A CORRELATIONAL ANALYSIS OF CLIENT CHANGE IN SHELTERED WORKSHOPS WITH SELECTED CHARACTERISTICS OF THE CLIENT, VOCATIONAL REHABILITATION COUNSELOR AND WORKSHOP SUPERVISOR

DISSERTATION

Presented to the Graduate Council of the North Texas State University in Partial Fulfillment of the Requirements

For the Degree of

DOCTOR OF PHILOSOPHY

By
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May, 1971

This investigation was designed to assess the amount of attitudinal change experienced by the client and certain selected characteristics of the client, his vocational rehabilitation counselor, immediate workshop supervisor and his sheltered workshop.

The purposes of the investigation were (1) to determine whether the kinds of helping relationships established between the client and his counselor and supervisor were related to client attitudinal change; (2) to determine whether a significant difference existed between the kind of client-counselor relationship established and the kind of client-supervisor relationship established; (3) to determine what other characteristics were related to both client attitudinal change and the effective helper.

It was hypothesized that (1) there was a positive relationship between client attitudinal change and client-perceived warmth, empathic understanding, and genuineness as offered by the rehabilitation counselor; (2) there was a positive relationship between client attitudinal change and client-perceived warmth, empathic understanding, and genuineness
as offered by the workshop supervisor; (3) no significant difference existed between the kinds of helping relationships as offered to the client by his counselor and supervisor.

Other independent variables were analyzed to determine what other characteristics might be related to client attitudinal change. These variables were also analyzed to determine their predictive power in describing the effective helper.

The population included sixty-one clients in ten randomly selected sheltered workshops in Region VI, who were evaluated and accepted for training during a designated three-week pre-testing period, and who remained in training for two months after the pre-testing period. All clients were pre and post-tested for attitudinal change. Clients also evaluated the kind of relationship offered by their counselor and supervisor. Personal data forms for the helpee, helpers and the workshop were completed.

The results of the investigation indicated that clients had significantly changed their attitudes toward self in the first two months of sheltered workshop training. Unmarried clients with no recent work history appeared to change their attitudes most readily. The attitudinal change, however, was unrelated to the kinds of relationships offered by either the counselor or supervisor. The helper relationships provided, appeared to be low quality, ineffective relationships. While the quality relationships offered by the counselor and
supervisor appeared significantly different, the supervisory data from one workshop seemed to be sufficiently biased to make the relationship insignificant and thereby require considerable caution in interpretation.

The results of the data also indicated that a lower quality counselor-offered helping relationship tends to be provided when the client is male, when the counselor is male and when the workshop is larger and more comprehensive. A lower quality supervisor-offered helping relationship tends to be provided when the client is culturally or emotionally disabled and when the client's counselor is paid a higher salary and not "in-house." A higher quality supervisor-offered helping relationship tends to be provided when the client is older and ethnically white, when the client's counselor is better educated, more experienced, has a larger caseload size and more client contacts, and finally, when the supervisor himself is paid a higher salary.

Recommendations were made.
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CHAPTER I

INTRODUCTION

Professions such as counseling and psychotherapy have as their function to provide helping services to those individuals in society who encounter difficulty in adjusting or coping with their respective environments. These helping services may be provided to clients under the auspices of private or public schools, universities, mental health centers, hospitals and vocational rehabilitation services.

In vocational rehabilitation, as in most helping professions, one of the critical components for changing a client's attitude to self and his behavior is the kind or quality of the relationship offered by the helper or counselor who assists and facilitates the client in this process (26, 7). Thus, in the individual one-to-one counseling session, it is generally the counselor or the therapist who provides the client with the kinds of therapeutic conditions which effect client change. It can be said that most if not all effectual helper-helpee interactions include necessarily a helper who can provide a relationship that is fostered and maintained by mutual respect—the kind of relationship which therapeutically enhances client growth or change (32). The client who requests
assistance in developing a more personally satisfying way of coping with himself and his environment must be provided with a helper relationship that communicates to this client a genuine concern for his welfare, a respect for him as an individual, a caring which is not conditional or contingent upon the kind of individual he is, or the kind of behavior he manifests, or finally, a caring which is not contingent upon the particular environmental setting in which both are situated. To the degree that this kind of and/or quality relationship is offered to the client, to that degree is client growth or change effected in the process.

The client who seeks assistance from a vocational rehabilitation agency is presumably helped by the same kind of therapeutic relationship that is so critical to most helper-helpee situations. To date, most of the research that concentrates on the quality of the helper-helpee relationship and its effect on client change has been done in fields other than vocational rehabilitation. In addition, the rehabilitation workshop is somewhat unique in that many helpers or facilitators cooperate and share in the rehabilitation or growth of the client; thus, there is some doubt as to who does foster and maintain the most therapeutic helping relationship. Secondly, the rehabilitation client is in many ways, very different from the college, high school, or mental health populations which are most often used in research projects of this kind. Because the rehabilitation client often suffers from personal
and social problems which are compounded by a physical handicap and a poor work history, he may react and interact differently (31). Therefore, it seems of considerable import to investigate those components which function as change agents for clients who are differentiated on the basis of age, ethnic background, type of disability and other defining characteristics.

Statement of Problem

The problem was to determine the relationship between client change in rehabilitation and the quality of the interpersonal relationships as offered by: (1) The vocational rehabilitation counselor, and (2) the workshop supervisor in the sheltered workshop setting.

Purpose of the Study

The purposes of the investigation were (1) to determine whether in a sheltered workshop setting, the kind of relationship established between the client and two staff members working closely with the client did affect the rehabilitation process in the client; (2) to compare the helping relationships established by the two staff members with the client-to-be-rehabilitated; (3) to establish what kind of clients are helped by what kind of staff members in what kind of workshops.
Hypotheses

The following hypotheses were generated in keeping with the problem and purposes of the investigation:

1. There will be a positive relationship between client change and client-perceived warmth as offered by the vocational rehabilitation counselor (VR counselor).

2. There will be a positive relationship between client change and client-perceived empathic understanding as offered by the VR counselor.

3. There will be a positive relationship between client change and client-perceived genuineness as offered by the VR counselor.

4. There will be a positive relationship between client change and client-perceived warmth as offered by the workshop supervisor.

5. There will be a positive relationship between client change and client-perceived empathic understanding as offered by the workshop supervisor.

6. There will be a positive relationship between client change and client-perceived genuineness as offered by the workshop supervisor.

7. There will be no significant difference between the client-perceived quality of the interpersonal relationships as offered by the VR counselor and the workshop supervisor.
Background and Significance of the Study

A helping agency in vocational rehabilitation services which attempts to provide help for the rehabilitation client is the publicly or privately owned sheltered workshop. The sheltered workshop for clients utilizing vocational rehabilitation services is a facility which incorporates a controlled working environment and a therapeutic climate for the purpose of providing a situation in which significant change in client behavior and attitudes can be effected.

Most clients who are referred to a sheltered workshop are multiple handicapped individuals, whether it be cultural, physical, mental or emotional. Given these psycho-physical problems in conjunction with various problems stemming from poor work adjustment, and few if any work habits, the client comes to the sheltered workshop seeing himself as a failure, something less than a whole individual. Thus he often views himself as a non-productive individual and therefore inadequate in the eyes of others and in his own eyes (25). Barton, in a major study on sheltered workshops in California, suggests that the absence of a stable self-concept or positive self-regard on the part of the client is a significant factor in the rehabilitation process (4). Similarly, Gellman, in discussing the operations of a vocational adjustment center, observes that the client's self-concept is a significant variable in the client's rehabilitation (17). In commenting on various barriers to rehabilitation, Westman indicates that
"attitudinal barriers are perhaps the most critical"; one can infer that he has reference not only to attitudes toward peers, supervisors, and the job itself, but also certain attitudes toward self which operate as barriers (35). Yuker is more pointed when he observes that "disabled persons' attitudes toward themselves are much more important than the nature or extent of their disability" (36, p. 16). One might suspect then that those people who perceive themselves as inadequate, worthless, or undesirable tend to act and react accordingly; those who deny and distort reality tend to approach life and other people in a distorted manner.

In this sense the concept of self provides a frame of reference from which the client perceives, evaluates, and reacts to his external environment. The client's concept of self is an index of his ability to withstand stresses, and to develop satisfying relationships with other people (14).

For many, if not most handicapped clients in rehabilitation, it appears valid to hypothesize that

... unless the potentialities and resources within that individual can be utilized or actualized, then there is a very real limit to what anyone can do to or for him that will accomplish his rehabilitation. And, since his self concept is such a central and influential part of him, it would follow that his self concept is a significant variable in rehabilitation. (14, p. 5)

As has been suggested above, it appears that for many rehabilitation clients, the manner in which they perceive
themselves is their major disability (14, p. 10). Thus, while a client may receive adequate training in some job function, he cannot be successfully rehabilitated until his attitudes toward self change. Further it could be stated that if the client's self concept can be modified so that his coping behavior is both more satisfactory and satisfying, he may well need no other rehabilitation (14).

Rehabilitation services have traditionally been concerned with the physically handicapped individual. The newest regulations (12, p. 16308) state very simply that eligibility for vocational rehabilitation services shall be based on "the presence of a physical or mental disability." These regulations have expanded greatly the scope of rehabilitation, including far more than the traditional vocational aspects only (23). This broad interpretation seems to reflect in part the realization that physically disabled clients characteristically are also clients who perceive themselves as inadequate, worthless, and ineffective (28). Whatever the handicap, the client must learn new skills, more appropriate ways of coping with himself and his world; in short, the client who feels less than whole needs help in accepting himself as a worthwhile person. For the client who is handicapped either physically, culturally, mentally or emotionally, the task of coping and realizing goals which are satisfying to self seems especially difficult. Thus the handicapped person
is more vulnerable to anxiety than the average person. He is more threatened by the ordinary demands of his culture. High levels of anxiety resulting from such threats reduce his ability to cope realistically with his environment, and he tends to react impulsively, compulsively, rigidly, constrictedly, and fragmentarily. Such reactions result in a high incidence of socially inappropriate, self-defeating, and blind-alley solutions to many of life's problems. The individual develops defenses which unnecessarily restrict his activity, maintain his aspirations at a low level and induce a minimal self-definition. (31, p. 30)

All too often the handicapped individual feels very much a worthless person; the handicapped client is thus defined because he sees himself as different from what he himself or others consider normal or appropriate (16). Once the rehabilitation client can come to accept himself as a worthwhile person having relatively more strengths and competencies than he has faults and imperfections, then the greater will be his chances for successfully and satisfactorily accepting self by coping with his disabilities, and subsequently coping in his own environment. If the disabled individual can learn to cope with his disability - neither to deny nor succumb to it - then it can be accepted as a problem to solve.

It is with this objective in mind that after referral and evaluation, the client-to-be-rehabilitated is provided with a sheltered work situation, taught appropriate and individualized work skills, and proffered assistance by therapeutically-oriented helpers with whom he constantly
interacts and relates. The client needs professional help in gaining assurance, insight, and control over his behavior; he needs an abiding and deeply meaningful sense of personal worth and well-being which will generate or inculcate a greater sense of adequacy and emotional security.

It has been suggested above that a client's concept of self appears to be highly influential in determining the kinds of behavior he may elicit or omit as well as being related to his general state of mental health. In this framework one might logically infer that the process of change in a client-to-be-rehabilitated is directly contingent upon the kinds of feedback he receives and finally upon the way he perceives himself in the light of this feedback. This process of change in the client is facilitated by a number of therapeutic conditions or agents (2, 3, 5, 17, 18), as is pointed out by a number of studies reported by various helping professions.

One of the critical agents of change appears to be the kind (quality) of interpersonal relationship that is fostered and maintained between the helper(s) and the helpee (5, 6, 7, 8, 9, 26, 32). Thus, client movement or change in therapy, in counseling, and (it is suggested), in the rehabilitation process, is contingent upon and responsive to the kind or quality or therapeutic agents that are provided for the client. Thus it is suggested (26) that the kind of interpersonal relationship established in a helper-helpee
relationship is not only a facilitator for client change, but is an essential ingredient for client change. While much of the present research on the quality of the relationship and its effect on client change has been done in counseling and psychotherapy, the implications of these findings appear to have considerable meaning and application to virtually all interpersonal relationships involved in the helping of a client. Indeed as Rogers points out, in nearly all professional work involving relationships with people, "it is the quality of the interpersonal encounter...which is the most significant element in determining effectiveness" (27, p. 416). Inasmuch as the findings cited above seem significant for helpers and since these same growth or change findings appear to hold for a wide majority of clients, it would seem then that the same therapeutic interpersonal skills would provide similar effects for the field of rehabilitation personnel and their clients.

In the rehabilitation process, the two professional "helpers" who interact and form perhaps the most extensive helping relationship with the client are (1) the Vocational Rehabilitation Counselor who hires and utilizes the workshop facility for his client, and (2) the Workshop Supervisor who personally oversees and works with the client-to-be-rehabilitated (4, 18, 19, 23). This interaction, along with other environmental stimuli impinging on the client, could
be characterized as the critical stimulus complex within which the developmental or relearning process takes place for the client (33,21).

This investigation concentrated primarily on certain components of the counseling process, the most critical component being the quality of the inter-relations fostered and maintained in the helper-helpee relationships. Secondarily, an attempt was made to account for or control for various client and staff characteristics in addition to other environmental conditions existing in the sheltered workshop—all of which could conceivably affect the degree of change in the client. Assuming that the quality of the relationships fostered in the rehabilitation process is as important as was suggested above, this investigation provides a valuable link in the attempts to discover what causes the rehabilitation client to change his behavior.

The present investigation also has significance in that it has attempted to establish what kinds of clients are helped, how they are helped, and by what kind of therapeutic conditions. By attempting to account for a number of characteristics or conditions existing in the therapeutic environment, controls were established for those various characteristics and conditions which, conceivably, affect client change.

More importantly, perhaps, there is considerable evidence to confirm and little evidence to disconfirm the
assertion that the therapeutic helper, on the average, does not greatly enhance client change or growth (5, 32). Thus counseling and psychotherapy as it is currently practiced, can be both harmful and helpful, resulting in a general non-significant growth factor for the clients. It would seem obvious that the total rehabilitation service could profit greatly by eliminating from its ranks those noxious or harmful helpers and therapeutic practices, thereby improving its services. The implications of this latter observation are three: First and most importantly, a greater number of clients can profit, and fewer would be harmed by improved interpersonal interactions. Second, clearer specification of harmful and helpful counselors would facilitate the establishment of personnel employment and evaluation criteria. Finally, it would provide data needed for educational and training programs which presently train rehabilitation personnel.

Research in Region VI (formerly designated as Region VII), on the rehabilitation process in general and the sheltered workshops in particular, has been very sparse. Ironically however, it is generally assumed that the workshop environment represents the real therapeutic mix for rehabilitation clients. It appears that an examination of certain critical therapeutic conditions and their effect on different kinds of clients in the workshop setting is merited. It is also necessary to develop sound descriptive
research which concentrates on basic properties of the rehabilitation process before more programs, demonstration projects and rehabilitation centers are developed and financed with both state and federal funds. This investigation which is properly designated as applied research and others of a similar nature must necessarily precede such development in order to insure that effective remedies are being utilized and that the financial support generated is not being wasted.

Finally by concentrating on the differential effectiveness of the treatments applied to the rehabilitation client, this investigation prepares the way for further outcome and follow-up research on the same population.

Definition of Terms

For reasons of clarity, the following terms were defined:

1. "Rehabilitation" was defined as that process consisting of a planned, orderly sequence of services designed to meet the total needs of the handicapped individual; its specific objective is to facilitate the vocational adjustment of the handicapped client.

2. A "sheltered workshop" was defined as

   A work-oriented rehabilitation facility with a control-led working environment and individual goals which utilizes work experiences and related services for assisting the handicapped person to progress toward normal living and a productive vocational status. (27, p. 1)

3. A "quality relationship" as used in this study, was one characterized by a high level of accurate empathic understanding.
nonpossessive warmth and genuineness or authenticity as offered by the helper to the helpee (client).

4. The terms empathy, warmth and genuineness were defined by the authors of the Relationship Inventory as follows:

Empathetic understanding (empathy) is conceived as the extent to which one person is conscious of the immediate awareness of another. Qualitatively it is an active process of desiring to know the full present and changing awareness of another person, of reaching out to receive his communication and meaning, and of translating his words and signs into experienced meaning that matches at least those aspects of his awareness that are most important to him at the moment.

Level of regard (warmth) refers here to the affective aspect of one person's response to another. This may include various qualities strengths of 'positive' and 'negative' feeling. Positive feelings include respect, liking, appreciation, affection, and any other affectively adient response. Conversely, negative feelings include dislike, impatience, contempt, and in general affectively abient responses.

Congruence (genuineness). The degree to which one person is functionally integrated in the context of his relationship with another, such that there is absence of conflict, or inconsistency between his total experience, his awareness, and his overt communication, is his congruence in this relationship. . . the highly congruent individual is completely honest, direct, and sincere in what he conveys, but he does not feel any compulsion to communicate his perceptions, or any need to withhold them for emotionally self-protective reasons. (2, pp. 3-4)

5. The term "helper" was understood to be the professional staff members who worked with the rehabilitation client to facilitate change in the client. Those helpers selected for this investigation were the rehabilitation counselor and the workshop supervisor.
6. "Client change" was defined as a change in self-perception or self-attitude change as determined by the Tennessee Self Concept Scale and the Personal Concept Scale.

Basic Assumptions

It was assumed that a representative sample of rehabilitation clients had been drawn from Region VI workshops, making it possible to generate certain inferences about the population. It was also assumed that the considerable cooperation required of all the participants in this research effort did not bias the results of the investigation.

Limitations of the Study

The client population was defined as all emotional, physical, culturally deprived and mildly retarded clients who had been accepted into the sheltered workshop sample. All blind and severely mentally retarded clients were eliminated since they were not capable of taking the test instruments.
CHAPTER BIBLIOGRAPHY

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


3. ______ and L. N. Jewell, "A Selection of Reported Studies Using the Relationship Inventory," unpublished manuscript, Department of Psychology, University of Waterloo, Ontario, Canada, 1966.


CHAPTER II

REVIEW OF LITERATURE

Introduction

The helping relationship is not a relationship that is unidirectional as regards responsibility for change. The helper's contribution to the relationship can effect change only if the helpee becomes involved also (19). How the helpee involves himself and what the helpee brings to the process vitally affects what returns he is likely to glean from the experience. Secondly, the effectiveness of the helper can best be understood in the light of those various characteristics the helpee brings to the process. The helper cannot function effectively nor can his effectiveness be fairly judged if the helpee does not interact or if he is not characterized as having a certain need system, as possessing this kind of personality or that kind of work history. Thus any model of the helping process must include meaningful dimensions of the helpee; secondly it must relate those helpee variables to the kind of treatment modality offered; finally it must relate these meaningful dimensions of the helpee to the change index established. Thus Carkhuff
has suggested that a comprehensive model of the helping process must include necessarily both "helper and helpee" variables, alone and in interaction with each other." (19, p. 46).

Demographic and Vocational Variables Associated With Client Change in Vocational Rehabilitation

An examination of the literature relating to the variables and/or characteristics of the helpee in the area of vocational rehabilitation, suggests that the data is both unsystematized and in many cases, unrelated to meaningful change criteria (19, 15, 56). While very few conclusions could be drawn, there does appear to exist some consistency in the literature.

Much of client data reported in vocational rehabilitation literature has consisted of demographic and psychological variables gathered at the pre-acceptance or pre-therapy stage of the helping process. This data was then often related to some criterion of success, generally some form of remunerative employment. While a large number of client variables have been investigated in the attempt to distinguish between successful and unsuccessful clients, only those variables that have been reported to significantly discriminate by a number of investigators are discussed below.

Ethnic Groups

A variable associated with outcome criteria in vocational rehabilitation studies has been that of ethnic background.
Research by Kluckkohn and Strodtbeck (68) suggested that "value orientations of various ethnic groups significantly affect rehabilitation success." The Mexican American in particular and generally many other minority groups and low socio-economic groups rely on the head of the family for counsel and decision-making when important situations arise; they may be unwilling to accept any counsel from other sources. Thus the potentially significant impact of professional services may be largely reduced. Support for this hypothesis is given by Saunders who states that based on his own and other studies, the Mexican American in rehabilitation is considerably influenced by his familial ties. Saunders found this phenomenon to be less valid for Anglo American rehabilitation clients (104). Additional data on race or ethnic description as being a critical variable in successful rehabilitation has been proposed by Hammond (53), Parsons et al. (90), and Eber (37). Weiner (135) noted that in his sample, the unemployed non-white group outnumbered the employed non-white group by five times. However, conflicting data was reported by DeMann (31) and Schor (108) who found that ethnic group did not significantly discriminate between the successful rehabilitant.

The reported discrepancy in these findings could of course, be accounted for by other factors not intrinsic to the rehabilitation process; thus, factors such as employer bias and consumer prejudice could effectively confound the effects of this variable.
Type of Disability and Age at Disablement

In vocational rehabilitation, most clients are in some way physically disabled. The client's own emotional reaction and the feedback he receives from society are vitally important to the psychological adjustment of the disabled client. A considerable number of theories have been advanced in attempts to discover the impact of different kinds of disabilities.

An early theory (1) suggested that a physical disability could serve as a motivator through compensation for achievement in other areas. A more recent view (3) describes a physically handicapped person as a member of a minority group, subject to "the same economic and social pressures" and therefore possessing similar emotional reaction patterns or habits of behavior, both adaptive and maladaptive. The physical appearance and functioning of an individual then, because it is one of the raw ingredients of personality, has considerable significance in the psychological adjustment of the helpee.

While it can be established that the existence of a physical disability can affect a client's adjustment both in and out of the rehabilitation setting, it is less certain whether the kind of disability or the age at the time of disability is related to the degree of adjustment a client can or has made to his life situation. Garret for instance, in commenting on the research of Barker et al., found "no evidence of a relationship between kind of disability and
kind of adjustment behavior" (43, p. 5). This would indicate that behavior as adjustment does not vary across physical disability types. A year later Glick (46) reported that while important, the type and extent of disability was not the most significant factor in client change in rehabilitation. However in a well-structured investigation conducted by Ayer, Thoreson and Butler (2), the value of both demographic variables (sex, marital status, age at onset of disability and a number of others), and personality variables were assessed to determine what data could be utilized as predictor variables for rehabilitation success. A multiple regression analysis procedure established a significant correlation between disability type (emotional) and the criteria; another variable from the same study, found to be significantly related to the criteria was age of disability or more precisely the age at disablement; the correlation was significant but negative. Thus, Ayer et al. (2) suggested that the younger the client at the time of disablement, the better his chances for successful rehabilitation. Hammond (53), after reviewing a large number of outcome studies supported the same conclusion, in addition to Magleby et al. (77) and Schletzer et al. (107). Additional support for this variable being a critical factor in the successful rehabilitation process was offered by Lesser and Darling (73), Shain (110), and Perlman (94). Thus if disability occurred before age thirty, prognosis was better.
Sankovsky (102) noted that the client with mental-emotional problems tended to terminate his rehabilitation program, suggesting that type of disability could function as a discriminator. He also reported that "impaired hearing clients" were in the successful group of rehabilitants. DeMann (31), however reported that clients suffering from tuberculosis were successful in rehabilitation but that the more unsuccessful clients were deaf. Shain (110) in partial support of both DeMann and Sankovsky, reported that neuropsychiatric groups were less successful than were tuberculosis and orthopedic disability clients.

In a study conducted by Neff (86) at the Vocational Adjustment Center of the Chicago Jewish Vocational Service, the type of disability and age of disability were not included as variables relating significantly to past rehabilitation employment success. Similarly in looking at preservice characteristics related to case closures as either rehabilitated or non-rehabilitated, Cheatham (24) found no significant differences for clients regarding primary and secondary disability, mobility status (type of disability), and past use of rehabilitation services. Parsons et al. (90) found as did Cheatham, no significant relationship between disability type and rehabilitation success.

If the research cited above can be considered representative, it would appear that the evidence for or against the client's disability as being a worthwhile predictor, is
less than solid. The findings have been somewhat contradictory as regards the type of disability. There is some evidence however, to suggest that the emotionally disabled clients are less successful in rehabilitation while orthopedic and respiratory clients tend to be more successful.

The research has indicated that the age at onset of disability is a significant predictor variable of client success in rehabilitation. The degree of change in attitudes however, and the ease with which such changes can come about will depend upon a multiple mix of dynamic factors, only one of which is the client's disability. It is critical then, to examine this and other demographic characteristics within the treatment process of rehabilitation rather than, as has been largely the case, to relate these characteristics to outcome data.

Age, Sex and Education

The more traditional client variables that are generally controlled for are those characteristics of age, sex and educational level. This kind of evidence which has been utilized to describe the kind of patient in the helping services may be of dubious significance as is suggested by some authors (9, p. 383; 19, p. 48). There are however a number of reported studies which have shown these variables as being significantly related to successful outcome in the rehabilitation process.
In an investigation with 200 rehabilitation clients, half of whom were closed rehabilitation cases, Ehrle (38) found that the client's age and the grade completed were factors (along with others) which appeared to predict successful rehabilitation. In a similar prediction study DeMann (31) found that rehabilitants, as opposed to those who were not rehabilitated, were likely to have a high school education and be less than thirty years of age. McPhee et al. (79) found that successful rehabilitation clients were male and also under thirty years of age at acceptance. The proposition that age is a meaningful correlate of rehabilitation success has been generally supported by a number of investigations: Hammond (53), Eber (37), Cheatham (24), Ayer et al. (2), Hammond et al. (54), Perlman (94), and Litman (74).

In a major report on rehabilitation success in central Arizona, Harwood (56) noted that the educational level of the intake group of clients was lower than that for the group considered rehabilitated. This would suggest that the better educated client adjusted better to rehabilitation. This proposition was also supported by others (82, 79).

But the evidence has not been entirely consistent. Thus, Parsons et al. (90) found no significant relationship between rehabilitation outcome (employed or in training) and the variables of age and education. Similarly, Neff (86) in a study investigating the long-term outcome of rehabilitants,
found sex to be the only discriminating variable related to employment success.

The research concerning sex as a critical variable has been inconsistent. Perlman (94) partially supported Neff's findings regarding sex as a discriminating variable when he observed that in a sample of 570 clients, 285 of whom completed their rehabilitation program, a higher percentage of women completed the program. Schletzer et al. (107) reported that based on employment criteria of 255 handicapped clients of labor force age, two-thirds of the men and one-third of the women were employed. However, research by DeMann (31) indicated no significant difference for sex as a discriminating variable.

The literature reviewed on the variables of sex, age and educational level has generally indicated that the younger and better educated client profits more from rehabilitation programs (67); however there does not appear to be solid evidence to support the sex of the client as a discriminating variable in predicting rehabilitation outcome. It should be added that logically, the younger client has more time to undergo the process of rehabilitation in addition to being more able to avoid the employment barrier of being too old for a new job (103, p. 10). This may account for some of the research findings. However, neither the age nor the education, and certainly not the sex of the client should be considered by themselves to be good predictors of outcome.
Marital Status and Number of Dependents

Demographic variables which have generally been classified as characteristics of motivation for the helpee in rehabilitation are those of marital status and number of dependents. Theorists have assumed that clients who are married and in addition have children or other dependents are more serious, more willing to learn and graduate to some more rewarding life-style. Thus, these client characteristics were thought to have some relationship to increased motivation and vocational adequacy (107). This proposition has been supported generally by a number of outcome studies. Investigations by McPhee and Magleby (80), Ehrle (38), Conley (27) and Eber (37) have found significant relationships between success in rehabilitation and the variables of marital status and number of dependents. Similar outcome data by Ehrle (38), Mortenson (83), Roehlke (98) and Parsons et al. (90) has indicated a relationship between adjustment criteria and marital status, but their investigation did not find the same significant relationship for the number of dependents. However, Weiner (135) reported a relationship between employed rehabilitants and number of dependents. Shain’s (110) findings supported Weiner's results indicating that the successfully employed had more dependents than did the unemployed.

Some investigators however (2, 24, 31) have reported conflicting results, having found no significant relationships
between successful rehabilitation and the variables of marital status and number of dependents.

Based on a review of the literature relevant to these and other demographic variables, any propositions generated would appear to be relatively dubious in meaning. While a variety of reasons have been suggested for these findings, a methodological approach that would involve more factors which interact with the helpee has been suggested (19). This approach would seem to have merit in view of the sometimes conflicting results reported.

Social and Economic Indicators

One of the client characteristics which initially was associated with the successful rehabilitation process was the social-economic class to which the client belonged. The significance of this variable was expanded by Hollingshead (60) and later by others (56, p. 21; 49, 36, 2). Based on these studies, it has generally been found (61, 104) that upper and upper-middle class helpees accept or at least are more receptive to professional services such as vocational rehabilitation assistance and counseling, while the lower class client is less trusting of professional services and tends to seek any help required from his respective family. Thus in a major study reviewing a number of outcome studies in vocational rehabilitation, Hammond (53) found that one of
the demographic consistencies which could indicate client movement and later job success was having a higher socio-economic status.

The socio-economic variable however, would appear to be a poorly defined variable because of the admittedly different factors operationally involved in the concept status. Thus, the helpee's level of vocational "success" prior to his entry into the helping services has generally been considered to be however gross, a measure of independence, determination or motivation for coping in a technical, industrialized work world. Thus, the work-style of any individual "is an indicator of how he has learned to cope with a major life-demand" (87, p. 27). Those indicators of an individual's coping capacity while admittedly varied, could be and have been generally categorized for a vocational rehabilitation population. Thus indicators such as - the client's financial independence, the client's income before entry into the helping services, the number of jobs held by the client in the last year or the last job-classification in which the client functioned - these indicators can be viewed as predictors of success for any potential helpee who requests assistance from vocational rehabilitation services.
The research literature reviewed, although inconsistent as regards the utilization of all indicators concurrently, has suggested certain tentative propositions.

Hammond (53), after reviewing a large number of outcome studies which utilized various criteria, summarized those demographic variables which could consistently indicate the client's success or failure in eventual job placement. Among those variables related to economic success were: (a) the client's owning a car or house; (b) not receiving welfare; (c) having a higher socio-economic status; (d) having a higher occupational level; (e) having a record of full employment; (f) utilizing wages as the primary source of income; and (g) not having been a recipient for Social Security Disability Insurance. In an investigation utilizing a factor analytic approach, Eber (37) found adequate vocational adjustment at closure was related to, among others: (a) client income before acceptance; (b) the work history of the client; and (c) the Social Security Dependency Status. A major study by Cheatham (24) at the University of Oregon involving 864 rehabilitation clients provided predictive data for sixteen pre-service client variables. Among those variables which were characteristic of the successful rehabilitant were: (a) the client having received private rather than public financial support, (b) having received no public funds, (c) working and (d) having earned at least something within the last three months.
Other investigations, while they tend to support the tentative conclusion summarized above, are less comprehensive in dealing with what could be called the coping variables. Thus in a follow-up study of educable-retarded clients of a state vocational rehabilitation agency, Gruber (49) found only two coping variables - current vocational status and degree of financial independence - to be significant predictors. Other investigators (79, 37) reported significant self-supporting behavior. Also Schor (108) and DeMann (31) both concluded from their research that unsuccessful clients were more often receiving public assistance than were the more successful clients in rehabilitation. Others (27, 36, 135) found that a history of substantial employment and the recency of employment were associated with the rehabilitation potential.

Concerning the client's occupation at application for rehabilitation services, Harward found that professional and technical workers constituted a larger percentage of closures than at intake. Thus Harward reported that "the professional group adjusted to rehabilitation better than others and a higher proportion of them completed the program. This same situation appears to be present among the skilled and semi-skilled." (56, p. 21)

The vocational and economic indicators reviewed above are positive indicators of vocational success. Their predictive power in isolation however, is not adequate. Client
characteristics such as the demographic variables discussed above are at best indicators of outcome. They are static rather than dynamic descriptions of what has happened to the client's future. A more accurate prediction model must include psychological, environmental and interaction variables which impinge upon the client and, consequently, affect behavior adjustment.

The Self-Concept Variable and Client Change in Vocational Rehabilitation

The psychological construct of self is by no means a new construct. In fact, it would be difficult to find many theorists who on the intuitive level at least would deny that the manner in which a person perceives himself can significantly affect his behavior. Most theories of human behavior have in some way incorporated the notion of the self-concept as the cornerstone for understanding human behavior. Theorists such as the phenomenologists or perceptualists have built their entire theory of behavior adjustment around the concept of the self. Theorists such as Combs and Snygg (26), Macleod (76), Rogers (99), and Brookover (13) are among the few spokesmen who have developed this point of view. Thus Combs and Snygg contend that what a person believes and how the individual behaves is "largely determined by the concepts he holds about himself and his abilities" (26, p. 122). The self-concept then provides the individual with a frame of reference from which other observations and decisions are
made. All incoming stimuli find meaning in relationship to the existing view of self (26). Through the individual's interaction with significant elements in his environment, he perceives himself as ugly or handsome, acceptable or unacceptable, adequate or inadequate, effective or ineffective; subsequent events or stimuli then are viewed from this frame of reference. It is when events and facts inconsistent with the individual's concept of self are confronted, that he tends to distort or deny these events; selective perception, tunnel vision and rationalizations are some of the mechanisms of defending the existing concept of self against the incoming environmental stimuli which threaten his view of self (26).

Thus, the degree to which an individual can cope in an adjustive and satisfying fashion is determined largely by his own perception of his ability to function in his environ. And each client, by virtue of his request for helping services, would seem to be searching for a more personally satisfying manner of behaving where the "facts" he perceives and the responses he emits are not inconsistent with his own view of self. Similarly, just as the psychiatrist or the counselor does, so too must the rehabilitation worker deal with the client's sense of personal worth, his relationships with others, his fears and feelings of shame and guilt (43, p. 5). In discussing the educational experiences for mentally retarded workshops, Doll (34) makes much the same
point: The specific workshop experience he noted, is a vehicle for assisting the mentally deficient client in achieving "maximum self-realization in personal happiness social usefulness."

More recently research has been done relating adjustment in the vocational rehabilitation process to the self-concept of the client or helpee in rehabilitation. This interest is due in part to the recent regulations (39) in vocational rehabilitation which have broadened the eligibility for rehabilitation services to include a wider range of handicapped clients. Thus the objectives of vocational rehabilitation would seem to include more than the traditional vocational aspects only (88). Quite logically then, a broad interpretation of eligibility requirements reflects an increased concern for the individual who, for whatever reasons --physical, emotional, mental or cultural-- perceives himself as ineffective or inadequate in his coping abilities (111).

The notion that an individual's concept of self is influential in determining what kinds of behavior may result has been suggested by a number of authors and supported by a number of investigators. Patterson for example (91), in discussing the kinds of incoming clients referred to a sheltered workshop, suggested that the client characteristically sees himself as a failure, something less than a whole individual. In part at least, this self-attitude appears to stem from his inability to cope in his environment;
more specifically, these attitudes could be generated by poor or ineffective work skills, poor work adjustment, inability to relate effectively on an interpersonal level or a combination of cultural and social factors. Support for this theory was added by Barton (6) in a major investigation of sheltered workshops and by Gellman (44); both observed that the client's self-attitudes or the degree of self-regard should be considered as a critical factor in the client's rehabilitation. Wright (138, p. 178), in a major treatise on the psychological correlates of physical disabilities, noted that while environmental conditions and attitudes of others are factors in client expectations of and self-regard for his own reality-based behavior, "the self-concept is psychologically of such great importance that it can hardly be overstressed. . . ." Wright's point was considerably strengthened when discussing the underlying importance of the physically handicapped personality. Research has not established basic personality differences across disability types and non-disabled populations; this would indicate argued Wright, that physical disability is but a surface classification. Thus Wright has insisted on the necessity for getting "below the surface" in order to understand rehabilitation outcomes: it was suggested that assessment deal more with the underlying psychological significance of differential client outcomes in the rehabilitation process (138, p. 377).
In discussing the self-concept as a variable in rehabilitation, Fitts (40) was perhaps the most direct and insistent when he noted that for the rehabilitation client their concept of self is their major disability; in addition, he asserted that such persons cannot be successfully rehabilitated until their self-concept changes and that further, if positive improvement or change is experienced, it is possible that no other rehabilitation is needed. While it may be argued that Fitts' definition of rehabilitation is too broad, it would seem certain that this construct (self-concept) provides a frame of reference for the client from which his perceptions, reactions and evaluations of the environment are given meaning. As such, it should be considered both the fulcrum for assessment and the primary concern in the treatment process. In effect then, it was suggested that those helpers in the rehabilitation process must be concerned with helping the client who feels less than whole.

The self-attitudes would appear to be highly critical in determining client movement in the rehabilitation process. This theory was supported by Westman (136) in discussing various attitudinal barriers to rehabilitation, and by Yuker (142, p. 16). In this attitudinal context, the rehabilitation client could be defined as one who views himself differently from what most would consider to be normal or adjustive.
It has been suggested that the way an individual perceives himself determines to a large extent what progress he has made or is likely to make in achieving a satisfactory life-style. While intuitively there is considerable support for the position posited above, empirical studies supporting this hypothesis are rather sparse. Wylie (141) in a review of the literature regarding the meaning of the self-concept was relatively unsuccessful in finding a substantial amount of consistent empirical data. Heber's (57) comprehensive review in the field of rehabilitation revealed only a few investigations relating to self-concept issues among the retarded. There have been however, a number of studies which support the theoretical hypothesis above.

In a study involving orthopedically disabled individuals, Litman (74) found that the response to rehabilitation was related positively to the self-concepts of the clients involved. This finding was supported by Conners et al. (28) in a study involving schizophrenic veterans. They found that clients with higher ego-strength had not only met with greater success in work adjustment training during hospitalization, but also achieved a higher level of vocational adjustment subsequent to discharge from the VA hospital. In a study involving fifty eight disabled dull normals, Danielson (30) found that ego-strength was a critical factor in relation to a client's behavior in rehabilitation. In studies relating degree of adjustment and rehabilitation success, Pool (96)
noted that those clients who scored in the normal range of the Edwards Personal Preference Scale also were successful in rehabilitation and later economic adjustment. In another investigation reported by Drasgow and Dreher (35), two VA groups were compared on a number of personality tests. Of the two VA groups, the group that failed in DVR training program showed significantly more maladjusted behavior as measured by the MMPI and the Kuder Neuropsychiatric Keys. Further, the successful group was judged to be more reality oriented than was the failure group as determined by the Rorschach. In analyzing the work readiness of selected adolescent educable mentally retarded girls, Baskin (7) found that based on research findings on the post-high school adjustment problems of the retarded, her mentally retarded adolescent girls were not only unrealistic in their aspirations but also reported poor self-concepts; thus, they were unprepared for employment. Finally, in a study related to self-adjustment and employability, Heilman (58) found that the employed psychiatric clients (as distinguished from those clients still "in training" or in "service interrupted" status) had the most positive pre and post scores on the psychological instruments (Kuder Preference Record, GATB, Sixteen PF and Adjustment Inventory) utilized in the investigation.

Because a client's view of himself affects subsequent behavior that he may emit or elicit, there is considerable
relevance to the contention that the self-concept plays a decisive role in interpreting social and interpersonal relationships. The client's self-view then, must necessarily be a causitive or at least a concurrent factor in evaluating the adjustive quality of the client's social interaction (138, p. 167). Of tangential importance to the self-concept issue therefore, would be the dimension of the client's social adequacy and adjustment.

Moed and Litman (82), in analyzing two groups of Cerebral Palsied Clients, found that the employable group appeared to be better integrated, stable and mature. Neff (86) supported this finding by noting that based on the coping style of successful and unsuccessful vocational rehabilitation mental patients, the characteristic manner of coping with social demands was a predictor for rehabilitation success.

In a major report by the Governor's Commission on Mental Retardation in Illinois (62), it was suggested that the mentally handicapped fail in their first job, not because of poor work skills but for other reasons such as personal hygiene, poor relations with peers and supervisors, accepting authority and managing their money. Boly and Cassell (10), Michal-Smith (81) and McIntosh (78) also reported that factors such as being even-tempered, emotionally stable, cooperative and able to relate satisfactorily were critical variables related to later employment success after rehabilitation.
The relative scarcity of self-attitude research would seem to suggest that rehabilitation research and vocational rehabilitation services have not sufficiently attended to the social and interpersonal behavior problems existing in their respective helpee populations. Very few theorists or practitioners in the field of rehabilitation would contend that clients lose jobs because of their inability to do the required task; rather it is those social skills necessary for adequate coping ability that are related to employment and personal failures (8). It has also been suggested above that socially adjustive skills are necessarily dependent upon the client’s concept of self. Thus a positive change in the client’s view of himself does affect and will determine to a large extent his ability to behave in a socially adequate fashion.

**Relationship Variables Related to Client Change In Vocational Rehabilitation**

The helper in vocational rehabilitation is described by Ogg (89) as a participant in the rehabilitation team or as a bridge connecting the often isolated world of the client to a helping, concerned world. More specifically, the VR counselor is the kingpin, the specialist in coordinating and integrating the program for the client or helpee (89, 91). Disregarding the validity or invalidity of this statement, it has been suggested (75, 52, 11) that the critical characteristic required by any helper is that he be able to develop
genuinely helping relationships with his peers and with the client(s) he serves; further, it is vital that he be able to communicate this kind of caring relationship to those with whom he interacts. Finally, it has been suggested that these are perhaps the most critical ingredients in the role definition of a helper.

Recent research concentrating on the kinds of relationships established and their importance in effecting change in the helping professions such as vocational rehabilitation have pointed to the importance of considering the kind of relationship established as a significant variable in client change. Logically, it is inferred that the process of change in a client-to-be-rehabilitated is directly contingent upon the kinds of feedback he receives and subsequently upon the way he perceives himself in the light of this feedback. Thus Pitts (40), in explaining a conceptual model for understanding and changing a client's self-concept and interpersonal behavior, suggested that new kinds of feedback can and do change what has been learned about self in the past. Secondly, he noted that new behavior can be learned and old behavior unlearned.

The process of client change is facilitated admittedly, by a number of therapeutic conditions or agents. One of the critical agents of change would appear to be the kind or quality of interpersonal relationship that is fostered and maintained between the helper(s) and the helpee (101, 9).
Client movement or change in the helping situation is contingent upon and responsive to the quality of the interpersonal relationship established in the helper-helpee relationship; thus Rogers suggests (101) that it (the relationship) is not only a facilitating agent, but an essential ingredient for client change. It is assumed then, that most effective helper-helpee interactions include a helper who can provide a relationship of mutual respect—the kind of relationship which therapeutically facilitates client growth (122).

Early research which tended to support the relevance of the quality of the relationship as being an effective agent of change grew out of the pioneering writings of both Rogers and Strupp (99, 100, 115). Rogers (100) generated primary interest in the therapeutic triad by proposing three basic ingredients which when present in a relationship were conditions for client change in therapy. He suggested that the elements of the therapeutic triad—empathic understanding, unconditional positive regard and congruence—were "necessary and sufficient" conditions for positive client growth in the helping relationship.

Other theorists have since proposed a similar hypothesis suggesting that those helpers who are effective establish helpee relationships that communicate to the client a high degree of non-possessive warmth, accurate empathy and genuineness (51, 35, 97, 105, 114, 65, 99, 100). Conversely, theorists
and researchers have shown that either little or negative behavioral change on the part of the client has occurred when the helpers of those respective clients communicate low levels of accurate and sensitive understanding (central ingredients). Thus, when those ingredients are absent or present to a minimal degree, little client change is effected (16, 17, 18, 21, 32, 119, 123, 127, 129).

Research that has been strictly empirical has also supported the proposition that clients demonstrating greater change in counseling perceive higher quality relationships as offered by the counselor or helper (5, 48, 66, 72, 122). Empirical research has also shown that when counselors are perceived as communicating certain relationship conditions such as warmth, empathy and unconditional positive regard, clients experience greater change especially during the initial stages of counseling (5, 9, 118, 124).

While considerable research on the kinds of relationships which effect client change has been done in the fields of counseling, mental health professions and other helping professions, very little research of this kind exists in the field of rehabilitation; thus, virtually no research of this kind has been done in the sheltered workshop setting. Because of the paucity of research in the specific area of this investigation, the related research has been surveyed in closely allied helping professions. For purposes of further clarifying the kind of relationship which can effect change, a number of investigations have been reviewed below.
In one of the earlier studies investigating the kind of
counselor-client relationship and its relation with client
outcome, Halkides (50) compared more successful client groups
and less successful groups. Based on a rating scale of
samples from the therapy sessions of both groups, she found
that the more successful group received higher levels of
therapist-offered conditions of self-congruence, empathic
understanding and unconditional positive regard. In a study
involving group therapy for hospitalized patients, Truax
(120) also reported a significant positive relationship
between therapist-offered conditions of warmth, empathy and
genuineness and the patients' self-exploration, self-revelation
self-involvement in therapy. Another study (119) of hospi-
talized patients which reported similar results compared
improved clients with clients who had deteriorated over a
period of six months. It was found that the therapists for
the improved group communicated a higher level of accurate
empathy.

In an attempt to provide supporting research on other
client populations, Truax and Wargo (128) reported significant
findings for a study involving eighty juvenile delinquents.
After three months of group counseling, they reported a
highly significant relation between counselor-offered levels
of empathy, warmth and genuineness and degree of improvement
in personality and behavioral change indices. In a replication
study (129) utilizing the same design (analysis of covariance)
and twenty-three measures of outcome for the outpatient population, essentially similar results were reported; thus, the clients who received high levels of all conditions showed above-average improvement while the reverse was found for clients receiving low levels of counselor-offered conditions.

Additional studies which lend support to this central thesis have been summarized by Truax and Carkhuff (125, p. 124ff). Their findings consistently show counselor-offered warmth, empathy and genuineness to be central characteristics to relationships that effect positive behavior change in clients.

In view of Eysenck's criticism (39) of overall change in outcome studies, it was necessary to utilize control groups in an effort to partial out the effects of improvement with no therapy at all. Thus it could be established that therapy or therapeutic approaches were in fact significantly more successful than were no treatment groups.

In a study (121) utilizing a control and treatment group of randomly assigned schizophrenic patients, the treatment group received a minimum of thirty individual therapy sessions throughout a three and one-half year span. In addition, by utilizing tape recorded samples of the therapy sessions, the treatment group was further subdivided into two groups. Group one of the treatment group had received high levels of therapist empathy, warmth and genuineness while group two of the treatment group had received low levels of
therapist-offered conditions. Based on the results of a pre and post treatment battery of psychological instruments, it was found that clients receiving high level conditions of warmth, empathy and genuineness manifested an overall gain in psychological functioning while the reverse was true for the clients receiving low levels of therapist-offered conditions. Finally, while the control group exhibited moderate gains, there was a significant difference in the control group gains and the gain manifested by the clients who had received high level therapist-offered conditions.

In a well designed investigation, Dickenson and Truax (32) investigated the effects of time-limited group counseling with a sample of emotionally disturbed college underachievers. Though with a very different population and setting, the results supported the findings of hospitalized schizophrenics; the treatment group reported significant gains over the control group. In addition, when the treatment group was subdivided on the basis of those who had received higher levels of counselor-offered conditions (judges ratings), it was found that the students who received only moderate levels showed gains similar to those in the control group.

Truax, Wargo and Silber (130) reported similar results in a group counseling study with female juvenile offenders. After randomly assigning clients to a therapy and control group, all institutional conditions were held constant except that the treatment group evidenced substantial
improvement over the control group. It was found that the significant gains were manifested in evidencing more adequate self-concepts, more tolerance to parental and authority figures and perhaps most important, a significant reduction in delinquency-related characteristics. Finally, a one year follow-up indicated that significantly fewer in the treatment group had returned to institutional settings.

While there have been studies which do not uniformly support the overall findings reported above (55, 126, 133), it would appear that helpers who are high in offered conditions of accurate empathy, non-possessive warmth and genuineness are more effective in facilitating helpee change or growth. This relationship seems to function as a direct proportion: As counselor-offered conditions improve, so too does the possibility of effecting client behavior change. This relationship appears to hold true across levels of training, theoretical orientation, experience, client typology, behavioral disability and individual setting (71).

Since the wide applicability of this change agent has been established as regards both kinds of helper and kinds of helpee, it would seem to apply as effectively to the helper and helpee in vocational rehabilitation.
Other Helper Characteristics Related to Client Change in Vocational Rehabilitation

In view of the divergency of opinions concerning the VR counselor's role, the various criteria utilized to judge his effectiveness and the admittedly varied functions he actually performs in the work setting, it is not surprising that research findings in this area are not consistent. In the field of vocational rehabilitation, research on counselor characteristics as descriptive data is plentiful. Similarly, research on the VR client is plentiful. But meaningful research on the counselor characteristics associated with client change as defined in this study is scarce.

A cursory examination of selection criteria for graduate programs for the helping services strongly indicates that neither theorists nor researchers have found what characteristics are associated with effective helpers. Valid, meaningful or relevant selection indexes for the helping services have not as yet been adequately developed (19, p. 79). While the reasons for this inconclusive state of affairs are obviously varied, it would appear that those indexes presently utilized are insufficient (59, 92, 137).

However, if counselor characteristics can predict counselor effectiveness better than chance, they then serve a purpose in accounting for some of the variability. This is especially true when a number of potentially meaningful variables are being considered concurrently.
Counseling Experience

Theorists have generally assumed that counselor experience is related to counselor effectiveness (15, 92). Thus, a helper who has had a practicum or internship in the helping services is assumed to be more effective. Similarly, one who has had practical experience in dealing with helpees in his own job situation presumably can predict whether the helpee will or will not profit from the helping service. Thus, Bradley and Stein (12) investigated the relationship between experience as a VR counselor and predictive accuracy in client behavior after counseling. The sample consisted of 135 VA clients who received counseling over four months and were then closed. In comparing the actual client job status after closure and the rehabilitation plan decided on before termination, it was found that experienced counselors made the most accurate predictions to a highly significant degree.

A comprehensive investigation by Wright et al. (140) surveyed counselors' perceptions of professional problems and found that experience level of counselors was related to problem perception. This could suggest that experienced counselors are more sensitive to counselor problem behavior or are more comfortable in admitting to various problems. In either case, it seems at least implicit that those experienced counselors who feel more self-assured or more aware of their problems could also function effectively (139, p. 26-27).
Conversely, a number of studies have indicated no significant relation between helper experience and either effectiveness or predictive accuracy on the part of the counselor. Watley for instance (134), after analyzing sixty-six counselors' predictions of client grade-point average found that neither training nor experience were variables in the ability to predict accurately. Similarly, in an investigation using case-folder sorting ability as the criteria, Roehlke (98) found that the six inexperienced counselors performed as well and in some cases better than the experienced group (n + 12).

Recent research comparing the effectiveness of experienced and naive helpers would seem to suggest that the variable of experience is largely irrelevant if not sometimes damaging to the helper's effectiveness. Carkhuff in fact (19, pp. 6-7), summarize a number of studies which compare lay helpers and professional helpers as regards their facilitation of client change. Based on these findings, he reported that with different kinds of clients and on different indexes, lay persons effect changes that are at least as great and not infrequently, greater than that of professionals (19, p. 7). There would appear to be some doubt then, that the experiential level of counselors by itself constitutes a critical variable in effecting or predicting client change.
Variables such as the number of contacts with the client, the number of clients in a caseload, the amount of time spent for a client, can all be classified as time expenditure variables for the counselor. In reality these variables constitute in part, a role definition or function for the counselor; thus if he sees his role as coordinator of client services, his time will be spent not in face-to-face counseling but in coordinating the overall service program for the client. Reciprocally, if a counselor spends a greater percentage of time in actual counseling activities, his counseling role is perceived differently. Thus in a study by Schieffer (106), it was reported that senior high school counselors who were perceived as "being most concerned with students' personal problems," spent fifty two per cent of their time in actual counseling. Barnhart, however, reported that DVR counselors spent one-fifth of their time in contact with the client, one-third on paper work and one-fourth in conferences (4).

In addition to clarifying the counselor's role or function, the manner in which a counselor utilizes his time may also affect the degree of client change in rehabilitation. While the variable of time expenditure has not been extensively explored in vocational rehabilitation, some research has shown that the time factor was meaningfully related to counseling outcome.
Based on the literature available and data from Region VI, it would appear that the counselor's caseload size is not a meaningful variable affecting client change in the rehabilitation process (14, 69). Caseload size varies with the kind and degree of client handicap, availability of professional personnel, experience and specialization of professional personnel and a host of other confounding variables. Thus it would not appear to be sufficiently definitive or meaningful as a discriminating variable. A more meaningful aspect of the counselor's time expenditure as it relates to client change would appear to be the amount of time spent with the client.

In a study involving seventy three clients seen at least twice in the counseling center at the University of Chicago, Standal and Van der Veen (112) found that personal integration as regards the client was related to case length; they further reported that most case variables were slightly related to the length of therapy. They concluded that case length was and could be a meaningful variable in effecting change in the client. They further suggested that, with respect to the actual amount of therapy received, personal integration change may be more important than rated successes.

In a similar investigation involving a population of eighty seven clients, Cartwright et al. (23) reinforced those observations reported by Standal et al. Utilizing the same criterion --personal integration-- they noted that counselor
ratings of client change or movement in personal integration was related to the log number of interviews or sessions had with the client. Thus client change was positively and significantly related to the amount of interviews received.

While his study did not report highly significant findings, Seeman (109) noted a trend in favor of higher success ratings by counselors for longer cases. Seeman reported that the shorter cases ranged from failure to success on a 1-9 point scale, while the success ratings for the longer cases clustered around two high points on the scale (points seven and eight). Seeman concluded that if the client received at least twenty sessions, there was good assurance of client gain. Similarly, Cartwright (22) found support for Seeman's investigation in an analysis of selected counselor actuarial variables affecting client movement.

In an attempt to verify the effects of short-term counseling, Gross et al. (48) suggested that short-term counseling (less than twenty sessions) was significantly related to client movement when the clients perceived the counselors as being warm, empathic and genuine. This finding was contrary to previous investigations.

Others have suggested the same hypothesis that short-term counseling can be effective in changing client behavior. Berendson and Carkhuff for instance, have suggested that the process of therapy can be evaluated very early in order
to determine the likelihood of success in the particular relationship between helper and helpee (9, p. 383).

While a review of the literature suggests that the time factor in its relation to counselor function has considerable influence on client change or outcome (15, p. 32), the evidence has not been entirely consistent. Thus Tyler suggests that the time factor is irrelevant (131), while Johnson (63) reports conflicting results.

**Counselor Age, Sex, Education and Salary**

Unless it is assumed that all individuals can actually function as helpers, it is necessary to establish valid, meaningful criteria to discriminate the effective helpers from those who would be or in fact are less effective. Yet, studies of counselor characteristics related to effective functioning in the helping role are scarce (19, p. 81). Patterson (93, p. 31) has suggested that tentative evidence exists that some VR counseling students "do not appear to possess characteristics usually considered desirable in counselors." This highly qualified statement further reinforces the lack of reliable, valid data in this area.

In a survey of state agency practices, Muthard and Miller (85) surveyed eighty-six state vocational rehabilitation agencies in order to develop criteria for counselor effectiveness. The authors were unable to report that demographic data were in fact, critical variables in determining counselor effectiveness. Watley (134) in a prediction study found no significant
differences between accurate counselor predictors and inaccurate predictors in the areas of counselor education, experience or biographical data.

There is some evidence reported that would seem to support the inclusion of variables such as counselor age, sex, education and salary. Thus Patterson (92) in a survey of selection requirements for graduate school in rehabilitation counseling observes that grade-point average and intelligence are the two variables most often used and in many cases the only variables used. The implications would seem to be that the chances of graduating effective counselors is increased if they are at least intelligent and capable of coping in the academic world. Thus, it was also suggested (15, p. 52) that education and/or experience did influence the effectiveness of service delivery. However, it has also been suggested (139) that counselor predictive accuracy is not related to either education or experience when individual variability on the part of the counselors was controlled.

In an investigation concerned with financial remuneration and counselor performance, Johnson and Fredrickson (64) utilized a 2 x 2 x 2 factorial design to differentiate performance for paid and non-paid students enrolled in a counseling course. The authors reported that the paid "counselors" as opposed to the unpaid were significantly "more expressive, satisfying, active, potent, and receptive than the unpaid counselors" (64, p. 132). It was further noted that both the clients and the judges rated the counselors' performance.
In an attempt to evaluate those typical factors critical to recruitment and later retention in the rehabilitation field, Sussman and Haug (116) assessed different characteristics of 324 graduate students in VR counseling. In reporting characteristics of those who "would be most likely to remain in rehabilitation counseling as a lifetime work..." they noted that these potential workers were: (1) the young (under thirty) and the older (over forty) who were entering this area; (2) an increasing number of women; and (3) individuals of diverse educational backgrounds. It can be inferred from Sussman and Haug's investigation then, that if the helper in rehabilitation is facilitating client change at all, it is likely to be due to the kinds of helpers characterized in their study.

The sex of the counselor as a variable affecting client outcome has been generally ignored (117). In a study on client preference for male or female counselors, Fuller (42) found that clients on the freshman college level generally preferred male counselors regardless of the problem presented. Thus he noted that client preference was generally unrelated to any other counseling variables. Similarly Daane and Schmidt (29) noted that clients of the same sex rated counselors of both sexes high on empathy suggesting that on the variable at least, clients were not differentially selecting a counselor of one sex predominantly.
In a third study investigating client preferences on rating scales, Pohlman (95) reported no significant differences between client preference for counselors and the rated success in counseling.

The above studies notwithstanding, there would appear to be some relationship between client preference and counseling outcome. Thus Koile and Bird (70) noted that while students sought help generally from a counselor of the same sex, both male and female clients were willing to discuss a greater number of problems with the male counselor.

In an operant conditioning experiment, Cieutat (25) noted that reinforcing observations from a helper of the same sex were more effective. In a similar experiment utilizing a complicated $2 \times 2 \times 2 \times 2$ factorial design, Thoreson and Krumboltz (117) employed male and female audio tape model counselors to measure the effects of information seeking behavior on the part of male and female clients. They found that the males of the experimental group who had received the audio tape models were more affected than were the females on the average. Secondly, the males in the experimental group responded best when male models were presented whereas females of the same group responded best when either an all-male or an all-female model was presented. Thus it would appear that male models were more effective for male clients but not for females.
An earlier study by Stevenson and Allen (113) suggested that both male and female helpers were equally effective in reinforcing both male and female clients. This finding does not support the theory of differential success in counseling due to the sex of either the helper or the helper. Notably however, the authors observed that a variable not included in studies of this kind of problem discussed; thus, they implied that the inclusion of this variable may help to establish what counselor can work best with what client and with what kind(s) of problem(s).

Environmental Variables and Their Relationship with Client Change in Vocational Rehabilitation

The workshop environment can be considered, at least logically, as a variable affecting client change in the rehabilitation process. Thus in a helping model, factors which conceivably affect client change are the client himself, the helper(s) and the environmental situation in which the helping process takes place (19). The environmental forces or stimuli that could conceivably impinge upon the client in the workshop are obviously numerous. A review of the rehabilitation literature however, revealed no investigations of environmental forces and affect they have in changing client behavior or attitudes. Two variables which could conceivably affect the degree of client change in the workshop situation are the size of the workshop facility and the type or rehabilitation orientation of the workshop facility (69).
Workshop Type

While the sheltered workshop is essentially a special place where handicapped clients who are capable of some productive functions enter into various kinds of work activity, it may subscribe to different rehabilitation objectives (132).

Thus, the classical problem of whether a workshop is a business with production as its goal or whether it is a rehabilitation facility with work-adjusted clients as its goal provides a rationale for the evolvement of the different workshop prototypes.

The work activity center provides noncompetitive or sheltered employment to a selected number of clients who are able to engage in some productive work. While it provides no counseling or supportive services, it does provide an income for clients who in turn maintain a production level sufficient to minimize community subsidy (45). This type of workshop while it stresses the value of work, concentrates on production rather than the individual client.

A second type of workshop (transitional workshop) incorporates not only a work situation but also counseling and supportive services which are offered separately from the day-to-day workshop activity. The workshop staff members are hired for their industrial background and the objective of the workshop is to provide the client with a salable skill rather than work activity; thus the final objective is job placement in a competitive job market.
The vocational adjustment workshop or what Gellman and Friedman (45) call the clinically oriented workshop constitutes the third type of modal workshop. This model incorporates the counseling services and a counseling oriented (rather than industrially oriented) workshop staff all of who work closely in facilitating the client's ability to cope with the problems of production, supervision and interpersonal relations. The helping process concentrates on the "reality aspects of work behavior in the workshop," (45, p. 36) with the counselor and supervisor constantly interacting with the client. Thus, the rehabilitation process is a unified process which utilizes the psychological aspects of work to modify the client's personality, work attitudes and actual behavior. The approach is both process and outcome oriented.

While no experimental data has been found to support the theory that the kind of workshop environment does, in fact, effect change in the rehabilitation client, it has been suggested that the type of workshop environment as described above could critically affect client movement.

**Workshop Size**

The size of the workshop is another environmental variable which could conceivably affect client movement in the workshop setting. The work of Goodman (47) has suggested that in the academic setting at least, smaller schools have provided a more responsive, personally meaningful and adaptive environment for students than have the larger academic institutions.
This observation has also been supported by Friedenberg (41). It would appear then, that based on this theoretical rationale, some support could be provided for the variable of workshop size. No experimental data has been found in the rehabilitation literature, however.
CHAPTER BIBLIOGRAPHY


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


84. Murphy, G. A., Personal interview, Nebraska Psychiatric Institute, Omaha, Nebraska, 1970.


133. Wargo, D. G., *The Barron Ego Strength and Life Scales as Predictors and Indicators of Change in Psychotherapy*, Brief Research Reports, No. 21, Madison, Wisconsin Psychiatric Institute, University of Wisconsin, 1962.


139. Wright, G. N. Editor, Wisconsin Studies in Vocational Rehabilitation, Series I, Monograph III, Madison, Regional Rehabilitation Research Institute, University of Wisconsin, 1968.


CHAPTER III

METHODOLOGY

Source and Selection of Data

The population chosen for this investigation was comprised of a sample of vocational rehabilitation clients who were selected from a random sample of sheltered workshops in a five-state region. Those states included for consideration were Texas, New Mexico, Louisiana, Arkansas and Oklahoma (Region VI). Twenty sheltered workshops were selected randomly from seventy-seven workshops in Region VI. This sample constituted roughly 26 per cent of those workshops in the Region after having excluded all blind workshops, evaluation facilities, speech, and hearing clinics and finally, all state schools and hospitals. Of the twenty randomly selected workshops, 10 or 50 per cent of the selected sheltered workshops in the sample population received clients during the designated three week testing period. The remaining ten received no clients and were subsequently not included in the investigation.

The client population was comprised of all clients who were evaluated and accepted for training by the twenty selected workshops during a three week period of the fiscal year. In
order to ensure sufficient representation and validity in the investigation, a number of sixty clients was established as an acceptable minimum number for representation.

Ninety clients from the ten reporting workshops received the pre-test packet during the three week testing period. Of the ninety pre-test clients, sixty-one remained in the workshop and were given the post-test packet after the two month time period. Since twenty-nine of the original ninety clients were no longer in training, they were not able to participate in the study. Thus the actual client population under consideration in this investigation consisted of the sixty-one clients who had been pre-tested, remained in training and finally, had received the post-test package.

The population of helpers (in this investigation, the helper was defined as the Workshop Supervisor and the Vocational Rehabilitation Counselor), consisted of those professional helpers who were directly responsible for each client in the client population. Thus only those VR counselors whose clients were included in the client population, were considered for inclusion in the study. Secondly only those workshop supervisors directly in charge of clients in the selected client population, were included in the sample. After the two month testing period, a total of twenty-two counselors and twenty-eight supervisors were actively involved as helpers for the sixty-one clients included in the client sample. Thus a total of fifty professionals constituted the helper sample.
Description of Instruments

The collection of helper and helpee research data was accomplished through the utilization of the Tennessee Self Concept Scale (12) the Barret-Lennard Relationship Inventory (2), a Semantic Differential (18) and Personal Data Forms developed for the client, VR counselor and the workshop supervisor.

The Tennessee Self Concept Scale (TSCS) consists of 100 self-descriptive statements such as, "I have a healthy body," taken from a pooled sample of individuals' descriptions of themselves. The client is asked to describe himself on a five point likert-type scale with alternative responses which are labeled as: Completely false, mostly false, partly false and partly true, mostly true and completely true. A total composite score is generated from eight sub-scale scores: (1) Self-Identity, (2) Self-Satisfaction, (3) Behavior (4) Physical Self, (5) Moral-Ethical Self, (6) Personal Self, (7) Family Self and, (8) Social Self. The Research Form, rather than the Counseling Form was utilized, primarily for the purpose of generating additional research spinoffs using the same data.

The TSCS was utilized because it is self-administering, appears to be relatively simple to take (sixth grade reading level), has a testing time of approximately twenty to thirty minutes and finally, because it provides a multidimensional description of the self-concept. In criticising the Scale,
Crites has noted that the TSCS is applicable for a wide range of psychological adjustment; thus it could be utilized to discriminate between and within a healthy or a psychotic patient population (9). Fitts in reviewing the literature which utilises the TSCS, has noted that it has been used extensively in a wide range of change studies including the area of vocation rehabilitation (13).

The manual for the TSCS (12) describes the norm group of 635 individuals with comprehensive ranges for age, area or locale, intelligence and social class. However as the author has noted, these norms over-represent the college individual, the Anglo-American and the twenty to thirty year age group. Reliability established by test-retest methods appears very satisfactory with reliability coefficients ranging from .60 - .92 on the composite or total score. Validity for the TSCS was reported by comparing it with other personality measures, through discrimination between normal and abnormal groups and by noting change scores under various conditions. Thus it was reported by the author that correlational data with the Tennessee Self Concept Scale and the Minnesota Multiphasic Personality Inventory and Edwards Personal Preference Scale, provided substantial support for this assertion (12). In addition, Crites indicates that the TSCS as a measuring instrument, "measures up well . . . ." with other similar test instruments (9).
The Barret-Lennard Relationship Inventory (RI) was designed to provide measurement scales for the counselor response variables of empathy, warmth and genuineness. The 1964 Revision (Form OS-M-64) of the RI was the form utilized in this investigation. In general, the revision of the 1962 Form was meant to improve the sensitivity and versatility of the inventory for measuring the relationship variable in any significant interpersonal relationship (3). The RI consists of sixty-four scaled items such as, "He likes me."; it generates both sub-scale scores and a total score which operationally, is a measure of the quality of the interpersonal relationship as offered by the helper and perceived by the helpee or client. The inventory has been used to measure various relationships in counseling, therapy groups, school adjustment, family groups, teacher and pupil perception and finally, in vocational rehabilitation (4).

The RI has particular applicability in this investigation since it has been used extensively on a rehabilitation population, has an acceptable reading level, and is self-administering. Reliability data for the Relationship Inventory has been reported by the author for both therapist forms and client forms. Split-half reliability for the different sub-scores on the therapist data ranges from .88 to .96 while the client data reliability coefficients ranged from .82 to .93. As appears evident and as the author indicates, these results suggest "quite satisfactory internal reliability measures"
Test-retest reliability data is also reported on a college population (N = 45), resulting in correlations ranging from .78 to .90 for the individual sub-scores and a correlation of .95 for the total score reliability (2, p. 12).

In a study involving college student reports of parent-child relationships, Hollenbeck (16) reported split-half reliabilities ranging from .83 to .95 for the RI scales; after waiting for a six month interval, he reported test-retest correlations ranging from .61 to .81 for the sub-scales of the inventory. Berzon also reported good test-retest reliability in a pilot study involving twenty students in four groups. Using the group or Milieux Form of the RI, she tested after the third and fourth month and reported a test-retest correlation of .86 for the total scores (6).

Mills and Zytowski (17) provided reliability data for a sample of college women who utilized the revised forms of the Inventory to describe their reciprocal relationships with their respective mothers. The authors reported test-retest reliability for Form CS and Form MO of the RI which ranged from .74 to .90 and from .80 to .87 respectively on the four sub-scores. In a recent report prepared by the author of the Inventory, similar data was gathered from forty college students at the University of Waterloo. The students were asked to describe their perception of their parents' relationship with them. Test-retest correlations (with a time interval
of from two to six weeks), ranged from .92 to .86 for sub-
scores and total score (3, p. 2).

The content of the Inventory was initially validated
by the use of judges' ratings on (1) the positive and negative
items for each variable they were designed to represent and
(2) their strength or importance as negative or positive
indicators of the particular variable involved. As regards
the first rating, the author reported perfect inter-judge
agreement on all but four of the items, three of which were
eliminated and the fourth, revised. An item analysis was
also run on client responses (N = 40) and compared for
"direction of response."; with the exception of one item
which was subsequently eliminated, none of the items "contri-
buted in the 'wrong' direction to their respective variables
. . . ." (2, p. 7).

Other evidence of validity for the RI is provided by
Emmerling in an investigation of effective and ineffective
teachers (10). Using the Q-Sort technique with the variable
of "openness" as the criterion, it was found that the more
open teachers were also perceived more positively on each of
the RI scales. Thus those teachers who saw themselves as
more responsible for problems and the resolution of these
problems in their work situation, were also seen in a more
positive light by the students. In a similar study, Cahoon (7)
reported a high relationship between open-minded counselors
as measured by the Dogmatism Scale and the client-perceived
quality of the counseling relationship as measured by the RI. Other studies by Gross and DeRidder (15) and Van der Veen (24) compare the RI and Roger's Process Scale (19) the latter of which is a measure of therapist functioning. The findings lend support for the hypothesis that the two measures are not only theoretically related but that they both function as effective measurement tools.

The basic theory that the RI was designed to test, gains considerable support from the studies reported by Truax and Carkhuff (23) which have also attempted to measure the levels of effective relationship conditions. Based upon this substantial pattern of evidence supporting this theory, there would seem to be "strong implications for the validity of the instruments and procedures used." (3 p. 5)

The Semantic Differential (SD) is a self-rating device for measuring the connotative meaning of certain concepts, which in this study are the concepts of "Self" and "Ideal Self." It purports to measure the client's evaluation or attitude to certain concepts by the allocation of the concept(s) in the multidimensional space of polar items (11). The particular form of the SD used in this study consisted of two concepts which were rated on twenty polar scale items. The intensity of the evaluation on each of the twenty item scales was rated on a seven-step scale and the change score after pre-post testing was determined by the increasing similarity or congruence between the two concepts.
The SD was selected because it serves as an operational index of change in a client's meanings, with respect to self. Thus the changes in meanings that occur with respect to certain concepts "appear to be changes in significance or meaning that various persons, events and situations have..." for the client (18 p. 191).

The particular form of the SD utilized in this investigation was developed for the specific population under study. Developed for two concepts --the Self and Ideal Self-- the scale items were selected for these concepts from a number of factor analytic studies reported by Osgood (18) and the Polarized Adjective Scale (5). Twenty-three scale items were selected and only those items that loaded on the "evaluative" factor were considered for inclusion.

In order to check the reliability of this instrument, two pilot studies were conducted. Using the two concepts and twenty-three scale items, the instrument was given to two client populations similar to that population under consideration in this investigation. Test-retest correlations reported below were across people and across items.

In the first pilot study, thirty-six rehabilitation clients were given the SD twice with the test-retest period being ten days apart. The test-retest correlation was .70. A second pilot study involving sixteen rehabilitation clients and one concept (Self) was run, utilizing the same time span and the same scale, the test-retest correlation was .82.
A final step in the development of this instrument involved the use of a panel of judges, to assess the face validity of the SD. The three judges were familiar with the theoretical rationale and usage of the SD as a research instrument. The criteria utilized for their assessment were as follows: (1) Delete those scales which in your opinion, are not primarily evaluative factors as defined by Osgood; (2) Delete those scales which do not appear to be true psychological opposites; (3) Delete any scale (or item) which appears to be too hazy, or for any other reason, nonfunctional. Twenty of the twenty-three scale items under consideration were judged satisfactory and subsequently, were utilized as the final form of the instrument.

Additional reliability and validity data was reported in the literature. A test for reliability (test-retest) with an N of 135 was reported by Tannenbaum with reliability coefficients ranging from .87 to .93 (22). Aiken reported alternate-form reliability ranging from .74 to .81 on a population of 348 subjects (1). On a test of item reliability with an N of 4,000, Osgood reported test-retest reliability to be .85 (18).

In reference to the validity of the SD, Osgood reports that "The evaluative dimension of the Semantic Differential displays reasonable face validity as a measure of attitude," (18, p. 193). In a prediction study reported in Osgood by Tannenbaum, the predictive power of the SD and the Bogardus
Social Distance Scale were compared; a multiple correlation of the three basic factors correlated with the Bogardus at .78, .80 and .72 respectively, indicating the similar predictive power of both (13, p. 199). Compared with other attitudinal scales - specifically the Thurstone and the Guttman scale - the validity of the semantic seems to be good (18).

Personal data forms for the client, the VR counselor and the workshop supervisor were developed in order to determine the differential characteristics of these three classes of participants in the research project. Based on an extensive review of the literature, only that demographic and vocational information which appeared to consistently and significantly discriminate was included in the list of helper and helpee variables generated. The personal data forms were then developed from this list of variables and subsequently utilized for data collection in the investigation.

Procedure For Collection of Data

The Rehabilitation Services Training Program at North Texas State University provides training for all workshop personnel in Region VI. Because of its regional responsibility, it was felt that any research activity also be regional in nature and scope. For this reason, a random sample of sheltered workshops from Region VI was selected. The population from which this sample was chosen was a list of
sheltered workshops offering comprehensive evaluation and work adjustment training, developed by the respective State Facility Specialists. This list did not include as "comprehensive," blind shops, speech and hearing clinics, evaluation centers with no work-adjustment training, work adjustment training centers with no evaluation and finally, all state schools and hospitals since they were residential centers. This list consisted of seventy-seven workshops. Twenty workshops from this population of comprehensive workshops were randomly selected to participate in the investigation. Each participating workshop director was then contacted and informed of his role in the study, the time expenditure involved and finally he was asked to indicate his willingness to participate by returning a brief information checklist. All twenty workshops indicated a willingness to participate.

The director of the sample workshops was subsequently sent the pre-test packet of instruments with the instructions that, beginning on a specified date and during the following three weeks, all incoming clients would be administered the pre-test instruments. The workshop director was given appropriate information and directions for test administration in addition to the responsibility of returning the completed instruments. Thus each incoming client was given: (1) the *Tennessee Self Concept Scale*, (2) the *Semantic Differential* and (3) a personal data sheet (client form).
Of the twenty workshops participating, only ten received new clients during the three-week testing period. The ten workshops reporting no incoming clients were contacted, thanked and dismissed from any post-testing responsibility.

After two months and three weeks of workshop involvement, all pre-test clients were administered the post-test instruments by the Rehabilitation Staff at North Texas State University. Those instruments in the post-test packet were:

1. the *Tennessee Self Concept Scale*,
2. the *Semantic Differential*,
3. the *Relationship Inventory*. The client filled out the RI twice, once in terms of his perceived relationship with his immediate workshop supervisor and once in terms of his counselor. The total testing time was approximately two hours for the client. In addition, the client's VR counselor and workshop supervisor were each given a personal data sheet during this post-testing period.

A final step in the operational procedures involved a coding of all related information by workshop, by client, by supervisor and by counselor. This coding was necessary in order to draw meaningful inferences from the multiple interaction of variables involved in the client's rehabilitation process. This coding system then was translated to a computer coding system for analysis.
Analysis of Data

In order to (1) determine the concomitance between client change and the quality relationships established by the helpers, and (2) in order to evaluate how different characteristics and conditions of the VR counselor, supervisor and client relate to client change in the rehabilitation process - the statistical technique of step-wise multiple regression was used. This statistic is generally used in two basic ways: (1) To determine what independent variables best predict the dependent variable (criterion), in this case, client change, and (2) to evaluate the amount of prediction that appears to be present or available (25).

Operationally, each of the independent variables involved is analyzed singly with the dependent variable by way of simple order correlations. In sequential order then, the independent variable with the highest Pearson Correlation is isolated from all the other remaining correlations. In this manner the variance contributed by the various independent variables can be partialled out and tested for significance.

Each of the first six hypotheses was analyzed to determine whether there was in fact a positive relationship, significantly different from no relationship. A two-tailed $t$ test was utilized with the significance level set at .05. The seventh hypothesis was analyzed to determine whether there was in fact, a significant difference in the relationship between the two independent variables with the dependent variable
(client change). A two-tailed test of "t" was utilized with the level of significance set at .05. Any significant relationships between other additional independent variables and the criterion(s) were also included in the discussion of the data.

The merit of this statistical treatment is substantiated because the study is more descriptive in design than purely experimental. This design also provides the most efficient and comprehensive method of analyzing the large number of variable involved (14). It should be noted that while most of the independent variables are quantitative and continuous in nature, a number of the variables are qualitative and discrete; the validity for the use of these "dummy" variables is explicitly shown by Cohen (8) and Suites (21).

Finally since this study includes two change instruments, it was necessary to run the data twice, once for each criterion measure. All simple and multiple correlation coefficients were generated for each computer run. A "360" computer was utilized for the analysis.
CHAPTER BIBLIOGRAPHY


3. Technical Note on the 64-Item Revision of the Relationship Inventory, Ontario, Department of Psychology, University of Waterloo, 1969.

4. and G. A. Elliott, Partial List of Reported Studies Using the Relationship Inventory, Duplicated List, Ontario, Department of Psychology, University of Waterloo, 1969.


CHAPTER IV

STATISTICAL ANALYSIS AND DISCUSSION

Analysis of Data and Discussion

The purpose of this chapter was to present and discuss the results of the data which was collected and analyzed statistically. The data collected was gathered for analysis in a multiple regression model which generated means, standard deviations, simple order correlations and multiple correlations by a step-wise procedure. This analysis was completed for all dependent and independent variables included in the investigation. Residual Gain Scores for the two criterion measures were generated for the multiple step-wise procedure after all simple order correlations were reported. The Pearson Product Moment Coefficient of Correlation (r) was used in Hypotheses I through VI to determine whether a substantial correlation existed between the specified independent and criterion measures involved in the respective Hypotheses. These correlations were then tested for significance by the use of Fisher's t technique. Mean difference scores were utilized in Hypothesis VII and the differences were tested for significance using Fisher's t technique for independent groups. Since the VR counselor and workshop supervisor
sample appeared to be biased by an extremely low client-counselor and client-supervisor ratio in one sheltered workshop (twenty seven of the sixty one clients were sponsored by one counselor and supervised by one supervisor), it was necessary to check for any biasing effects which might significantly alter the correlational relationships found. A statistical check for this potential biasing affect was accomplished by first, extracting the biased data reported by the one workshop (Workshop No. 4, Appendix A) from the total sample and then recomputing the correlations and mean differences for all possible relationship combinations with the same statistical procedures. The correlations and mean differences from both samples were then compared to determine whether significant biasing effects had been introduced by including the data from the one sheltered workshop. Those significant differences found were then discussed in the appropriate sections of subsequent chapters.

The first six research hypotheses were restated in the null form for the purpose of statistical treatment and the .05 level of significance was chosen as the level at which the null hypotheses could be rejected. The seventh hypothesis was already stated in the null form.

The research procedure utilized a pre and post-test design on a population of rehabilitation clients, in order to determine the amount of client change in attitude to self, experienced during the first two months and three weeks of
their sheltered workshop experience. Client change was defined as: (1) a mean gain score as measured by the Tennessee Self Concept Scale (TSCS) and (2) a mean gain congruency score as measured by the Personal Concept Scale (PCS). Table I shows the pre and post-test mean scores on both criterion measures along with respective tests for significant difference as determined by Fisher's $t$ test for correlated groups.

**TABLE I**

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Value of $r$</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>TSCS</td>
<td>317.36</td>
<td>36.82</td>
<td>315.20</td>
<td>41.08</td>
</tr>
<tr>
<td>PCS</td>
<td>42.74</td>
<td>19.17</td>
<td>35.02</td>
<td>16.36</td>
</tr>
</tbody>
</table>

*Significant at greater than the .001 level

An examination of Table I suggests that there was a significantly greater congruency in the client's self-ideal self image as measured by the PCS. Thus during their initial exposure in the workshop, the rehabilitation clients reduced the self-ideal self discrepancy in their attitude to self. Change in the clients' self concept as measured by the TSCS, however, neither improved nor deteriorated significantly in
the initial exposure to the sheltered work experience. Biasing effects due to overrepresentation in both helper samples did not substantially affect any of the mean differences.

**Hypothesis One**

The first research hypothesis as stated in the null form was as follows: There will not be a significant positive correlation between client change as measured by the TSCS and the PCS and client-perceived warmth of the VR counselor as measured by the Relationship Inventory (RI). Table II presents simple order correlations between the two criterion measures and the client-perceived condition of counselor warmth.

**TABLE II**

**SIMPLE ORDER CORRELATIONS AND LEVEL OF SIGNIFICANCE BETWEEN**
**CLIENT CHANGE AS MEASURED BY THE TENNESSEE SELF CONCEPT**
**SCALE AND THE PERSONAL CONCEPT SCALE AND CLIENT**
**.PERCEIVED WARMTH OF VR COUNSELOR AS**
**MEASURED BY THE RELATIONSHIP INVENTORY**

<table>
<thead>
<tr>
<th>Client perceived counselor warmth</th>
<th>TSCS</th>
<th>Significance Level</th>
<th>PCS</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.11</td>
<td>.85 nsd</td>
<td>.04</td>
<td>.31 nsd</td>
</tr>
</tbody>
</table>

As indicated in Table II, the independent variable of warmth as offered by the VR counselor was not significantly related to client change as defined above. No substantial biasing affects were evidenced. Therefore the null hypothesis
which states that there will be no significant positive correlation between the criterion and counselor warmth was accepted. Reciprocally, the research hypotheses was rejected.

**Hypothesis Two**

The second research hypothesis as stated in the null form was as follows: There will not be a significant positive correlation between client change as determined by the TSCS and the PCS and client perceived empathic understanding of the VR counselor as measured by the RI. In Table III are presented the statistical relationships of these dependent and independent variables along with the significance levels for these relationships.

**TABLE III**

<table>
<thead>
<tr>
<th>Client perceived empathic understanding</th>
<th>TSCS</th>
<th>Significance Level</th>
<th>PCS</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.08</td>
<td>.61 nsd</td>
<td>.03</td>
<td>.23 nsd</td>
</tr>
</tbody>
</table>

The $t$ value needed to reach the .05 level of significance with fifty nine degrees of freedom is 2.00; the significance
levels as indicated in Table III above did not approach the .05 level of significance.

Since no substantial biasing affects were found, the results as presented in Table III, suggest that the condition of counselor-offered empathic understanding was not significantly related to the degree of client change experienced in his initial exposure to a sheltered work situation. Therefore the null hypothesis was accepted and the second research hypothesis was rejected.

**Hypothesis Three**

The third research hypothesis as stated in the null form was as follows: There will not be a significant positive correlation between client change as measured by the TSCS and the PCS and client-perceived genuineness of the VR counselor as measured by the RI. Table IV gives the correlational relationships of the independent with the two dependent or criterion measures in addition to the level of significance attained by these correlations.

The Fisher $t$ value required for the .05 level of significance with fifty-nine ($N - 2$) degrees of freedom is 2.00; the significance levels reached through analysis and presented in Table IV were .23 and .31 respectively. The required level of significance to reject the null hypothesis was not reached and no biasing of the data was found. Therefore the null hypothesis was accepted and the research hypothesis, rejected.
TABLE IV

SIMPLE ORDER CORRELATIONS AND LEVELS OF SIGNIFICANCE BETWEEN CLIENT CHANGE AS MEASURED BY THE TENNESSEE SELF CONCEPT SCALE AND THE PERSONAL CONCEPT SCALE AND CLIENT-PERCEIVED GENUINENESS OF THE VR COUNSELOR AS MEASURED BY THE RELATIONSHIP INVENTORY (N=61)

<table>
<thead>
<tr>
<th>Client perceived empathic understanding</th>
<th>TSCS</th>
<th>Significance Level</th>
<th>PCS</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.03</td>
<td>.23 nsd</td>
<td>.04</td>
<td>.31 nsd</td>
</tr>
</tbody>
</table>

Hypothesis Four

The fourth research hypothesis as stated in the null form was as follows: there will not be a significant positive correlation between client change as measured by the TSCS and the PCS and client-perceived warmth of the Workshop Supervisor as measured by the RI. The resulting correlations of these

TABLE V

SIMPLE ORDER CORRELATIONS AND LEVELS OF SIGNIFICANCE BETWEEN CLIENT CHANGE AS MEASURED BY THE TENNESSEE SELF CONCEPT SCALE AND THE PERSONAL CONCEPT SCALE AND CLIENT-PERCEIVED WARMTH OF THE WORKSHOP SUPERVISOR AS MEASURED BY THE RELATIONSHIP INVENTORY (N=61)

<table>
<thead>
<tr>
<th>Client perceived warmth</th>
<th>TSCS</th>
<th>Significance Level</th>
<th>PCS</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-.04</td>
<td>.31 nsd</td>
<td>-.13</td>
<td>.97 nsd</td>
</tr>
</tbody>
</table>
relationships and their respective levels of significance as measured by Fisher's $t$ technique are presented in Table V.

As indicated in Table V, the significance levels reached by the correlations between the independent and dependent variables were not sufficient to reject the null hypothesis. The required significance level for rejection with fifty-nine degrees of freedom is $2.00$. Since no biasing of the data was evidenced, the null hypothesis was accepted and the fourth research hypothesis was rejected. Further, an examination of the presented data suggested the possibility of an inverse relationship between perceived supervisor warmth and client change as defined above.

**Hypothesis Five**

In the null form the fifth research hypothesis read as follows: there will not be a significant positive correlation between client change as measured by the TSCS and the PCS and client-perceived empathic understanding as measured by the RI. Table VI presents the correlational data between the criteria, client change and the independent variable of empathy. The significance levels for these correlations are also provided, utilizing for comparison, Fisher's $t$ technique for related groups.
TABLE VI

SIMPLE ORDER CORRELATIONS AND LEVELS OF SIGNIFICANCE BETWEEN
CLIENT CHANGE AS MEASURED BY THE TENNESSEE SELF CONCEPT
SCALE AND THE PERSONAL CONCEPT SCALE AND CLIENT-
PERCEIVED EMPATHIC UNDERSTANDING OF THE
WORKSHOP SUPERVISOR AS MEASURED BY
THE RELATIONSHIP INVENTORY
(N=61)

<table>
<thead>
<tr>
<th>Client perceived empathic understanding</th>
<th>TSCS Significance Level</th>
<th>PCS Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.00</td>
<td>.00 nsd</td>
</tr>
<tr>
<td></td>
<td>-.19</td>
<td>1.46 nsd</td>
</tr>
</tbody>
</table>

The significance level required for rejection of the null hypothesis with fifty-nine degrees of freedom is set at 2.00; the levels reached between the variables presented in Table VI are .00 and 1.46 respectively. Thus, while the correlation between client change as defined by the PCS and supervisor empathy approached significance, neither reached the required level. Further, no biasing of the data was found after comparing the total sample results with the recomputed sample. Therefore, the null hypothesis was rejected. It should also be noted that while one correlation (-.19) approached significance, it was not in the direction expected.

**Hypothesis Six**

The sixth research hypothesis as stated in the null form was as follows: there will not be a significant positive correlation between client change as measured by the TSCS
and the PCS and client-perceived genuineness as measured by the RI. The resulting correlations and their respective levels of significance are reported in Table VII.

**TABLE VII**

**SIMPLE ORDER CORRELATIONS AND LEVELS OF SIGNIFICANCE BETWEEN CLIENT CHANGE AS MEASURED BY THE TENNESSEE SELF CONCEPT SCALE AND THE PERSONAL CONCEPT SCALE AND CLIENT-PERCEIVED GENUINENESS OF THE WORKSHOP SUPERVISOR AS MEASURED BY THE RELATIONSHIP INVENTORY**

(N=61)

<table>
<thead>
<tr>
<th>Client perceived genuineness</th>
<th>TSCS</th>
<th>Significance Level</th>
<th>PCS</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-.04</td>
<td>.31 nsd</td>
<td>-.13</td>
<td>.97 nsd</td>
</tr>
</tbody>
</table>

The correlations between the independent variable (supervisor genuineness) and the criterion measures were not sufficient to reach the significance level needed (2.00 with fifty-nine degrees of freedom) to reject the null hypothesis. Secondly, no substantial biasing affects appeared to be operating. Therefore, the null hypothesis was accepted and the research hypothesis, rejected. Again, as with hypothesis four and five above, the correlational relationships were not in the expected direction. This might suggest that the supervisor-offered conditions of warmth, empathic understanding and genuineness are inversely related to the degree of client change as defined above.
Hypothesis Seven

The seventh hypothesis was stated as follows: there will be no significant difference between the client-perceived quality of the interpersonal relationships offered by the VR counselor and workshop supervisor, as measured by the RI. Table VIII presents the mean differences and standard deviations between the helping conditions as offered by the client's VR counselor and the workshop supervisor. In addition, the levels of significance for each of the mean differences was included as determined by Fisher's t technique for independent groups with unequal N's.

**TABLE VIII**

**MEANS, STANDARD DEVIATIONS AND SIGNIFICANCE LEVELS FOR THOSE HELPING CONDITIONS OFFERED BY THE WORKSHOP SUPERVISOR AND VR COUNSELOR AS MEASURED BY THE RI (N=50)**

<table>
<thead>
<tr>
<th>Helper offered conditions of:</th>
<th>Counselor Mean</th>
<th>SD</th>
<th>Supervisor Mean</th>
<th>SD</th>
<th>Level of Confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warmth</td>
<td>56.69</td>
<td>12.90</td>
<td>47.46</td>
<td>17.97</td>
<td>2.00 nsd</td>
</tr>
<tr>
<td>Empathy</td>
<td>51.33</td>
<td>11.06</td>
<td>40.51</td>
<td>12.96</td>
<td>3.08**</td>
</tr>
<tr>
<td>Genuineness</td>
<td>52.46</td>
<td>13.53</td>
<td>44.64</td>
<td>13.44</td>
<td>2.01*</td>
</tr>
<tr>
<td>Total</td>
<td>202.05</td>
<td>40.03</td>
<td>174.28</td>
<td>42.15</td>
<td>2.35*</td>
</tr>
</tbody>
</table>

* significant at greater than the .05 level

** significant at greater than the .01 level
The Fisher's t value required to reach the .05 level of significance with $48(N-2)$ degrees of freedom is 2.01. An examination of Table VIII indicated that three of the four mean differences for the helper-offered conditions appeared significantly different while the helper-offered condition of warmth (2.00) approached significance. However, it would seem that significant biasing caused by the reported RI supervisor scores in the one workshop, had occurred. Thus, when the counselor and supervisor scores were extracted from the total helper sample and the data recomputed, no significant differences were found between the helping conditions as offered by the remaining VR counselors and workshop supervisors. Further, it was noted that the supervisor RI scores from the single workshop (No. 4) were substantially lower than the scores reported on all other supervisions from the remaining supervisor sample. The counselor scores from the original and revised sample (Workshop No. 4 extracted) however, when compared, did not deviate from each other. Thus the biasing affects present appeared to be caused by the depressed RI scores of the one supervisor from the single workshop (No. 4).

An analysis of the data would seem to suggest then, that mean difference scores between the helper-offered conditions of the VR counselors and workshop supervisors were found to be significantly different because of the depressing affect of the single-supervisor scores on the mean score for the total supervisor sample. Said in another way, when the
depressed scores of the one supervisor were extracted from the total sample supervisor scores, the remaining supervisors did not have a total mean score significantly different from the total mean score for counselor-offered helping conditions.

In view of findings it can be said that while the mean differences in helper-offered conditions between the counselors and supervisors appear to be significantly different, the difference would seem to be due primarily to the low-level helping conditions offered by one of the twenty eight supervisors. This biasing effect becomes more pronounced when it is remembered that a single supervisor was responsible for forty four per cent of the client-sample responding.

Other Variables Related to Client Change and the Helping Relationship

In addition to the specific helping variables selected for examination in the seven hypotheses, other client, counselor and supervisor variables were included in the data and statistical analysis. The purposes of this investigation included not only an analysis of the relationships between the helping variables and client change but also an analysis of other selected client, counselor, supervisor and workshop variables to assist in determining what kinds of clients change, what kinds of helpers help and in what kinds of workshop environments.

Table IX presents those correlations between the criterion (PCS) and all the client, counselor and supervisor variables.
### TABLE IX

SIMPLE ORDER CORRELATIONS AND LEVEL OF SIGNIFICANCE BETWEEN SELECTED CLIENT, COUNSELOR AND SUPERVISOR VARIABLES AND THE PERSONAL CONCEPT SCALE (N=61)

<table>
<thead>
<tr>
<th>Client Variables</th>
<th>Correlation With PCS</th>
<th>Counselor Variables</th>
<th>Correlation With PCS</th>
<th>Supervisor Variables</th>
<th>Correlation With PCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>.02</td>
<td>Age</td>
<td>.04</td>
<td>Age</td>
<td>.12</td>
</tr>
<tr>
<td>Age</td>
<td>.09</td>
<td>Sex</td>
<td>.16</td>
<td>Sex</td>
<td>.08</td>
</tr>
<tr>
<td>Race</td>
<td>.04</td>
<td>Salary</td>
<td>.11</td>
<td>Salary</td>
<td>-.20</td>
</tr>
<tr>
<td>Education</td>
<td>.06</td>
<td>Case-load Size</td>
<td>.06</td>
<td>No. of Clients Supervised</td>
<td>.02</td>
</tr>
<tr>
<td>Marital Status</td>
<td>.28*</td>
<td>Education</td>
<td>-.19</td>
<td>Education</td>
<td>.09</td>
</tr>
<tr>
<td>Economic Independence</td>
<td>.05</td>
<td>Experience</td>
<td>.19</td>
<td>Experience</td>
<td>.07</td>
</tr>
<tr>
<td>No. of Dependents</td>
<td>.14</td>
<td>Contacts With Client</td>
<td>-.15</td>
<td>Quality of Relationship</td>
<td>-.14</td>
</tr>
<tr>
<td>No. of Jobs in Last Year</td>
<td>.36**</td>
<td>Location</td>
<td>.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of Disability</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of Disability</td>
<td>-.19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* significant at greater than the .05 level of confidence
As indicated in Table IX, two of the client variables were significantly related to client change as measured by the PCS. No helper variables appeared to relate with the change criterion. No substantial biasing effects were noted in any of the correlations when comparing the total sample correlations and the sample correlations with the data from workshop number four extracted.

The client variable of "marital status" was significantly related to the client change criterion. This statistic suggests that the unmarried client tended to experience greater change on the chosen criterion than did the married client. This is further supported when it was noted that the correlation relationship between the married client and client change in attitude to self was an inverse relationship (-.23). Thus single as opposed to married clients exhibited more change on the criterion index.

This finding tends to contradict some of the earlier research which suggests that married clients exhibit more change in the sheltered workshop setting than do the single clients. It should be noted however that in former investigations the change criterion has been based on economic criteria like present earnings, present job status, etc., while the present investigation utilized a psychological criterion measure.

The second client variable which was significantly related to the criterion was the number of jobs held by the client in
the previous year. Those clients who had no job in the year previous to their acceptance into the sheltered work environment manifested significantly more change as measured by the PCS than did those clients who had had at least one job. This statistical relationship would seem to be more important in view of the inverse relationship (-.33) between those clients with at least one job and the amount of change in the criterion measure. This would suggest, contrary to previous research, that clients with no recent work history tend to change their attitudes to self more readily than do clients with a recent work history.

In an attempt to assess what kinds of factors or variables are related to the quality of the helping relationship as offered by the VR counselor, correlational relationships were determined between selected client, counselor and supervisor variables and the quality of the counselor-offered relationship. Table X presents these correlations and their respective levels of significance.

An examination of Table X indicated that the kind/quality of helping relationship as offered by the VR counselor was related to the client's sex, the counselor's own sex and two workshop variables—size and type. The remaining variables were not significantly related to the selected criterion variable. No substantial biasing affects were evidenced in the correlation when comparing the original and restricted samples.
TABLE X

SIMPLE ORDER CORRELATIONS AND LEVEL OF SIGNIFICANCE BETWEEN SELECTED CLIENT, COUNSELOR, SUPERVISOR, AND WORKSHOP VARIABLES AND THE QUALITY OF THE HELPING RELATIONSHIP AS OFFERED BY THE VR COUNSELOR (N=61)

<table>
<thead>
<tr>
<th>Client Variables</th>
<th>Total Co. Relationship</th>
<th>Counselor Variables</th>
<th>Total Co. Relationship</th>
<th>Supervisor Variables</th>
<th>Total Co. Relationship</th>
<th>Workshop Variables</th>
<th>Total Co. Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>-.27*</td>
<td>Sex</td>
<td>-.27*</td>
<td>Sex</td>
<td>-.20</td>
<td>Size</td>
<td>-.32*</td>
</tr>
<tr>
<td>Age</td>
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<td>Age</td>
<td>.20</td>
<td>Age</td>
<td>-.15</td>
<td>Type</td>
<td>-.34*</td>
</tr>
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<td>Salary</td>
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<td>Economic Indep-</td>
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<td>-endence</td>
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<tr>
<td>Client Variables</td>
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<td>Counselor Variables</td>
<td>Total Co. Relationship</td>
<td>Supervisor Variables</td>
<td>Total Co. Relationship</td>
<td>Workshop Variables</td>
<td>Total Co. Relationship</td>
</tr>
<tr>
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<td>No. of Dependents</td>
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<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

*significant at the .05 level of confidence

**significant at the .01 level of confidence
The correlation between client sex and the counselor-offered helping relationship (criterion variable) would suggest that to a significant degree, the male clients did not perceive the counselor as offering a helping relationship. The correlation was in fact, in the negative direction (-.27) which would suggest an inverse relationship between the dependent and independent variables under consideration. In addition the counselor variable of sex was inversely related to the quality of the counselor-offered relationship (-.27). This would indicate that male counselors were perceived differently than were female counselors; it would suggest that as the perceived quality of the counselor relationship increased, the proportion of male VR counselors in that sample decreased significantly.

The independent variables of workshop size and type were also significantly related to the chosen criterion. As Table X (page 111) indicates, as the size of the workshop increases in terms of its client population, the perceived quality of the VR counselor's relationship with his client(s) decreases significantly. Secondly, as the workshop becomes comprehensive in its total rehabilitating services provided for the client, the less quality do those clients perceive the counselor-offered helping relationship to possess. This latter inverse relationship is suggested by the negative correlation between workshop type and the quality of the counselor-offered relationship. Based on this correlational
data it would appear that the smaller, less comprehensive workshops are provided a significantly higher quality of helping services from the VR counselor and as perceived by the client in the sheltered work facilities.

Table XI presents statistical data regarding the relationships between selected client, counselor, supervisor and workshop variables and the quality of the supervisor-offered helping relationship as perceived by the client in the sheltered workshop.

As the statistical data in Table XI indicates, significant correlations were found between the client variables of age, race and disability type and the dependent variable which in this instance was defined as the quality of the supervisor-offered helping relationship. While no significant biasing affect was evidenced by the inclusion of data from workshop number four all of the client variables significantly related to the criterion were consistently depressed in the second analysis. Thus when the biasing data was extracted and the remaining data recomputed, the resulting correlation between the client variables and the criterion were consistently, though not significantly, lower. Thus a uni-directional suppressing bias appeared to be present with the inclusion of the workshop number four data. This biasing would seem to necessitate a very conservative interpretation of those findings.
<table>
<thead>
<tr>
<th>Client Variables</th>
<th>Total Sup. Relationship</th>
<th>Counselor Variables</th>
<th>Total Sup. Relationship</th>
<th>Supervisor Variables</th>
<th>Total Sup. Relationship</th>
<th>Workshop Variables</th>
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<td>Type</td>
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<td>Salary</td>
<td>.33**</td>
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<td>Education</td>
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<tr>
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<td>Location</td>
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<td>Type of Disability</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

*significant at greater than the .05 level of confidence

**significant at greater than the .01 level of confidence

***significant at greater than the .001 level of confidence
The significant relationships between the client variables and the quality of the supervisor-offered helping conditions may suggest that the older, white client as opposed to the younger, black or Mexican client, perceived their supervisor as offering a significantly higher-quality helping relationship. Assuming accurate perception on the part of the client, the results would seem to suggest that the supervisor provides higher quality helping relationships to client groups differentiated on the basis of age and race. In addition, the client variable of disability type was negatively related to the criterion variable as an examination of Table XI indicates. This would suggest that supervisors differentially provided higher quality helping relationships to physically and mentally handicapped clients; reciprocally, the culturally and emotionally handicapped clients perceived their supervisor as providing a lower quality helping service. Finally, it would seem that the above relationships between kind of client and the quality of helping is perhaps more valid for the single supervisor in workshop number four than for the other supervisors in the sample.

Those counselor variables which correlated significantly with the criterion were counselor (1) salary, (2) education, (3) caseload size, (4) experience, (5) number of client contacts and (6) location. As with the client variables above the counselor variables significantly related to the quality
of the supervisor-offered helping conditions were not significantly biased by the inclusion of the data from workshop number four. However after extracting the potentially biased data from workshop number four the recomputed correlational relationships were generally reduced in size. Thus some caution would seem to be necessary in interpretation.

As indicated in Table XI, the quality of the helping relationship as offered by the supervisor and perceived by the client, appeared to be related to VR counselors who are better educated (.36), more experienced (.32), with a larger caseload size (.26) and a lower salary (-.42). The criterion was also significantly related to VR counselors who are not located in-house (-.52) and report a higher number of face-to-face contacts with their clients (.28). While it is understood that correlational relationships of this kind are not causative relationships as such, it would appear that the supervisor who offers higher quality help is associated with the kind of VR counselor identified above. It should be noted again however, that the biasing affects due to the workshop number four data, necessitates considerable caution in drawing these inferences.

The only supervisor variable that related significantly with the criterion was that of supervisor salary (.33). No substantial biasing was evidenced; thus it would appear that the better paid supervisors were also those supervisors who offered higher quality helping services.
Summary

The purpose of this chapter was to present and briefly discuss the statistical data gathered from the investigation. Means, standard deviations, simple order and multiple correlations were generated from the raw data along with test for significance for mean differences and correlational relationships between the independent and dependent or criterion variables. The formulas utilized for determining significant relationships between selected independent and criterion variables were Fisher's t technique for independent and related groups and an analysis of variance for multiple relationships of independent variables to the selected dependent variable. To check for biasing affects caused by the unbalanced helper-helpee ratio in workshop number four, the data from this workshop was extracted from the total sample; the remaining sample was then analyzed with the same statistical procedures and the results compared to the original total sample and significant biases evidenced in the comparison were discussed.

The measurement of client change as determined by the Personal Concept Scale, indicated that clients changed significantly over a period of two months and three weeks of their first exposure to a sheltered workshop situation. However the second criterion measure, the Tennessee Self Concept Scale, indicated no significant change for the same clients over the same period of testing time. The results of these analyses
were presented in Table I, (page 97). This would seem to suggest that while both criterion measures purport to measure the same thing—attitude change with reference to the self-concept—they are not equally sensitive in measuring the same personality indices and their change.

The first six hypotheses posited the theory that six selected independent variables would be significantly positively related to the attitude change experienced by the client in his initial exposure to a sheltered work experience. Thus it was hypothesized that the quality of the relationships as offered by the clients' helpers—his VR counselor and workshop supervisor—would correlate significantly with the amount of change experienced by the client during the pre and post-test period. As indicated in Tables II, III and IV (pages 98, 99 and 101 respectively), the quality of the interpersonal relationship as offered by the VR counselor and operationally defined as counselor warmth, counselor empathic understanding and counselor genuineness, was not significantly related to the criterion measurements of client change. Similarly Tables V, VI and VII (pages 101, 103, and 104 respectively), indicated no significant relationship between the criterion measures of client change and the quality of the interpersonal relationship as offered by the workshop supervisor and operationally defined as supervisor warmth, supervisor empathic understanding and supervisor genuineness. The results from Tables II through VII would seem to indicate
that the change which was experienced by the client on at least one criterion index did not seem to be related to the kinds of helping relationships established with the client by at least two of the potentially significant helpers in the sheltered workshop setting.

In attempting to differentiate between the quality of the relationships as offered by the two potential helpers—the client's VR counselor and workshop supervisor—it was hypothesized that there would be no significant difference between the offered conditions for the two helpers. From an examination of Table VIII (page 105), it would appear that clients did perceive their counselors as offering a significantly higher quality helping relationship than did the supervisors of clients, with the exception of helper-offered warmth. However no significant differences were found between the counselor and supervisor-offered helping conditions when the biased data from workshop number four was extracted. It would appear that the supervisor from workshop number four was perceived as a very low quality helper and this low helper score had substantially depressed the total mean score for all supervisor helpers thus increasing the probability of finding a significantly different quality of helper-offered conditions as provided by the counselors and the supervisors in the total sample. The data would seem to indicate then, that the significant difference found between the counselor and supervisor-offered helping conditions (Table VIII) was
substantially influenced if not caused primarily by, the extremely low-quality helping score of one of the supervisors in the total supervisor sample. Extreme caution in interpretation is thus necessitated.

Table IX (page 108) presented those client, counselor, and supervisor variables as they relate to the criterion index as measured by the PCS. An examination of the data suggested that with the exception of the client's marital status and his recent work history, no variables would seem to be related to the degree of change manifested by the clients in the sample. Thus they would not seem to be critical factors for predicting client change. However, the unmarried client with no recent work history exhibited greater change on the criterion index selected for this investigation.

Those variables that relate to the helping relationship as offered by the client's VR counselor (Table X, page 108), were the sex of the client and counselor and the size and type of workshop facility to which they refer clients. The male clients did not perceive nor were male counselors perceived as offering higher quality helping services. In addition, it could be predicted that VR counselors would provide higher quality helping services in small, less comprehensive sheltered workshops.

Table XI (page 115) represented those independent client, counselor, supervisor and workshop variables that were related to and could possibly predict, the quality of the
supervisor's helping relationship. The counselor variables related to the supervisor criterion would seem to predict to some degree, the quality of the supervisor's helping relationship. Thus the kind of counselor working with the supervisor and the client respectively seemed to affect the kind of helping services provided by the supervisor. In addition the client variables of age, race and disability type appeared to be important in determining what kinds of clients perceived the supervisor as offering a higher quality helping relationship. Finally the salary of the supervisor was related to the criterion variable, suggesting that the better paid supervisor is also the supervisor who provides a higher quality of helping service.

It should be noted that while no significant biasing was evidenced in this data, the client and counselor variables significantly related to the criterion, were substantially depressed or reduced in size when the biased data (workshop No. 4) was extracted. This would seem to suggest that considerable caution should be used in the interpretation of this relationship data since some consistent bias had been introduced with the inclusion of the data from workshop number four.
SUMMARY, RESULTS, CONCLUSIONS
AND RECOMMENDATIONS

Summary

This study was an investigation of a random sample of vocational rehabilitation clients in Region VI which was designed to assess the amount of change experienced by the client in the sheltered workshop and to determine the relationship between that attitudinal change experienced by the client and certain selected characteristics of the client, his VR counselor, workshop supervisor and individual sheltered workshop.

The purposes of the investigation were (1) to determine whether the kind of relationships established between the client and his counselor and workshop supervisor were significantly related to the attitudinal change experienced by the rehabilitation client; (2) to determine whether a significant difference existed between the kind of client-counselor relationship established and the kind of client-supervisor relationship established; and (3) to determine what other characteristics are related to both client change and the effective helper.
In keeping with the purposes of the investigation, seven hypotheses were generated:

1. It was hypothesized that there would be a positive relationship between client change and client-perceived warmth as offered by the vocational rehabilitation counselor (VR counselor).

2. It was hypothesized that a positive relationship would exist between client change and client-perceived empathic understanding as offered by the VR counselor.

3. It was hypothesized that a positive relationship would exist between client change and client-perceived genuineness as offered by the VR counselor.

4. It was hypothesized that there would be a positive relationship between client change and client-perceived warmth as offered by the workshop supervisor.

5. It was hypothesized that a positive relationship would exist between client change and client-perceived empathic understanding as offered by the workshop supervisor.

6. It was hypothesized that there would be a positive relationship between client change and client-perceived genuineness as offered by the workshop supervisor.

7. It was hypothesized that no significant difference would exist between the client-perceived quality of the interpersonal relationships as offered by the VR counselor and the workshop supervisor.

Other independent variables were also included in the analysis to determine what other characteristics might be
related to client change. In addition, these variables were also analyzed to determine their predictive power in describing the potentially effective helper.

The sample population was chosen from twenty randomly selected sheltered workshops in a five-state region (Region VI). All clients in these twenty workshops who were evaluated and accepted for training during a designated three-week period and who subsequently remained in the workshop training program for the pre-determined two month and three week testing period, constituted the client population. Of the ninety clients who were evaluated and accepted into the sheltered workshop programs during the three-week pre-testing period, sixty-one remained in training and thus constituted the actual client sample utilized in the investigation. The sample of professional helpers (VR counselors and workshop supervisors) directly involved in sponsoring/supervising the clients, included twenty-two counselors and twenty-eight supervisors or fifty helpers.

During the pre-testing period of three weeks, all incoming clients were given the Tennessee Self Concept Scale and the Personal Concept Scale by the Director of the workshop or by his psychometrist. After two months and three weeks, the rehabilitation staff at North Texas State University administered to the client the Tennessee Self Concept Scale, the Personal Concept Scale, the Relationship Inventory and a Client Personal Data Form. The North Texas staff also
administered a Counselor Personal Data Form and a Supervisor Personal Data Form to the sponsoring VR counselor and the client's workshop supervisor respectively. Finally the workshop director was asked to provide information as regards the size and type of his workshop facility.

Following the collection and tabulation of all the information, the data was analyzed in a multiple step-wise regression model at the North Texas State University Computer Center. The particular statistical procedure utilized, generated means, standard deviations, all simple order correlations, residual gain scores for the two criterion measures (Tennessee Self Concept Scale and the Personal Concept Scale), and multiple correlations for the two criterion measures. In addition, all "F" ratios were calculated for each step of the multiple regression model along with the appropriate degrees of freedom for both the numerator and denominator at each step. Significant relationships and differences were determined by the use of Fisher's t technique for both independent and related groups and the .05 level of significance was arbitrarily chosen as the level at which the null hypotheses could be rejected. A final statistical procedure checking for potential bias introduced by data from a supervisor from one of the ten workshops, involved the extraction of this biased data from the total sample data, recomputing relationships and mean differences and comparing the two analyses for significant differences in correlations and mean differences.
Results

Pre-and post-test mean difference scores as measured by the Personal Concept Scale were significantly different at greater than the .001 level of confidence. The second criterion measure however, the Tennessee Self Concept Scale, indicated that no substantial self-concept change had occurred during the pre and post-testing period. According to the PCS criterion measure this would indicate that considerable attitudinal change in their self, ideal-self image had occurred during the client's initial exposure to a sheltered workshop experience. It would also appear that the two criterion instruments are either not measuring the same kind of client change or that the TSCS is less sensitive to the kind of self-image change evidenced in the PCS pre and post-test scores. The latter supposition would seem more plausible in view of the construction of the PCS; the PCS is a measure of the semantic space between two concepts (Self and Ideal Self) and as such, is sensitive to the potential change (variance) possible in both the client's image and his self-ideal image. Thus significant change on this index could be attributed to (1) a reported increase in the client's self image score (2) a decrease in the self-ideal image score, or (3) increased congruency in both the self and ideal-self scores. An item-analysis of both the self image pre and post-test scores and the ideal-self pre and post-test scores did indicate that both self image dimensions did in fact change in the direction
of greater congruency. This statistical fact would strengthen the supposition that the PCS, because of its construction allows for a greater sensitivity to evidenced attitudinal change.

It was suggested that the kind of counselor-client relationship established would be related positively to the degree of attitudinal change experienced by the rehabilitation client. However the research hypothesis which stated that there was a positive relationship between client change and client-perceived warmth as offered by the VR counselor was rejected. The second hypothesis, also rejected, theorized that there was a positive relationship between client change and client-perceived empathic understanding as offered by the VR counselor. The third hypothesis suggested a positive relationship between client change and client-perceived genuinences as offered by the VR counselor; this hypothesis was also rejected as no significant relationship was found.

An analysis of the data did not support the hypothesis that the kind of client-counselor relationship as defined in the Relationship Inventory was related to the attitudinal change experienced by the client. This would indicate that clients did not perceive their VR counselors as providing and maintaining helping relationships where they are concerned. These results were not consistent with much of the previous relationship research on other populations with different helpers. A possible explanation might be that
while VR counselors generally perceive their primary role as providing a therapeutic helping relationship for the rehabilitation client, their administrative and coordinating functions disallow or impede their responsible functioning in the primary objective—providing a personally meaningful and helping, client-counselor relationship.

Another explanation for the lack of any significant relationship between client change and the quality of the counselor-offered helping relationship may be that the helping relationships provided were all of a low quality, insufficient for any positive effect to occur. This finding was not inconsistent with earlier research investigations which have reported that low quality helpers provide either no therapeutic help or may in fact hinder the client's attempts at developing either a more adequate concept of self or a more adequate coping style.

It was hypothesized that the kind of supervisor-client relationship established would be positively related to the degree of client attitudinal change. However, the hypothesis which stated that there was a positive relationship between client change and client-perceived warmth as offered by their workshop supervisor was rejected. In addition, the second hypothesis rejected stated that there was a positive relationship between client change and client-perceived empathic understanding as offered by the client's supervisor. The third hypothesis regarding the client-supervisor relationship
and client change stated that there was a positive relationship between client change and client-perceived genuineness as offered by the client's supervisor. The lack of a significant relationship between the two variables necessitated the rejection of the hypothesis.

Because the sheltered work situation attempts to generally simulate a regular competitive work situation, a possible explanation for the lack of any positive relationship between kind of client-supervisor relationship and client change might be reflected in the supervisor's objectives; thus production rather than client-relating objectives have highest priority. The slightly negative or inverse relationships found in the statistical data might tend to reinforce this reasoning.

Secondly, as indicated above, the lack of any significant relationship might be due to the fact that the helping relationships as offered by the client's workshop supervisor, were low-level or low quality helping relationships and thus, ineffectual.

It was hypothesized that there was no significant difference between the kind of client-helper relationships as offered by the client's VR counselor and supervisor. While neither the client-counselor relationship nor the client-supervisor relationship was significantly related to the change criteria, a comparison of the different helping relationships indicated that the client's counselor offered a higher quality helping relationship than did the client's supervisor. However,
substantial biasing was found in the comparison, due to the biased total mean helper score of the supervisors. For this reason it was noted that extreme caution should be exercised in interpreting this comparison since the considerable bias introduced, causes the statistical results to be highly questionable. It cannot be safely inferred therefore, that these particular results either support or fail to support earlier research in the helping services. In addition, it should be remembered, that in comparing the differential quality of the helping conditions as offered by the counselors and supervisors, the counselor-client exposure was much less frequent than the supervisor-client exposure. This additional constraint on the counselor may have affected the client-perceived quality of the helping relationship provided by the counselor.

Independent variables other than the helping relationship variables, were included in the investigation to assist in determining what kinds of rehabilitation clients are helped and by what kinds of helpers and/or working environments. Utilizing the same criterion index -- the PCS -- a significant relationship was found between clients who experienced change on the PCS and unmarried clients with no recent work history. These positive relationships would seem to appear more meaningful in view of the inverse relationships generated between client attitudinal change and married clients with recent work histories. Thus it would appear that unmarried clients (as
opposed to married) with no recent work history (as opposed to those having a recent work history) are also those clients who change their attitudes to self most readily. While it should be noted that these findings are inconsistent with earlier research findings, a possible explanation for these results could be the use of a psychological or personality index for change rather than the more usual economic or job-status criteria utilized in former research investigations. A second logical but unsubstantiated explanation could be provided in noting that being married and possessing a more successful work history are ego-building experiences; thus those unmarried clients who were not working prior to their sheltered work, were more susceptible to self-attitude change.

In determining what variables were associated with the level or quality of the helping relationship provided by the VR counselor, the statistical data indicated that the higher quality client-perceived helping relationships as offered by the counselors were related (1) inversely to male counselors, (2) inversely to male clients and (3) inversely to large, comprehensive sheltered workshops. This data would indicate that fewer male than female counselors were perceived as offering the higher quality helping relationships. Secondly it would suggest that as the quality of the counselor-offered relationship increased the proportion of male clients who perceived the counselor in this fashion, decreased. Finally the data would indicate that the clients in the smaller,
less comprehensive workshops perceived the counselor as offering a higher quality helping relationship than did the clients of counselors in the larger more comprehensive workshops. This workshop size-quality helper relationship would indicate that counselors function at higher helping levels when they refer their client to smaller service organizations. It would also suggest that female VR counselors tend to provide higher quality helping services than do male VR counselors in the sample. Finally it would suggest that counselors tend to discriminate against male clients in providing the client with a quality helping relationship.

A final statistical analysis attempted to determine what factors are associated with the higher quality helping service provided by the client's workshop supervisor. While no significant biasing affects were noted in the following relationships discussed below, a consistent inflation in the size of the correlational relationships was noted, due to their inclusion of the supervisory data from workshop number four. Thus the following relationships although significant must be interpreted conservatively since the size of the correlations appears to be at least in part, a function of the data from one supervisor in one workshop (see Appendix A).

The data seemed to indicate that supervisors providing higher quality helping services tended to discriminate between clients of different age, race and disability types. Thus an analysis of the data indicated that older, white
clients with physical and mental disabilities perceived their supervisor as offering higher quality helping services than did the younger, Negro and Mexican client with cultural and emotional disabilities. The data would also seem to suggest that the supervisor who offers a higher quality helping service would appear to be associated with those VR counselors who are better educated, more experienced, carry larger caseloads and report a higher number of client contacts. Reciprocally, the criterions variable - in this case the quality of the supervisor-offered helping relationship - was inversely related to both the counselor's salary and the fact that the counselor was not in-house, but operating from another agency. Thus it would appear that the kind of supervisor who was perceived as a higher level helper by the client, was related to a certain kind of VR counselor who also functions as a co-helper to the client.

Finally the supervisor offering the higher quality helping services was also the higher salaried supervisor; thus would suggest that the supervisor's salary might function as a reinforcer in providing quality helping services. It should be remembered however as indicated above, that a causative relationship cannot be assumed from the data.

Conclusions

This investigation was undertaken to try to determine what kinds of client, helper or environmental variables were related to rehabilitation clients who experienced change on
certain psychological indices. The investigation was specifically designed to investigate among other selected variables, the relationship between those helping relationship variables provided to the client by the VR counselor and the workshop supervisor. The investigation was also designed to determine what other variables might be related to the kind of helping relationship offered by those critical helpers, the client's counselor and supervisor.

From the statistical data presented, it did not appear that the helper relationship variables were associated with the kind of client change measured. While counselors appeared to have offered their client a slightly higher quality helping relationship than did the client's workshop supervisor, neither the counselors' nor the supervisors' helping relationships were significantly related to or seemingly affected, the amount of attitudinal change experienced by the client. The only variables which were significantly related to client attitudinal change were the client variables of marital status and recent work history.

The lack of any significant findings between the client change indices and those helper-offered relationship variables does not generally support earlier research in other related helping services. Thus recent research has rather consistently found that the kind/quality of helping relationships provided clients or helpees, affects the kind of change the helpee experiences. Said in another way, client change is contingent
upon the quality of the helping relationship(s) offered the helpee by the helper. Though unsubstantiated, a possible explanation for the results of this investigation might be that those helping services offered by both the counselor and supervisor, were of a low quality; thus, no relationship was found between the independent and criterion variables. A second explanation for the lack of significant findings could be accounted for by evaluating the functional roles of both supervisor and counselor. Thus while both helpers formally and informally attest to the importance of providing warm, empathic and genuine helping relationships to the client or helpee, their actual behavior in interacting with the client may not coincide with their professed role.

The client variables of marital status and recent work history were significantly related to the PCS change index. These findings are not generally consistent with earlier research. It is possible that the unmarried clients with no recent work history are more receptive to self-attitudinal change in the sheltered workshop than are those married clients with recent work histories. This explanation would seem plausible if it can be assumed that the client who has married and has been actively employed in the competitive job market has also developed more ego strength or become more realistic and satisfied with his self image.

From the additional statistical data presented in this investigation, it would appear that the kind of helping
relationship provided by the helpers-- in this study, the VR counselor and workshop supervisor-- is related significantly to a number of other variables. In reference to the counselor, a lower quality helping relationship may tend to be provided when the client or helpee is male, when the counselor is male and when the recipient workshop is larger and more comprehensive in its client services. In reference to the workshop supervisor, a lower quality helping relationship may tend to be provided when the client is culturally or emotionally disabled and when the respective client's counselor is paid a higher salary and is office (located) outside of the sheltered workshop facility. Again, in reference to the supervisor however, a higher quality helping relationship may tend to be provided when the client is older and ethnically white, when the supervisor himself is paid a higher salary and when the respective client's counselor is better educated, more experienced, has a larger caseload size and reports relatively more face-to-face client contacts.

Relationship research in the area of rehabilitation in sheltered workshops has been sparse. However prior research tends to support the findings that the older, ethnically white client appears to be more receptive to rehabilitation attempts. It does not consistently support however, the finding that the emotionally disabled are among the more difficult to rehabilitate. An analysis of the data from this investigation suggests that the older, white client
perceives the supervisor as providing a higher quality helping service; the opposite is true with the culturally and emotionally disabled. A possible explanation might exist in that older white clients are more attune to social-cultural attitudes of the supervisor-helper while the emotionally and culturally disabled clients are more estranged from the beliefs, attitudes, and biases of the supervisor-helper.

The counselor appears to provide lower quality helping services to those clients in larger more comprehensive facilities. A possible explanation could exist in noting that large comprehensive workshops generally provide for a greater number of client services; thus the sponsoring counselor may be less consistent, if not concerned about, providing quality helping services to this clientele.

The supervisor who was better paid appeared to provide higher quality helping services to his clients. It would seem that financial reward in this case, functions as a motivator. Prior research however, has been inconsistent in suggesting that this variable functions as a meaningful predictor.

The supervisor who provides a higher quality helping relationship appeared to cooperate with a counselor who was better educated, more experienced, with a larger caseload size and more reported face-to-face contacts with his (their) client. Prior research suggests that these counselor variables are often, though not consistently, associated with the
more "successful" counselors. Thus as an explanation, it might be suggested that supervisors function at higher helping levels when cooperating with counselors who appear to have been more successful in rehabilitating their clients.

The supervisor who provides a lower quality helping relationship was associated with the counselor who is paid a relatively higher salary than other counselors and who works with their mutual client not from in-house but from another agency location. It would appear that the cooperating counselor's position as in-house or operating from another agency, might function as a predictor of the level of helping provided by the client's supervisor. This relationship might be explained by the possibility that supervisors may function as higher quality helpers when the counselor is in closer physical contact with both the client and the supervisor. The variable of counselor salary, while significantly related to the criterion variable, has not been a consistent predictor as shown by prior research investigations. In addition the correlation of this variable with the quality of the supervisor's relationship seemed to be substantially inflated by the supervisory data from workshop number four. Thus its use as a reliable predictor would be questionable.

Recommendations

In view of the findings of this investigation, the following recommendations are made:
1. That a follow-up investigation be made on the same population to determine whether those clients who experienced change on the psychological change index would also experience change on the more typical vocational-economic criteria utilized in vocational rehabilitation.

2. That this investigation be replicated but that high quality helpers be incorporated in both the supervisor and counselor populations.

3. That the supervisor-counselor relationship be investigated experimentally to determine the interaction and individual effects on their respective clients.

4. That the effectiveness in facilitating client change of in-house counselors and out-of-house counselors be further differentiated.

5. That the sex variable of VR counselors be investigated as a potential predictor in determining differential levels of counselor-offered helping relationships.

6. That some determination be made of the relative importance of changing personality characteristics of rehabilitation clients when present vocational-economic criteria are used as rehabilitation objectives.

7. That an experimental investigation study the effects on rehabilitation outcomes when the rehabilitation helpers concentrate primarily on changing socially maladaptive behavior.
9. That a factorial analysis of motivational characteristics of rehabilitation helpers be done.

9. That the kinds of motivational variables for state and private vocational rehabilitation counselors be compared to academic and job selection criteria, education (academic) objectives and rehabilitation success.

10. That process research be done on highly successful helper populations, ineffective helper populations and no helper, client populations utilizing various rehabilitation outcome criteria.

11. That an operational assessment of specific rehabilitation inputs as provided by all sheltered workshop personnel be determined.

12. That training programs for workshop supervisors and VR counselors be implemented to increase the effectiveness of these helpers in providing therapeutic relationships with their clients.
APPENDIX A

DATA SOURCES BY WORKSHOP AND MATCHED FOR CLIENTS, COUNSELORS AND SUPERVISORS
Sampling Distribution for the Randomly Selected Workshops and Respective Helpee and Helper Populations

<table>
<thead>
<tr>
<th>No. of coded workshops by State</th>
<th>No. of clients per workshop</th>
<th>No. of counselors per workshop</th>
<th>No. of supervisors per workshop</th>
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</thead>
<tbody>
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</tr>
<tr>
<td>Code 01</td>
<td>9</td>
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<td>8</td>
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</tr>
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<td>Code 07</td>
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<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Code 10</td>
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<td>3</td>
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</tr>
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<td>1</td>
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<td><strong>TOTALS</strong></td>
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</table>
APPENDIX B

INSTRUMENTS USED IN DATA COLLECTION
PERSONAL CONCEPT SCALE
INSTRUCTIONS

The purpose of this scale is to identify the meaning that various concepts have for you by having you rate them against a series of descriptive scales. Place an "x" on each line according to what the concept means to you. For example:

If you consider yourself very talkative, you would place your "x" as follows:

```
|     |     |     |     |     |     | quiet
|-----|-----|-----|-----|-----|-----|-----
| talkative |     |     |     |     |     | quiet
|     |     |     |     |     |     |     |
```

If you feel you are mostly quiet, you would mark as follows:

```
|     |     |     |     |     |     | quiet
|-----|-----|-----|-----|-----|-----|-----
|     |     |     |     |     | talkative | quiet
|     |     |     |     |     |     |     |
```

If you see yourself as slightly talkative, mark this way:

```
|     |     |     |     |     | talkative |     |
|-----|-----|-----|-----|-----|-------|-----
|     |     |     |     |     | talkative |     |
|     |     |     |     |     |     |     |
```

If you think you equally talkative and quiet, mark this way:

```
|     |     |     |     |     | talkative |     |
|-----|-----|-----|-----|-----|-------|-----
|     |     |     |     |     |     |     |
```

Be sure you mark every scale. Do not skip any. Never put more than one "x" on a single space. Make each item a separate and independent judgment. Place your marks in the middle of the space.

```
|     |     |     |     |     | talkative |     |
|-----|-----|-----|-----|-----|-------|-----
|     |     |     |     |     |     |     |
```

Your first impressions are generally the most accurate, so work quickly, but do not be careless.
I AM

plain__·__·__·__·__·__·__·_sexy
feminine__·__·__·__·__·_masculine
warm__·__·__·__·__·_cool
unaware__·__·__·__·__·_aware
tense__·__·__·__·_relaxed
depth__·__·__·__·_shallow
certain__·__·__·__·_uncertain
accepted__·__·__·__·_rejected
cautious__·__·__·_adventuresome
talkative__·__·_quiet
close__·__·__·_distant
disturbed__·__·_contented
active__·__·_passive
down__·__·_up
powerful__·__·_weak
following__·__·_leading
loose__·__·_tight
early__·__·_late
conservative__·__·_liberal
clear__·__·_hazy
I WOULD LIKE TO BE

plain
feminine
warm
unaware
tense
deep
certain
accepted
cautious
talkative
close
disturbed
active
down
powerful
following
loose
everly
conservative
clear

masculine
cool
aware
relaxed
shallow
uncertain
rejected
adventuresome
quiet
distant
contented
passive
up
weak
leading
tight
late
liberal
hazy
RELATIONSHIP INVENTORY

NAME: ________________________

Directions: Below are listed a variety of ways that one person may feel or behave in relation to another person. Please consider each statement with reference to your present relationship with your __________, Mark each statement in the left margin, according to how strongly you feel that it is true, or not true, in this relationship. Please mark every one. Write in 6, 5, 4, 3, 2, or 1 to stand for the following answers:

6 Yes, I strongly feel that it is true
5 Yes, I feel it is true
4 Yes, I feel that it is probably true, or more true than untrue
3 No, I feel that it is probably untrue, or more untrue than true
2 No, I feel it is not true
1 No, I strongly feel that it is not true

_1. (He/she) respects me as a person.
_2. (He/she) wants to understand how I see things.
_3. (His/her) interest in me depends upon the things I say or do.
_4. (He/she) is comfortable and at ease in our relationship.
_5. (He/she) feels a true liking for me.
_6. (He/she) may understand my words but (he/she) does not see the way I feel.
_7. Whether I am feeling happy or unhappy with myself makes no real difference to the way (he/she) feels about me.
_8. I feel that (he/she) puts on a role or front with me.
_9. (He/she) is impatient with me.
_10. (He/she) nearly always knows exactly what I mean.
11. Depending upon my behavior, (he/she) has a better opinion of me sometimes than (he/she) has at other times.

12. I feel that (he/she) is real and genuine with me.

13. I feel appreciated by (him/her).

14. (He/she) looks at what I do from (his/her) own point of view.

15. (His/her) feeling toward me doesn't depend upon how I feel toward (him/her).

16. It makes (him/her) uneasy when I ask or talk about certain things.

17. (He/she) is indifferent to me.

18. (He/she) usually senses or realizes what I am feeling.

19. (He/she) wants me to be a particular kind of person.

20. I nearly always feel that what (he/she) says expresses exactly what (he/she) is feeling and thinking as (he/she) says it.

21. (He/she) finds me rather dull and uninteresting.

22. (His/her) own attitudes toward some of the things I do or say prevents (him/her) from understanding me.

23. I can (or could) be openly critical or appreciative of (him/her) without making (him/her) feel any differently about me.

24. (He/she) wants me to think that (he/she) likes me or understands me more than (he/she) really does.

25. (He/she) cares for me.

26. Sometimes (he/she) thinks that I feel a certain way, because that's the way (he/she) feels.

27. (He/she) likes certain things about me, and there are other things (he/she) does not like.

28. (He/she) does not avoid anything that is important for our relationship.
29. I feel that (he/she) disapproves of me.

30. (He/she) realizes what I mean when I have difficulty saying it.

31. (His/her) attitude toward me stays the same; (he/she) is not pleased with me sometimes and critical or disappointed at other times.

32. Sometimes (he/she) is not all comfortable but we go on, outwardly ignoring it.

33. (He/she) just tolerates me.

34. (He/she) usually understands the whole of what I mean.

35. If I show that I am angry with (him/her), (he/she) becomes hurt or angry with me too.

36. (He/she) expresses (his/her) true impressions and feelings with me.

37. (He/she) is friendly and warm with me.

38. (He/she) just takes no notice of some things that I think or feel.

39. How much (he/she) likes or dislikes me is not altered by anything that I tell (him/her) about myself.

40. At times I sense that (he/she) is not aware of what (he/she) is really feeling with me.

41. I feel that (he/she) really values me.

42. (He/she) appreciates exactly how the thing I experience feel to me.

43. (He/she) approves of some things I do, and plainly disapproves of others.

44. (He/she) is willing to express whatever is actually in (his/her) mind with me, including my feelings about (himself/herself) or about me.

45. (He/she) doesn't like me for myself.

46. At times (he/she) thinks that I feel a lot more strongly about a particular thing than I really do.
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RELATIONSHIP INVENTORY—Continued

47. Whether I am in good spirits or feeling upset does not make (him/her) feel any more or less appreciative of me.

48. (He/she) is openly (himself/herself) in our relationship.

49. I seem to irritate and bother (him/her).

50. (He/she) does not realize how sensitive I am about some of the things we discuss.

51. Whether the ideas and feelings I express are "good" or bad seem to make no difference to (his/her) feeling toward me.

52. There are times when I feel that (his/her) outward response to me is quite different from the way (he/she) feels underneath.

53. At times (he/she) feels contempt for me.

54. (He/she) understands me.

55. Sometimes I am more worthwhile in (his/her) eyes than I am at other times.

56. I have not felt that (he/she) tries to hide anything from (himself/herself) that (he/she) feels with me.

57. (He/she) is truly interested in me.

58. (His/her) response to me is usually so fixed and automatic that I don't really get through to (him/her).

59. I don't think that anything I say or do really changes the way (he/she) feels toward me.

60. What (he/she) says to me often gives a wrong impression of (his/her) whole thought or feeling at the time.

61. (He/she) feels deep affection for me.

62. When I am hurt or upset (he/she) can recognize my feeling exactly, without becoming upset (himself/herself).

63. What other people think of me does (or would, if he/she knew) affect the way (he/she) feels toward me.

64. I believe that (he/she) has feelings (he/she) does not tell me about that are causing difficulty in our relationship.
PERSONAL DATA SHEET
FOR CLIENTS

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 and Address of the Client's Counselor:

16. Name of the Client's Floor Supervisor: (To Be Filled In After the Client Has Been Placed Under a Supervisor)
PERSONAL DATA SHEET
FOR COUNSELORS

1. Name of Counselor:

2. Work Address:

3. Age: _______ Years    Sex: M   F

4. Your annual salary is: $________

5. Number of years you have worked as a rehabilitation counselor: _______

6. What academic qualifications do you have?
   Academic Degrees:
   Specialized Training:
   Other:

7. Your caseload size (annual):

8. How many individual, face-to-face contacts have you had with the following clients as of today? (Approximate, if necessary)

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<th>CLIENT NAME</th>
<th>NO. OF CONTACTS</th>
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</table>
PERSONAL DATA SHEET
FOR WORKSHOP SUPERVISORS

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? ________

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. ________________________________
   g. ________________________________
WORKSHOP DATA

1.

A. Size

1. Over 50
2. Under 50

B. Type

1. Production
2. Rehabilitation

C. Sponsor

1. Private
2. Public

D. Name of Workshop and address

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
APPENDIX C

DEPENDENT AND INDEPENDENT VARIABLES INCLUDED IN THE STUDY
DEPENDENT AND INDEPENDENT VARIABLES

X1  client sex
X2  client age
X3  client race
X4  client education
X5  marital status of client
X6  client economic independence
X7  number of dependents of client
X8  client's number of jobs in last year
X9  client income for last year
X10 client disability type
X11 length of client disability
X12 taylor anxiety - pre
X13 personal concept - pre
X14 total self "P" - pre
X15 taylor anxiety - post
X16 personal concept - post
X17 total self "P" - post
X18 age of supervisor
X19 sex of supervisor
X20 annual salary of supervisor
X21 number of clients supervised by supervisor
X22 educational level of supervisor
X23 years of experience as supervisor in workshop
X24 regard - supervisor relationship
X25 empathy - supervisor relationship
X26 unconditional regard - supervisor relationship
X27 congruence - supervisor relationship
X28 total - supervisor relationship
X29 empathy - counselor relationship
X30 regard - counselor relationship
X31 unconditional regard - counselor relationship
X32 congruence - counselor relationship
X33 total - counselor relationship
X34 counselor age
X35 counselor sex
X36 counselor salary
X37 counselor years experience
X38 counselor educational level
X39 counselor caseload size
X40 client contacts by counselor
X41 counselor location
X42 workshop size
X43 workshop type
BIBLIOGRAPHY

Books


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Articles


Cohen, J., "Multiple Progression as a General Data-Analytic System," Psychological Bulletin, LXX, No. 6 (October, 1968), 426-443.


Danielson, F. H., "Relationships Among Ego-Strength, Motivation and Degree of Success in Rehabilitation Activity," Rehabilitation Counseling Bulletin, VIII, No. 3 (September 1965), 82-88.


Johnson, R. W., "Number of Interviews, Diagnosis and Success of Counseling," *Journal of Counseling Psychology*, XII (Fall, 1965), 248-251.


Reports

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


Barret-Lennard, G. T., Technical Note on the 64-Item Revision of the Relationship Inventory, Ontario, Department of Psychology, University of Waterloo, 1969.

and G. A. Elliott, Partial List of Reported Studies Using the Relationship Inventory, Duplicated List, Ontario, Department of Psychology, University of Waterloo, 1969.


Bozarth, J. D., Research in State Vocational Rehabilitation Agencies, Discussion Papers, I, Fayetteville, Rehabilitation, Research, and Training Center, University of Arkansas, 1968.


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


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


Gellman, W., Adjusting People to Work, Monograph N. 1, Chicago Jewish Vocational Service, 1957.


_________, The Use of Supportive Personnel in Rehabilitation Counseling, Discussion Papers, No. 259, Fayetteville, Rehabilitation, Research and Training Center, University of Arkansas, 1966.


Wargo, D. G., The Barron Ego Strength and LH" Scales as Predictors and Indicators of Change in Psychotherapy, Brief Research Reports, No. 21, Madison, Wisconsin Psychiatric Institute, University of Wisconsin, 1962.

Wright, G. N., Editor, Wisconsin Studies in Vocational Rehabilitation, Series I, Monograph III, Madison, Regional Rehabilitation Research Institute, University of Wisconsin, 1968.


Unpublished Materials

Baskin, B. H., "The Vocational Self-Concept of Selected Adolescent Educa".


Kohler, A., Personal interview, Research Utilization, Texas Rehabilitation Commission, Austin, Texas, 1970.
Murphy, G. A., Personal interview, Nebraska Psychiatric Institute, Omaha, Nebraska, 1970.


