an unpublished report, found that subjects at a rehabilitation center for male delinquents revealed a significant self-concept change over an average stay of eight months. Likewise, Fitts (23, p. 42) reported a significant trend toward positive change over a four-month period for inmates at a woman's prison.

Other studies indicated, however, that one's self-concept is resistant to change under many circumstances. There are a number of variables other than the immediate change agent present which can influence the degree of change. Taylor (75, p. 172) for instance, reported that the consistency of the self-description of a heterogeneous sample of adults was discovered to be significantly less than that for a homogeneous sample of college students. This indicates that the spectrum of variation among subjects may affect the outcome of any self-concept investigation. Taylor offered another finding of some significance for the present study when he reported that the self-concept is much more subject to

change than the ideal self (that self-description which an individual reports he would like to become). Also of importance here are Taylor's findings that a person with a positive self-concept is more likely to be consistent and stable than the person with a less positive or even negative self. The implication here is that, because a population of handicapped clients are likely to have a lower self-concept than a population of normal clients, the former group may be more likely to experience a self-concept change than the latter.

Other writers reported that the stability of the self-concept is in part a function of age. Engel (20, pp. 211-215) contended that the self-concept is stabilized early in individual development. He also reported an item which substantiated one of Taylor's findings: Those subjects who were considered to have an unfavorable self-concept in the first year showed significantly more change over a two-year period than those subjects who had initially reported a favorable self-concept.

In a study indirectly related to this investigation, Jourard (39, pp. 364-366) found in a sample of college students a significant positive relationship between subjects' self-esteem and body-esteem scores. It follows from this finding that poor health or physical disability as found among rehabilitation clients could affect self-concepts. Other writers are more poignant in defining the self-concept problems of rehabilitation clients. Block (9, pp. 256-263) stated

that body-image changes which accompany physical disability often lead to maladjustment because the original goals associated with a normal body-image have been distorted by the disability.

In summary, the preceding has been an attempt to describe the history and current status of self-concept theory, indicating conditions under which it has been shown to change, and to reveal the role of the self-concept for vocational rehabilitation.

Supervisor Dogmatism and Neuroticism

It has been established that there are a host of variables acting on the client's self-concept that can lead to either positive or negative change. For the purposes of this study, there is another variable to be considered, and that is the influence of certain personality characteristics present in the client's production or floor supervisor. In short, it is significant to ascertain whether the degree to which the supervisor is psychologically "healthy" affects the self-development of the client, especially during the early and most sensitive months of his stay in the workshop. Considerable vocal support is to be found in the literature in favor of this contention.

In the presentation of pertinent literature which describes the importance of the supervisor-client relationship, both descriptive and empirical findings will be discussed. In the field of vocational rehabilitation, the

major work, which centers on determining the importance of the sheltered workshop supervisor, is Barton's research (7). The primary objective of Barton's study was to identify the critical requirements considered necessary in order for effective workshop supervision to occur. Twenty-eight workshops in Washington, Oregon, and California comprised the sample. The investigator interviewed the staff personnel, using the Critical Incident Technique, to collect descriptions of effective and ineffective supervisory behavior. In all, 431 incidents were identified; 200 were categorized as effective while 231 were categorized as ineffective. A system was then developed for classifying these 431 incidents with the classifications as follows: (1) the supervisor as manager of production, (2) the supervisor as a communicator, (3) the supervisor as a representative of the workshop organization, (4) the supervisor as a model or example for workers, (5) the supervisor as a human relations agent and leader, (6) the supervisor as a manager of personnel and as a rehabilitation agent.

One point was clearly evident from Barton's results, and that was the fact that of all the incidents classified as "critical" for effective sheltered workshop supervision to occur, 79.9 per cent fell in categories which are highly related to interpersonal relations (5 and 7 above). Category 1, dealing with production, received only a minimal weight with only 1.8 per cent of all the incidents being related

to the importance of the supervisor as a manager of production.

The same trend appeared in the incidents identified as ineffective. Numbers 5 and 7 again received a significant proportion of all ineffective incidents--60.0 per cent. In a more positive tone, 60 per cent of all incidents considered as poor supervisory behavior fell into the more interpersonal relations categories.

It is possible that industrial studies would arrive at different results. But in dealing with sheltered workshop inhabitants, the importance of supervisory behavior lies in how the supervisor, as a person, relates with his clients; production knowledge and ability were considered of little significance in his job.

When trying to determine why interpersonal skills and abilities are so outstandingly important, two reasons seem evident. First, production is not usually the sole source of income for the workshops, since referral fees and private contributions account for much of it. Therefore, emphasis can be relegated to interpersonal skills. Second, because the literature shows that the disabled person is likely to suffer from a poor self-image--a condition which requires interpersonal skills on behalf of the supervisor to assist in improving it--workshops must give considerable emphasis to trying to correct this problem through "quality" interpersonal relationships between the client and the supervisor.

Barton stated the issue as follows: "The supervisor must possess sufficient emotional security and lack of need to 'be liked' by his workers so that he can confront workers with objective and constructive evaluations of their work performance and personal behavior." He continued,

To upgrade the quality of supervision in rehabilitation workshops, greater emphasis must be placed upon selecting supervisors with the appropriate personality characteristics. . . . What the floor supervisor is as a person appears more important than what he knows about supervision or rehabilitation (7, p. 3).

Other writers supported the notion of the supervisor's being an important variable in the total rehabilitation process. Gellman confronted the applicability of the industrial supervisor-worker relationship as really workable in a rehabilitation setting: "the key to the operation of the workshop as a clinical rehabilitation instrument resides in the ability of professionally trained foremen to relate the work program to the psychological and work needs of the client" (27, p. 37). In addition, Fellows stated that "the pressure point in the workshop today is the live production supervisor" (21, p. 4). Goldin et al. contended that

the practitioner in the field of rehabilitation must remain alert to the impact of his relationship upon the performance of the client. To achieve this awareness he must be sufficiently aware of his own influence on clients to enable him to evaluate accurately his feelings towards his client. . . . This applies to workshop supervisors, instructors, and rehabilitation coordinators. . . ." (30, p. 72).

Roehrer (64, p. 68) indicted supervisors and others in the field of rehabilitation for their failure to give adequate attention to the "social" climate surrounding the handicapped. Wright (83, pp. 224-225) identified the crucial importance of the "helper" in advancing the "helped" towards his desired goals. It is imperative that the "helper" accurately perceive the dilemma confronting the client; but even then he may lack the interpersonal skills necessary to act on what he perceives to be correct information regarding the client.

Since rehabilitation facilities choose (16, p. 24) to define their activities as being composed of both a training and a change experience for the client, it is necessary to identify the change components acting on the rehabilitation client as related by the supervisor. Lubow et al. identified two components of change:

Such changes, when they do occur, seem most likely to be produced by one of two factors: (1) the relatively infrequent, but perhaps highly potent, interactions that the client has with professionals in the workshop, or (2) the various experiences and activities taking place while he is working (49, p. 52).

In light of the abnormal self-concept conditions of the rehabilitation client, considerable attention in the literature has been devoted to the importance of establishing a social environment which will facilitate the surmounting of self-concept abnormalities. Furthermore, the quality of the supervisor-client relationship has been identified specifically

by the literature as having an important influence in bringing about the required social climate.

Research is available which strongly suggests that the personality variable present in the supervisors has several relevant implications for the social climate between the client and his supervisor. Barker and Wright explained the issue cogently as follows:

The worker (supervisor) will be most efficient when he is sensitive to the clues given by the client as to the course their relationship should take. . . . Being sensitive to the client means that the worker must take into account the emotional meanings of the disability for the client (6, p. 1832).

Psychologically speaking, the above passage can be interpreted as meaning that the supervisor should be mentally free from debilitating personality traits that prevent the necessary response from occurring.

Dogmatism and neuroticism are two personality factors which, if present in the supervisor, could likely prevent correct and accurate perception of client problems and could prevent correct and accurate behavior from being brought to bear to assist the client. Moreover, apart from an inability to provide solution-oriented responses, these two personality shortcomings could actually damage the therapeutic climate which has been established as necessary in order for positive client change to occur.

Dognatism

In an attempt to identify the personality characteristics of dogmatism, Vacchiano et al. (77, pp. 83-85) correlated dogmatism scores with fifty-eight diverse personality instruments and produced twenty significant correlations. The conclusions pertinent to the present study are as follows: (1) dogmatic subjects exhibit no tolerance for understanding the feelings and motives of others; (2) dogmatic subjects tend to avoid change in environment and daily routine; (3) dogmatic subjects exhibit a general maladjustment because they are doubtful of their own self-worth; (4) dogmatic subjects are defensive and noncommittal and are not satisfied with either their behavior or personal adequacy; and, (5) dogmatic subjects are traditional in respect to new ideas and generally become frustrated by changing conditions.

In a descriptive report, Maslow (51, pp. 401-414) stated that the authoritarian* individual in a position of authority will tend to be cruel and to use power in a self-seeking way. Fromm agreed by stating that the authoritarian is fascinated by power and that "powerless people arouse his contempt. The very sight of a powerless person makes him want to attack, dominate, humiliate him" (24, p. 187).

*Note: Rokeach in his book, The Opened and Closed Mind, claimed that dogmaticism and authoritarianism are highly correlated variables. He found high statistically significant relationships between scores on the authoritarian scale con-

There is some evidence to support the idea that dogmatism leads to premature closed mindedness when one is confronted with problems in his perceptual field. Long et al. (48, pp. 375-378) found in a sample of seventy-two freshman women that the nondogmatic subjects were more willing to delay decision and engage in predecisional research than were dogmatic individuals. Psychological openness also appeared to lead to responses of "don't know" when inadequate decisional information was present. Similarly, Rokeach (68, p. 211) confronted both high and low dogmatic subjects with a laboratory situation which required the use of newly learned concepts to solve a particular problem. Open subjects took significantly less time to arrive at correct solutions than did the closed group. The results were explained in terms of the ability of the open group to more readily integrate and act on new information. Kemp (40, pp. 662-665) also found closed-minded counselors to be defensive, insecure, and threatened by new experiences and, furthermore, discovered that they have a tendency to distort the reality of the event itself. Allen (2, pp. 35-40) found that open subjects responded to the feelings of the counselees with greater frequency than did closed subjects.

Normal (59, p. 278) in his study of 130 female liberal arts college sophomores reported findings similar to Long's in that high-dogmatic subjects were not able to adjust to new environments which required a cognitive reappraisal. This

suggests that, when confronted with a new and different problem posed by the client, the dogmatic supervisor may not be able to respond as well as the more open supervisor.

In another report by Rokeach (68), further evidence was added concerning the difference between the receptivity of closed and open subjects to unconventional or new aspects of one's environment. Forty subjects, twenty scoring extremely high in dogmatism and twenty scoring extremely low, were exposed to conventional and unconventional music systems. Using an adjective check list, the researchers discovered that open persons were more ready to accept the unconventional music than were the closed subjects.

In light of the foregoing evidence, it is likely to be more difficult for dogmatic supervisors to respond structurally to problems which arise out of the client's striving for rehabilitation. As mentioned earlier, dogmatism and its related counterpart, authoritarianism, can lead the supervisor to view the client with hostility. Furthermore, such traits are highly likely to prevent the kind of sane and objective responses necessary in the problem-filled world of a handicapped individual who is trying to make a new adjustment to work and to the inner world of his self-concept.

Neuroticism

Neuroticism is the second supervisor variable of primary importance to this study. The term generally is defined as a type of psychopathologic or behavior disorder that has

developed out of an individual's unsuccessful attempts to deal with stress. It has both cultural and individual manifestations; the former has reference to behavior which runs counter to acceptable social behavior, and the latter refers to an individual's inability to cope with stress-inducing childhood experiences. This should not be interpreted to mean that all antisocial behavior is neurotic or that similar stressful childhood experiences among individuals will cause all of them to exhibit neurotic behavior. Before an exact diagnosis is possible, a more precise understanding of the personality in question must be obtained. That is to say, before specific types of behavior can be accurately categorized as neurotic, the cultural and individual forces present must, in combination, be diagnosed.

Aside from these difficulties, there are some general traits which can be associated with people who are neurotic. Horney (34, p. 22) identified two characteristics neurotics exhibit regardless of the remainder of their personality structure: a certain rigidity in the ability to react differently to different situations and an abnormal discrepancy between potentialities and accomplishments.

These two identifying traits must be interpreted within the cultural context in which they occur. The rigid response which most Americans exhibit in reference to the acceptance of socialism as a possible alternative to capitalism is not

necessarily neurotic since rigidity in this specific example is socially acceptable, and thus normal, behavior. This rigid response becomes neurotic when an individual behaves in an abnormal way, such as committing all of his energies to stopping the "evils of socialism."

Similarly, when one's accomplishments lag behind potentialities to a degree in excess of the culturally acceptable boundaries, the resulting anxieties may lead to neurotic behavior. Horney expressed the issue of normal versus abnormal behavior in the following way:

The normal person is capable of making the best of the possibilities given to his culture. Expressing it negatively, he does not suffer more than is unavoidable in his culture. The neurotic person, on the other hand, suffers invariably more than the average person. He invariably has to pay an exorbitant price for his defenses, consisting in an impairment in vitality and expansiveness, or more specifically, in an impairment of his capacities for achievement and enjoyment . . . (34, p. 26).

In direct reference to the question of the effect a neurotic supervisor could have on his clients, Horney wrote, "The neurotic will desire to have control over others as well as over himself. He wants nothing to happen that he has not initiated or approved of." And in reference to the relatively weak or dependent condition of the rehabilitation client, she said,

The neurotic considers weakness not only as a danger but also as a disgrace. He certifies people as either 'strong' or 'weak' admiring the former and despising the latter . . . persons of this type are inclined to want to be right all the time, and are

irritated at being proved wrong. . . . They have to know everything better than anyone else (34, p. 167).

In a theoretical context, Rogers (66, pp. 95-103; 67, p. 416) maintained that in any helping relationship the degree to which the helper is free from debilitating personal traits is the degree to which the relationship can be therapeutic. Neurosis in the helper decreases the chances of establishing the "necessary and sufficient conditions" for client change to occur.

Fromm believed that, "in neurotic strivings one acts from a compulsion which has essentially a negative character: to escape an unbearable situation. The strivings tend in a direction which only ficticiously is a solution" (24, p. 187). In Fromm's view, neurotic supervisors are not likely to arrive at correct solutions to problems confronting the client.

It should be pointed out that attempts to measure neuroticism and dogmatism in the same individual may be redundant-- that is, they may be one and the same variable. There is some evidence which both supports and contradicts this contention. Watson (80, p. 105) contended that caution is needed when using the two terms synonymously. Using an instrument which gives both a score for dogmatism and one for introversion neurosis and extroversion neurosis, four extreme groups of high and low neurotic and introvertic-extrovertic were isolated from 194 students. The four groups did not

differ in their ability to produce novel or changed responses as determined by a chi square test, but they did differ in their ability to use the responses generated. The introverted neurotic group was found to be highly inflexible--indicating a parallel with Rokeach's dogmatism concept. However, the extroverted neurotic group did not exhibit an inflexibility of similar proportions. Therefore, dogmatism and neuroticism are found to be related for introvertic neurotics.

Rokeach added further uncertainty as to whether dogmatism and neuroticism were the same by saying that,

Thus we are confronted with a rather paradoxical set of results: political and religious groups that score relatively high on the Dogmatism Scale may manifest either a good deal or relatively little anxiety (68, pp. 351-352).

Norman (59), in a previously mentioned study which involved 130 college women, found a positive relationship between dogmatism and characteristics of neurosis such as anxiety, depression, social introversion, and lack of ego strength. Using the F Scale (Adorno's measure of authoritarianism) and the MMPI, Jenson concluded that there are certain psychopathological factors present in the authoritarian syndrome. Similar findings were reported by Vacchiano et al. (77).

The question as to whether or not the two variables in question are redundant is not subject to indisputable solution in light of the foregoing evidence. Therefore, both have been included on the assumption that they are, in part at least, independent.

Summary

The purpose of this chapter was to present the variables and the justification for their having been included in the study. Several variables of secondary import related to both the clients and the supervisors were discussed in light of previous research findings. Three variables of primary import were also presented and related theoretically. They were: (1) supervisor dogmatism, (2) supervisor neuroticism, and (3) client self-concept change.

CHAPTER BIBLIOGRAPHY

1. Aiken, E. G., Self Concept Conditioning and Rehabilitation, Final Narrative Report, La Jolla, California, Western Behavioral Sciences Institute, September, 1965.
2. Allen, T. W., "Effectiveness of Counselor Trainees as a Function of Psychological Openness," Journal of Counseling Psychology, XIV (January, 1967), 35-40.
3. Allport, G. W., Becoming, New Haven, Yale University Press, 1965.
4. Ayer, M. J., R. W. Thoreson and A. J. Butler, "Predicting Rehabilitation Success with the MMPI and Demographic Data," Personnel and Guidance Journal, XLIV (February, 1966), 631-637.
5. Barker, R. G., B. A. Wright, L. Myerson and M. R. Gonick, Adjustment to Physical Handicap and Illness: A Survey of the Social Psychology of Physique and Disability, Bulletin No. 55, New York, Social Science Research Council, 1946.
6. Barker, R. G., and B. A. Wright, The Social Psychology of Adjustment to Physical Disability, in Psychological Aspects of Physical Disability, Office of Vocational Rehabilitation, Rehabilitation Services Series No. 210, Washington, 1952.
7. Barton, E. H. and E. F. Barton, The Requirements of Effective Sheltered Workshop Supervision, San Jose, California, Goodwill Industries Co., Inc., 1965.
8. Block, J. R. and H. E. Yuker, "Some Correlates of Job Satisfaction Among Disabled Workers," Personnel and Guidance Journal, XLII (April, 1964), 803-810.
9. Block, W. E., "Operational Principles for Counseling the Disabled," Journal of Counseling Psychology, II (Winter, 1955), 256-263.
10. Brent, C. Z., "Personality Interaction--A Concept of Rehabilitation of the Disabled," American Journal of Physical Medicine, XXXVII (February, 1958), 16-17.

11. Cheatham, J. C., Differences in Background Characteristics of Vocational Rehabilitation and Non-Rehabilitation Clients, Eugene, Oregon, Department of Special Education, University of Oregon, 1966.
12. Combs, A. W. and D. Snygg, Individual Behavior, Rev. Ed., New York, Harper Press, 1959.
13. Conley, R. W., The Economics of Vocational Rehabilitation, Baltimore, Maryland, John Hopkins Press, 1965.
14. Daane, C. J. and L. G. Schmidt, "Empathy and Personality Variables," Journal of Educational Research, LI (October, 1957), 129-135.
15. DeBlasie, R. R., Self Concept: A Comparison of Spanish Americans, Negroes, and Anglo Adolescents Across Ethnic, Sex, and Socio-economic Variables, Las Cruces, New Mexico, The Clearing House on Rural Education and Small Schools, New Mexico State University, 1969.
16. Dubrow, M., "Habilitation for Employment," Journal of Rehabilitation, XXVI (January, February, 1960), 24.
17. DeMann, M., "A Predictive Study of Rehabilitation Counseling Outcome," Journal of Counseling Psychology, X (Winter, 1963), 340-343.
18. Eber, H. W., Multivariate Analysis of a Vocational Rehabilitation System, Multivariate Behavioral Research Monographs No. 66-1, Athens, Georgia, Department of Psychology, University of Georgia, 1966.
19. Ehrle, R. A., The Predictive Value of Biographical Data in Vocational Rehabilitation, Doctoral dissertation, University of Michigan, University Microfilms, No. 61-6033, Ann Arbor, Michigan, 1961.
20. Engel, M., "The Stability of the Self-Concept in Adolescents," Journal of Abnormal Social-Psychology, LVIII (March, 1959), 211-215.
21. Fellows, J. B., Introductory Statement for Phase III of A Federally Assisted Project for Training Supervisors in A Rehabilitation Workshop, Washington, Goodwill Industries of America, No date.
22. Felton, J. S., C. Spencer, and J. S. Chappell, Work Relationships of the Physically Impaired in a Multiple

Disability Sheltered Workshop and In Standard Industry, Oklahoma City, University of Oklahoma Medical Center and Oklahoma Goodwill Industries, 1958.

23. Fitts, W. H. and W. T. Hammer, The Self Concept of Delinquency, Monograph No. 1, Nashville, Tennessee, Nashville Mental Health Center, 1969.
24. Fromm, Erich, Escape From Freedom, New York, Avon Books, Inc., 1941.
25. Fuller, F., "Preferences for Male and Female Counselors," Personnel and Guidance Journal, XLII (January, 1964), 463-467.
26. Gellman, W., Adjusting People to Work, Monograph No. 1, Chicago, Jewish Vocational Service, 1957.
27. Gellman W. and S. B. Friedman, "The Workshop as a Clinical Rehabilitation Tool," Rehabilitation Literature, XXVI (February, 1965), 34-38.
28. Glick, S. J., Vocational Education and Recreational Needs of the Cerebral Palsied Adult, New York, United Cerebral Palsy, 1953.
29. Goldin, G. J. and S. L. Percy, Dependency and Its Implication for Rehabilitation, Monograph No. 1, Boston, New England Rehabilitation Research Institute, Northeastern University, 1967.
30. Goldin, G. J., R. J. Margolin and B. A. Stotsky, "Motivational Factors in the Rehabilitation Facility," Rehabilitation Literature, XXXIX (March, 1968), 72.
31. Grotberg, E. H., "Learning Disabilities and Remediation in the Disadvantaged Child," Review of Education Research, XXXV (December, 1965), 413-423.
32. Hammond, C. D., G. N. Wright and A. J. Butler, Caseload Feasibility in an Expanded Vocational Rehabilitation Program, Monograph No. 6, Madison, Wisconsin, Studies in Vocational Rehabilitation, 1968.
33. Havens, L. M., Dependency: Definition and Strategies, R. J. Margolin and F. L. Hurwitz, Editors, Report of a Dependency and Motivational Workshop, Boston, Northeastern University, 1963.
34. Horney, K., The Neurotic Personality of Our Time, New York, W. W. Norton and Company, 1937.

35. Hughes, G. R., "Self-Resignation: A Mighty Fee," Journal of Rehabilitation, XXVI (September, October, 1960), 18.
36. James, W., Principles of Psychology, Volume 2, New York, Holt, Rinehart and Winston, 1890.
37. Jensen, A., "Authoritarian Attitudes and Personality Maladjustment," Journal of Abnormal Social Psychology, LIV (May, 1957), 303-331.
38. Joplin, G. H., "Unpublished Data From Highfields Residential Group Center," Newark, New Jersey, 1967.
39. Jourard, S. M. and R. M. Remr, "Perceived Parential Attitudes, the Self, and Security," Journal of Consulting Psychology, XIX (October, 1955), 364-366.
40. Kemp, C. G., "Influence of Dogmatism on Counseling," Personnel and Guidance Journal, XXIX (April, 1961), 662-665.
41. Kluckholm, E. R. and F. L. Strodtbeck, Variations in Value Orientations, Evanston, Illinois, Row, Peterson and Company, 1961.
42. Koller, E. A. and D. J. Bird, "Preferences for Counselor Help on Freshmen Problems," Journal of Counseling Psychology, III (Summer, 1956), 96-106.
43. Kunce, J. T. and C. S. Cope, Rehabilitation and the Culturally Disadvantaged, Research Series No. 1, Columbia, Missouri, University of Missouri, 1969.
44. Kunce, J. T., R. J. Mahoney, R. R. Campbell and J. Finley, Rehabilitation in the Concrete Jungle, Research Series No. 3, Columbia, Missouri, University of Missouri, 1969.
45. Kvaraceus, W. C., J. S. Gibson, F. Patterson, B. Seasholes and J. D. Grambs, Negro Self-Concept, New York, McGraw-Hill, 1965.
46. Levine, L. S., Personal and Social Development, New York, Holt, Rinehart and Winston, 1963.
47. Litman, T. L., "The Influence of Self-Conception and Life Orientation Factors in the Rehabilitation of Orthopedically Disabled," Journal of Health and Human Behavior, III (Winter, 1962), 249-257.

48. Long, B. H. and R. C. Ziller, "Dogmatism and Predecisional Information Search," Journal of Applied Psychology, XLIX (October, 1965), 376-378.
49. Lubow, B. K., R. P. Kimberly, W. H. Button, and J. R. Kimberly, Studies in Behavior and Rehabilitation, Ithaca, New York, Cornell University Rehabilitation Research Institute, 1969.
50. Mahoney, R. J., C. S. Cope and R. R. Campbell, Rehabilitation and the Culturally Disadvantaged: A Digest, Research Series No. 2, Columbia Missouri, University of Missouri, 1969.
51. Maslow, A. H., "The Authoritarian Character Structure," Journal of Social Psychology, XVII (November, 1943), 401-414.
52. Matthews, J. B., "The Psychological Impact of Physical Disability Upon Vocationally Handicapped Individuals," unpublished doctoral dissertation, University of Wisconsin, Madison, Wisconsin, 1967.
53. McPhee, W. M. and others, Adjustment of Vocational Rehabilitation Clients, Washington, D. C., U. S. Department of Health, Education and Welfare, Vocational Rehabilitation Administration, 1963.
54. Mead, G. H., Mind, Self, and Society, Chicago, Illinois, University of Chicago Press, 1934.
55. Menninger, K. A., "Psychiatric Aspects of Physical Disability," J. F. Garrett, Editor, Psychological Aspects of Physical Disability, Washington, D. C., Federal Security Agency, Office of Vocational Rehabilitation, 1952.
56. Miller, J. O., "Research, Change, and Social Responsibility: Intervention Research With Young Disadvantaged Children and Their Parents," Paper Presented at the American Psychological Association Convention, San Francisco, 1968.
57. Mossimo, J. L. and M. F. Shore, "The Effectiveness of a Comprehensive Vocationally Oriented Psychotherapeutic Program for Adolescent Delinquent Boys," American Journal of Orthopsychiatry, XXXIII (July, 1963), 634-643.

58. Neff, W. S., "The Meaning of Work to the Poor," Rehabilitation Counseling Bulletin, XI (September, 1967), 71-77.
59. Norman, R. P., "Dogmatism and Psychoneurosis in College Women," Journal of Consulting Psychology, XXX (June, 1966), 278.
60. Oppenheimer, E. A., "The Relationship Between Certain Self Constructs and Occupational Preferences," Journal of Counseling Psychology, XIII (Summer, 1966), 197.
61. Parsons, J. R., J. Thorne, D. H. Growald, and W. Fordyce, Studies in Public Assistance Referrals to Vocational Rehabilitation: I - Administrative Effectiveness, II - Predicting Outcomes, Seattle, School of Social Work, University of Washington, 1959.
62. Perlman, L., "The Development of a Predictive Model for the Detection of Potential Dropouts from Vocational Training in a Comprehensive Rehabilitation Center," proposal for doctoral dissertation, Pennsylvania State University, University Park, Pennsylvania, no date.
63. Psychological Research and Rehabilitation Conference Report, L. Lofquist, Editor, American Psychological Association, 1960.
64. Roeher, G. A., "Significance of Public Attitudes in the Rehabilitation of the Disabled," Rehabilitation Literature, XXII, No. 3 (March, 1961), 68.
65. Rogers, C. R., Client-Centered Therapy, Boston, Massachusetts, Houghton Mifflin Co., 1951.
66. _____, "The Necessary and Sufficient Conditions of Therapeutic Personality Change," Journal of Consulting Psychology, XXI (April, 1957), 95-103.
67. _____, "The Interpersonal Relationship: The Core of Guidance," Harvard Education Review, XXXII (Fall, 1962), 416-429.
68. Rokeach, M., The Open and Closed Mind, New York, Basic Books, 1960.
69. Sankovsky, R., Predicting Successful and Unsuccessful Rehabilitation Outcomes: A Review of the Literature, Pittsburg, Pennsylvania, Research and Training Center in Vocational Rehabilitation, University of Pittsburg, 1968.

70. Schor, S., The Not Rehabilitated Client: Characteristics of Clients Whose Cases Were Closed Not Rehabilitated From the Active Caseload in Fiscal Year, 1964, Washington, D. C., Department of Health, Education and Welfare, Vocational Rehabilitation Administration, 1966.
71. Scott, R. A., The Making of Blind Men, New York, Russell Sage Foundation, 1969.
72. Snyder, R., W. Jefferson, and R. Strauss, "Personality Variables as Determiners of Academic Achievement of the Mildly Retarded," Mental Retardation, VI (February, 1968), 18.
73. Spackman, C. S. and H. S. Willard, "Occupational Therapy: History and Organization," H. A. Pattison, Editor, The Handicapped and Their Rehabilitation, Springfield, Illinois, C. C. Thomas, Inc., 1957.
74. Super, D. E., "Self Concepts in Vocational Development," D. Zytowski, Editor, Vocational Behavior, Dallas, Texas, Holt, Rinehart and Winston, Inc., 1968.
75. Taylor, D. M., "Consistency of the Self-Concept," unpublished doctoral dissertation, Vanderbilt University, Nashville, Tennessee, 1953.
76. Tiffany, D. W., Work Improvement and Self-Perceptions of Ex-Psychiatric Patients: An Exploratory Study, Institute for Community Studies, Kansas City, 1967.
77. Vicchiano, R. B., P. S. Strauss and D. C. Schiffman, "Personality Correlates of Dogmatism," Journal of Consulting and Clinical Psychology, XXXII (February, 1968), 83-85.
78. Wagner, M. K. and W. H. Fitts, "The Effects of Hospitalization Upon the Self Concept of Mental Patients," W. H. Fitts and others, Editors, Three Studies in Self Concept Change, Research Bulletin No. 6, Nashville Mental Health Center, Nashville, 1969.
79. Waltman, M., "Techniques for Helping the Working Clients," Journal of Rehabilitation, XXIX (May, June, 1963), 16.
80. Watson, D. L., "Introversion, Neuroticism, Rigidity, and Dogmatism," Journal of Consulting Psychology, XXXI (February, 1967), 105.

81. Weiner, H., "Characteristics Associated With Rehabilitation Success," Personnel and Guidance Journal, XLIII (March, 1964), 687-694.
82. Westman, W. C., "Attitudinal Barriers to Vocational Rehabilitation," Journal of Rehabilitation, XXXIV (May, June, 1968), 24.
83. Wright, B. A., Physical Disability: A Psychological Approach, New York, Harper Brothers, 1960.
84. Wright, G. N., The Wood County Project: An Expanded Program of Vocational Rehabilitation, Rehabilitation Research Institute, Madison, University of Wisconsin, 1969.
85. Yaker, H. E., "Attitudes as Determinants of Behavior," Journal of Rehabilitation, XXXI (November, December, 1965), 14-17.

CHAPTER III

METHODOLOGY

The purposes of Chapter III are twofold 1) to describe the procedures used to collect the data and 2) to set forth the analytical device used to analyze the data.

The Population

The federal bureau responsible for assisting state, local, and private rehabilitation agencies is the Social and Rehabilitation Services Administration (SRS), an agency under the Department of Health, Education, and Welfare. For administrative purposes, SRS has subdivided the states into several regions. The region utilized in this study was Region VI which is composed of Texas, Oklahoma, New Mexico, Arkansas, and Louisiana.

There were 128 rehabilitation facilities listed in this five-state region as of Spring, 1970 (1). However, only sixty-six of these facilities were designated as the population for this study. The other sixty-two facilities were unacceptable because (1) they served only the blind or deaf, (2) they served only the severely retarded, or (3) they served non-adults only. A list of the workshops which made up the population can be found in Appendix C.

The Sample

From the population of sixty-six workshops, twenty were chosen for the sample by a stratified random sampling technique. Stratification was based on the monthly average number of clients in the workshop during the previous year. The three strata were (1) 1-40 clients, (2) 41-90 clients, and (3) 91 or more clients. The number of sample workshops allocated to each stratum was determined by a proportional allocation method (12). For example, if the workshops having between 1 and 40 clients comprised 15 percent of the total population of workshops, then 15 percent of the twenty workshops which were to comprise the sample were chosen for that stratum. Table I contains the proportion of workshops in the population and in the sample for each stratum.

TABLE I
THE SELECTION OF SAMPLE WORKSHOPS
BY PROPORTIONAL ALLOCATION

Strata	In Population	In Sample
1-40	33 (48%)	9 (48%)
41-90	22 (34%)	7 (34%)
91 +	<u>11 (19%)</u>	<u>4 (19%)</u>
TOTAL	66 (100%)*	20 (100%)*

*Totals are subject to rounding error.

The sample workshops chosen for each stratum were then selected through the use of a table of random numbers. The directors of all twenty sample workshops were contacted either by mail, phone, or in person during March, 1970, and were asked to participate in the study. All twenty indicated that they were willing to participate.

The sample subjects were defined as all incoming clients who arrived at and were accepted by the sheltered workshop for rehabilitation services during a three-week pretest period in April, 1970. Not all twenty workshops received new clients during the designated period. Out of the twenty selected in the initial sample, ten received new clients during the designated time interval. The ten shops that did not receive clients during the pretest period were given an extension time of one week in an attempt to get client representation from these shops. Since no new clients were reported during the entire four-week period for these ten shops, they were subsequently dropped from further consideration. Table II lists the workshops, by strata, which received new clients during the pretest period. Ninety new clients were received by these ten workshops during the established period.

TABLE II
THE NUMBER OF WORKSHOPS BY STRATA THAT RECEIVED
CLIENTS DURING THE PRETEST PERIOD

Strata	Number of Workshops	Number of Clients
0 - 40	1	4
41 - 90	6	51
91 +	<u>3</u>	<u>35</u>
TOTAL	10	90

From Table II it is apparent that the sample was heavily weighted with subjects in large workshops--a fact which virtually destroys the advantages of stratification. The inability to obtain test subjects from smaller workshops was due, in part, to the fact that small shops normally receive only a few new client referrals a year. The problem was further increased by the coincidence that the pretest period occurred during a national recession, which meant that rehabilitation agencies which send clients to workshops were extremely short of referral funds. New referrals to large and small shops alike were much below the number of referrals that occur during normal times.

The Instruments

The data for this study were collected through the utilization of the Tennessee Self Concept Scale (5), Rokeach's Dogmatism Scale (8), Winne's Neuroticism Scale (11), and Personal Data Forms developed by the writer for the clients and supervisors.

The Tennessee Self Concept Scale.--This scale is composed of 100 self-descriptive statements which were taken from a broad range of 626 subjects. The sample included people from various geographical areas of the country and of various ages from 12 to 68. Approximately the same number of both sexes and the same number of Negro-white subjects were represented. All socioeconomic and educational levels from the sixth grade through graduate degrees were included. The author of the test, however, admitted that the sample was heavily weighted by college students.

The scale produced a composite score as well as several subscale scores. Reliability coefficients for the composite score established by test-retest procedures ranged from .60 to .92. Further reliability evidence was produced by getting similar profile patterns through repeated measures of the same test subjects over an extended period of time.

The validity of the TSCS was obtained by comparing it with other personality measures. Fitts (6) reported correlations

between TSCS and the Minnesota Multiphasic Personality Inventory for disturbed subjects. The TSCS also correlated with the Edwards Personal Preference Scale.

Further validity was established from an analysis of 369 psychiatric and 626 non-psychiatric patients. Highly significant differences (.001 level) were found for almost all subscores provided by this scale. The instrument was also found to discriminate in the desired direction between subjects considered high in personality integration and a normal group of subjects (6, p. 17).

In reviewing the instrument, one author offered the following remarks: "It can be concluded, therefore, that the initial data on the scale's psychometric attributes indicate that it 'measures up' by traditional criteria rather well" (3, p. 331).

Eleven subscale scores produced by the TSCS will be utilized in this study as criterion variables. Fitts described each one of these eleven subscores as follows:

The Self-Criticism Score--This scale is composed of . . . items which are all mildly derogatory statements that most people admit as being true for them. Individuals who deny most of these statements most often are being defensive and making a deliberate effort to present a favorable picture of themselves.

Total P Score--This score reflects the overall level of self esteem. Persons with high scores tend to like themselves, feel that they are persons of value and worth, have confidence in themselves, and act accordingly.

Identity--These are the "what I am" items. Here the individual is describing his basic identity--what he is as he sees himself.

Self Satisfaction--This score comes from those items where the individual describes how he feels about the self he perceives. In general, this score reflects the level of self satisfaction or self acceptance.

Behavior--This score comes from those items that say "this is what I do, or this is the way I act." Thus this score measures the individual's perception of his own behavior or the way he functions.

Moral-Ethical Self--This score describes the self from a moral-ethical frame of reference--moral worth, relationship to God, feelings of being a "good" or "bad" person, and satisfaction with one's religion or lack of it.

Personal Self--This score reflects the individual's sense of personal worth, his feelings of adequacy as a person and his evaluation of his personality apart from his body or his relationships to others.

Physical Self--Here the individual is presenting his view of his body, his state of health, his physical appearance, skills, and sexuality.

Family Self--This score reflects one's feelings of adequacy, worth, and value as a family member. It refers to the individual's perception of self in reference to his closest and most immediate circle of associates.

Social Self--This is another "self as perceived in relation to others" category, but pertains to "others" in a more general way. It reflects the person's sense of adequacy and worth in his social interaction with other people in general.

Total V--This represents the total amount of variability for the entire record. High scores mean that the person's self concept is so variable from one area to another as to reflect little unity or integration. High scoring persons tend to compartmentalize certain areas of self and view these areas quite apart from the remainder of self (6, pp. 2-3).

Subjects with high scores on all but one (Total V) of these subscales tend to have a favorable self-concept. High Total V scores indicate a fragmented or non-integrated self-concept.

The Dogmatism Scale.--The purpose of this scale is to measure the degree to which an individual's belief system is either open or closed. The scale also measures general authoritarianism and general intolerance (9, pp. 71-72). Form E of the scale was used in this study. It is composed of forty items; test subjects respond to each item on a scale ranging from -3 to +3 with 0 excluded to obtain a forced score. The scale was developed on subjects from various parts of the country and from various backgrounds such as automobile workers, destitute war veterans, college students, and members of the Communist Society at University College in England. The instrument produced reliability coefficients from these groups ranging from .68 to .93. Item analysis showed that high-scoring subjects differed statistically on most of the items from low-scoring subjects (9).

The validity of the dogmatism scale was established through the Method of Known Groups. Graduate students in psychology selected high and low dogmatic persons from their friends and acquaintances. A statistically significant difference was found between the mean dogmatism scores of the two groups. A high

a closed belief system; a low score indicates an open belief system.

Winne's Neuroticism Scale--This scale was developed from 117 items which make up the sections of the Minnesota Multiphasic Personality Inventory dealing with hysteria, depression, and hypochondria because it was felt that such items would distinguish between normal persons and neurotics.

Five hundred and sixty white male veterans at the Philadelphia Veterans Administration Mental Hygiene Clinic were divided into experimental and control groups of normal and neurotic individuals and given the MMPI. That part of the scale which measured hysteria, depression, and hypochondria was analyzed to determine if its 117 items would discriminate between normal and neurotic. It was discovered that normals and neurotics did not differ with respect to intelligence, age, education, occupation, or marital status.

Out of the initial 117 items, 33 items were able to distinguish between normal and neurotic at the .01 level of significance (11). This list was shortened to thirty items which comprise the scale used in this study. The items are scored by the subjects as either true or false. A person scoring high on this scale is considered to be relatively free from neurosis.

Personal Data Forms.--These instruments were designed specifically for this study in order to collect the necessary

demographic information on both the clients and the supervisors who were included in this study. These data sheets were based on the evidence found in the literature pertaining to the various items which were discussed in Chapter II.

Several considerations entered into the choices of the instruments mentioned above. First, the Tennessee Self Concept Scale was the only comprehensive self-concept test found which could be self-administered in a group setting to subjects of fairly low reading ability. Second, both the dogmatism and neuroticism instruments were considered to be less demanding on the time limitations of the supervisors. Both tests could be taken in less than one hour. Because of the necessity of testing supervisors during their work hours, the less time they were asked to be away from their jobs the more willing their directors would be to let them participate in the study.

The Administration of the Instruments

Because the study centered on the question of client self-concept change over a period of time, a pre-post measure was necessary. In order to collect the pretest information, each workshop director was asked to designate a competent member of his staff (other than his production supervisor) to be placed in charge of administering the pretest instruments. It was further stipulated that the person placed in charge have some background in testing procedures. In all cases,

the person designated held either an academic degree in counseling, psychology, or social work, or else had had considerable experience in the testing of rehabilitation clients.

Before the start of the pretest period, each workshop was mailed a test packet for each client which contained the test instruments and a detailed list of instructions explaining the particulars for administering each test. Duplicate copies of all the test instructions are found in Appendix B. One of the principal requirements asked of the tester was that he administer the test packet before the client was placed in a work situation in contact with his production supervisor.

There were ninety pretest clients accepted for rehabilitation services who met the minimum requirements for taking the tests as judged by the workshop appointed assistant. All the test subjects were administered the battery of tests before they made contact with their supervisors.

The posttests were administered in person by two staff members of the Rehabilitation Services Training Program on the North Texas State University campus. (The writer was one of these persons.) The posttest period began approximately two months and three weeks after the close of the pretest period.

During the in-house posttesting, the thirty-three supervisors of all the clients involved in the pretest were also tested. All the supervisors were capable of taking the required instruments.

Out of the original ninety clients involved in the pretest, sixty-one were still available for posttesting. During the actual in-house posttesting, two of the sixty-one clients were eliminated because they were judged by the writer as incapable of successfully taking the TSCS.*

Analysis of the Data

The analytical tool employed to test the four hypotheses set forth in Chapter I was a step-wise multiple regression technique. It involved computing in sequence multiple linear regression equations. In the first step of the calculations, the independent variable was the one chosen for entry into the equation which made the greatest reduction in the error sum of squares. In the second step, the second most influential variable was entered and so on until all influential variables were included. The contribution each variable made in reducing the error sum of squares was equivalent (in this particular technique) to a partial correlation coefficient on the variables which had already been added (4, pp. 233-236).

As revealed in Chapter II, many of the independent variables included in this study were qualitative in nature and therefore not normally included in a multiple regression analysis. However, the validity for their inclusion here was

*It should be pointed out that one workshop by itself accounted for twenty-seven of the fifty-nine posttest clients. It was thought that this occurrence could cause the data to be biased. Consequently, a check for bias was made by making a t test between each of the eleven TSCS subscale scores for the twenty-seven clients in the workshop in question and all other clients. No significant differences were found.

explained by Lane (7), Cohen (2), and Suits (10). Variables of this type are referred to as "dummy" variables.

The first two hypotheses which focused on the question of whether or not client self-concept change was related to supervisor dogmatism and neuroticism was analyzed in the following way: The criterion variable (Y) was the TSCS post scores; X_n were the demographic variables associated with both clients and supervisors. All eleven TSCS subscale scores were analyzed in this fashion. The variables associated with these tests appear in Appendix D.

By letting the post-TSCS scores act as the criterion variable and the pre-TSCS scores act as one independent variable, the net result was to extract that portion of the variation in the postscores which was attributed by the pre-scores. Whatever variation that remained was the change that had occurred in the clients' TSCS scores. Hopefully, these residual change values would then be associated with other independent variables, specifically supervisor dogmatism and neuroticism.

The last two hypotheses focused on the following two issues. First, was there a relationship between neurotic and dogmatic supervisors and the client's dropping out of or remaining in his rehabilitation program during the eleven weeks of the testing period? In this analysis, the criterion variable was "dummied" in that a value of zero was entered

for the client who dropped out and a value of one was entered for the client who remained in his program. Then x_1 and x_2 were supervisor neuroticism and dogmatism, and x_3 through x_n were a variety of other client and supervisor variables. See Appendix D for a complete listing.

Second, was there a relationship between the pre-TSCS scores and the client's dropping out of or remaining in his rehabilitation program during the eleven weeks of the testing period? Here again the criterion variable was "dummied" as either zero for the dropouts or one for those who remained. x_1 through x_{11} were the pre-TSCS scores while x_{12} through x_n were a variety of other independent variables (Appendix D).

BIBLIOGRAPHY

1. "A List of Rehabilitation Facilities in Region VI," an unpublished document compiled by Rehabilitation Services Training Program, North Texas State University, Denton, Texas, Spring, 1970.
2. Cohen, J., "Multiple Regression as a General Data-Analytic System," Psychological Bulletin, LXX (October, 1968), 426-443.
3. Crites, J. O., "Test Reviews: Tennessee Self Concept Scale," Journal of Counseling Psychology, XII (Fall, 1965), 331.
4. Dixon, W. J., Editor, Biomedical Computer Programs X-Series Supplement, Berkeley, California, University of California Press, 1969.
5. Fitts, W. H., Tennessee Self Concept Scale, Counselor Recordings and Tests, Nashville, Tennessee, 1965.
6. Fitts, W. H., Manual: Tennessee Self Concept Scale, Counselor Recordings and Tests, Nashville, Tennessee, 1965.
7. Lane, N. E., Correlational Analysis of Qualitative Data, Research Report, U. S. Navy School of Aviation Medicine, U. S. Naval Aviation Center, Pensacola, Florida, 1965.
8. Rokeach, M., The Open and Closed Mind, Basic Books, New York, 1960.
9. Rokeach, M., "Political and Religious Dogmatism: An Alternative to the Authoritarian Personality," Psychological Monograph, LXX, No. 18 (1956).
10. Suits, D. B., "Use of Dummy Variables in Regression Equations," Journal of American Statistical Association, LII (Fall, 1957), 548-551.
11. Winne, J. F., "A Scale of Neuroticism: An Adaptation of the Minnesota Multiphasic Personality Inventory," Journal of Clinical Psychology, VII (April, 1951), 117-122.

12. Yamane, T., Elementary Sampling Theory, Englewood Cliffs, New Jersey, Prentice-Hall, 1967.

CHAPTER IV

ANALYSIS OF THE DATA

Chapter IV presents the results of the data analyses which tested the hypotheses stated in Chapter I. The data were taken from a sample of clients in ten sheltered workshops in the Southwest. The design of the research required both a premeasure and a postmeasure of the self-concept of the sample subjects. The pretests were administered by staff members of the workshops involved. The posttests were completed in the workshops under the supervision of two staff members of the Rehabilitation Services Training Program on the North Texas State University campus.

The four working hypotheses restated in null form are as follows:

1. There is no significant relationship between changes in the clients' self-concept and the degree to which the clients' supervisors are dogmatic.
2. There is no significant relationship between changes in the clients' self-concept and the degree to which the clients' supervisors are neurotic.
3. There is no significant relationship between the dogmatism and neuroticism scores of supervisors associated with clients who dropped out of their rehabilitation programs before the testing period was over and the clients who remained for the entire duration of the testing period.

4. There is no significant relationship between the self-concept scores of clients who dropped out of their rehabilitation programs and clients who remained for the entire duration of the testing period.

In order to test the first two hypotheses, a step-wise multiple regression analysis was utilized. This technique mathematically manipulates all the independent variables in a search for a multitude of variables that together account for part of the variation in the criterion variable.

The technique also provides for certain desired independent variables to be "forced" into the group of relevant variables which normally would not be included. For example, the variables of dogmatism and neuroticism, because of their importance to this study, were two variables out of the total independent variables which were forced into the predictor equation. As the computer examined each of the remaining variables in trying to determine their contribution, the most relevant variable was, at each step, selected for inclusion also. The criterion for inclusion of any particular variable into the equation was set at an F score of 2.00; the criterion for deletion was set at 1.00.

At the 2.00 level of inclusion, the computational procedures at the first step examined that independent variable which, in relation to all the other independent variables, made the best contribution to reducing the error sum of squares--that is to say, which accounted for the variation

in the criterion variable. The independent variable identified was entered into the equation if its F score was 2.00 or higher.

At step two, the second such variable was chosen in the same way. However, because it was likely that the introduction of a second variable would reduce the contribution originally computed for the first variable, the question arose as to whether or not the user would be willing to lose the first variable whose contribution by itself was greater than 2.00 but which, because of the inclusion of the second variable, dropped below 2.00. Setting the deletion level at 1.00 provided some leeway for fluctuations in the value of the first variable before it was dropped from further consideration.

Each of the eleven TSCS subscales was examined in reference to the relationship between changes in the premeasures to postmeasures and the supervisor variables of neuroticism and dogmatism. The change variable was derived by using the posttest TSCS scores as the criterion variable (Y) and the pretest TSCS scores as the first independent variable (X_1).

Table III shows the mean change in TSCS subscale scores obtained from the pretest and posttest measures along with the standard deviations for the pretests, posttests, and mean differences. It can be seen from this data that changes which occurred are small and primarily negative.

TABLE III

PRETEST MEANS AND STANDARD DEVIATIONS, POSTTEST MEANS
AND STANDARD DEVIATIONS, AND MEAN DIFFERENCES AND
STANDARD DEVIATIONS OF SCORES ON THE TENNESSEE
SELF CONCEPT SCALE
(n = 59)

TSCS Subscores	Pretest		Posttest		Differences	
	Mean	SD	Mean	SD	Mean	SD
Total P	316.58	37.76	314.34	40.30	-2.24	22.70
Identity	117.58	16.09	114.76	16.14	-2.81	10.40
Self- Satisfaction	96.27	14.21	96.56	14.19	+ .28	10.87
Behavior	103.19	14.49	103.02	16.58	- .16	9.79
Physical Self	66.75	9.61	66.20	7.32	- .54	7.96
Moral Self	62.88	9.27	62.86	10.57	- .02	8.43
Personal Self	61.61	9.05	61.36	9.87	- .25	6.56
Family Self	63.88	10.17	62.92	10.85	- .97	7.15
Social Self	61.29	9.30	61.00	9.09	- .29	6.43
Total "V"	55.63	15.49	53.15	15.15	-2.47	14.79
Self-Criticism	34.47	6.79	34.64	7.69	+ .16	5.69

The variables for each of the eleven equations generated were as follows:

Y = Posttest TSCS Scores

X₁ = Pretest TSCS Scores

X₂ = Dogmatism

X_3 = Neuroticism

X_m = All other independent control variables

The degrees of freedom were calculated for each variable as $n - m - 1$, where n is the number of subjects and m is the number of independent variables at each step in the calculations. All eleven equations were of the form

$$Y = B_0 + B_1X_1 + B_2X_2 \dots B_mX_m$$

Hypotheses One and Two

The first Tennessee Self Concept Scale (TSCS) subscale score analyzed in accord with the first two hypotheses was Total "P" which measures the overall level of one's self esteem. As can be seen in Table IV, the nature of the relationship between the criterion and dogmatism was not found to differ significantly from zero. The relationship between neuroticism and the criterion was found to differ significantly from zero at the .025 level with 55 degrees of freedom. The direction of the relationship was positive.

Based on the evidence found in Table IV, the null hypothesis related to dogmatism was accepted, while the null hypothesis related to neuroticism was rejected. Four other independent variables were found to be significant. These variables are twelve or more years of education for the client, no previous work experience by the client, the length of the client's disability, and client mental retardation.

TABLE IV
 THE RELATIONSHIP BETWEEN SEVERAL INDEPENDENT
 VARIABLES AND THE CHANGE IN CLIENTS'
 TSCS TOTAL "P" SCORES
 (n = 59)

Predictor Variable	df*	Regression Coefficient	Standard Error	t Value	Type I Error	In-crease In RSQ
Total "P" PreScore	57	.8836	.0685	12.8992	.001	.6936
Dogmatism	56	.0170	.0867	.1960	.900	.0100
Neuroticism	55	2.2480	.9612	2.3387	.025	.0021
Client Education 12+ years	54	41.1731	9.7268	4.2329	.001	.0455
No Previous Work Experience	53	15.1773	5.0757	2.9901	.010	.0358
Mentally Disabled	52	17.1946	7.4752	2.3002	.050	.0215
Length of Disability	51	.8134	.3593	2.2638	.050	.0175

*df = n - m - 1.

The second TSCS subscale score is identity. It measures how the client sees himself. Once again the data were analyzed in such a way as to test the first two hypotheses which were restated earlier in null form. The results of that analysis are found in Table V.

TABLE V
 THE RELATIONSHIP BETWEEN SEVERAL INDEPENDENT
 VARIABLES AND THE CHANGE IN CLIENTS'
 TSCS SUBSCALE IDENTITY SCORES
 (n = 59)

Predictor Variable	df*	Regression Coefficient	Standard Error	Computed t Value	Type 1 Error	In-crease In RSQ
Identity PreScore	57	.7423	.0685	9.8317	.001	.6269
Dogmatism	56	-.0207	.0393	.5267	.600	.0112
Neuroticism	55	.2861	.4773	.5994	.500	.0043
Client Education 12+ years	54	9.1988	4.4573	2.0638	.050	.0352
Mexican American	53	-7.5768	2.8034	2.7027	.025	.0260
Supervisor Experience In Industry	52	-.6095	.2261	2.6957	.025	.0235
Client Divorced	51	11.6361	4.5962	2.5316	.025	.0233
Client Partially Self Supporting	49	4.8100	2.2552	2.1328	.050	.0208

*df = n - m - 1.

The relationships between supervisor dogmatism and neuroticism and changes in TSCS Identity scores were not significantly different from zero at the .05 level. Both null hypotheses

were, therefore, accepted. Several other independent variables were found to be significantly related to changes in Identity scores. This finding will be discussed in Chapter V.

The third criterion variable of importance was the change in Self-Satisfaction scores. This scale measures the client's level of self-acceptance. The results of the analysis pertaining to this variable are found in Table VI. As indicated, neither dogmatism nor neuroticism was found to be significant at the .05 level. The first two null hypotheses were subsequently accepted. Four other independent variables were, however, found to be significant.

TABLE VI
THE RELATIONSHIP BETWEEN SEVERAL INDEPENDENT
VARIABLES AND CHANGE IN CLIENTS' TSCS
SELF-SATISFACTION SCORES.
(n = 59)

Predictor Variable	df*	Regression Coefficient	Standard Error	Computed t Value	Type 1 Error	Increase In RSQ
PreSelf-Satisfaction Scores	57	.7599	.0837	9.0788	.001	.5212
Dogmatism	56	-.0148	.0382	.3874	.800	.0000
Neuroticism	55	-.7108	.5288	1.3441	.200	.0041
No Previous Work Experience	54	7.5598	2.3965	3.1545	.010	.0587
Client Education 12+ years	53	18.9168	4.7310	3.9984	.001	.0591
Mentally Disabled	52	12.5255	3.7892	3.3055	.010	.0382
Culturally Disabled	51	7.4438	3.0700	2.4246	.025	.0329

*df = n - m - 1.

The fourth criterion variable under consideration was the change in the client's Behavior scores. This scale measures one's perception of his own behavior. The results of the analysis of these data are found in Table VII. As

TABLE VII
THE RELATIONSHIP BETWEEN SEVERAL INDEPENDENT
VARIABLES AND THE CHANGE IN CLIENTS'
BEHAVIOR SCORES
(n = 59)

Predictor Variable	df*	Regression Coefficient	Standard Error	Computed t Value	Type I Error	Increase In RSQ
Behavior PreScores	57	.9203	.0788	11.6789	.001	.6557
Dogmatism	56	.0519	.0398	1.3040	.100	.0174
Neuroticism	55	2.0224	.4750	4.2576	.001	.0155
White Client	54	8.5308	2.6198	3.2562	.010	.0305
Length of Disability	53	.6529	.2029	3.2178	.010	.0378
Supervisor Sex: Male	52	-7.6797	2.8826	2.6641	.025	.0319
Emotional Disability	51	-6.9627	4.0168	1.7333	.100	.0117

*df = n - m - 1.

indicated, the relationship between changes in Behavior scores and dogmatism did not differ significantly from zero. The coefficient for neuroticism was, however, found to be

significantly different. As a result, the first null hypothesis was accepted, and the second was rejected. Three other independent variables are shown in the table to be significant at the .05 level or higher.

The fifth variable concerned the changes in the client's Physical Self scores. This score measures how an individual views his body, his state of health, skills, sexuality, and appearance. The results of the analysis are found in Table VIII.

TABLE VIII

THE RELATIONSHIP BETWEEN SEVERAL INDEPENDENT VARIABLES
AND THE CHANGE IN THE CLIENTS' PHYSICAL SELF SCORES
(n = 59)

Predictor Variable	df*	Regression Coefficient	Standard Error	Computed t Value	Type I Error	Increase In RSQ
Physical Self Pre-Scores	57	.3819	.0731	5.2243	.001	.3434
Dogmatism	56	-.0020	.0238	.0840	.900	.0040
Neuroticism	54	1.0396	.3063	3.3940	.010	.0485
Client Education 12+ years	53	7.6290	2.6366	2.8934	.010	.0789
Multiple Disability	52	-6.4556	1.8265	3.5344	.010	.0676
Cultural Disability	51	-3.8965	1.8967	2.0543	.050	.0483

*df = n - m - 1.

As revealed in this table, dogmatism was not found to be significantly related to changes in Physical Self scores at the predetermined .05 level. The first null hypothesis was, therefore, accepted.

Neuroticism was found to be significantly related at the .01 level. Therefore, the second null hypothesis was rejected. Three other independent variables were also found to be statistically significant at the .05 level or higher.

The sixth TSCS subscale under consideration was the changes in the client's Moral Self scores. This score measures one's feelings of being a "good" or "bad" person. As can be seen in Table IX, neither dogmatism nor neuroticism was found to be significantly related to the criterion. Therefore, the first and second null hypotheses were accepted. Once again, however, several other predictor variables were found to be significantly related at the .05 or higher level.

TABLE IX

THE RELATIONSHIP BETWEEN SEVERAL INDEPENDENT VARIABLES AND
THE CHANGE IN CLIENTS' TSCS MORAL SELF SCORES
(n = 59)

Predictor Variable	df*	Regression Coefficient	Standard Error	Computed <u>t</u> Value	Type I Error	In-crease In RSQ
Pre Moral Self	57	.6832	.1042	6.5566	.001	.4178
Dogmatism	56	.0094	.0306	.3071	.800	.0062
Neuroticism	55	.1275	.3448	.3697	.800	.0002
Client Education 7-12 years	54	-11.9532	2.6502	4.5103	.001	.1277
Previous Jobs Last Year: 1-2	53	-4.1773	2.2724	2.2724	.050	.0388
Mexican American	52	-4.6420	2.0746	2.0746	.050	.0313

*df = n - m - 1.

The seventh variable of importance to this study was the change in the client's Personal Self scores, which measures the person's feelings towards himself apart from his physical condition. The results of this analysis appear in Table X. In this case, both dogmatism and neuroticism were found to be significantly related to changes in the scores associated with this variable. The level at which they were significant was

.01. The null hypotheses were, therefore, rejected. Several other predictor variables were also found to be significantly related to the .05, .035, and .01 levels.

TABLE X

THE RELATIONSHIP BETWEEN SEVERAL INDEPENDENT VARIABLES
AND THE CHANGE IN CLIENTS' PERSONAL SELF SCORES
(n = 59)

Predictor Variable	df*	Regression Coefficient	Standard Error	Computed t Value	Type I Error	In-crease In RSQ
Pre Personal Self Scores	57	.8424	.0873	9.6494	.001	.5823
Dogmatism	56	.0824	.0277	2.9747	.010	.0012
Neuroticism	55	1.1430	.3244	3.5234	.010	.0068
Length of Disability	54	.6224	.1235	4.8435	.001	.0748
Supervisor Sex: Male	53	-5.9046	1.9150	3.0833	.010	.0489
Previous Jobs Last Year: 0	52	2.9055	1.5268	1.9029	.100	.0186

*df = n - m - 1.

The eighth criterion variable concerned the changes in the scores associated with Family Self. This variable measures one's feelings of worth as a family member or in relation to his closest associates. As revealed in Table XI, neither

dogmatism nor neuroticism was found to be significantly related to changes in Family Self scores. On that evidence, the first two null hypotheses were accepted. Four other predictor variables were, however, found to be significantly related at the .05, .01, and .025 levels.

TABLE XI

THE RELATIONSHIP BETWEEN SEVERAL INDEPENDENT VARIABLES
AND THE CHANGE IN CLIENTS' TSCS FAMILY SELF SCORES
(n = 59)

Predictor Variable	df*	Regression Coefficient	Standard Error	Computed <u>t</u> Value	Type I Error	In-crease In RSQ
Pre Family Self Scores	57	.7655	.0892	8.5818	.001	.5933
Dogmatism	56	-.0212	.0276	.7681	.500	.0135
Neuroticism	55	-.1160	.3077	.3769	.800	.0057
Client Education 12+ years	54	8.1868	3.3703	2.4291	.025	.0344
Mexican American	53	-4.2534	2.0102	2.1159	.050	.0234
Supervisor Sex: Female	52	8.7202	2.6332	3.3116	.010	.0254
Client Sex: Male	51	6.5882	2.6413	2.4943	.025	.0331

*df = n - m - 1.

The ninth criterion variable analyzed was changes in Social Self scores. This subscale measures one's sense on adequacy

in relations with people in general. The results of the analysis related to this variable are found in Table XII.

TABLE XII

THE RELATIONSHIP BETWEEN SEVERAL INDEPENDENT VARIABLES
AND THE CHANGE IN CLIENTS' TSCS SOCIAL SELF SCORES
(n = 59)

Predictor Variable	df*	Regression Coefficient	Standard Error	Computed <u>t</u> Value	Type 1 Error	In-crease In RSQ
Pre Social Self Score	57	.7017	.0763	9.1965	.001	.5715
Dogmatism	56	.0398	.0212	1.8773	.100	.0000
Neuroticism	55	.0035	.2497	.0140	.950	.0149
Mexican American	54	-5.5165	1.5971	3.4540	.010	.0546
Single Client	53	11.6421	2.7330	2.7330	.001	.0587
Married Client	52	9.6635	3.5432	2.7273	.010	.0429
Client Education 12+ years	51	6.6318	2.5877	2.5628	.025	.0214
Multiple Disability	50	-2.9801	1.5865	1.8784	.100	.0155

*df = n - m - 1.

As indicated in the table, neither dogmatism nor neuroticism was found to be related at the .05 level of significance to changes in Social Self scores. The related null hypotheses

were, therefore, accepted. Four other predictor variables did relate significantly at the .025, .01, and .001 levels.

The tenth TSCS subscale score of importance was Total "V." This score is a measure of the total variation in the entire TSCS scale. High scores indicate a lack of stability from one area of the scale to another and imply that the subject tends to "compartmentalize" one area from all others. In short, his self-concept is poorly integrated.

The results of the analysis pertaining to changes in Total "V" scores are found in Table XIII. As illustrated, supervisor dogmatism was found to be highly significant in relation to changes in Total "V" scores. The first null hypothesis was, therefore, rejected. The second null hypothesis related to neuroticism was accepted since no significant relationship was found. No other independent variables were found to be significantly related to this particular criterion variable.

TABLE XIII

THE RELATIONSHIP BETWEEN SEVERAL INDEPENDENT VARIABLES
AND THE CHANGE IN CLIENTS' TOTAL "V" SCORES
(n = 59)

Predictor Variable	df*	Regression Coefficient	Standard Error	Computed t Value	Type 1 Error	Increase In BSQ
Total "V" Pre Score	57	.5274	.2431	2.1694	.050	.2857
Dogmatism	56	.5063	.1064	4.7575	.001	.0469
Neuroticism	55	.0853	.6454	.1321	.900	.0034
Length of Disability	54	-.0677	.0556	1.2176	.250	.0532

Hypothesis Three

The third hypothesis of interest to this study was based on the question of whether or not supervisor dogmatism or neuroticism is related to the clients' dropping out of their rehabilitation programs before the end of the eleven-week testing period.

In order to test this hypothesis, the eighteen clients who had, for negative reasons, terminated their respective programs were grouped with the fifty-nine clients who were available for the posttesting. This aggregation was then treated as the criterion variable with a zero score given to dropouts and a score of one given to retainers. The primary independent variables were the neuroticism and dogmatism scores of the supervisors associated with each client. The data were then analyzed by the same step-wise procedures presented earlier in this chapter. The results of the analysis appear in Table XV.

The eleventh and last TSCS subscale score analyzed was entitled Self-Criticism. It is composed of mildly derogatory statements that most people accept as being true in relation to themselves personally. (Those who reject these statements are being defensive and are probably trying to present an unrealistic picture of themselves.)

Table XIV contains the results of the analysis of the data related to this variable. The results show that neither

TABLE XIV

THE RELATIONSHIP BETWEEN SEVERAL INDEPENDENT VARIABLES
AND THE CHANGE IN CLIENTS' TSCS SELF-CRITICISM SCORES
(n = 59)

Predictor Variable	df*	Regression Coefficient	Standard Error	Computed t Value	Type I Error	In-crease In RSQ
Pre Self Criticism Score	57	.7512	.1085	6.9235	.001	.4861
Dogmatism	56	-.0038	.0239	.1589	.900	.0036
Neuroticism	55	-.3301	.2813	1.1734	.300	.0002
White Client	54	-3.5050	1.4918	2.3495	.025	.0586
Physically Disabled	53	-4.3494	2.4191	1.7979	.100	.0260

*df = n - m - 1.

dogmatism nor neuroticism was significantly related to change in the client's Self-Criticism scores. Therefore, both null hypotheses were accepted. One independent variable did relate significantly at the .025 level.

TABLE XV

THE RELATIONSHIP BETWEEN SUPERVISOR NEUROTICISM,
 DOGMATISM AND OTHER INDEPENDENT VARIABLES
 AND CLIENT DROPOUTS AND RETENTIVES
 (n = 77)

Predictor Variable	df*	Regression Coefficient	Standard Error	Computed t Value	Type I Error	Increase In RSQ
Neuroticism	75	.0078	.0190	.4106	.700	.0027
Dogmatism	74	-.0020	.0015	1.3096	.200	.0345
Client Education 12+ years	73	.3182	.2133	1.4917	.200	.0268
Partial Support	72	-.1650	.1005	1.6411	.200	.0258
Married Client	71	-.4302	.1633	2.6340	.025	.0538

*df = n - m - 1.

An explanation is in order to aid in interpreting a criterion variable when it has been "dummied." Because a score of one was given to retentives and a zero score given to dropouts, a significant positive regression coefficient between, for example, supervisor dogmatism and the criterion means that it is the client retentives who vary with changes in dogmatism of the supervisor. A significant negative regression coefficient means that supervisor dogmatism scores were related to client dropouts.

As indicated by the data presented in Table XIII, neither supervisor dogmatism nor neuroticism was significantly related to client dropouts or client retainives at the .05 level of significance or above. A significant relationship, however, for married clients' dropping out of their rehabilitation programs was indicated by the negative regression coefficient.

Hypothesis Four

The fourth and final hypothesis of importance to this research effort was whether or not a relationship was present between the TSCS scores for clients who, for negative reasons, dropped out of their rehabilitation programs sometime during the eleven-week testing period and those clients who remained for the duration of the testing period. It seemed possible that the self-concept of those clients who dropped out of the workshops of which they were a part was poorly integrated and of less strength than that of those clients who were able to deal with a variety of new and challenging experiences.

The criterion variable was once again "dummied" since a score of one was given to client retainives and a score of zero was given to client dropouts. The independent variables of importance were the eleven TSCS pre-subscale scores. These eleven independent variables were included as part of the analysis related to testing hypothesis three. As indicated

in Table XV, none of these subscale scores were even entered into the regression equation. They were, therefore, of little or no importance in explaining why a client either dropped out of or remained in his respective program.

Summary

The purpose of this chapter was to present the results of the analysis of the data. The four research hypotheses were restated in null form and tested statistically for significance through the use of a step-wise multiple regression procedure. The first and second hypotheses dealt with the question of whether or not supervisor dogmatism and neuroticism were related to changes in the self-concept scores and client subordinates.

Dogmatism was shown to be significantly related to two of the TSCS subscales: Personal Self and Total "V." Neuroticism was found to be significantly related to four of the TSCS subscale listed as follows: (1) Total "P," (2) Behavior, (3) Physical Self, and (4) Personal Self. A variety of other independent variables were significantly related to ten out of the eleven TSCS subscales.

The third hypothesis was centered around the question of whether having neurotic or dogmatic supervisors was related to client dropouts or client retainives. The results of the analysis indicated no significant relationship between these variables at the .05 level of significance.

The interpretation of these findings and recommendations for future investigations of this nature will be discussed in the following chapter.

CHAPTER V

SUMMARY, FINDINGS, INTERPRETATIONS AND RECOMMENDATIONS

Summary

The purpose of this study was to determine whether or not supervisor dogmatism and neuroticism were related to changes in the self-concept of handicapped clients in rehabilitation. Two subproblems arose out of the supervisor-client investigations: 1) was supervisor dogmatism or neuroticism associated with those clients who, for negative reasons, terminated the particular rehabilitation program they had entered before the end of the eleven-week testing period: 2) was the variation in clients' self-concept scores associated with having dropped out for negative reasons?

The hypotheses developed from these questions were stated in null form as follows:

1. There is no significant relationship between changes in the clients' self-concept and the degree to which the clients' supervisors are dogmatic.
2. There is no significant relationship between changes in the clients' self-concept and the degree to which the clients' supervisors are neurotic.
3. There is no significant relationship between the dogmatism and neuroticism scores of supervisors associated with clients who dropped out of their rehabilitation programs before the testing period was over and the clients who remained for the entire duration of the testing period.

4. There is no significant relationship between the self-concept scores of clients who dropped out of their rehabilitation programs and clients who remained for the entire duration of the testing period.

The source of data for this study was defined as all sheltered workshops in a five-state region in the Southwest. An attempt was made to choose a stratified random sample of twenty workshops from this population. Stratification was based on the previous year's monthly average number of clients in a given workshop. The strata were defined as 1-40 clients, 41-90 clients, and 91+ clients. The number of sample workshops chosen for each stratum was determined by the percentage of workshops in the population strata.

Nine sample workshops were chosen for the first stratum, seven for the second, and four for the third. The director in charge of operating each workshop was then contacted and asked to participate in the study. All agreed to participate.

The sample subjects under investigation were defined as all new incoming clients accepted by the sample workshops during a three-week period in April, 1970. Ninety clients were accepted into ten of the twenty sample workshops by the end of the three-week period. The ten workshops which did not receive clients during the established time period were given an extension of one week in hopes of getting client representation from them, but no additional clients appeared.

The majority of the sample subjects were in workshops in the two largest strata. The smallest strata (1-40 clients)

was poorly represented since only one workshop out of the nine chosen in that strata received new clients.

Because the study was centered on the question of client change, a pre-post testing procedure was necessary. The ten workshops that received clients during the three-week period were mailed all the necessary testing instruments and instructions. A staff member in each workshop was placed in charge of administering the tests as soon as possible after the client was selected for rehabilitation.

The posttests were administered in the workshop by two staff members of the Rehabilitation Services Training Program on the North Texas State University Campus. The author was one of these two people. The posttests were completed approximately eleven weeks after the pretests had been given with sixty-one clients available for posttesting. This figure was reduced to fifty-nine because two clients were considered incapable of accurately reading and understanding the content of the self-concept instrument.

The instruments used to collect the data were (1) The Tennessee Self Concept Scale, (2) Rokeach's Dogmatism Scale, (3) Winne's Neuroticism Scale, and (4) a Personal Data Form constructed by the author. Once administered, the instruments were then scored, and the information was put on computer cards and analyzed. The analysis was accomplished through the use of a step-wise multiple regression technique developed for computer use by the University of California at Berkeley.

The construction of the analytical design used in testing the first two hypotheses set the post self-concept scores as the criterion variable (Y). The corresponding pre self-concept scores were set as one independent variable (X_1), along with supervisor dogmatism (X_2) and neuroticism (X_3) and a variety of other demographic variables (X_n) associated with both clients and supervisors. All tests for significance were made at the .05 level.

The procedure used for testing the last two hypotheses involved the use of a "dummy" technique for the criterion variable for client dropouts and client retainives. This variable was then regressed against supervisor dogmatism and neuroticism for one of the hypotheses and against client self-concept scores (pre) for the final hypothesis. Again, all tests for significance were made at the .05 level.

Findings

The analysis of the eleven subscales of the Tennessee Self Concept Scale versus supervisor dogmatism and neuroticism (hypotheses one and two) produced the following findings:

1. Total "P"--Although supervisor dogmatism was not found to be significantly related to change variation, supervisor neuroticism was at the .025 level. The direction of the relationship was positive.

2. Identity--Both supervisor dogmatism and neuroticism were unrelated to change variation in this self-concept variable.

3. Self Satisfaction--Both supervisor dogmatism and neuroticism were unrelated to change variation in this self-concept variable.

4. Behavior--Neuroticism was found to be significantly related to change variation in a positive direction; dogmatism was unrelated.

5. Physical Self--Neuroticism was found to be significantly and positively related to change variation in this self-concept variable.

6. Moral Self--Both dogmatism and neuroticism were unrelated to change variation in this self-concept variable.

7. Personal Self--Both dogmatism and neuroticism were found to be significantly and positively related to change variation at the .01 level.

8. Family Self--Both dogmatism and neuroticism were unrelated to change variation in this variable.

9. Social Self--Both dogmatism and neuroticism were unrelated to change variation in this variable.

10. Total "V"--Dogmatism was significantly related to change variation at the .001 level. The relationship was positive. Neuroticism was not significantly related.

11. Self Criticism--Both dogmatism and neuroticism were unrelated to change variation in this variable.

Findings related to the third hypothesis which centered on the question of the relationship between client dropouts

and retentives (the criterion variable) and supervisor dogmatism and neuroticism (two independent variables) were as follows: Neither supervisor variable was significantly related to client dropouts or retentives. However, the fact that clients were married was significantly related to the drop out rate at the .025 level.

The fourth hypothesis centered on the issue of whether or not the relative strength or weakness of the clients' self-concept (the independent variable) was related to dropping out or remaining in the rehabilitation programs (the criterion variable). The findings related to this analysis revealed no significant relationship between all eleven TSCS subscales and the criterion variable.

Interpretations

The sparse and contradictory findings between changes in the clients' self-concept and supervisor dogmatism and neuroticism make any theoretical interpretation difficult. The relationships found between variations in Total "P", Behavior, Physical Self, and Personal Self scores and the mental health (neuroticism) of supervisors are contrary to expectations, because all four of these relationships were positive in direction. That is to say, increases in supervisor neuroticism were associated with slight positive increases in the scores of these four measures of the clients' self-concept; theoretically, the more neurotic supervisor was thought to be associated with negative changes in self-concept scores.

The significant findings between supervisor dogmatism and Personal Self and dogmatism and Total "Y" were also positive in nature. Here, again, the findings are antithetical to expectations. Dogmatic supervisors, because of their assumed inability to accurately perceive problems confronting clients and, more importantly, because of their assumed inability to reappraise the information that was perceived and restructure the necessary response, were expected to have a detrimental effect on the client.

One speculative interpretation for both findings related to dogmatism and neuroticism could be that handicapped clients are largely threatened by the new and demanding conditions that confront them upon entering the workshop setting. In an attempt to deal with the threat, they might attach themselves to someone in the new environment who could provide a measure of security. Both the neurotic or dogmatic supervisor could foster this type of dependency relationship (see pages 30, 31, and 34 in Chapter II).

This likelihood is further exacerbated by the fact that, for many clients, dependency has generally been a way of life. Whatever the type of disability, it still forces the client into a position which is more likely to require outside assistance than if the disability were not present. If this is true, then it is possible that the challenge (threat?) of the workshop leads to a greater need for dependency, at

least until an adjustment has been made. It could be that the dogmatic and/or neurotic supervisor provides this necessary measure of security.

A remark or two is needed in reference to the contradictory findings between this research and Barton's research (Chapter II) which was the first major research effort in the field of vocational rehabilitation to report the necessity for a quality interpersonal relationship between supervisors and employees if positive rehabilitation is to occur.

There are several possible reasons for these contradictions. First, from the vantage point of this researcher the critical incidents technique used in Barton's study is a measure only of opinions of what makes for effective workshop supervisors. It does not precisely measure what has actually taken place that adds to or detracts from the effectiveness of interpersonal encounters. It is possible to imagine positive rehabilitation outcomes resulting from certain relationships that would be considered "poor" based on Barton's findings. For example, the need to dominate present in some neurotic supervisors could be the added security necessary for some clients to muster the energy to try and finish their rehabilitation programs.

Logical as the above situation appears, there are hardly adequate grounds for engaging in a refutation or adulation of Barton's results based on the findings presented herein.

Several constraints prevent comparing the results of these two studies. The most obvious one is the geographical difference from which the samples for both studies were chosen--the Northwest and the Southwest. Second, different results could be due to the fact that these two studies occurred nearly six years apart. Third, Barton's sample was much larger and involved many more workshops than this research; a distinction that doesn't always increase the validity of a study but it certainly increases the probability of doing so. And finally, it is not accurate to compare empirical results when the means by which the data were gathered were considerably different from one another.

In regard to the question of whether or not supervisor dogmatism and neuroticism were associated with client dropouts or retentives (hypothesis three), no explanation is possible in light of the non-significant findings. Married clients were, however, associated with numerous client dropouts. This finding is contrary to previous investigations since the married client was thought to be better motivated to complete the program because of his added responsibilities. However, looking at the issue from a different perspective, his higher motivation to provide support for his spouse could conceivably lead to the client's leaving the workshop to look for a better-paying job. The wages one earns while in rehabilitation are generally insufficient support for one person

and without a doubt insufficient for supporting someone else. Because no significant findings were found between each of the eleven TSCS subscales and client dropouts or retainives (hypothesis four), no interpretation is possible.

It should be noted that several client demographic variables were found to be frequently associated with changes in self-concept scores. Clients with twelve or more years of formal education were positively related to self-concept change on seven out of the eleven TSCS subscales. Several explanations for this occurrence are possible. First, it could be that clients with higher amounts of education could more accurately read and understand the one-hundred questions on the TSCS. If so, the results of the instrument would be more reliable and accurate in reflecting the change that did occur.

Another explanation could be based on the notion that the higher one's educational attainment, the better the ability to comprehend environmental factors that would, for a person of lesser insight (level of attainment), be incomprehensible and perhaps threatening. In simpler terms, because of a more enlightened understanding of the demands of the workshop, the higher-educated client would be more likely to grow and change with his experience than would the less-educated client.

Clients of Mexican-American origin were also found to be significantly, although negatively, related to self-concept

change variation on four of the eleven TSCS subscales. This finding could be attributed to the fact that all of the ten workshops involved in this study had not been designed to deal with cultural variations that exist among their client inhabitants. The professional staff and indeed the values surrounding the work and training activity are reflective of the dominant and white subculture. This explanation would have more validity if Black clients had also been found negatively related to self-concept variations. However, such was not the case, since no relationships were found between Blacks and changes on any of the eleven TSCS subscales.

In reference to the predictive ability of any of the findings produced by this investigation, only one merits discussion. The composite measure of the clients' self-concept was reflected in the subscale entitled, Total "P". Predictive equations were produced for the ten remaining subscales, but they were so varied in terms of the variables produced that logical and consistent trends were not discernible. The only possible alternative for dealing with the question of prediction was to turn to the composite self-concept measure (see Table II in Chapter IV).

Clients who had been disabled the longest, who had no previous work experience, who were mentally disabled, and who had completed twelve or more years of formal schooling were more likely to experience positive self-concept change

than clients who did not share these characteristics. A note of caution should be sounded in reference to these predictive variables: associate inferences made by each of these four variables were extremely small. That is to say, only a small portion of the total variation in Total "P" scores could be associated with these four variables. The remaining variation is not explainable within the confines of this study.

Recommendations

Several methodological problems emerge from this study that are amenable to correction if a similar study is ever undertaken. First, because of the relative stability of the self-concept once an individual approaches or has reached maturity, the pre-post time period should be extended from eleven weeks to six months or more in an attempt to allow time for the dynamics in the workshop to be effective in altering the self-concept of the clients. This would, of course, increase the chances of losing pretest clients before the posttest period arrived, but this problem could be offset partially by increasing the sample size.

Second, the TSCS instrument restricts the available alternative responses to any one question because it is a written, self-administering instrument. As a possible alternative to restricting the clients' responses, an in-depth

interviewing technique might be more accurate in discerning client self-concept change.

The desirable situation, in this author's opinion, would be to get measures on the client upon his entering the workshop, one month later, and six to twelve months later. In this way, the trauma experienced by the client caused by having to make an adjustment to a new and complex situation could be accounted for by the intermediary measure. The change identified by the final measure would more likely be consistent, genuine, and larger.

Similar studies concerned with self-concept change should not attempt to deal with more than one type of disability group unless resources are available to obtain a very large sample. The diversity of forces acting on any one disability type are enough problems for any researcher.

APPENDIX A

INSTRUCTIONS FOR ADMINISTERING THE TEST INSTRUMENTS

(The test instructions as they appear herein are an exact duplicate of the instructions sent to the workshops at the beginning of the pretest period.)

GENERAL INSTRUCTIONS

FOR

ADMINISTERING TOTAL TEST PACKET

(These Instructions Must Be Read Prior To Any Other Activity)

GENERAL DIRECTIONS FOR ADMINISTERING THE TWO PRETEST INSTRUMENTS

1. INSTRUCTIONS FOR ADMINISTERING THE TEST INSTRUMENTS

The instructions for administering each of these two instruments are on separate sheets with the following titles:

Test 1. Instructions for administering the Tennessee Self Concept Scale.

Test 2. Instructions for administering the Client Personal Data Sheet.

2. WHO IS TO ADMINISTER THE TESTS?

We prefer that the Executive Director assume the sole responsibility of administering these tests. If desirable, however, some other responsible person in the workshop may be given this task as long as that person is NOT a production supervisor.

Administering these initial two test instruments is all that will be required of the person in charge of testing. We will personally come to the workshop sometime in July to conduct the posttesting. Between now and then we will be in contact with the person in charge of testing at various times seeking certain information and to check on the clients who have been tested.

3. WHICH CLIENTS ARE TO BE TESTED?

(A). All new clients who are accepted into your workshop during the period from May 11th through May 29th, 1970, (three weeks) must be tested with the exception of those who fall in categories A1, A2, and A3 below. (This of course requires you to test those new clients who may already be in your workshop as of May 11th.)

A1. EXCEPTION: Those clients who have more than a 50 per cent hearing loss should not be included in the testing.

A2. EXCEPTION: Those clients who are severely mentally retarded (i.e., below 6th grade reading level) should not be included in the testing.

A3. EXCEPTION: It is important to us that the client has not worked under a floor production supervisor before he is tested;

therefore, try to test all clients before they are placed in the production area for training or evaluation.

4. WHEN DO YOU TEST THE CLIENT?

You should test each client as soon as possible after he enters the workshop; however, since your time is important you may test incoming clients as a group on Friday of each week.

5. WHERE SHOULD YOU TEST?

It is important that the place of testing be quiet and comfortable. Please use your own discretion. Remember, the total testing time involved is approximately one hour.

6. WHAT IS THE MOST IMPORTANT THING TO REMEMBER?

It is essential that the client understand exactly what he is to do! The directions, we hope, are clear, but if he is still confused, help should be given to clarify the problem. Therefore, you must be familiar with the three test instruments. It would be wise to personally make a "dry run" yourself to see that you understand the directions and the tests.

7. RETURNING TEST FORMS TO US.

Enclosed in the test packet is one or more enclosure(s) which is already addressed and stamped. This is the means you should use to return ALL test instruments (used and unused) to us.

Staple these two instruments together with the personal data sheet on top, and return this material in the brown, self-addressed envelope(s). Please seal and mail first class.

If, for example, you had eight clients altogether, you should have eight separate packets to include in the brown envelope(s).

Please be sure that all questions are completed, enclosed in the envelope, and securely sealed before mailing to us. If necessary, please bind each envelope with tape or string if it needs it.

8. SUMMARY

We have tried to make these instructions as clear and concise as possible. If, however, any serious questions arise, please do not hesitate to call us collect.

WE SINCERELY APPRECIATE YOUR ASSISTANCE!!!

I N S T R U C T I O N S F O R A D M I N I S T E R I N G

T E S T N U M B E R O N E

T H E T E N N E S S E E S E L F
C O N C E P T S C A L E

(Approximate Testing Time: 20-30 Minutes)

I N S T R U C T I O N S F O R A D M I N I S T E R I N G
T H E T E N N E S S E E S E L F
C O N C E P T S C A L E

(The Person Giving This Test MUST Read All These
Instructions Carefully Before He Begins
Testing.)

- Step 1. Give each client a blue test booklet and an answer sheet. Both you and the client(s) should open the test booklet to page 1.
- Step 2. On the back side of the front cover are the instructions for taking the test. Have the client(s) follow along as you read the instructions CAREFULLY to them. Give the client(s) time to fill in completely the data requested on the left side of the answer sheet.
- Step 3. After you have read all the instructions, ask if all the clients understand them. If they do not, read the instructions a second time.
- Step 4. This is probably the most difficult part of explaining the test. In order to line up the answer sheet with the questions in the booklet, insert the answer sheet BETWEEN the last page and the back cover of the test booklet.
- Step 5. Now, line up item 1 on page 1 in the test booklet with item 1 on the answer sheet and begin the test. When page 1 is completed, turn to page 2 in the test booklet and realign the item numbers.

Page 3 requires that the answer sheet be pulled out slightly and realigned. This process continues until the test is completed.

PLEASE NOTE: You have been given more answer sheets than test booklets. This is because the test booklets will be re-used each week. The answer sheets, however, can only be used once.

INSTRUCTIONS FOR ADMINISTERING
TEST NUMBER TWO

THE CLIENT PERSONAL DATA SHEET

(Approximate Testing Time: 8 Minutes)

CLIENT PERSONAL DATA SHEET

IMPORTANT: You may fill these out individually with the client if you so desire; if, however, you wish to do it as a group to save time, you may do so. Please note the following remarks about the individual items for your clarification:

- a) Item 11: In other words, what was the client's last job before coming to your Rehabilitation Program.
- b) Item 12: We are asking you to make your own judgement here, with the help of the client. You may not be sure, but make your best choice.
- c) Items 14 & 16: Omit, we repeat, Omit numbers 14 and 16 at this time. We will get this information at a later time.

APPENDIX B

TEST INSTRUMENTS

WINNE'S NEUROTICISM SCALE

NAME: _____ NAME OF WORKSHOP: _____

This inventory consists of numbered statements. Read each statement and decide whether it is true as applied to you or false as applied to you.

If a statement is TRUE or MOSTLY TRUE, as applied to you, circle the "T." If a statement is FALSE or NOT USUALLY TRUE, as applied to you, circle the "F."

Remember to give YOUR OWN opinion of yourself. Do not leave any blank spaces if you can avoid it.

NOW LOOK AT THE QUESTIONS AND BEGIN.

CIRCLE ONE

- T : F 1. My sleep is fitful and disturbed.
- T : F 2. I cannot understand what I read as well as I used to.
- T : F 3. Much of the time my head seems to hurt all over.
- T : F 4. I wake up fresh and rested most mornings.
- T : F 5. I am troubled by discomfort in the pit of my stomach every few days or oftener.
- T : F 6. I frequently notice my hand shakes when I try to do something.
- T : F 7. I feel weak all over much of the time.
- T : F 8. I am about as able to work as I ever was.
- T : F 9. I brood a great deal.

- T : F 10. I am happy most of the time.
- T : F 11. I have little or no trouble with my muscles twitching or jumping.
- T : F 12. I have had periods of days, weeks, or months when I couldn't take care of things because I couldn't "get going."
- T : F 13. I believe I am no more nervous than most people.
- T : F 14. I am bothered by acid stomach several times a week.
- T : F 15. I have a good appetite.
- T : F 16. I have very few headaches.
- T : F 17. Often I feel as if there were a tight band about my head.
- T : F 18. I seldom or never have dizzy spells.
- T : F 19. Once a week or oftener I suddenly feel hot all over, without apparent cause.
- T : F 20. I have periods of such great restlessness that I cannot sit long in a chair.
- T : F 21. I like to flirt.
- T : F 22. My judgment is better than it ever was.
- T : F 23. There seems to be a fullness in my head or nose most of the time.
- T : F 24. I am in just as good physical health as most of my friends.
- T : F 25. I am easily awakened by noise.

- T : F 26. Sometimes, when embarrassed, I break out in a sweat which annoys me greatly.
- T : F 27. My memory seems to be all right.
- T : F 28. I hardly ever feel pain in the back of my neck.
- T : F 29. Most of the time, I feel blue.
- T : F 30. I sweat very easily even on cool days.

TENNESSEE SELF CONCEPT SCALE

INSTRUCTIONS

On the top line of the separate answer sheet, fill in your name and the other information except for the time information in the last three boxes. You will fill these boxes in later. Write only on the answer sheet. Do not put any marks in this booklet.

The statements in this booklet are to help you describe yourself as you see yourself. Please respond to them as if you were describing yourself to yourself. Do not omit any item! Read each statement carefully; then select one of the five responses listed below. On your answer sheet, put a circle around the response you chose. If you want to change an answer after you have circled it, do not erase it but put an X mark through the response and then circle the response you want.

When you are ready to start, find the box on your answer sheet marked time started and record the time. When you are finished, record the time finished in the box on your answer sheet marked time finished.

As you start, be sure that your answer sheet and this booklet are lined up evenly so that the item numbers match each other.

Remember, put a circle around the response number you have chosen for each statement.

Responses-

Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
1	2	3	4	5

You will find these response numbers repeated at the bottom of each page to help you remember them.

1. I have a healthy body.
3. I am an attractive person.
5. I consider myself a sloppy person.
19. I am a decent sort of person.
21. I am an honest person.
23. I am a bad person.
37. I am a cheerful person.
39. I am a calm and easy going person.
41. I am a nobody.
55. I have a family that would always help me in any kind of trouble.
57. I am a member of a happy family.
59. My friends have no confidence in me.
73. I am a friendly person.
75. I am popular with men.
77. I am not interested in what other people do.
91. I do not always tell the truth.
93. I get angry sometimes.

Responses-

Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
1	2	3	4	5

2. I like to look nice and neat all the time.
4. I am full of aches and pains.
6. I am a sick person.
20. I am a religious person.
22. I am a moral failure.
24. I am a morally weak person.
38. I have a lot of self-control.
40. I am a hateful person.
42. I am losing my mind.
56. I am an important person to my friends and family.
58. I am not loved by my family.
60. I feel that my family doesn't trust me.
74. I am popular with women.
76. I am mad at the whole world.
78. I am hard to be friendly with.
92. Once in a while I think of things too bad to talk about.
94. Sometimes, when I am not feeling well, I am cross.

Responses-

Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
1	2	3	4	5

7. I am neither too fat nor too thin.
9. I like my looks just the way they are.
11. I would like to change some parts of my body.
25. I am satisfied with my moral behavior.
27. I am satisfied with my relationship to God.
29. I ought to go to church more.
43. I am satisfied to be just what I am.
45. I am just as nice as I should be.
47. I despise myself.
61. I am satisfied with my family relationships.
63. I understand my family as well as I should.
65. I should trust my family more.
79. I am as sociable as I want to be.
81. I try to please others, but I don't overdo it.
83. I am no good at all from a social standpoint.
95. I do not like everyone I know.
97. Once in a while, I laugh at a dirty joke.

Responses-

Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
1	2	3	4	5

8. I am neither too tall nor too short.
10. I don't feel as well as I should.
12. I should have more sex appeal.
26. I am as religious as I want to be.
28. I wish I could be more trustworthy.
30. I shouldn't tell so many lies.
44. I am as smart as I want to be.
46. I am not the person I would like to be.
48. I wish I didn't give up as easily as I do.
62. I treat my parents as well as I should (Use past tense if parents are not living).
64. I am too sensitive to things my family say.
66. I should love my family more.
80. I am satisfied with the way I treat other people.
82. I should be more polite to others.
84. I ought to get along better with other people.
96. I gossip a little at times
98. At times I feel like swearing.

Responses-

Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
1	2	3	4	5

13. I take good care of myself physically.
15. I try to be careful about my appearance.
17. I often act like I am "all thumbs".
31. I am true to my religion in my everyday life.
33. I try to change when I know I'm doing things that are wrong.
35. I sometimes do very bad things.
49. I can always take care of myself in any situation.
51. I take the blame for things without getting mad.
53. I do things without thinking about them first.
67. I try to play fair with my friends and family.
69. I take a real interest in my family.
71. I give in to my parents. (Use past tense if parents are not living).
85. I try to understand the other fellow's point of view.
87. I get along well with other people.
89. I do not forgive others easily.
99. I would rather win than lose in a game.

Responses-

Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
1	2	3	4	5

14. I feel good most of the time.
16. I do poorly in sports and games.
18. I am a poor sleeper.
32. I do what is right most of the time.
34. I sometimes use unfair means to get ahead.
36. I have trouble doing the things that are right.
50. I solve my problems quite easily.
52. I change my mind a lot.
54. I try to run away from my problems.
68. I do my share of work at home.
70. I quarrel with my family.
72. I do not act like my family thinks I should.
86. I see good points in all the people I meet.
88. I do not feel at ease with other people.
90. I find it hard to talk with strangers.
100. Once in a while I put off until tomorrow what I ought to do today.

Responses-

Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
1	2	3	4	5

PERSONAL DATA SHEET FOR CLIENTS

WORKSHOP NO.: _____

DATE: _____

1. Name of Client: _____
2. Name and Address of Workshop: _____

3. Age: _____ Sex: M _____ F _____
4. Race: (Check One) _____ Mexican American
_____ White American
_____ Black American
_____ Other
5. Education: (Give Highest Level Attained) _____ Years
6. Marital Status: (Check One) _____ Single
_____ Married
_____ Divorced
_____ Widow(er)
7. As Regards Financial Independence, the Client is: (Check One)
_____ Fully Self-Supporting
_____ Partially Self-Supporting
_____ Dependent on Others
_____ Entirely
8. Number of Dependents (Other than Himself): _____
9. Number of Jobs Held by Client in the Last Year: _____
10. Client's Approximate Income Last Year: \$ _____
11. What Was The Client's Last Job? (Describe Briefly): _____

12. Type of Disability: (Check One) _____ Physical
_____ Mental
_____ Emotional
_____ Multiple
_____ Cultural
13. Length of Disability: _____ Years

14. The Client is Currently Engaged in the Following Work Activity: (Briefly Describe the Job): _____

15. Name of the Client's Floor Supervisor: (To Be Filled in After the Client Has Been Placed Under a Supervisor)

PERSONAL DATA SHEET FOR WORKSHOP SUPERVISORS

WORKSHOP NO.: _____ DATE: _____

1. Name of supervisor: _____
2. Title: _____
3. Age: _____ Sex: M _____ F _____
4. Religious preference: (Check One)
 - _____ Catholic
 - _____ Protestant
 - _____ Other (Specify: _____)
5. Have you ever served in the military? Yes: _____ No: _____
6. What is your annual salary? \$ _____
7. How many years of supervisory experience have you had in a sheltered workshop? _____ Years
8. How many years of supervisory experience have you had in industry? _____ Years
9. What is your estimated caseload size (annual)? _____
10. Please list the highest level of school attained: _____ Years
11. Name of client(s) you are supervising pertinent to this research effort:
 - a. _____
 - b. _____
 - c. _____
 - d. _____
 - e. _____
 - f. _____

ROKEACH'S DOGMATISM SCALE

The following is a study of what the general public thinks and feels about a number of important social and personal questions. The best answer to each statement below is your personal opinion. We have tried to cover many different and opposing points of view; you may find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others, and perhaps uncertain about others; whether you agree or disagree with any statement, you can be sure that many people feel the same as you do.

Mark each statement in the left margin according to how much you agree or disagree with it. Please mark every one.

Write +1, +2, +3, or -1, -2, -3, depending on how you feel in each case.

+1: I AGREE A LITTLE	-1: I DISAGREE A LITTLE
+2: I AGREE ON THE WHOLE	-2: I DISAGREE ON THE WHOLE
+3: I AGREE VERY MUCH	-3: I DISAGREE VERY MUCH

- _____ 1. The United States and Russia have just about nothing in common.
- _____ 2. The highest form of government is a democracy and the highest form of democracy is a government run by those who are most intelligent.
- _____ 3. Even though freedom of speech for all groups is a worthwhile goal, it is unfortunately necessary to restrict the freedom of certain political groups.
- _____ 4. It is only natural that a person would have a much better acquaintance with ideas he believes in than with ideas he opposes.
- _____ 5. Man on his own is a helpless and miserable creature.
- _____ 6. Fundamentally, the world we live in is a pretty lonesome place.
- _____ 7. Most people just don't give a "damn" for others.
- _____ 8. I'd like it if I could find someone who would tell me how to solve my personal problems.

- _____9. It is only natural for a person to be rather fearful of the future.
- _____10. There is so much to be done and so little time to do it in.
- _____11. Once I get wound up in a heated discussion I just can't stop.
- _____12. In a discussion I often find it necessary to repeat myself several times to make sure I am being understood.
- _____13. In a heated discussion I generally become so absorbed in what I am going to say that I forget to listen to what the others are saying.
- _____14. It is better to be a dead hero than to be a live coward.
- _____15. While I don't like to admit this even to myself, my secret ambition is to become a great man, like Einstein, or Beethoven, or Shakespeare.
- _____16. The main thing in life is for a person to want to do something important.
- _____17. If given the chance I would do something of great benefit to the world.
- _____18. In the history of mankind, there have probably been just a handful of really great thinkers.
- _____19. There are a number of people I have come to hate because of the things they stand for.
- _____20. A man who does not believe in some great cause has not really lived.
- _____21. It is only when a person devotes himself to an ideal or cause that life becomes meaningful.
- _____22. Of all the different philosophies which exist in this world there is probably only one which is correct.
- _____23. A person who gets enthusiastic about too many causes is likely to be a pretty "wishy-washy" sort of person.

- _____24. To compromise with our political opponents is dangerous because it usually leads to the betrayal of our own side.
- _____25. When it comes to differences of opinion in religion we must be careful not to compromise with those who believe differently from the way we do.
- _____26. In times like these, a person must be pretty selfish if he considers primarily his own happiness.
- _____27. The worst crime a person could commit is to attack publicly the people who believe in the same thing he does.
- _____28. In times like these it is often necessary to be more on guard against ideas put out by people or groups in one's own camp than by those in the opposing camp.
- _____29. A group which tolerates too much difference of opinion among its own members cannot exist for long.
- _____30. There are two kinds of people in this world: those who are for the truth and those who are against the truth.
- _____31. My blood boils whenever a person stubbornly refuses to admit he's wrong.
- _____32. A person who thinks primarily of his own happiness is beneath contempt.
- _____33. Most of the ideas which get printed nowadays aren't worth the paper they are printed on.
- _____34. In this complicated world of ours the only way we can know what's going on is to rely on leaders or experts who can be trusted.
- _____35. It is often desirable to reserve judgment about what's going on until one has had a chance to hear the opinions of those one respects.
- _____36. In the long run the best way to live is to pick friends and associates whose tastes and beliefs are the same as one's own.

- _____37. The present is all too often full of unhappiness.
It is only the future that counts.
- _____38. If a man is to accomplish his mission in life
it is sometimes necessary to gamble "all or
nothing at all."
- _____39. Unfortunately, a good many people with whom I
have discussed important social and moral
problems don't really understand what's going
on.
- _____40. Most people just don't know what's good for
them.

APPENDIX C

WORKSHOPS IN THE POPULATION AND IN THE SAMPLE

WORKSHOPS IN THE POPULATION AND IN THE SAMPLE
 (Sample Workshops Indicated by *)

Oklahoma:

Ardmore Sheltered Workshop
 Ardmore, Oklahoma*

Bartlesville Sheltered Workshop
 Bartlesville, Oklahoma

Chickasha Opportunity Workshop
 and Training Center, Inc.
 Chickasha, Oklahoma

Lawton Goodwill Industries
 Lawton, Oklahoma*

Goodwill Industries Of Muskogee
 Muskogee, Oklahoma

Oklahoma City Goodwill Industries
 Oklahoma City, Oklahoma

United Cerebral Palsy Workshop
 Oklahoma City, Oklahoma*

Vocational Evaluation, Adjust-
 ment and Placement Center
 Oklahoma City, Oklahoma

Dale Rogers Training Center
 Sheltered Workshop
 Oklahoma City, Oklahoma

Kay County Training Center and
 Sheltered Workshop
 Ponca City, Oklahoma

Hissom Memorial Center
 Sand Springs, Oklahoma

Handicapped Opportunity Workshop
 Tulsa Oklahoma

Tulsa Goodwill Industries, Inc.
 Tulsa, Oklahoma

Texas:

Goodwill Industries
 Amarillo, Texas*

Goodwill Industries
 Austin, Texas*

Darrell Royal Training
 Center
 Austin, Texas

Baytown Opportunity Center
 Baytown, Texas

Goodwill Industries
 Beaumont, Texas

Services Unlimited
 Beaumont, Texas

Goodwill Industries
 Corpus Christi, Texas*

Coastal Bend Opportunity
 Workshop
 Corpus Christi, Texas*

Goodwill Industries
 Dallas, Texas*

Dal-Worc, Inc.
 Dallas, Texas*

Dallas Vocational Adjust-
 ment Center
 Dalles, Texas

Goodwill Industries
 El Paso, Texas

Ft. Worth Society for Crip-
 pled Children and Adults
 Fort Worth, Texas

Texas, continued:

Goodwill Industries
Houston, Texas*

South Texas Regional Workshop
Laredo, Texas

Goodwill Industries
Lubbock, Texas

Gen-Tex Sheltered Workshop
Mexico, Texas

Goodwill Industries
San Antonio, Texas*

Opportunity Workshop
San Antonio, Texas*

Goodwill Industries
Sherman, Texas

Opportunity Workshop
Tyler, Texas

Goodwill Industries
Tyler, Texas

Goodwill Industries
Victoria, Texas*

Goodwill Industries
Waco, Texas*

Opportunity Workshop
Wichita Falls, Texas

New Mexico:

Goodwill Industries of New
Mexico
Albuquerque, New Mexico*

Pathfinders, Inc. Sheltered
Workshop
Albuquerque, New Mexico

The Rehabilitation Center, Inc.
Albuquerque, New Mexico

Gallup Community Council
Sheltered Workshop
Gallup, New Mexico

Goodwill Industries of
Southern New Mexico
Las Cruces, New Mexico

Goodwill Industries of
New Mexico
Santa Fe, New Mexico

Louisiana:

Baton Rouge Sheltered Work-
shop
Baton Rouge, Louisiana*

Kenner Sheltered Workshop
Kenner, Louisiana

New Hope Sheltered Workshop
Lafayette, Louisiana*

Westbank Sheltered Workshop
New Orleans, Louisiana

Gumbel Sheltered Workshop
Monroe, Louisiana*

Monroe Sheltered Workshop
Monroe, Louisiana*

C-Barc Sheltered Workshop
Shreveport, Louisiana

Arkansas:

Abilities Unlimited, Inc.
El Dorado, Arkansas

Abilities Unlimited of NW
Arkansas, Inc.
Fayetteville, Arkansas

Abilities Unlimited, Inc.
Fort Smith, Arkansas

Arkansas, continued:

Abilities Unlimited of
Eastern Arkansas
Helena, Arkansas

Abilities Unlimited, Inc.
of
Hot Springs, Arkansas

Abilities Unlimited, Inc.
Work Adjustment Center
Hot Springs, Arkansas

Abilities Unlimited of NE
Arkansas, Inc.
Jonesboro, Arkansas

Easter Seal Sheltered Workshop
Little Rock, Arkansas*

Goodwill Industries of Arkansas
Little Rock, Arkansas

Abilities Unlimited, Inc. of
Magnolia
Magnolia, Arkansas

Conway County Community Service
Morrilton, Arkansas

Jenkins Memorial Skilled Workshop
Pine Bluff, Arkansas*

Texarkana Sheltered Workshop, Inc.
Texarkana, Arkansas

APPENDIX D

THE VARIABLES

STUDY ONE AND TWO

<u>Dependent Variable</u>	<u>Dichotomous or Continuous</u>
TSCS (Posttest) Each of the eleven TSCS post subscale scores were separately analyzed as the criterion variable.	C
 <u>Independent Variables</u>	
1. TSCS (Pretest) The particular subscale entered here corresponds with the subscale entered as the criterion.	C
2. Supervisor Dogmatism	C
3. Supervisor Neuroticism	C
4. Client Sex	D
5. Client Age	C
6. Client Ethnic Background	D
7. Client Education Level	D
8. Client Marital Status	D
9. Client Degree of Self-Support	D
10. Number of Dependents on Client	D
11. Number of Jobs Held Last Year by Client	D
12. Client Income Last Year	C
13. Disability Type	D
14. Length of Disability	C
15. Supervisor's Age	C
16. Supervisor's Sex	D
17. Supervisor's Salary	C
18. Supervisor's Religion	D
19. Military Service	D
20. Supervisor Experience in Workshops	C
21. Supervisor Experience in Industry	C
22. Number of Client Supervisees	C
23. Supervisor Education	D

STUDY THREE AND FOUR

<u>Dependent Variable</u>	<u>Dichotomous or Continuous</u>
Client Dropout or Retentive	D
<u>Independent Variable</u>	
1. Total "P" (Pre)	C
2. Identity (Pre)	C
3. Self Satisfaction (Pre)	C
4. Behavior (Pre)	C
5. Physical Self (Pre)	C
6. Moral Self (Pre)	C
7. Personal Self (Pre)	C
8. Family Self (Pre)	C
9. Social Self (Pre)	C
10. Total "V" (Pre)	C
11. Self-Criticism (Pre)	C
12. Supervisor's Age	C
13. Supervisor's Sex	D
14. Supervisor's Salary	C
15. Supervisor's Religion	D
16. Military Service	D
17. Supervisor's Experience in Workshops	C
18. Supervisor's Experience in Industry	C
19. Number of Client Supervisees	C
20. Supervisor's Education	D

BIBLIOGRAPHY

Books

- Allport, G. W., Becoming, New Haven, Connecticut, Yale University Press, 1965.
- Combs, A. W. and D. Snygg, Individual Behavior, Rev. ed., New York Harper Press, 1959.
- Conley, R. W., The Economics of Vocational Rehabilitation, Baltimore, Maryland, John Hopkins Press, 1965.
- Dixon, W. J., Editor, Biomedical Computer Programs X-Series Supplement, Berkeley, California, University of California Press, 1969.
- Fromm, E., Escape From Freedom, New York, Avon Books, Inc., 1941.
- Fitts, W. H., Tennessee Self Concept Scale, Counselor Recordings and Tests, Nashville, Tennessee, 1965.
- _____, Manual: Tennessee Self Concept Scale, Counselor Recordings and Tests, Nashville, Tennessee, 1965.
- Horney, K., The Neurotic Personality of Our Time, New York, W. W. Norton and Company, 1937.
- James, W., Principles of Psychology, Volume 2, New York, Holt, Rinehart and Winston, 1890.
- Kessler, H., Rehabilitation of the Physically Handicapped, New York, Columbia University Press, 1953.
- Kluckholm, E. R. and F. L. Strodbeck, Variations in Value Orientations, Evanston, Illinois, Row, Peterson and Company, 1961.
- Kvaraceus, W. C., J. S. Gibson, F. Patterson, B. Seasholes and J. D. Grambs, Negro Self-Concept, New York, McGraw-Hill, 1965.
- Levine, L. S., Personal and Social Development, New York, Holt, Rinehart and Winston, 1963.

- Mead, G. H., Mind, Self, and Society, Chicago, Illinois, University of Chicago Press, 1934.
- Menninger, K. A., "Psychiatric Aspects of Physical Disability," J. F. Garrett, Editor, Psychological Aspects of Physical Disability, Washington, D. C., Federal Security Agency, Office of Vocational Rehabilitation, 1952.
- Neff, W., Work and Human Behavior, New York, Atherton Press, 1968.
- Rogers, C. R., Client-Centered Therapy, Boston, Massachusetts, Houghton Mifflin Company, 1951.
- Rokeach, Milton, The Open and Closed Mind, New York, Basic Books, Inc., 1960.
- Scott, R. A., The Making of Blind Men, New York, Russell Sage Foundation, 1969.
- Sheltered Workshops: A Handbook, Washington, D. C., National Association of Sheltered Workshops and Homebound Programs, Inc., 1966.
- Spackman, C. S. and H. S. Willard, "Occupational Therapy: History and Organization," H. A. Pattison, Editor, The Handicapped and Their Rehabilitation, Springfield, Illinois, C. C. Thomas, Inc., 1957.
- Super, D. E., "Self Concepts in Vocational Development," D. Zytowski, Editor, Vocational Behavior, Dallas, Texas, Holt, Rinehart and Winston, Inc., 1968.
- Wright, B. A., Physical Disability: A Psychological Approach, New York, Harper Press, 1960.
- Yamane, T., Elementary Sampling Theory, Englewood Cliffs, New Jersey, Prentice-Hall, 1967.

Articles

- Allen, T. W., "Effectiveness of Counselor Trainee as a Function of Psychological Openness," Journal of Counseling Psychology, XIV (January, 1967), 35-40.
- Ayer, M. J., R. W. Thoreson and A. J. Butler, "Predicting Rehabilitation Success with the MMPI and Demographic Data," Personnel and Guidance Journal, XLIV (February, 1966), 631-637.

- Bergin, A. E., "Some Implications of Psychotherapy Research for Therapeutic Practice," Journal of Abnormal Psychology, LXXI (August, 1966), 235-246.
- Block, J. R. and H. E. Yuker, "Some Correlates of Job Satisfaction Among Disabled Workers," Personnel and Guidance Journal, XLII (April, 1964), 803-810.
- Block, W. E., "Operational Principles for Counseling the Disabled," Journal of Counseling Psychology, II (Winter, 1955), 256-263.
- Brent S. Z., "Personality Interaction--A Concept of Rehabilitation of the Disabled," American Journal of Physical Medicine, XXXVII (February, 1958), 16-17.
- Burke, R. J. and D. S. Wilcox, "Effects of Different Patterns and Degrees of Openness in Superior-Subordinate Communication on Subordinate Job Satisfaction," Academy of Management Journal, XXXII (September, 1969), 319-326.
- Cohen, J., "Multiple Regression as a General Data-Analytic System," Psychological Bulletin, LXX (October, 1968), 426-443.
- Crites, J. O., "Test Reviews: Tennessee Self Concept Scale," Journal of Counseling Psychology, XII (Fall, 1965), 328-331.
- Daane, C. J. and L. G. Schmidt, "Empathy and Personality Variables," Journal of Educational Research, LI (October, 1957), 129-135.
- DeMann, M., "A Predictive Study of Rehabilitation Counseling Outcome," Journal of Counseling Psychology, X (Winter, 1963), 340-343.
- Dubrow, M., "Habilitation for Employment," Journal of Rehabilitation, XXVI (January, February, 1960), 24.
- Engel, M., "The Stability of the Self-Concept in Adolescents," Journal of Abnormal Social-Psychology, LVIII (March, 1959), 211-215.
- Fuller, F., "Preferences for Male and Female Counselors," Personnel and Guidance Journal, XLII (January, 1964), 463-467.
- Gellman, W. and S. B. Friedman, "The Workshop as a Clinical Rehabilitation Tools," Rehabilitation Literature, XXVI (February, 1965), 34-38.

- Goldin, G. J., R. J. Margolin and B. A. Stotsky, "Motivational Factors in the Rehabilitation Facility," Rehabilitation Literature, XXXIX (March, 1968), 72.
- Grotberg, E. H., "Learning Disabilities and Remediation in the Disadvantaged Children," Review of Education Research, XXXV (December, 1965), 413-423.
- Hughes, G. R., "Self-Resignation: A Mighty Foe," Journal of Rehabilitation, XXVI (September, October, 1960), 18.
- Jensen, A., "Authoritarian Attitudes and Personality Maladjustment," Journal of Abnormal Social Psychology, LIV (May, 1957), 303-331.
- Jourard, S. M. and R. M. Remr, "Perceived Parental Attitudes, the Self, and Security," Journal of Consulting Psychology, XIX (October, 1955), 364-366.
- Kemp, C. G., "Influence of Dogmatism on Counseling," Personnel and Guidance Journal, XXIX (April, 1961), 662-665.
- Koiler, E. A. and D. J. Bird, "Preferences for Counselor Help on Freshmen Problems," Journal of Counseling Psychology, III (Summer, 1956), 96-106.
- Litman, T. L., "The Influence of Self-Conception and Life Orientation Factors in the Rehabilitation of the Orthopedically Disabled," Journal of Health and Human Behavior, III (Winter, 1962), 249-257.
- Long, B. H. and R. C. Ziller, "Dogmatism and Predecisional Information Search," Journal of Applied Psychology, XLIX (October, 1965), 376-378.
- Lytle, H. G., "Standards for Sheltered Workshops," Journal of Rehabilitation, XXVII (November, December, 1969), 12.
- Maslow, A. H., "The Authoritarian Character Structure," Journal of Social Psychology, XVII (November, 1943), 401-414.
- Mossimo, J. L. and M. F. Shore, "The Effectiveness of a Comprehensive Vocationally Oriented Psychotherapeutic Program for Adolescent Delinquent Boys," American Journal of Orthopsychiatry, XXXIII (July, 1963), 634-642.
- Neff, W. S., "The Meaning of Work to the Poor," Rehabilitation Counseling Bulletin, XI (September, 1967), 71-77.

- Norman, R. P. "Dogmatism and Psychoneurosis in College Women," Journal of Consulting Psychology, XXX (June, 1966), 278.
- Oppenheimer, E. A., "The Relationship Between Certain Self Constructs and Occupational Preferences," Journal of Counseling Psychology, XIII (Summer, 1966), 197.
- Roehrer, G. A., "Significance of Public Attitudes in the Rehabilitation of the Disabled," Rehabilitation Literature, XXII (March, 1961), 68.
- Rogers, C. R., "The Necessary and Sufficient Conditions of Therapeutic Personality Change," Journal of Consulting Psychology, XXI (April, 1957), 95-103.
- _____, "The Interpersonal Relationship: The Core of Guidance," Harvard Education Review, XXXII (Fall, 1962), 416-429.
- Rokeach, M., "Political and Religious Dogmatism: An Alternative to the Authoritarian Personality," Psychological Monographs, LXX (1956).
- Snyder, B., w. Jefferson and E. Strauss, "Personality Variables as Determiners of Academic Achievement of the Mildly Retarded," Mental Retardation, VI (February, 1968), 18.
- Suits, D. B., "Use of Dummy Variables in Regression Equations," Journal of American Statistical Association, LIII (Fall, 1957), 548-551.
- Vicchiano, R. B., P. S. Strauss and D. C. Schiffman, "Personality Correlates of Dogmatism," Journal of Consulting and Clinical Psychology, XXXII (February, 1968), 83-85.
- Waltman, M., "Techniques for Helping the Working Clients," Journal of Rehabilitation, XXIX (May, June, 1963), 16.
- Watson, D. L., "Introversion, Neuroticism, Rigidity and Dogmatism," Journal of Consulting Psychology, XXXI (February, 1967), 105.
- Weiner, H., "Characteristics Associated With Rehabilitation Success," Personnel and Guidance Journal, XLII (March, 1964), 687-694.
- Westman, W. C., "Attitudinal Barriers to Vocational Rehabilitation," Journal of Rehabilitation, XXXIV (May, June, 1968), 24.

Winne, J. F., "A Scale of Neuroticism: An Adaptation of the Minnesota Multiphasic Personality Inventory," Journal of Clinical Psychology, VII (April, 1951), 117-122.

Yuker, H. E., "Attitudes as Determinants of Behavior," Journal of Vocational Rehabilitation, XXXI (November, December, 1965), 14-17.

Reports

Aiken, E. G., Self Concept Conditioning and Rehabilitation, Final Narrative Report, La Jolla, California, Western Behavioral Sciences Institute, 1965.

Barker, R. G., B. A. Wright, L. Myerson and M. R. Gonick, Adjustment to Physical Handicap and Illness: A Survey of the Social Psychology of Physique and Disability, Bulletin No. 55, New York, Social Science Research Council, 1946.

Barker, R. G., B. A. Wright, The Social Psychology of Adjustment to Physical Disability, Washington, Psychological Aspects of Physical Disability, Office of Vocational Rehabilitation, Rehabilitation Services Series No. 210, 1952.

Barton, E. H. and E. F. Barton, The Requirements of Effective Sheltered Workshop Supervision, San Jose, California, Goodwill Industries Co., Inc., 1965.

Cheatham, J. C., Differences in Background Characteristics of Vocational Rehabilitation and Non-Rehabilitation Clients, Eugene, Oregon, Department of Special Education, University of Oregon, 1966.

DeBlasse, R. R., Self Concept: A Comparison of Spanish Americans, Negroes, and Anglo Adolescents Across Ethnic, Sex, and Socio-economic Variables, Las Cruces, New Mexico, The Clearing House on Rural Education and Small Schools, New Mexico State University, 1969.

Eber, H. W., Multivariate Analysis of a Vocational Rehabilitation System, Multivariate Behavioral Research Monographs, No. 66-1, Athens, Georgia, Department of Psychology, University of Georgia, 1966.

Ehrle, R. A., The Predictive Value of Biographical Data in Vocational Rehabilitation, Doctoral Dissertation, University of Michigan, University Microfilms, No. 61-6033, Ann Arbor, Michigan, 1961.

- Fellows, J. B., Introductory Statement for Phase III of a Federally Assisted Project for Training Supervisors in a Rehabilitation Workshop, Washington, Goodwill Industries of America, No date.
- Felton, J. C., C. Spencer and J. S. Chappell, Work Relationships of the Physically Impaired in a Multiple Disability Sheltered Workshop and in Standard Industry, Oklahoma City, University of Oklahoma Medical Center and Oklahoma Goodwill Industries, 1958.
- Fitts, W. H. and W. T. Hammer, The Self Concept of Delinquency, Monograph No. 1, Nashville, Tennessee, Nashville Mental Health Center, 1969.
- Gellman, W., Adjusting People to Work, Monograph No. 1, Chicago, Jewish Vocational Service, 1957.
- Glick, S. J., Vocational Education and Recreational Needs of the Cerebral Palsied Adult, New York, United Cerebral Palsy, 1953.
- Goldin, G. J. and S. L. Percy, Dependency and Its Implications for Rehabilitation, Monograph No. 1, Boston, New England Rehabilitation Research Institute, Northeastern University, 1967.
- Goldstein, A. P., Relationship Enhancement in Counseling and Psychotherapy, R. Leslie, Behavior Modification in Rehabilitation Facilities, Hot Springs, Arkansas, 1968.
- Hammond, C. D., G. N. Wright and A. J. Butler, Caseload Feasibility in an Expanded Vocational Rehabilitation Program, Monograph No. 6, Madison, Wisconsin, Studies in Vocational Rehabilitation, University of Wisconsin, 1968.
- Havens, L. M., Dependency: Definition and Strategies, R. J. Margolin and F. L. Hurwitz, Editors, Report of a Dependency and Motivational Workshop, Boston, Northeastern University, 1963.
- Janzen, F., R. A. MacGuffie, D. A. Israe and W. M. McPhee, Interpersonal Relationships in Rehabilitation: A Five Year Summary, Bulletin No. 5, Salt Lake City, Regional Rehabilitation Research Institute, University of Utah, 1969.
- Kunce, J. T. and C. S. Cope, Rehabilitation and the Culturally Disadvantaged, Research Series No. 1, Columbia, Missouri, University of Missouri, 1960.

- Kunce, J. T., R. J. Mahoney, R. R. Campbell and J. Finley, Rehabilitation in the Concrete Jungle, Research Series No. 3, Columbia, Missouri, University of Missouri, 1969.
- Lane, N. E., Correlational Analysis of Qualitative Data, Research Report, Pensacola, Florida, U. S. Navy School of Aviation Medicine, U. S. Naval Aviation Center, Pensacola, Florida, 1965.
- Lubow, B. K. R. P. Kimberly, W. H. Button and J. R. Kimberly, Studies in Behavior and Rehabilitation, Ithaca, New York, Cornell University Rehabilitation Research Institute, 1969.
- Mahoney, R. J., C. S. Cope and R. R. Campbell, Rehabilitation and the Culturally Disadvantaged: A Digest, Research Series No. 2, Columbia, Missouri, University of Missouri, 1969.
- McPhee, W. M. and others, Adjustment of Vocational Rehabilitation Clients, Washington, D. C., U. S. Department of Health, Education and Welfare, Vocational Rehabilitation Administration, 1963.
- Parsons, J. R., J. Thorne, D. H. Growald and W. Fordyce, Studies in Public Assistance Referrals to Vocational Rehabilitation: I - Administrative Effectiveness, II - Predicting Outcomes, Seattle, School of Social Work, University of Washington, 1959.
- Report of the National Citizens Advisory Committee on Vocational Rehabilitation, Washington, D. C., A Report to the Secretary of Health, Education and Welfare, 1968.
- Report of the Regional Conference of Workshop Managers, Auburn, Extension Division of the University of Alabama, University of Alabama, 1962.
- Psychological Research and Rehabilitation Conference Report, L. Lofquist, Editor, American Psychological Association, 1960.
- Rusalem, H. and R. Baxt, Emerging Patterns of Rehabilitation Service Delivery, Washington, D. C., National Citizens Conference on Rehabilitation of the Disabled and Disadvantaged, No date.
- Sanskovsky, R., Predicting Successful and Unsuccessful Rehabilitation Outcomes: A Review of the Literature, Pittsburg, Pennsylvania, Research and Training Center in Vocational Rehabilitation, University of Pittsburg, 1968.

Schor, S., The Not Rehabilitated Client: Characteristics of Clients Whose Cases Were Closed Not Rehabilitated From the Active Caseload in Fiscal Year, 1964, Washington, D. C., Department of Health, Education and Welfare, Vocational Rehabilitation Administration, 1966.

Tiffany, D. W., Work Improvement and Self-Perception of Ex-Psychiatric Patients: An Exploratory Study, Kansas City, Institute for Community Studies, 1967.

Truax, C. B., Effective Vocational Rehabilitation: Differential Agency Practice and Client Outcomes, Discussion Papers, II, No. 5, Fayetteville, Arkansas, Rehabilitation Research and Training Center, University of Arkansas, 1969.

Vocational Evaluation and Work Adjustment Bulletin, Quarterly Publication of the Vocational Evaluation and Work Adjustment Association, No. 2, (April, June, 1969), 3-5.

Wagner, M. K. and W. H. Fitts, The Effects of Hospitalization Upon the Self Concept of Mental Patients, W. H. Fitts and Others, Editors, Three Studies in Self Concept Change, Research Bulletin No. 6, Nashville, Nashville Mental Health Center, 1969.

Workshops in a Changing World--The Three Faces of the Sheltered Workshop, Washington, D. C., National Association of Sheltered Workshops and Homebound Programs, Inc., 1965.

Wright, G. N., The Wood County Project: An Expanded Program of Vocational Rehabilitation, Madison, Rehabilitation Research Institute, University of Wisconsin, 1969.

Unpublished Materials

"A List of Rehabilitation Facilities in Region VI," an unpublished document compiled by Rehabilitation Services Training Program, North Texas State University, Denton, Texas, Spring, 1970.

Joplin, G. H., "Unpublished Data From Highfields Residential Group Center," Newark, New Jersey, 1967.

Matthews, J. B., "The Psychological Impact of Physical Disability Upon Vocationally Handicapped Individuals," unpublished doctoral dissertation, University of Wisconsin, Madison, Wisconsin, 1967.

- Miller, J. O., "Research, Change, and Social Responsibility: Intervention Research with Young Disadvantaged Children and Their Parents," Paper Presented at American Psychological Association Convention, San Francisco, 1968.
- Perlman, L., "The Development of a Predictive Model for the Detection of Potential Dropouts from Vocational Training in a Comprehensive Rehabilitation Center," proposal for doctoral dissertation, Pennsylvania State University, University Park, Pennsylvania.
- Taylor, D. M., "Consistency of the Self-Concept," unpublished doctoral dissertation, Vanderbilt University, Nashville, Tennessee, 1953.