FIELD DEPENDENCE AND THE EFFECTIVENESS OF TRAINING
IN TWO SELECTED ORIENTATIONS TO COUNSELING

DISSERTATION

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By

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This study investigates the effect of Witkin's cognitive-style variable on training success in two different orientations to counseling. Field-dependent individuals exhibit more social orientation, social compliance, and emotional warmth than field-independent individuals. Conversely, field-independent individuals exhibit more internal directedness, achievement orientation, emotional distance, and analytical task orientation than field-dependent individuals. Traits associated with field dependence appeared more complementary to an interpersonal-skills counseling approach, while traits associated with field independence appeared more complementary to behavior-modification techniques. Thus it was hypothesized that field-dependent individuals would be significantly more successful and satisfied with interpersonal skills training than would field-independent individuals, and that field-independent individuals would be more successful and satisfied with behavior modification training.

Thirty-eight graduate students in the first course in a large university's master's counseling program were divided into two groups, one trained in an interpersonal skills
approach based on Carkhuff's theory, the other in behavior modification techniques. Training consisted of twelve hours of intensive performance-based teaching methods over a five-week period.

To determine level of field dependence, the Group Embedded Figures Test (GEFT) was administered prior to training, and, as a check for stability, again after training. As a control for intelligence, the Otis Quick-Scoring Test of Mental Ability (Otis) was administered. The Counselor Evaluation Rating Scale (CERS) was used to evaluate videotaped counseling sessions. To assess trainee satisfaction, an eighteen-item semantic differential was constructed.

All trainees were videotaped in a five-minute counseling session with a coached client both before and after training. Tapes were rated independently, using the CERS, by three independent judges and two trainers per group. Judges and trainers were all doctoral interns in counseling and psychology, having either interpersonal-skills or behavior-modification orientations.

Pretape and posttape difference scores between field-dependent and independent individuals were insignificant in the interpersonal skills group but were significant in the behavior modification group ($p < .05$), confirming the hypothesis that field-independent students would be evaluated
as more successful counselors in that group than would field-dependent students. A significant correlation \((p \leq .05)\) was obtained between the Otis and the GEFT pretest, and a significant difference was found between pretest and posttest scores of the GEFT, in the direction of increased field independence \((p \leq .05)\). Results from the semantic differential indicated no significant differences between field-dependent and independent students in expressed satisfaction with training in either group.

Intelligence and achievement-motivation variables may have been factors in confirming the hypothesis that field-independent students were more successful in the behavior modification group. These and other factors are possible reasons for failure to confirm the other hypotheses. The apparent practice effects on the GEFT indicate need for another measure of field dependence for future research with similar populations.

Because of the significant correlation of the GEFT with the Otis and failure to confirm six of the seven hypotheses, it was concluded that the GEFT was insufficient as a predictor of probable success of field-dependent or independent counselor trainees in the behavior modification or interpersonal skills models.
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CHAPTER I

INTRODUCTION

The past two decades have seen an increase in the number of questions about selection and training procedures in counselor education programs. Numerous educators, such as Chenault (2), Krumboltz (3), and Woody (8), have expressed concern with current practices in counselor education and have stressed the need for more innovative approaches based on improved and relevant empirical research. One of the more cogent and organized proposals for improving counselor education programs is that of Thoresen (6), who advocates a "systems" approach. Within this paradigm, questions are asked systematically in terms of explicitly defined criterion variables which can point to specific structural changes in the counselor training program. It appears that this is possibly the most efficient way to relate the many variables found in the personality functioning of incoming graduate students to the many variables found within the structure of any graduate program in counseling.

Following a systems approach as proposed by Thoresen, a possible initial step is selecting one specific personality dimension which has been shown to be measurable, pervasive, and stable across situational variables and
relating this dimension to specific orientations of counseling being taught in the program. One variable which meets these criteria is that of the extensively investigated field-dependence dimension. The investigation of the relationship of this aspect of personality functioning to specific theoretical orientations being taught in the program is consistent with Thoresen's proposals for more systematic treatment of both personal and program variables in the evaluation and procedures of counselor training programs. A recent extensive review of the literature reveals that apparently this relationship has not been investigated; nor have many studies investigated the possible relationship of specific personality dimensions to criteria of success in specific orientations to counseling.

Weiss (7) was able to show significant personality differences between students in training in psychoanalysis and those in training in behavior modification techniques. Psychoanalytically oriented students emerged as different in intellectual organization; they were also significantly more anxious, more global in responses, and more sensitive in interpersonal relationships than were behavior modification students. From these results, Weiss states,

If . . . we can establish that individuals with certain personality traits are better suited to particular therapy orientations, then training settings may have considerably more success in screening potential trainees than they do at present (7, p. 149).
Because the field-dependency dimension is primarily based on measurement of global versus analytical functioning, Weiss' results are of particular importance to the present research. The question posed in the statement above is the focus of the present study.

Statement of the Problem

The problem with which this study is concerned is to determine the relationship of the specific personality dimension of field dependency to two equated counselor training paradigms which have different theoretical orientations and which require mastery of different concepts and skills. The two orientations selected for the present research are behavior modification and an interpersonal skills phenomenological model based on the theoretical position of Carkhuff (1).

Purpose of the Study

The purpose of the study is to investigate the predictive validity of field-dependence scores in determining the relative success or failure of graduate students seeking admission to a counselor education program in mastering the theoretical concepts and applied skills subsumed under either of two distinctive approaches to counseling: behavior modification or an interpersonal skills model based on the theoretical position of Carkhuff.
Hypotheses

Hypothesis 1
Field-dependent students will be rated significantly more effective as counselors by independent judges after training in the interpersonal skills model than will field-independent students.

Hypothesis 2
Field-independent students will be rated significantly more effective as counselors by independent judges after training in the behavior modification model than will field-dependent students.

Hypothesis 3
Field-dependent students in the interpersonal skills group will be rated as significantly more effective counselors by their trainers at the completion of training than will field-independent students.

Hypothesis 4
Field-independent students in the behavior modification group will be rated as significantly more effective counselors by their trainers at the completion of training than will field-dependent students.

Hypothesis 5
Field-dependent students who are in the interpersonal skills group will express significantly more positive attitudes toward the training experience on an attitudinal questionnaire administered at the completion of training than will field-independent students.
Hypothesis 6
Field-independent students who are in the behavioral group will express significantly more positive attitudes toward the training experience on an attitudinal questionnaire administered at the completion of training than will field-dependent students.

Hypothesis 7
The level of field dependence will not be significantly changed at the termination of training for either the field-independent or field-dependent students, regardless of the training group in which they participated.

Assumptions
It was assumed that the two groups involved for the purposes of training would be comparable. This was not a statistical issue, since the groups were not to be directly compared, but rather it was of interest to determine the relative impact of behavior modification or interpersonal skills training. In addition, it was assumed that the doctoral students who were to serve as trainers would make every effort to instill the principles and usage of their particular orientations to counseling, and that they were equally capable in the training capacity. Finally, it was assumed that the training procedures were an equated task, entailing approximately the same degree of difficulty regardless which orientation to counseling was to be taught.
and that trainees in both groups would be similarly cooperative and motivated to learn the counseling skills as presented.

Limitations

Only those students who scored in the first and fourth quartiles on the Group Embedded Figures Test were included in the data analysis. The data supporting perceptual and behavioral differences as a function of level of psychological differentiation is valid only when extreme scores on field-dependence measures are used. It has been shown that individuals who score in the neutral range on these tests exhibit slightly better social adjustment than individuals who score at either of the extremes (4), and that they are able to offer higher levels of empathy in counselor training settings (5). In other words, individuals who score at the extremes of field-dependence measures would appear to have more of the characteristics which would be of concern to counselor educators, thereby supporting the need for more research concerning these groups.

A second limitation imposed on the study is the use of the same training procedures for both field-dependent and field-independent participants. Under the hypothetical structure of a systems approach to the counselor program, there would be an effort to organize the training formats based on the specific characteristics of the groups indicated by the empirical evidence available.


CHAPTER II

REVIEW OF THE LITERATURE

Introduction

The present study represents a systematic attempt to aid in the continuing search of counselor educators for possibly significant variables which affect the results in training counseling skills. Because the phenomena of perception are the most significant variables in counseling interactions, a personality construct primarily concerned with styles of perceptual behavior appears to be the most meaningful approach. Many attempts have been made to distinguish between individuals on the basis of these styles. Some examples are between "confident" versus "cautious" perceivers (7), between "levelers" and "sharpeners" (37, 38), between "repressors" and "sensitizers" (2, 15), and many others. The bulk of the literature on perceptual styles, however, has been concerned with the concept of "field dependence" versus "field independence," developed and presented by Witkin and his associates (83, 85). Because the concepts of field dependence are grounded in a well developed theory of behavior based on solid empirical research, this approach was selected as an initial variable for investigation of factors affecting the results of counselor training.
Theoretical Concepts

The significance of the research presented is more comprehensible in the light of a brief explication of the theoretical position underlying field-dependence concepts. The most basic assumption of the theory is that performance on a perceptual task which involves the individual's ability to overcome "embeddedness" by the visual separation of a simple figure from a complex ground is indicative of a more general and pervasive way of perceiving. The ability to ignore the distracting field and perform the task is a function of one's level of "psychological differentiation," a term which refers to the degree to which the human system has attained specificity of its component parts. With more specificity within the separate parts of the personality system, according to the theory, perceptual and psychological functions are more highly developed, and the individual will respond primarily only with specific responses to specific stimuli, as opposed to earlier global functioning. Witkin's contention is that all psychological functions are interrelated in that all are a function of the level of psychological differentiation. The unifying concept of differentiation is said to be reflected in observable behaviors associated with the individual's "cognitive style," the label given to pervasive and stable ways of perceiving. With an analytical type of perception, an individual is said to be differentiated and can easily
separate the various components of both self and field. Figure-ground tasks for this individual are thus relatively simple, and the resultant good performance on tests of field dependence yields a score in the "field-independent" range. At the opposite extreme is the global perceiver, who is said to be relatively undifferentiated in psychological functioning. On tests of field dependence, global perceiving precludes separation of the simple figure from the complex ground, resulting in a score in the "field-dependent" range. Summing up the concept, Witkin states, "Implicit in this hypothesis is the view that greater inner differentiation is associated with greater articulation of experience in the world" (83, p. 16). The literature reveals that the general hypothesis has been supported in many different ways. One example from the research exemplifying direct support of the hypothesis is a study by Steinmetz (74), who found that analytical and global students, as defined by their scores on the Concealed Figures Test, also tended to give analytical or global concept responses consistent with their field-dependence ratings.

One final and extremely important point made in the Witkin position is that the differentiation hypothesis tends to carry a value judgment, i.e., "the more differentiated the better." Contrary to this notion, he emphasizes that separateness or specificity of function does not imply integration of functioning of a personality
system, and thus a relatively field-independent individual may be functioning very poorly, for example, a chronic paranoid (83, p. 204).

Social versus Task Orientation

Field-dependence scores have shown numerous positive and significant relationships to several behaviors which are important in the general area of counseling. A consistent finding which is perhaps the most crucial to counselor education is that field-dependent subjects are more socially oriented than field-independent subjects. Studies using many different approaches and experimental situations report this conclusion. An initial study will be presented in sufficient detail to exemplify the nature and quality of field-dependence research. Solar, Davenport, and Bruehl (72) presented a well designed study to determine the task versus social orientations of field-independent and field-dependent subjects. Forty participants who scored at the extremes of the Thurstone Embedded Figures Test were then administered an initial six trials on the Rod-and-Frame Test (RFT). Each subject was asked to respond to a five-point scale expressing her degree of confidence as to how well she thought she had performed. The final sample of subjects consisted of the ten field-dependent and ten field-independent girls who had rated themselves most confident on the scale. Subjects were then randomly
paired for the task of performing the RFT together for six additional trials. The results were clear ($p < .001$) that the field-dependent girls were influenced by their field-independent cohorts. Field-dependent girls attained significantly improved scores over the scores they received on the initial trials, which they had performed alone, while the field independent girls' scores remained the same; i.e., the latter were not swayed to the judgment of the field-dependent girls. Improvement was confined to the paired situation, since trials administered to the field-dependent subjects subsequent to the paired trials were no different from the initial trials. The conclusion of the authors was that these findings were indicative of a general "person-oriented" factor among the field-dependent subjects, since there was evidence that the field-dependent girls were striving to cooperate with their cohorts on rod placement. Field-independent subjects tended to attend primarily to the task, confirming a general "task orientation" for this group. Because a large bulk of the literature supports social compliance behaviors among field-dependent subjects, the authors stress that their findings support a cooperative social orientation, but not social compliance, since final interview data with the subjects revealed that the field-dependent subjects were not relying on their cohorts for rod placement, but were striving to accomplish the task in a cooperative manner.
Numerous other studies have investigated social factors in relationship to field dependency. Linton (50, 51) and Weinberg (79) reported that field-dependent subjects exhibited more social compliance in experimental situations using stooges. Social dependency has also been shown for field-dependent subjects across different situations and types of populations (30, 68). In related areas, Messick and Damarin (56) have demonstrated that field-dependent subjects have a better incidental memory for faces, while Eagle et al. (24) found that field-independent subjects have a better incidental memory for task-relevant stimuli. Fitzgibbons et al. (31) reported that field-dependent subjects show a higher rate of recall for social words, and Nightingale (59) found that they made more socially oriented and conforming responses after viewing films. Under social pressure to conform, field-dependent subjects have exhibited significantly more responses indicating need for social approval (3). Using ratings, Crutchfield et al. (20) found that field-dependent subjects are more likely to be rated as gregarious, considerate, and affectionate, while field-independent subjects are more likely to be rated as cold and distant. Crutchfield's finding is consistent with Witkin's extensive studies, which reported field-independent children as tending to be "aloof" and "emotionally hard" (83, p. 261). In a study with direct implications for counselor training, Brilhart
reported that scores on the Embedded Figures Test (EFT) were significantly related to relative focus on speaker or on message quality. Field-dependent subjects tended to focus on the speaker himself, while field-independent subjects tended to focus on message content.

In an unusual but well designed study, Justice (43) demonstrated that there are significant differences in the literal distance a field-dependent or field-independent subject will place between himself and the examiner. After anxiety-arousing talks on intimacy, subjects unknowingly walked through white chalk onto a black rug on four separate trials. Field dependent subjects, as hypothesized, chose smaller interpersonal distances than did field-independent subjects. One interpretation of this behavior offered by the author is that field-dependent subjects may see the examiner as a possible source of anxiety reduction, while field-independent subjects look more to themselves. Other studies have noticed the role of the examiner in terms of reinforcement, generally finding that field-dependent subjects will respond more readily to positive social reinforcement, showing increased production and improved scores on performance tasks, than will field-independent subjects (66, 53). Randolph (65), using a large sample (N = 180) of extreme scores from the Children's Embedded Figures Test, found some significant differences among field-dependent and field-independent
subjects in ways of responding after examiner praise or criticism. Field-dependent subjects tended to respond poorly after criticism or failure on the task, and to respond differentially to praise or criticism of performance, while field-independent subjects tended to perform better after failure, and were not affected by criticism. The implication of this study for counselor training is that all trainees entering into a program should not be subjected to identical teaching methods; i.e., some methods are indicated for improving performance for field-dependent students (e.g., praise, reassurance, support), while other methods are suitable for field-independent students (e.g., constructive criticism).

Personality Factors

In addition to social factors, several other important personality differences have been shown to be related to level of field dependence. One of the consistent findings which is most relevant to counselor training and screening is that field-dependent subjects have tended toward rigidity in several different performance situations. This research appears to have strong implications for both screening and training of prospective counselors. Breskin and Gorman (13) and Gardner et al. (32) both reported that field-dependent subjects exhibited significantly more rigidity in responses than did field-independent subjects.
Immergluck (41) found that field-independent subjects demonstrated higher reversal rates on reversible figures than did field-dependent subjects. Under changed instructions to resist impulsive or spontaneous responding, however, this finding was reversed (36, 58). Fehr (26), in studying alcoholic and nonalcoholic populations, found field-dependent nonalcoholics to be most consistent in interpersonal perceptions. Fehr interpreted this tendency as a function of rigidity. Using the Edwards Personal Preference Schedule, Ogden (61) found that field-dependent male clients in a university counseling center were significantly lower than field-independent males on the Change Scale. Another study in this area pertains directly to counselor education. Loewenstein (52) used the Rokeach Dogmatism Scale and the field-dependence dimension in a broader approach to rigidity. Using graduate students in counselor training practicums, she found that field-dependent students who were high on the Rokeach made significantly lower scores on the Truax Accurate Empathy Scale ratings of outside judges than did field-independent students who were low on the Rokeach. An encouraging note by Loewenstein was that ratings on later tapes of field-dependent subjects showed gains on the Accurate Empathy Scale, indicating that apparently empathy can be taught to this group. In a closely related area, but with a different orientation towards the dimension of rigidity,
Gensemer (33) offered support for field-dependent subjects being more rigid. Comparing the Runner Studies of Attitude Patterns measure to field-dependence ratings, Gensemer found that field independence provided a more favorable condition for creative thinking, and that field-independent subjects were more often able to resist the impulse to complete tasks in a rapid, unimaginative manner. Implications of the study, according to Gensemer, were that global measures of intelligence were apparently insufficient in attempting to understand individual intellectual, social, and creative performance.

Two additional personality correlates of field-dependence measures which have been reported are those of introversion-extraversion, and internal-external locus of control. Field independence has been shown to have a positive relationship to extraversion in numerous studies (18, 25, 48, 76). Beck (8) supported these findings using the Eysenck Personality Inventory. Less work has been done on the internal-external locus of control variable, but one recent study (12) was able to demonstrate this relationship. High levels of field dependency showed a significant positive relationship to external locus of control.

Finally, field-dependence measures have been extensively investigated in relation to performance on various widely accepted projective techniques. A comprehensive review of the literature on the "sophistication-of-body-concept"
scale, developed by Witkin and his associates as a primary
test of the differentiation hypothesis, is available in
Witkin's major publication, *Psychological differentiation*
(83, pp. 115-133). Summarizing these studies, the bulk of
the findings supported the hypothesis that field-independent
children tend to have an articulated concept of their bodies;
i.e., the drawings contained discrete and accurate boundaries
of parts of the bodies, and the figures were clearly distinct
from the environment. In contrast, field-dependent children
tended to draw figures which were characteristically primi-
tive and inaccurate with respect to body parts. Subsequent
research has offered general support for the relationship
between field-dependence ratings and projective techniques.
DeKonick and Crabbé-Declève (21) found that field-independent
subjects gave more white reversal responses on the Rorschach
Inkblots than did field-dependent subjects. Using a battery
of tests, Young (87) found that the Holtzman Inkblot Tech-
nique and Draw-A-Person Test correlated best with field-
dependence measures. Type of frustration exhibited on the
Rosenweig Picture Frustration Study has been related to
field dependence (27) and to type of defense mechanisms
employed (40). This latter study is supportive of the
general findings that types of behavior disorders are
related to levels of field dependence.
Another major area of importance to the training of prospective counselors is the relationship of the field-dependence dimension to various types of psychopathology. The literature indicates that global or analytical functioning per se is not predictive of pathological behaviors, but that type of behavior disorder appears to be related. Many studies have investigated the relationship of field dependence to neuroticism and have failed to establish significant correlations (1, 23, 25, 60, 76). Bennett (9) and Bailey et al. (5) reported that field-dependence measures were unable to discriminate between schizophrenics and normals. Research conducted with specific disorders presents a different picture. Pardes and Karp (62) found that obese individuals tend to exhibit marked field dependence. Hypertensive subjects have been shown to be significantly more field dependent than peptic ulcer patients (71). High field dependence among asthmatic children was reported by Fishbein (29). Extensive research with alcoholic populations has consistently reported greater field dependence among alcoholics than among nonalcoholics or the population at large. Rhodes and Yorioka (67), Karp et al. (46), Witkin et al. (84), Bailey (4), Karp and Konstadt (45), and many others have reported this finding. In general, the literature appears to support the contention that psychopathological problems are associated with extreme
scores on the field-dependence measures (82), which partially supports the rationale of the present study in investigating only the extreme scores of incoming students in counseling, assuming more adequate psychological adjustment of neutral scorers. Sugarman and Cancro (75) specifically support this statement with their study. They found that extreme field dependence or field independence was predictive of a poor outcome for recently hospitalized schizophrenic patients.

Achievement and Intelligence

High levels of field independence have been consistently related to high scores on standard intelligence tests. Numerous studies have supported this finding (10, 34, 42, 54, 69). Witkin and his associates, utilizing subtests of the Wechsler Intelligence Scale for children (83, pp. 61-71), conducted an extensive factor analysis to differentiate field dependence as a dimension separate from that of general intelligence. Heaviest loadings were found on Object Assembly, Block Design, and Picture Completion in correlations with field-dependence measures. It appears from this finding that the major differences noted between the total test scores of field-dependent and field-independent subjects is "carried" by those subtests which rely most heavily on analytical ability. In addition, there are at least two important confounding variables which have been
related to the field-dependence dimension. Both achievement motivation and mode of attack on tasks have been shown to have a significant relationship to level of field dependence. In a study by Dickstein (22), field-dependent subjects exhibited reluctance to omit or test irrelevant stimuli on concept attainment tasks, supporting the conclusion that there were differences in mode of perceptual attack on the tasks; i.e., the differences between field-dependent and field-independent subjects appeared to be related to performance variables rather than to the facility with which the tasks could be accomplished. Dickstein's study supported Witkin's contention that subtests of the Wechsler Intelligence Scale for Children requiring analytical ability have tended to increase total scores, since he failed to establish a significant difference between the Otis Mental Maturity Test and the concept-attainment tasks scores. In another study, Bloomberg (11) found that field-dependent and field-independent subjects were equally capable of solving anagram problems but demonstrated significant differences in manner of responding. Field-dependent subjects had a significantly higher number of incorrect solutions. Bloomberg suggested that this could be a function of (a) greater impulsivity in problem solving, (b) an overdependence on the examiner, or (c) susceptibility to irrelevant combinations of words. Any or all of these conclusions are consonant with Witkin's contention of the characteristics of
field-dependent individuals. In support of this finding, Vaught and Hunter (78) also found that field-dependent and field-independent subjects obtained equal numbers of correct words on an autokinetic word test, but that field-independent subjects were quicker to respond. Willoughby (81) found that field-dependent subjects had a significantly higher frequency of guessing than field-independent subjects, indicating lack of caution of field-dependent individuals in responding. This is consistent with Witkin's findings that field-dependent children were more impulsive in many types of behaviors (83, pp. 164-168). These differences in manner of responding could be a function of the achievement-motivation variable, since field-independent subjects have been shown to exhibit significantly higher levels of this behavior than field-dependent subjects (19, 39).

Counseling and Interview Behavior

The rationale for the present study is strongly supported by the literature which has shown that field-dependence measures have had significant relationships with several important process and outcome variables in counseling and psychotherapy. Investigations in this area are relatively recent and fewer in number than in other areas of field-dependence research, but are sufficient to support the need for more extensive study. Several studies have investigated the relationship of field-dependence
Cooper (17), for example, observed that level of field dependence was related to both accurate empathy and modes of handling interviews. Counselors who were more field analytic and better able to perform cognitive shifting tasks also tended to be higher on accurate empathy measures. In the interview situation, they tended to ask more questions, particularly about thoughts and feelings. Low scorers on the cognitive functioning measures and the accurate empathy scales tended toward more opinions and wordiness in the interview situation. In another area of counseling and psychotherapy, several attempts have been made to relate field-dependence measures to the A-B therapist dimension. In the original study of A-B classification for therapist "types," Whitehorn and Betz (80) studied the characteristics of high-success therapists as compared to low-success therapists according to several well-defined criteria of patient improvement. Administration of the Strong Vocational Interest Blank revealed that the high-success group (Type A) and the low-success group (Type B) had different vocational preferences. Type A therapists were found to have interests similar to those of lawyers, while Type B expressed interests similar to those of mathematics/physical science teachers. Pollock and Kiev (64) reported that the field-independent therapist preferred
either an instructional and directive approach to therapy, or contrarily, a passive one, while field-dependent therapists preferred personal and mutual relations. Contrary to their hypothesis, Type B therapists were found to be field independent and preferred vocational interests requiring a precise and mechanistic approach. The Type A group was more field dependent. Replication of this study (70) found that Type A's were neither field dependent or independent, but were more variable in scoring than Type B's. In this study, Type B's were extremely field independent. The literature on the A-B therapist dimension has been largely inconclusive (55, pp. 303-306), and a recent study (63) found no support for a relationship between level of field dependence and A-B therapist classification.

Using a different approach to the study of counseling and psychotherapy in relation to field dependence, Greene (35) studied a sample of social caseworkers and their clients. Client perception of the interviews, as measured by the Barrett-Lennard Relationship Inventory, revealed that the relationship as evaluated by the client received mild but consistent support for more empathy, positive regard, genuineness, and total scores when the cognitive styles of the caseworker and the client were congruent, i.e., when both were either field dependent or field independent. An important finding of Greene's study was that there was a
significant difference between choice of method for treatment related to level of field dependence. Caseworkers emphasized supportive techniques for field-dependent clients, while field-independent clients had more emphasis on self-awareness. Another recent study (44) reported a similar finding. Field-independent patients were selected significantly more often for insight therapies, while field-dependent patients were selected for drug therapies. Possible support for these procedures is offered by Trainor (77), who found that field-independent clients tended to complete their participation in encounter-group programs significantly more often than field-dependent clients, the latter tending to drop out. Trainor suggested that the Embedded Figures Test is apparently predictive of whether or not an individual will complete an encounter-group program, and that its usage as a screening device would result in savings in time, money, and energy in this type of work. Witkin et al. (86) investigated both therapist and patient interview behaviors in relation to field-dependence ratings and reported many significant differences between differentiated and undifferentiated individuals. Among the more important findings was that field-dependent patients were more prone to report "shame" in interviews, while field-independent patients were more prone to report "guilt." The hypothesis was confirmed, supporting the theoretical position and the many empirical findings which
state that field-dependent individuals tend to be more involved with "critical others." Combined with the tendency to respond globally, the expectation from the theoretical point of view would be that a global feeling caused by the negative reaction of significant others would predominate in therapeutic problems, the response being labeled "shame." Conversely, the field-independent patient, being more internally directed and differentiated with respect to affect, would be expected to express guilt, a response which does not require the presence of others and refers to more articulated experiences. Another important finding in this study was that there was a tendency for the more field-independent therapists to intervene less, with the lowest rates of interaction between therapist and patient occurring when both were field independent, and the highest rates of interaction occurring when both were field dependent. In another study investigating patient variables in relation to field dependence, Koff (49) found that patients’ stated expectations for advice and guidance was associated with more field dependence, and that field-dependent clients tended to drop out of relatively unstructured "talk" therapies sooner than field-independent clients. A final investigation illustrates the possibility of using field-dependence measures to predict the probability of success using behavior modification techniques for therapeutic purposes. Fineman (28) tested the hypothesis that field-dependent
mothers would function better in behavior therapy programs for their problem children than would field-independent mothers, since they are expected to be more subject to external influences. The results indicated that while field-dependent mothers perceived that they had formed greater positive relationships with their therapist, field-independent mothers had greater successes in reducing maladaptive behaviors in their children. In addition, a higher level of field dependence was associated with greater attrition and resistance, and reports of higher frequencies of specific maladaptive behaviors in the children. Fineman's results are supportive of the other recent studies on field dependence and psychotherapy; i.e., higher field dependence is associated with higher attrition, and the reported greater "resistance" is consistent with the studies which have shown that field-dependent individuals tend to be more rigid.

In overview, field-dependence measures have shown significant correlations with numerous variables across many experimental situations, which could have relevance for counselor training programs. The predominant patterns which have emerged for field-dependent individuals are strong social orientation, emotional warmth, reaction to social influences, social-orientation as opposed to task-orientation, impulsivity in responding, rigidity, and a poor differentiation of self and other. In contrast,
field-independent individuals exhibit emotional distance, internal directedness, task-orientation, achievement-orientation, an analytical approach to tasks, and an ability to establish a sharp distinction between self and other. The specific contention of the present study is that the strengths and weaknesses of individuals who are field dependent or field independent can be related to the different skills involved in pursuing different orientations to counseling. Although there is overlap of counseling behaviors regardless of orientation (e.g., personal acceptance, warmth, honesty, concreteness/specificity), the primary skills required to become an effective behavioral counselor and those required to become an effective interpersonal skills counselor have some explicit differences. An example of the former is the ability to develop the skill of analyzing the contingencies of reinforcement and to assume a highly directive role, and an example of the latter is the ability to tolerate emotional closeness and to assume a more passive experiential role. If one examines the overall techniques implemented under each of these approaches, it would appear that more of the characteristics of the field-independent individual would be complemented by training in behavior modification techniques, while the field-dependent individual appears to exhibit more of the characteristics associated with interpersonal skills training. A study by Melchiskey and Wittmer (54) will help
to clarify this point. Using the Edwards Personal Preference Schedule and the Rokeach Dogmatism Scale, significant differences were found between counselor candidates who either accepted or rejected group sensitivity training. Of interest is that those who accepted the training were high on the subscale of the Edwards Personal Preference Schedule entitled "Succorance," (defined on this measure as the need to receive help and understanding from others), and those who rejected the training were high on the Achievement-orientation subscale. It could be hypothesized that the achievement-oriented group was largely field independent and the succorance group largely field dependent. Incidental support is given to this hypothesis in a study by Bard (6), who reported that field-dependent students chose group sports significantly more often than field-independent students, who preferred individual sports, and by Sousa-Poza (73), who found that field-dependent students were significantly more self-disclosing than were field-independent students. Self-disclosure is an important characteristic in group counseling situations. In relation to counselor training, it becomes feasible to consider the possibility that perhaps mandatory group training for all counselor candidates is questionable, if there are individuals whose personality assets could be developed to higher levels in another orientation to counseling. Converse to this idea is the possibility that field-dependence
measures could indicate specific personality characteristics of prospective counselors of which both the student and the staff need to be aware, and which perhaps are in need of some degree of modification. A highly relevant study by Carlino (16) suggests that such modification may occur to some degree in the course of counselor training even in present programs. Carlino investigated thirty college counselors (fourteen with master's degrees and sixteen with doctorates) with the Embedded Figures Test, and had them submit tapes of their counseling sessions for ratings on the Truax Accurate Empathy Scale. Analysis of the data failed to establish a relationship between field dependence and accurate empathy responses, but the interpretation of the findings is optimistic for the present study. The author's suggestion for the null results is that perhaps field-dependent or field-independent individuals wishing to become counselors are able to overcome the more negative traits associated with either of the extremes of psychological differentiation by utilizing knowledge and skills gained in professional training. Interpreting his findings, Carlino stated, "An experienced counselor thereby distorts the theoretical relationship between his field orientation and his ability to empathize" (16, p. 2706). The experimental format to be used in the present study will partially test this possibility, asking a similar question, but using a sample of inexperienced counselor trainees as subjects.
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CHAPTER III

METHOD

Subjects

In order to obtain subjects who were interested in acquiring counseling skills and who had not yet received any formal training in a graduate counseling program, students were selected who had enrolled in the two sections of Education 571, the initial course offered at North Texas State University in the graduate program in counseling. One section received behavior modification training and the other, interpersonal skills training. In the final sample, there were fifteen students remaining in the behavior modification group (twelve females and three males) and twenty-three in the interpersonal skills group (eleven females and twelve males). Within each group, subjects were classified according to scores on the Group Embedded Figures Test (GEFT), as shown in Table I. Classification of students as field dependent, field independent, or field neutral was based on normative data for college samples provided in the Manual for the embedded figures tests (22, p. 28). Students who scored in the fourth quartile were designated as field independent, and in the first quartile, field dependent, using separate normative data for males and females, the latter having been shown to score slightly lower on field
dependence measures across most samples in this culture. All others were considered to be field neutral. Field neutral students were treated exactly as if they were actual participants in the study, both in the training procedures and in the collection of data.

<table>
<thead>
<tr>
<th>TABLE I</th>
<th>FIELD-DEPENDENCE CLASSIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Classification</td>
<td>Behavior Modification</td>
</tr>
<tr>
<td>Field dependent</td>
<td>6</td>
</tr>
<tr>
<td>Field independent</td>
<td>7</td>
</tr>
<tr>
<td>Field neutral</td>
<td>2</td>
</tr>
</tbody>
</table>

The age range in the behavior modification group was twenty-three to thirty-four, with a mean age of 27.5, and in the interpersonal skills group, the range was twenty-three to forty-five, with a mean age of 29.1. Because both the Embedded Figures Test and the Otis Test of Mental Maturity are standardized on normative data from rather large adult age ranges, this difference is insignificant in the group comparison. All participants held bachelor's degrees, and all expressed a verbal interest in attaining graduate training in the counseling program.

**Instruments**

The GEFT was used for both initial and final classification of participants according to level of field dependency.
Based on the same theoretical assumptions and empirical foundations as the individual forms of the test, a group form of the test was selected because of the relatively large sample size and the fact that the test had to be administered twice in order to satisfy the hypothesis concerning stability of field dependence classification. Reliability for the group forms was established separately for males and females, using the Kuder-Richardson formula 21 for alternate forms of the Embedded Figures Test (EFT). Correlations of .84 for males and .75 for females were found for the individual short form of the EFT and Form V of the group forms, which was the form selected for use in the present study.

Use of the EFT is fully supported by Gough in a review in the Mental measurements yearbook, sixth edition (6) and partially supported by Tyler (20) in that same volume. Gough reports that reliability, regardless of type, has had a median of .905, and Tyler cites Bauman's study (2) which reported reliability of .89 for both males and females over three-year intervals. Neither reviewer questions the validity of the instrument, and Gough comments,

One of the most attractive features of the test is its firm anchoring in a systematic context of theory and empirical evidence. There is no question concerning the importance of the approach to cognitive testing represented by this device... one can discern the gradual crystallizing of a concept of measurement of truly fundamental significance (6, p. 210).
In the interim since the publication of the reviews, the major criticisms of the test have been alleviated. Gough's major points were that there was (a) no manual containing normative data, inter-item correlations, and so on, (b) no group form, (c) no short form of the individual form of the test, and (d) no parallel form. All of these forms of the test are now available from the publisher, along with an excellent manual. A final criticism by Gough—that more evidence was needed that level of cognitive functioning is a dimension explicitly independent of intellectual ability—is apparently still valid, based on the recent review of the literature for the present paper.

To assess the degree to which the counselor trainees possess the desired counseling skills, judges used the Counselor Evaluation Rating Scale (CERS), a twenty-seven-item Likert rating scale used to rate an individual's performance in supervision, counseling, and overall effectiveness. (See Appendix E.) Myrick and Kelly (13), authors of the test, used forty-five student counselors and their supervisors in the reliability study, and established a split-half reliability of .95 using the Spearman-Brown correction. To test stability, a test-retest procedure with a four-week interval yielded reliability of .94. The scale has been developed primarily to aid practicum supervisors to systematically evaluate counselor trainees, and according to the authors, represents
a relatively standardized effort to rate counselor performance. It appeared that the use of the scale could be justified for the purposes of the present research, though the empirical evidence for its usage is limited at the present time. The scale was modified in that only the thirteen items pertaining directly to counseling ability were used.

To satisfy the hypotheses concerning attitudes of the subjects toward the training, an eighteen-item semantic differential was constructed, following the suggestions of Nunnally (14, pp. 535-544). Using a seven-point scale, the highest rating possible was 126, while the lowest possible rating was 18.

Because of the inconclusive literature concerning the concept of cognitive functioning as a dimension separate from a general intellectual dimension, the Otis Quick-Scoring Test of Mental Ability (henceforth Otis), Form Gamma BM, was administered. The Otis test series has been extensively used in schools and other organizations as a convenient measure of general intelligence. Split-half reliabilities for the new forms of the Gamma series have been reported as .91, .92, and .92 (11). Predictive validity of the Otis tests compare favorably with that of other intelligence tests for scholastic achievement (4), and the Otis Gamma forms have shown high significant correlations with both the Wechsler Intelligence Scale for Children and the Wechsler Adult Intelligence Scale (18).
Procedures

The design of the research was performance-based, requiring the participants to be able to apply the skills that were taught in the training program. The primary criterion variables were subjects' scores on the Counselor Evaluation Rating Scale, evaluated from video tape recordings of sessions prior to training, and again after training. Taping was conducted in a separate room with a coached client, who presented the identical problem (depression and low grades) to each subject. Pretapes and posttapes were done in the same manner, except that for the posttaping session subjects were given a brief synopsis of the client's background. (See Appendix A). Sessions were five minutes, using the same coached client for both the behavior modification and interpersonal skills groups.

Prior to the initiation of the training procedures, six raters (three for each group) were selected to evaluate the video tapes. Raters for the interpersonal skills group were all doctoral students in counseling who were familiar with the general position and techniques of Carkhuff, and raters for the behavior modification group were doctoral students in clinical psychology who were familiar with behavior modification techniques.

To establish interrater reliability, prior to the research ten five-minute video tapes were made of coached sessions (both counselor and client), using graduate
students who were currently enrolled in master's practicums in counseling. Ratings were based on CERS scores. Table II shows the interrater correlations yielded by the Spearman rho.

**TABLE II**

**PRE-STUDY INTRERRATER RELIABILITY**

<table>
<thead>
<tr>
<th>Behavior Modification</th>
<th>Correlation</th>
<th>Interpersonal Skills</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raters</td>
<td></td>
<td>Raters</td>
<td></td>
</tr>
<tr>
<td>A-B</td>
<td>.83</td>
<td>D-E</td>
<td>.73</td>
</tr>
<tr>
<td>A-C</td>
<td>.77</td>
<td>D-F</td>
<td>.73</td>
</tr>
<tr>
<td>B-C</td>
<td>.81</td>
<td>E-F</td>
<td>.69</td>
</tr>
</tbody>
</table>

Because the scores received by each participant from the three raters was averaged in order to give the participant a single score for pretest and posttest ranking, these correlations were deemed adequate for the raters' first experience in using the Counselor Evaluation Rating Scale. With the actual ratings for use in an analysis of the research data, the interrater reliability minimum was set at .75 as an average correlation.

An initial survey of the two groups revealed that most of the students would be unable to attend training sessions except at the regularly scheduled class time of the course in which they were enrolled. Because direct comparison of the groups was not of primary interest in the study, the use of intact groups did not present a
problem in the research design. One group was arbitrarily designated to be trained in the behavior modification model, and the other the interpersonal skills model. The use of a control group was not necessary in the design, since there was no test of a treatment effect versus a no-treatment effect. The hypotheses as stated required only the analysis of the data of within-group differences, with controls for initial differences among the participants on the criterion measures. Administration of the Group Embedded Figures Test, and video taping of all participants prior to the beginning of the training procedures provided this control.

To design the training format, the literature concerning performance-based studies in counseling was reviewed. Some methods have been shown to be more effective than others in training counseling skills, and these were included in the training procedures. Several studies have been able to demonstrate that an emphasis on applied skills is more effective in helping counselor trainees meet specific counseling criteria than an emphasis on "sensitivity," or other similar poorly defined variables. Keucher (10) found that systematic training designed to meet specific behavioral performance criteria produced significantly higher ratings on criterion variables than did T-group training. Hansen and Warner (7) reported a similar finding that "technique-oriented" training was most effective over the other methods used in their study. Other studies have shown
that skills are acquired to a greater extent when approaches
to training are combined. Parker (15), for example, found
that experimental training using didactic methods, actor-
clients, video counseling models, and interpersonal-
process-recall methods (i.e., critiquing of sessions with
both supervisors and client during a video tape replay of
the session) attained significantly higher levels of cri-
terion skills than did a traditional control group. In a
study supporting the training methods of Parker, Spivack
(19) found that a group using interpersonal-process-recall
methods attained a higher level of performance toward cri-
terion variables than did a traditional group using lectures,
demonstrations, and discussions. Many studies have supported
the use of video tapes in training of counselors, e.g.,
Durand (5), and the importance of several ways of modeling
the desired counseling behaviors (3, 8). Finally, the use
of role-playing has been supported (12) and was also in-
cluded in the format.

Using the methods indicated as most effective for
improving counseling skills, the format was designed to
include (a) short didactic presentations with lecture,
discussion periods, written outlines of the material,
short tests on vocabulary and concepts, and immediate-
feedback reviews, (b) modeling by the trainers of the
criterion counseling skills desired in the training, and
(c) practice of the trainees in using the skills being
taught, utilizing actor-clients, with direct observation, supervision, and feedback. Interpersonal-process-recall and direct-trainer-feedback methods were approximately equally implemented for suggestions to trainees regarding improvement of their practice sessions. To ensure that both groups received adequate performance-based training, the same design was used for both, except for content, which followed the theoretical position and applied techniques of the particular orientation to counseling. The primary text for the interpersonal skills group was Interpersonal skills development (1), and for the behavior modification group, A primer of behavior modification (21). (For additional reading, tests, and other materials, see Appendix B. The detailed training format for each group can be seen in Appendix C.)

After the completion of training and the final taping of each participant with the coached client, the Group Embedded Figures Test was re-administered. During the six-week interim since the first administration, there had been no discussion or other mention of this test. In addition, the Otis Quick-Scoring Test of Mental Ability, and the semantic differential, constructed to assess the attitudes of the participants toward the training, were also administered. The posttapes of each group were rated by the respective trainers and raters to complete the collection of data.
Analysis of Data

Since the purpose of the study was to test the power of the Group Embedded Figures Test as a predictor variable for levels of performance in either of two selected orientations to counseling, the primary dependent variable was participants' ratings on the Counselor Evaluation Rating Scale as evaluated by the three independent raters for each group. A second dependent variable was the evaluation by each participant of degree of satisfaction with the training, as evaluated by the ratings on the semantic differential. The independent variable of the study was the particular orientation to counseling in each group, either behavior modification or an interpersonal skills approach. To control for the possibility that the variable of intelligence could be a factor in the prediction of performance on the Counselor Evaluation Rating Scale, since this variable has been shown to correlate with field dependence measures, the Otis Test of Mental Ability was administered.

Statistical treatments of the data were conducted separately for each group. An initial problem was the reestablishment of acceptable levels of interrater reliability among the three independent raters for each group. Pretape and posttape reliabilities were computed separately for each set of raters using the Spearman rho statistic. To determine the degree of change of each participant from pretape to posttape rating, the CERS
ratings of the three raters were averaged to yield a single score, which made it possible to rank each individual within his group on both pretapes and posttapes. The pretape rating was subtracted from the posttape rating to give a difference score which could be subjected to the Mann-Whitney U-Test to determine significance of differences. In addition, the evaluations of the participants by the two trainers from each group were treated independently by the Mann-Whitney U-Test.

For the pretest and posttest administrations of the GEFT, the test of significance was determined by the t Test for Related Samples, and for the test of significance of the relationship of the GEFT to the Otis, the Pearson \( r \) statistic was used.

Because of the theoretical issues involved in the study, i.e., that the personality traits associated with either field dependence or independence would complement particular orientations to counseling, it was of interest to know if the individuals participating as raters and trainers were field independent or dependent. Thus the six raters and four trainers of the two groups were tested with the individual short form of the Embedded Figures Test.
CHAPTER BIBLIOGRAPHY


CHAPTER IV

RESULTS

The interrater reliability using the CERS to evaluate participants in the training groups was established separately for the three raters of each group. Results yielded by the Spearman rho are shown in Table III. Since the minimum acceptable average reliability was set at .75, these correlations were deemed sufficient for the purposes of the study.

TABLE III

INTERRATER RELIABILITY

<table>
<thead>
<tr>
<th></th>
<th>Behavior Modification (N = 15)</th>
<th>Interpersonal Skills (N = 23)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correlation</td>
<td>Correlation</td>
</tr>
<tr>
<td></td>
<td>Pretapes</td>
<td>Posttapes</td>
</tr>
<tr>
<td>A-B</td>
<td>.69</td>
<td>.73</td>
</tr>
<tr>
<td>A-C</td>
<td>.77</td>
<td>.82</td>
</tr>
<tr>
<td>B-C</td>
<td>.84</td>
<td>.75</td>
</tr>
<tr>
<td>Average</td>
<td>.77</td>
<td>.77</td>
</tr>
</tbody>
</table>

To satisfy the first two hypotheses, ratings of the three independent judges for each group were averaged, giving a single score for each participant on pretape and posttape sessions. Pretape ratings were subtracted from
the posttape ratings to determine the degree of change for each participant (required to test the hypotheses). The first hypothesis stated that field-dependent students in the interpersonal skills group would be rated as more effective counselors after training than would field-independent students. The second hypothesis stated that field-independent students in the behavior-modification group would be rated more effective as counselors after training than would field-dependent students. Subjecting the change scores from pretape and posttape sessions to the Mann-Whitney U-Test, it was found that there were no significant differences in improvement scores between field-dependent and field-independent students in the interpersonal skills group (U = 32, U < 15, not significant at the .05 level of confidence for two-tailed tests), thus failing to confirm the first hypothesis. The mean improvement score for the field-dependent trainees was 21.9, and for the field-independent trainees, 19.6, a difference which was attributed to chance. In the behavior modification group, however, field-independent trainees did have significantly higher change scores from pretape to posttape ratings (U = 3, U < 3, significant at the .01 level of confidence for two-tailed tests). The mean improvement score for the field-independent trainees was 23.9, and for field-dependent trainees, 16.55.
The third hypothesis stated that the two trainers in the interpersonal skills group would rate field-dependent students higher in counseling skills after training than they would field-independent students. The two sets of ratings on the CERS were treated separately for each trainer, since significant levels of correlation between trainers could not be established (Spearman rho = .45). Results from the Mann-Whitney U-Test yielded nonsignificant differences between field-dependent and field-independent trainees on the trainer ratings (U = 21, 21, U < 15 at the .05 level of confidence for two-tailed tests). The fourth hypothesis was also concerned with trainers' ratings of the groups, stating that in the behavior modification group field-independent students would be evaluated as more effective counselors after training than would field-dependent students. Following the same procedures for the analysis of data as in the interpersonal skills group, it was found that CERS ratings of one trainer failed to show significant differences between field-dependent and field-independent students (U = 16, U ≤ 6), but that the other trainer approached significance (U = 8, U ≤ 8, significant at the .10 level of confidence for two-tailed tests). Correlation between the two sets of trainer ratings was 0.

To satisfy the fifth and sixth hypotheses, the eighteen-item semantic differential was administered
at the completion of training. (See Appendix D.) The fifth hypothesis stated that field-dependent students in the interpersonal skills group would express more positive attitudes toward the training experience than would field-independent students at the completion of training. The sixth hypothesis stated that field-independent students in the behavior modification group would express more positive attitudes toward the training experience than would field-dependent students. Final data for the semantic differential is presented in Table IV.

### TABLE IV

**SEMANTIC DIFFERENTIAL**

<table>
<thead>
<tr>
<th>Training Group</th>
<th>N</th>
<th>Mean</th>
<th>Median</th>
<th>Range</th>
<th>SD</th>
<th>U</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field dependent</td>
<td>9</td>
<td>89.7</td>
<td>95.0</td>
<td>54-108</td>
<td>18.44</td>
<td></td>
</tr>
<tr>
<td>Field independent</td>
<td>8</td>
<td>89.8</td>
<td>93.5</td>
<td>50-103</td>
<td>16.25</td>
<td></td>
</tr>
<tr>
<td>Total group*</td>
<td>23</td>
<td>93.0</td>
<td>101.0</td>
<td>50-109</td>
<td>16.63</td>
<td>30</td>
</tr>
<tr>
<td>Behavior Modification</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field dependent</td>
<td>6</td>
<td>89.3</td>
<td>93.5</td>
<td>63-110</td>
<td>14.66</td>
<td></td>
</tr>
<tr>
<td>Field independent</td>
<td>7</td>
<td>97.7</td>
<td>98.0</td>
<td>85-116</td>
<td>9.92</td>
<td></td>
</tr>
<tr>
<td>Total group*</td>
<td>15</td>
<td>93.9</td>
<td>95.0</td>
<td>63-116</td>
<td>12.36</td>
<td>15</td>
</tr>
</tbody>
</table>

*Includes field-neutral students.

Comparing the ratings by field-dependent and field-independent students separately for each group with the Mann-Whitney U-Test yielded the two values of U shown in the final column, neither of which is significant at the .05 level of confidence for two-tailed tests (U ≤ 15,
U ≤ 6, interpersonal skills and behavior modification, respectively). Additional analysis of data collected in the interpersonal skills group, due to the relatively larger number of field-neutral students in this group (six, as opposed to two in the behavior modification group), revealed that field-neutral students rated the training experience significantly higher than either field-independent or field-dependent students, when the latter ratings were combined. The Mann-Whitney U-Test was significant at the .05 level of confidence for two-tailed tests (U = 22, U ≤ 22). Also of interest in this group was the negative skew of the ratings, due to three students who rated the training experience exceptionally low.

The final hypothesis was included as a control for the stability of the field-dependence dimension according to scores on the GEFT. Pretest and posttest scores from the GEFT were subjected to the t Test for Related Samples to test for significance of differences. Results are presented in Table V. The mean increase of approximately one item in each group occurred primarily in the field-dependent and field-neutral ranges in both groups, with five students in the behavior modification group, and six in the interpersonal skills group who were in the field-dependence range gaining two or more points on the posttest.
TABLE V
GROUP EMBEDDED FIGURES TEST

<table>
<thead>
<tr>
<th>Training Group</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavior Modification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>11.47</td>
<td>6.05</td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>12.50</td>
<td>4.93</td>
<td>2.56*</td>
</tr>
<tr>
<td>Interpersonal Skills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>11.30</td>
<td>5.28</td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>12.48</td>
<td>4.84</td>
<td>4.09**</td>
</tr>
</tbody>
</table>

*p < .05, df = 12.
**p < .001, df = 16.

From the analysis of the data for the GEFT, field dependence, as measured by this instrument, is apparently not stable over a six-week interval for the population studied, thus failing to confirm the hypothesis.

In addition to procedures required as direct tests of the hypotheses, the Otis was administered to control for the variable of intelligence. Table VI shows the separate means and standard deviations for field-dependent and field-independent students, and the total means and standard deviations for the groups. Analysis of the data used the Pearson r to determine the degree of relationship of the GEFT scores with Otis scores. Correlation of the Otis with the GEFT was found to be .73 for the behavior modification group, and .68 for the interpersonal skills group, both significant at the .01 level of confidence (r < .62, r < .515, respectively).
TABLE VI

OTIS QUICK SCORING TEST OF MENTAL ABILITY

<table>
<thead>
<tr>
<th>Field Classification</th>
<th>Behavior Modification</th>
<th>Interpersonal Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Field dependent</td>
<td>108.1</td>
<td>10.7</td>
</tr>
<tr>
<td>Field independent</td>
<td>126.4</td>
<td>7.9</td>
</tr>
<tr>
<td>Total group*</td>
<td>118.3</td>
<td>12.5</td>
</tr>
</tbody>
</table>

*Includes field-neutral participants.

Because of the theoretical issue of the study that traits of field-dependent individuals would be complemented by the interpersonal skills approach, and that field-independent individuals would be complemented by the techniques implemented in behavior modification approaches, the four trainers and six raters were administered the individual short form of the Embedded Figures Test, Form A. Scores and field-dependence ratings are shown in Table VII. To assign ratings, normative data for college populations were obtained from the Manual for the Embedded Figures Test (2), and scores were converted from normalized deviation scores into percentiles, using the table for proportion of areas under the normal distribution curve (1, p. 569). Scores which fell below the twenty-fifth percentile were considered in the field-dependent range, and above the seventy-fifth percentile, in the field-independent range. All others were considered to be field neutral.
TABLE VII
EMBEDDED FIGURES TEST--RATERS AND TRAINERS

<table>
<thead>
<tr>
<th>Trainers</th>
<th>Score*</th>
<th>Rating</th>
<th>Trainers</th>
<th>Score*</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>21.0</td>
<td>FI</td>
<td>C</td>
<td>68.3</td>
<td>FD</td>
</tr>
<tr>
<td>B</td>
<td>46.6</td>
<td>FN</td>
<td>D</td>
<td>27.0</td>
<td>FI</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Raters</th>
<th></th>
<th></th>
<th>Raters</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>15.8</td>
<td>FI</td>
<td>D</td>
<td>40.2</td>
<td>FI</td>
</tr>
<tr>
<td>B</td>
<td>16.7</td>
<td>FI</td>
<td>E</td>
<td>44.9</td>
<td>FN</td>
</tr>
<tr>
<td>C</td>
<td>48.8</td>
<td>FI</td>
<td>F</td>
<td>31.5</td>
<td>FI</td>
</tr>
</tbody>
</table>

*Score is mean seconds per item.
FI = Field Independent.
FD = Field Dependent.
FN = Field Neutral.

The tabular presentation of the field-dependence ratings of trainers and raters on initial examination appear to show little difference between the two groups. Averaging the total scores, however, for the individuals who worked with either the behavior modification or interpersonal skills training procedures revealed a rather large difference in mean scores--29.8 for the behavior modification group, and 42.4 for the interpersonal skills group.
CHAPTER BIBLIOGRAPHY


CHAPTER V

DISCUSSION

The concept of the first hypothesis was that field-dependent students in the interpersonal skills group would possess more of the characteristics associated with successful counseling in that approach, and would thus attain higher skills during training than would field-independent students. Failure to confirm the hypothesis had several possible explanations. First, the video taping procedures themselves may have been a factor in the final CERS evaluations. Field-independent trainees may have had an advantage in that an initial session with the client was taped, and this session is characteristically more cognitive compared to later sessions in this model of counseling. In later sessions, when the client trusts the relationship and needs more emotional closeness, theoretically it would be possible that field-dependent counselors would have been able to use their greater social orientation and to offer the client more warmth and acceptance than would field-independent counselors. An additional factor associated with taping of an initial session, which may have caused field-independent trainees to attain higher ratings than expected, was that first interviews characteristically require higher analytical and intellective skills, traits which have been
empirically shown to be associated with higher levels of field independence. This remains a question for future research, and a methodological limitation of the present study. A second possible explanation for failure to confirm this hypothesis concerns the use of the CERS. Some of the items on this scale required rather large assumptions about the counselor being rated (See Appendix E, items 6, 9, 26), and others (8, 12, 17) lacked objectivity about the specific behaviors considered to be indicative of certain counselor characteristics. Several of the judges commented on the subjectivity factor, and occasionally expressed uncertainty about the degree to which, for example, the counselor was "sensitive to the dynamics of self," in the counseling relationship. A rating scale with fewer items requiring inferences and global evaluations of behavior, and with more items for specific evaluation of quality and number of counselor and client responses, possibly would have been able to discriminate more effectively between field-dependent and field-independent trainees. A third possibility was that the higher discrimination skills which have been empirically shown to be associated with field independence could have given them an advantage in understanding the client's problem more quickly. Their ability to reflect content more accurately, even though the more salient feature of effective counseling in this model is to reflect and clarify the client's affective
functioning, could have given them higher ratings than expected. Fourth, due to the short-term aspect of the training, the greater intellectual ability and achievement-orientation associated with field independence could have enabled them to master the vocabulary and concepts more rapidly, which could have made them more comfortable in the attempts to apply what they had learned for the purposes of the actual counseling sessions which were video taped for final evaluation. Another personal characteristic which has been empirically shown to be associated with field-dependence scores could also have been a factor of the relative comfort of field-dependent and field-independent trainees. Field-dependent individuals have been shown to be more sensitive to examiner and peer influences, which could have caused them to be slightly more anxious in the particular training format which was followed. Such procedures as the direct feedback from both trainers and peers, and the continual evaluation of video tape performances, could have had more effect on field-dependent trainees than on field-independent trainees, which could have caused the former to become less confident and comfortable about their abilities in the role of a counselor. Finally, failure to confirm the hypothesis could possibly have resulted from the combined effect of any or all of these factors, and only future research manipulating the variables singularly could help clarify the findings. In view of the
extensive literature which has supported the empirical differences in personal functioning of individuals who have scored at the extremes of field-dependence measures, the most acceptable interpretation of the null results from the analysis of the data for the first hypothesis appeared to be that methodological and/or measurement procedures were probable factors.

The second hypothesis was theoretically converse to the first, with the concept that field-independent students would have more of the characteristics associated with successful counseling in the behavior modification model. Confirmation of the second hypothesis appeared supportive of Witkin's position of differentiating personality traits between field-dependent and field-independent individuals, and of the empirical studies which have reported this finding. However, because of the control for intelligence, the greater improvement in counseling skills of field-independent subjects in this group cannot be attributed to field independence alone. Since the Otis scores of the field-independent trainees were significantly higher than those of the field-dependent trainees, intelligence was considered to be a confounding variable in the predictive power of the GEFT. The most satisfactory explanation of the findings appeared to be that the field-independent trainees, because of the many new concepts and unfamiliar language used in the behavior modification model, had an unusual advantage in this
group in apparently being significantly more intelligent. In the interpersonal skills group, most of the vocabulary and concepts were relatively familiar to the group, and intelligence was possibly not as significant as in the behavior modification group. In the latter, for example, terms such as "operant," "contingencies," "shaping," and "negative reinforcement," involved completely new concepts for the majority of the group, most of whom had no background in theories of learning. To think of clients only in terms of topographies of behavior and contingencies of reinforcement appeared to require an entirely new viewpoint for most, if not all, of the students in the behavior modification group. Field-independent individuals, who have been empirically shown to be both more achievement oriented and flexible in cognitive tasks, than have field-dependent individuals, along with their apparent greater intelligence, would theoretically have a large advantage in this type of situation. As in the interpersonal skills group, their easier mastery of the vocabulary and other academic materials may have given them more confidence than field-dependent individuals in their attempts to apply behavior modification techniques in the actual counseling sessions which were video taped for evaluation. Finally, interpretation of the results of the second hypothesis could be made in terms of any or all of the variables considered.
in the discussion of the first hypothesis, since the same characteristics of field-independent and field-dependent individuals which may have tended to depress differences in CERS ratings in the interpersonal skills group could have had the opposite effect in the behavior modification group, thereby confirming the hypothesis.

The third and fourth hypotheses had the same conceptual basis as the first two hypotheses. In the third hypothesis, it was stated that the trainers in the interpersonal skills group would rate the field-dependent trainees as more effective counselors at the completion of training than they would field-independent trainees. Failure to confirm this hypothesis may have been due to the same reasons given for failure to confirm the first hypothesis, i.e., methodological problems in the video taping procedures, subjectivity in the use of the CERS, intelligence and achievement factors, differences in social sensitivity and anxiety, or a combination of any or all of these variables. Interpretation of trainers' ratings favored the subjectivity factor, since the trainers appeared to be much more opinionated at the time of the evaluations than did the independent judges. The primary reason for trainer lack of objectivity was attributed to the involved and personal nature of the training format, particularly the informal discussion of trainee performance during the training for purposes of consistent and accurate feedback to trainees on their counseling skills.
Combined with the subjective aspects of some of the items on the CERS, the validity of the trainer evaluations was questionable. Support was given to this interpretation by the fact that trainer ratings had to be subjected to individual statistical analysis, due to failure to attain a satisfactory level of correlation ($r = .45$).

For the fourth hypothesis, the statement was that the trainers in the behavior modification group would rate field-independent trainees as more effective counselors at the completion of training than they would field-dependent trainees. The unusually low correlation obtained between the two trainers' ratings ($r = 0$), as in the interpersonal skills group, posed the question of validity, and required individual statistical analysis of the data. Failure to confirm the third and fourth hypothesis is thus attributed to the lack of objectivity in trainer ratings. In a final effort to establish validity for trainer evaluations of the groups, an attempt was made to correlate trainer ratings with those of the independent judges of the respective groups. Using the average scores of each participant as rated by the independent judges on the posttape evaluations, correlations were found to be .38 and .41, for the interpersonal skills group, and .17 and .47, for the behavior modification group. The low positive correlations, which indicated only modest agreement with the independent judges, were considered additional
support for bias in trainer ratings as a function of personal preferences from working closely with the students in the training situation. Apparently, agreement on the CERS was dependent on the limitation of having only the video tapes as stimuli, since the only high agreement was attained between the three judges for each group, who had no personal or other involvement with the participants in the study.

Hypotheses five and six were tested by the administration of the semantic differential. The conceptual bases of these two hypotheses were consistent with the theoretical position and the empirical evidence underlying the first four hypotheses, but posed the additional question of personal preferences and satisfaction with the training situation according to the specific approach to counseling being taught. Referring to Table IV (p. 56), it can be seen that the behavior modification trainees rated the training experience slightly higher than did the interpersonal skills trainees, but that the means of the total groups vary less than one point. Hypothesis five stated that field-dependent students in the interpersonal skills group would rate the training experience more positively than would field-independent students. Hypothesis six stated that field-independent students in the behavior modification group would rate the training experience more positively than would the field-dependent students in that group.
Interpretation of the null results for both groups could be based on the empirically shown personality traits associated with extreme scores on field-dependence measures. In the review of the literature, it was shown that field-dependent individuals have tended to be more susceptible to external social controls, have exhibited more social orientation as opposed to task orientation, and have shown more social dependence and social compliance, compared to field-independent individuals. Field-independent individuals have tended to maintain independence of judgments and a distinctive task orientation regardless of different types of social pressures introduced into the situation, either by examiners or peers. Because field-dependent individuals have been shown to be more socially sensitive, a possible explanation for failure to confirm the sixth hypothesis was that they may not have been willing to express their dissatisfaction with the training on the semantic differential. Conversely, field-independent trainees in that group could have tended to maintain a more critical and independent attitude, which could have depressed the differences as hypothesized. Combining these factors appeared to provide the most logical explanation for failure to confirm the results for the sixth hypothesis, but were not adequate as an explanation for the fifth hypothesis. For the fifth hypothesis, the factors of a more critical and discriminating evaluation of the training by field
independent trainees, combined with more social dependency, compliance, and acceptance factors of field-dependent trainees, would have possibly confirmed the hypothesis. Since the analysis of the data yielded null results for both hypotheses, other possibilities were considered. First, the greater intellectual ability and achievement orientation of field-independent trainees in the interpersonal skills group could have caused them to be more comfortable with the intensive performance based training format than were field-dependent trainees. If field-independent trainees enjoyed the challenge of mastery of the concepts and applied skills in the training activities, and if they were also relatively insensitive to the direct criticisms and feedback procedures, then they would probably have tended to evaluate the training experience more positively on the semantic differential, thus depressing the hypothesized differences. These same factors could also have caused field-dependent trainees to evaluate the training experience lower than expected, i.e., if they were more sensitive to the direct feedback and criticisms, and were not as comfortable in the intensive performance based training, they would probably rate the training experience less positively than hypothesized. A second possibility for the failure to confirm the fifth hypothesis was that the populations used for the study may not have been representative of the general groups who have exhibited the personality
traits associated with extreme scores on field-dependence measures. By the time a field-dependent individual has completed undergraduate coursework and has aspirations for graduate training, it is possible that he has developed an overlay of more independent-appearing behaviors, including a tendency toward more discriminating and critical attitudes, since these are highly rewarded traits in the university system. On an instrument such as the semantic differential used in the study, with the task being to evaluate an academic training situation, such increased discrimination and critical behaviors would possibly tend to be demonstrated, and could have caused field-dependent trainees to rate the training experience lower than hypothesized. In summation of the results of these two hypotheses, no completely satisfactory explanation for the negative findings appeared possible with the limited data of the study. Administration of additional scales, such as an anxiety scale, a comprehensive personality measure, and perhaps a general attitudinal scale, could possibly have provided more cogent interpretations. The results of the fifth and sixth hypotheses, however, are consonant with the lack of significant differences among field-dependent and field-independent individuals in this sample found in the other areas investigated.
Hypothesis seven was included in the study to test the crucial factor of stability of the field-dependence dimension, since the predictive validity of the GEFT was contingent on the establishment of an acceptable level of test-retest reliability for that instrument. Because of the extensive literature which has supported high test-retest reliabilities for field-dependence measures, the question of stability of the theoretical dimension of field dependence was not foreseen as a problem, which made failure to confirm this hypothesis an unexpected finding. Though there was a six-week interim between the test administrations, with no feedback or other mention of the test made during that time, there was still evidence of practice effects on the posttest administration. The interpretation of practice effects as the primary possibility for the significant improvement of posttest scores was made because twenty-five participants gained one or more points on the second administration. In a similar finding, Evans (16) attributed such improvements on field-dependence measures to familiarity with the test format, not the test content, which could be an appropriate interpretation for the present results. The pretest was administered unexpectedly, since the students had just enrolled in the two classes and had anticipated a relatively academic teaching format, with no prior knowledge that they would be involved in actual counseling training procedures.
The concept of being tested for ability to locate hidden or embedded figures was apparently unfamiliar to the majority of the students, and many had questions, both before and after the test administration. For the posttest administration, however, students were ready to begin the test with only a cursory examination of the sample figures, and appeared eager to start. Some support for Evans' conclusion was possible as a function of these observations, but the crucial question of stability of the theoretical dimension was not satisfactorily resolved for the purposes of the present study. If, in view of the finding of significant differences between pretest and posttest scores on the GEFT, all participants in the study could have been retested with another field-dependence measure, such as the Rod-and-Frame Test (RFT), which would have required a different test format and mastery of new content, then some resolution concerning the theoretically pervasive and stable aspects of field dependence could have been possible for the groups studied. Because of failure to confirm the seventh hypothesis, and the crucial theoretical issue raised by this finding, some of the divergent literature was reviewed, concordant with the evidence of the present study.

Many researchers have been able to effect changes in field-dependence status by manipulating situational variables, either by altering the physiological functioning of subjects, or by systematically changing various
contingencies of reinforcement in the experimental format. In the first of these areas of research, it has been shown that brief sensory deprivation has caused increased field independence. Jacobson (24) found that a sensory deprivation group had significantly fewer errors on the second administration of the RFT than did a control group, who showed no improvement. His explanation of the improvement in the experimental group was that they had acquired increased bodily awareness during the deprivation period, and that this was an asset in the perceptual orientation task posed by the RFT. Support for such changes in field dependence according to body states was offered by Wolf (44), who reported that body rotation led to increased field independence, and by Hill (22), who found that stress decreased level of field independence. Hill's study is supported by Pollack et al. (28), who found that possible decrease of stress due to electroshock therapy tended to increase level of field independence. Using a series of different experimental treatments on a sample of undergraduate females, Reeves (32) also reported that field independence can be increased, with longer treatments the most effective. Callaway (6) found that methamphetamine narrowed perception, while amobarbital broadened it, which caused differences in performance on the Stroop Test and the Embedded Figures Test (EFT). The second area of research was much more salient for the present study.
McAllister (26) reported that performance on the RFT could be significantly improved with the techniques of shaping and fading, using tokens as reinforcers for a group of schizophrenics from a token economy ward. Support for McAllister's results was obtained by Weinberg (39) and by Small (37), both of whom found that normal subjects could be changed toward greater field independence according to the reinforcing contingencies in their studies. Camenietski (7) attempted to influence performance on the RFT in one group by instructions on how to cope with the task, and in another group by small monetary reinforcement. Although Camenietski reported that there were no significant differences between the two groups and a comparison group, he did find a significant decrease in field dependence from pretest to posttest for all three groups, which he concluded was due to practice effects. Weiner (40), in an exceptionally significant study, was able to demonstrate that performance on a rod-in-cube task could be significantly improved by training on adjustment of the cube to the upright. The importance of this finding is Weiner's contention that his results indicated real changes in the perceptions themselves, since transfer effects of perceptual learning were evident. Gross (18) reported that expectancy, or "set," played an important role in modifying performance on the RFT. Finally, Pottinger (29), who was unable to establish a relationship between the Hidden Figures Test and Rotter's Internal-External
Locus of Control Scale, concluded that his results indicated some question about the methods used for establishment of the construct validity reported for field-dependence measures. He felt that the construct-validating test scores could have been largely a function of similar measurement features of the test situation as well as responses to "trait" content. Although Pottinger stated his position as one not specifically identified with behaviorism, his alternative explanation for the findings of field-dependence research appeared consistent with an operant conditioning model. He suggested,

rather than viewing perception as representing personality in its totality of psychological organization, perception is viewed as being continuous with other aspects of personality to the extent that reinforcing consequences are similar. That is, perceptual behaviors, like all other behaviors, are affected by the details of the particular evoking conditions in which they occur. Not only are behaviors specific to particular stimulus situations, . . . but the response mode in which behavior occurs also influences the consequences to which behavior leads (29, p. 7296).

The literature is inconclusive concerning the extent to which learning is a factor in performance on field-dependence measures, and the differences reported between field-dependent and field-independent performance have stimulated little interest among behaviorists. From the literature just cited, however, there is enough evidence to indicate the need for further research directly testing the manipulation
of various contingencies of reinforcement in the test situation, and more explicit investigation of similarities and differences in the reinforcement histories of individuals who perform poorly or well on field-dependence measures. More evidence is needed on the important question of whether the conditioned changes have actually changed pervasive cognitive style behavior, or whether the changes are relatively transitory and specific to a particular test situation. No studies were found which investigated long-term generalization effects of conditioned responses in field-dependence performance.

In addition to studies which have been able to show that performance on field-dependence measures can be altered as a result of the physiological condition of the subject or to the changed conditions of the test situation, there is another area of research which casts doubt on Witkin's position of cognitive style as a unitary and separate construct within the personality structure, and that is the research on the instruments themselves. Because of the null results of the last hypothesis in the present study, this research is especially significant to the theoretical issue on which the study was based, and that is the stability of the field-dependence dimension as operationally defined by performance in either the first or fourth quartile ranges according to norms for the GEFT. A primary recommendation in the case of replication of the study with a similar population would
be to utilize a different measure of field dependence. However, the literature revealed that the measures used for the empirical tests of the theory of psychological differentiation have posed a continual problem, which has not been resolved at the present time. Embedded figures types of tests have generally shown moderately high correlations with the original RFT, but not consistently. The problem originated with Witkin's concept that the early Gottschaldt figures (1926) could be standardized into an instrument that would be an accurate index of field dependence, and could thus be substituted for the RFT. In 1950, Witkin (41) presented the first comprehensive publication for the rationale and use of the Embedded Figures Test (EFT), and, as predicted, it quickly became a widely used test of field dependence, since administration of the RFT requires special apparatus and a lightproof location. That the instruments measure similar discrimination ability is not in question, but the extent to which they require different performance bears further investigation. Haronian and Sugarman (21) and DuPreez (14) both reported correlations as low as .38 between the RFT and the EFT, while even lower correlations ($r = .27, .32$) have been reported by Crutchfield et al. (10) and Goodman (17), respectively. The most commonly reported intercorrelation has been slightly higher, approximately $.50 (5, 36, 31, 1, 19),
although evidence of spuriously high correlations due to the use of extreme scores has also been reported, so that even these correlations may be elevated (12). Another line of evidence that the tests may not measure the same perceptual dimension is the differential predictive validity of the two measures. Renear (33) found that the EFT was predictive of success on parole for a large sample of female prison inmates, but that RFT scores for that same group were unrelated to return or nonreturn to prison. Kurie and Mordkoff (25) found that changes in performance on the RFT due to somatic concentration or stimulus deprivation did not occur on the EFT. Gruenfeld and Arbuthnot (20) suggested from their findings that the EFT was not an adequate substitute for the RFT, and Elliott (15) found that the RFT and the EFT apparently did not measure the same cognitive and personality factors in his study. One of the most crucial questions posed by these studies is how the measures are related, and how they are unrelated, which is still to be determined. One study has even reported a nonlinear relationship between the standard RFT and the Hidden Figures Test (3) which serves to illustrate the extent of the measurement problem for empirical research of the field-dependence dimension.

In view of the lack of agreement often reported between the instruments used to determine level of field dependence, other variables could be assumed to be present. Such factors
as examiner variables, stimulus cues in the test procedures, cues within the test format and content, discrepancies between different populations used in the research studies, and the varying state of the subject according to variables outside the test situation may have been operational in causing low correlations between measures. The EFT, for example, stimulates the cues associated with other standardized testing situations, while the RFT requires entering and adapting to a darkened room, stimulating a very different set of cues for the subject. In general, the EFT may have appeared more simplified and familiar than the RFT to subjects. Such factors as having to perform in the dark and using unfamiliar and perceptually distorting task mechanisms may have had differential effects on individuals who made similar scores on the EFT, which has a minimum personal adjustment for the test situation. Conversely, for some individuals, the face-to-face involvement with the examiner in the format of the EFT, and the fact that the examiner must watch the tracing efforts of the subject very carefully for purposes of timing, may have had differential effects on individuals who performed similarly on the RFT. In the present study, it was observed that the ten individuals who were administered the individual form of the EFT had highly variable reactions to the close observation and timing, some ignoring this procedure, but others appearing to be slightly anxious, making many comments about
not being able to find the simple figures. Reasons for the moderate correlations often reported between the two measures or their various forms is a problem which needs resolution at the present time, and until this is done, the validity of the empirical tests of the theory will continue to be in question.

From the results of the present study, it appeared that explanation of poor or good performance on the GEFT in terms of level of psychological differentiation was not completely adequate, and that other explanations could have been equally useful. Since all the variables in any topography of behavior are never known, a satisfactory explanation of field-dependent or field-independent behavior is not possible at the present time, but some progress has been made, primarily using the same lines of evidence as have been used in the study of the variables associated with the study of general intelligence. Courter et al. (8), for example, found that individuals who performed poorly on field-dependence measures also exhibited a less well-developed autonomic nervous system as measured by standard physiological devices. Courter's finding was supportive of both developmental theory and empirical studies which have demonstrated progressive stages of differentiation which apparently occur in the maturation process. Developmental level may be the single most parsimonious explanation of performance on field-dependence measures, since discrimination
ability has been shown to steadily improve on these measures through young adulthood, and then to gradually decline with age, creating a curve similar to that of standard intelligence curves (43). Arbuthnot (2) directly tested a "maturity hypothesis," which held that field-independent individuals were developmentally more mature than field-dependent individuals. Using three measures of personality and behavior attributes associated with general maturity, he found that performance on the RFT was predictive for the general maturity measures. Organismic limitations and abilities due to the extent of autonomic specificity would appear to be a fruitful area for more research of Witkin's theory. Some of the research of performance on standard intelligence tests and field dependence has also supported the concept of a general maturational dimension as opposed to the more limited concept of psychological differentiation. Dubois (13) found that field-dependence measures had high correlations with intelligence tests which were not dependent on embeddedness, spatial perceptual skills, or nonverbal organization, which is directly contrary to Witkin's contention and empirical evidence that correlations of field-dependence measures with intelligence tests have been "carried" by these overlapping areas of ability. A study by Powell (30) also reported that both the EFT and the RFT were significantly related to the single factor of verbal intelligence, supporting Dubois' findings.
In addition to a developmental and maturity approach to the data of field dependence, another broad interpretation of the findings of field-dependence research was suggested by Irving (23), from the results of his extensive cross-cultural investigation. Comparing data he obtained from several large samples of Dutch, Mexican, and Negro ghetto children in their native locations with the data of the white, middle-class American children primarily used in Witkin's studies, Irving found several distinctive patterns of correlations which indicated that field-dependence tests were apparently not measuring the same combinations of abilities among children in different locations and cultures of the world. He concluded that patterns of abilities develop in response to social role prescriptions for behavior interacting with intellectual ability and development, and that investigation of these two factors would be the most expedient method of explaining perceptual behaviors presently incorporated under the concepts of psychological differentiation. Irving's study is supported by other cross-cultural research with field-dependence measures, which have also reported findings significantly different from those of studies using American samples. Berry (4), for example, found that Eskimo children failed to exhibit the consistent sex differences reported by Witkin--girls in Berry's sample performed equally as well as boys on the RFT. McArthur (27) successfully replicated Berry's study
for Eskimo children, supporting this finding. Also supporting the presence of patterns of abilities in lieu of interpretation in terms of the unitary concept of psychological differentiation was Crego (9), who reported patterns of relationships of the field-dependence measure to Byrne's Repression-Sensitization Scale and to Rotter's Internal-External Locus of Control Scale. Based on his findings, Crego suggested that a "configural" model of pattern analysis would be a more comprehensive approach to cognitive style behaviors than the approach of psychological differentiation. Some support of the need for an approach such as Crego suggested was reported by deGroot (11), who failed to establish the relationship between field dependence and the characteristic "affects" previously reported by Witkin. In Witkin's early studies of patients, he found that field-independent patients characteristically expressed more external hostility, while field-dependent patients expressed more internally directed hostility and shame anxiety (42); deGroot concluded that Witkin's model was not an adequate single predictor of characteristic affect, and that broader explanations of pervasive personality characteristics were needed. Stein (38) also suggested a broader interpretation of personality than that provided by the concepts of psychological differentiation. In this study, clusters of traits were found to have significant relationships, including the traits of field dependence or field independence.
In one group the related cluster was conformity, receptive verbal learning, convergent thinking, and field dependence, and in the other group traits of autonomy, discovery, active verbal learning, divergent thinking, and field independence were found. The first empirical clustering was labeled the "humanities equation," and the second, the "science equation." The concepts of this study appeared to bear further investigation, differing from Witkin's concepts in that a unitary determinant of personality would not be needed, but rather the determination of clusters could possibly be a predictor variable for personal functioning in several areas.

In summation, the literature is supportive of the need for more extensive investigation of the variables of learning and general developmental factors involved in performance on field-dependence measures which purport to indicate either a global or analytical cognitive style. Research appears to be particularly needed on the effects of particular reinforcement histories, contingencies of the various test situations, and the extent of generalization effects of experimental changes on field-dependence measures. Since cognitive style has been related to level of autonomic nervous system development, theoretically it should be difficult to modify global or analytic functioning to extreme degrees, but, as with studies of improvement of intellectual functioning--e.g., Rosenthal and Jacobson
specific changes in contingencies could be related to degree and type of change. The present study was supportive of the fact that performance on at least one field-dependence measure, the GEFT, was subject to significant change and was thus supportive of other investigations which have reported the effects of apparent learning factors on these measures. The significant improvement of posttest performance suggested that use of the GEFT was questionable for the population studied, as did the fact that ten individuals were able to complete all the items correctly in the allotted time, which indicated a comparatively low test ceiling. Future research with similar populations could possibly use a longer form of the group test with shorter timing, or could be administered the individual form of the EFT, which has no test ceiling. Because of the lack of stability of the GEFT in the present study, and the high correlation of the standard intelligence test with that measure, little support for the theoretical position of Witkin was possible from the results of the present study. The problem of possibly quicker and more comprehensive learning of individuals who were designated as field independent, since they also achieved higher scores on the standard intelligence test, also appeared to preclude an interpretation of the results as supportive of the differentiation hypothesis, even for the second hypothesis, though it was confirmed as stated.
Correction of the methodological and measurement problems as suggested, using a similar sample of counselor trainees, could possibly have confirmed more of the hypotheses and the theoretical position, but until this is done, the overall results of the present study tended to support a final possibility that the field-dependence dimension may not be a significant variable in the training of counselors in either of the two orientations to counseling investigated. Without additional data, the relationship between the dimension of field dependence and the approaches of either behavior modification or interpersonal skills counseling will remain indeterminate.
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CHAPTER VI

SUMMARY AND CONCLUSIONS

This study dealt with the problem of counselor education programs in determining which types of candidates have the highest probability of success in mastering the skills and concepts associated with particular orientations to counseling. As an initial effort, the study focused on the effect of one variable, field dependence, on the quality of counseling performance in either of two distinctive orientations, behavior modification or interpersonal skills. The field-dependence dimension was selected because of the extensive empirical evidence of differences in personal functioning of either field-dependent individuals, who perceive both self and the environment with a global cognitive style, and field-independent individuals, who perceive self and the environment with an analytic cognitive style. Literature was cited which showed that field-dependent subjects have demonstrated more social dependence, social compliance, more attention to social cues in stimuli, impulsivity, and rigidity in both task-behavior and social perceptions, than have field-independent subjects. Conversely, this literature had supported that field-independent subjects have been shown to demonstrate more task orientation, independence in judgments, achievement-orientation, and more flexibility on
both experimental tasks and in social perceptions. With these personal differences, it was hypothesized that field-dependent individuals would be better able to master the concepts and skills associated with interpersonal skills counseling, and that field-independent individuals would be better suited for training in behavior modification counseling. The hypotheses were based on the assumption of relatively different orientations to clients and different emphases in the counseling situation according to the model of counseling being applied. In the interpersonal skills group, more emphasis was placed on counselor empathy, understanding of the affective functioning of the client, emotional closeness of counselor and client, and over-all acceptance of the client's perceptions and problems. In the behavior modification group, emphasis was placed on analyzing the client's contingencies of reinforcement which may be maintaining or extinguishing the desired behavior, management of contingencies, and training the client to use self-contingency management, establishment of specific goals for client's desired behavior changes, and designing a highly structured and directive program to help the client effect the goal behaviors.

The purpose of the study was to test the power of the GEFT to predict effectiveness of counseling performance in either the behavior modification or interpersonal skills models after short-term training. If predictive
validity for the field-dependence measure could be established, and the hypotheses confirmed, then the contribution of the present study would be that individuals could be guided into orientations to counseling which would tend to complement their pervasive cognitive styles. The points were made that much time and effort could be saved in training prospective counselors if a more systematic approach to incoming students could be implemented in counselor training programs, and that more research was needed which would investigate the effects of specific variables in both the personal functioning of the incoming graduate students and in the structure of the counselor education program. An additional variable investigated by the study was the degree to which the GEFT was able to predict trainee attitude toward the two orientations to counseling.

The subjects of the study were two groups of incoming graduate students enrolled in the first course offered in a large university counseling program. The behavior modification group consisted of fifteen students, and the interpersonal skills group, twenty-three students. For the purposes of testing the hypotheses, the groups were matched as nearly as possible with regard to all taping and training procedures, which provided a mutual control for the relative effectiveness of training in the two different orientations to counseling. On the basis of the pretest administration of the GEFT in each group, students were classified as
field-dependent, field-neutral, or field-independent, according to the normative data in the *Manual for the embedded figures test* (1, p. 28). Individuals who scored in the fourth quartile were designated as field independent, and in the first quartile, field dependent, using separate normative data for males and females, the latter being slightly more field dependent across most samples in this culture. All other students in the two groups were considered to be field neutral, and were not included in the final statistical analyses, though they participated in the training and taping procedures and data collection exactly as if they were included in the study.

For the test of the first four hypotheses, a performance based criterion procedure was established, with improvement operationally defined as change in ratings on the CERS. Actual counseling sessions of each participant were video taped prior to the initiation of training and again at the completion of training, for evaluation by the three independent judges and two trainers for each group. Tabular presentation of the final statistical results from the two groups were evaluated, and the effects of the training found to be comparable in terms of general improvement of scores from pretape to posttape ratings on the CERS. The first two hypotheses were tested by averaging the scores each participant had received from the three judges for his group on the pretape and posttape evaluations, and then
subtracting the average pretape score from the average posttape score, which yielded a systematic change score. In order to justify the use of this procedure, acceptable levels of interrater reliability had to be established prior to the study. Ten five-minute video taped excerpts of counseling sessions were presented to nine prospective judges for evaluation on the CERS. Subjects for these tapes were master's students in counseling practicums who had been coached for their roles as either counselor or client, a procedure which was designed to help test the reliability of the CERS over a broad range of counseling situations. The three individuals in the two separate orientations to counseling who obtained the highest interrater reliability were selected to participate in the actual study. For the rating of participants in the study, a minimum average correlation between raters was established, and the final average correlations were slightly higher than that minimum.

The first hypothesis stated that field-dependent students in the interpersonal skills group would be rated as more effective counselors after training than would field-independent students. Results from the CERS ratings of the three independent judges for this group indicated no significant differences in improvement scores between field-independent and field-dependent trainees. Several interpretations of these findings were discussed. Such factors
as the taping of an initial session with the client, which could have given field-independent trainees an advantage since initial sessions are often characteristically more cognitive than later sessions in this model, and the higher intellectual and discriminative skill apparently possessed by field-independent trainees in this group, could have depressed differences between field-dependent and field-independent students. Other possibilities suggested were subjectivity factors of some of the items of the CERS, greater mastery of concepts and terminology of the model by the field-independent students, due to their higher intelligence level, possible achievement-motivation factors, and more confidence of field-independent students due to more independent judgment of their skills and less sensitivity to the direct feedback criticisms and evaluations which were an integral part of the training format. Finally, it was suggested that all, or any combination, of these variables could have tended to depress the differences between field-independent and field-dependent students as hypothesized.

The second hypothesis stated that field-independent students in the behavior modification group would be rated as more effective counselors after training than would field-dependent students in that group. Final results showed field-independent students to have significantly higher improvement scores on the CERS ratings than did
field-dependent students, thereby confirming the hypothesis. For interpretation of these findings, it was suggested that the same factors which could have depressed differences between field-dependent and field-independent students in the interpersonal skills group could have tended to increase differences in the behavior modification group. In addition to these possibilities, an additional suggestion was made that the concepts and vocabulary of behavior modification counseling appeared to be more difficult to master than were concepts and vocabulary in the interpersonal skills model, which could have indicated greater possible significance of the higher intelligence levels and achievement-motivation variables which have been shown to be associated with field independence. It was noted that confirmation of this hypothesis would have appeared to have offered support for Witkin's theory of psychological differentiation, if the control for intelligence had not been included in the study. The significant correlation of the GEFT and Otis scores, however, cast doubt on the field-dependence dimension as a singular predictive factor for these results.

The third and fourth hypotheses were also tested with the CERS. The third hypothesis stated that field-dependent students in the interpersonal skills group would be rated as more effective counselors by their trainers at the completion of training than would field-independent students. The fourth hypothesis stated that field-independent students
in the behavior modification group would be rated as more effective counselors by their trainers at the completion of training than would field-dependent students. An unexpected finding of the test of these hypotheses was the failure to find significant correlations of the CERS ratings between the two trainers for each group. Because of this finding, trainer ratings were treated independently. None of the trainer ratings showed significant differences between field-independent or field-dependent trainees in either group, thus failing to confirm the third and fourth hypotheses. It was noted, however, that one trainer rating in the behavior modification group approached significance \((p < .10)\) in the direction hypothesized. The low positive correlation between the trainer ratings was interpreted in terms of subjectivity factors, and the question of validity of trainers' ratings was discussed. In an effort to validate these ratings, an attempt was made to correlate the four individual trainer ratings with the average posttape ratings of the independent judges for their respective groups. Results showed only low positive correlations for both groups, which appeared to confirm the interpretation of limited validity for the trainer ratings. It was suggested that apparently the reliability of the CERS was dependent on the use of video tape stimuli alone, since the primary differential variable between the judges and trainers appeared to be the personal involvement of the latter
with the students in the study, and that the lack of agreement between the two trainers for each group could have been due primarily to subjective factors and bias associated with personal preferences.

The fifth and sixth hypotheses were concerned with the question of possible differences between field-dependent and field-independent students in relative satisfaction expressed according to training in the two orientations to counseling. The fifth hypothesis stated that field-dependent students in the interpersonal skills group would express more positive attitudes toward the training experience than would field-independent students, and the sixth hypothesis stated that field-independent students in the behavior modification group would express more positive attitudes toward the training experience than would field-dependent students. To test these two hypotheses, an eighteen-item seven-point semantic differential was constructed for administration at the completion of training. Analysis of the results showed no significant differences between field-dependent and field-independent students in their evaluation of the training in either group, thus failing to confirm the fifth and sixth hypotheses. It was of interest, however, that further analysis of the interpersonal skills group revealed that field-neutral trainees rated the training experience significantly higher than either field-dependent or independent students. Similar
analysis was not indicated in the behavior modification group, since there were only two field-neutral individuals in that group. For the results of the test of the fifth hypothesis, several interpretations were considered. One possibility suggested was that the greater intelligence and achievement-orientation of field-independent students in the interpersonal skills group may have made them more comfortable with the challenge of intensive short-term training than were field-dependent trainees, which could have caused them to rate the experience more favorably than expected. Consonant with this interpretation, it was suggested that the social dependence and greater social sensitivity which had been shown to be associated with higher levels of field-dependence could have caused field-dependent trainees to be more anxious in the training situation, particularly in competition with the more intellectual and achievement-oriented field-independent individuals in the group. It was noted that higher anxiety of field-dependent trainees could have caused them to rate the training lower than expected. Finally, the possibility was considered that field-dependent students in the population investigated may have not been representative of the general groups for which empirical personality differences between field-dependent and field-independent individuals have been shown. By the time field-dependent individuals have reached the graduate level in a university system, they may have
been able to develop an overlay of more critical behaviors contrary to the basic tendencies associated with global cognitive styles, since these behaviors are highly rewarded in the university setting. Because of the limited data of the study, it was concluded that no completely satisfactory explanation of the findings for the fifth hypothesis could be offered. The sixth hypothesis could be interpreted in terms of the empirical differences which have been shown to be associated with extreme scores on field-dependence measures. It was suggested that the more critical and discriminating attitudes of field-independent individuals, combined with factors of greater sensitivity to social influences and compliance behaviors of field-dependent individuals, could have tended to depress the hypothesized differences between field-dependent and field-independent students in the behavior modification group. As in the interpretation of the fifth hypothesis, it was concluded that no completely satisfactory explanation of these findings were possible from the data of the study, since the empirical factors associated with either field dependence or independence, offered as an interpretation of the sixth hypothesis, could have resulted in confirmation of the fifth hypothesis, which did not occur.

The final hypothesis was tested with the pretest and posttest administrations of the GEFT. Because stability of the field-dependence dimension was crucial to the
predictive validity of the GEFT, the seventh hypothesis was included to state that level of field dependence would not be significantly different on pretraining and posttraining administrations of the field-dependence measure. Contrary to the hypothesis, results of the two administrations of the GEFT showed significant differences in the direction of improved posttest scores in both groups. It was suggested that the most logical explanation for this finding was that, for the population studied, there were significant practice effects on this particular measure of field dependence. The additional problem of the low test ceiling of the GEFT was discussed, and the suggestion was made that use of the individual form of the test would possibly be indicated as a more valid measure of field dependence for future research with graduate student populations. Further discussion of this finding included a review of some of the negative findings in field-dependence literature. Studies were cited which have shown that experimental manipulation of drug administration and physiological states, contingencies of reinforcement, and subject expectancy, or "set," have all altered performance on various measures of field dependence. Research on the measures of field dependence was also cited, and several studies were mentioned which had failed to show significant correlations between the RFT and the EFT, and in some cases, not even between the different forms of the same measures.
Some of the theoretical issues, raised by the rather large number of studies with null results, were discussed, and some suggestions were offered for alternative explanations of the findings attributed to the theory of psychological differentiation. Empirical studies were cited which supported other theoretical positions for the data of field-dependence research, including a "maturity hypothesis," a "configural," or pattern analysis approach, and a combined cultural-developmental position. The latter approach was noted as being particularly well supported by research, which has shown cross-cultural differences in field-dependence performance, and by the evidence that patterns of apparent abilities have tended to be combined in different ways according to cultural and developmental variables.

The results of the present study showed little direct support for the theory of psychological differentiation, and it was suggested that the dimension of field dependence may not be a significant variable in the training of counselors in either of the two orientations investigated. However, several methodological and measurement problems could perhaps preclude an interpretation that field-dependence measures apparently are not predictive of counseling effectiveness in different orientations to counseling. Because of the extensive empirical research which has supported that there are significant differences between field-dependent
and field-independent individuals as measured by the EFT and the RFT and their various forms, it was concluded that such factors as a longer training period, different procedures for video taping, a more refined rating scale for evaluation of counseling performance, and an individual form of either the EFT or RFT could possibly have confirmed more of the hypotheses as stated. The value of the present study was that it followed a relatively systematic approach to the problem of investigating a possibly significant variable in the personal functioning of incoming graduate students in relation to two distinctive orientations to counseling taught within the structure of the counselor education program, and was able to offer some limited empirical suggestions and conclusions concerning that variable.
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Client’s Background

Francette has been married for four years. Both she and her husband are twenty-two years old, recent college graduates, with Bachelor of Business Administration degrees. She is currently working her way up through the ranks of a well-established business concern, and her husband has a good prospect of becoming city manager (his specific major), in another city. He is very excited about this opportunity.

Session 8

The problem is focusing on Francette’s passivity and inability to make a decision about her husband. In a separation period several months ago she made a relatively ineffective attempt at suicide and her husband moved back in to try to help her over the depression and to solve some of the difficulties within the marriage. She is being forced to make the decision whether to move away with her husband (and to continue to move from city to city every few years as he moves up as a city manager of larger cities), or whether she should file for divorce and pursue her own career. She is currently in a state of depression and again mentioning suicide during the counseling sessions.
Training Schedule--Carkhuff Interpersonal Skills

Feb. 5 - March 5, 1974

Trainers: Charles Coller, Bob Gairing

February 5
1st - 2nd hours
A. Two general presentations of the principles underlying the Carkhuff Interpersonal Skills approach to counseling
   1. Social-developmental theory
   2. Core dimensions in helping relationships
   3. Facilitating and retarding concepts
   4. Levels of interpersonal functioning
   5. Evaluation
      a. Scales to measure levels of interpersonal helping dimensions
   6. General vocabulary
      a. Assign the reading of handout, Evaluation of Overall Therapeutic Functioning (Carkhuff, 1969)
      b. Definitions
         1. Empathy
         2. Respect
         3. Genuineness
         4. Confrontation
         5. Concreteness
         6. Self-disclosure
         7. Immediacy
         8. Core dimension
         9. Facilitating relationships
        10. Retarding relationships

B. Question-answer period over lectures and handouts--30 minutes

3rd hour
A. Trainer discussion covering the following interpersonal skills concepts:
   1. Discrimination
   2. Communication
   3. Action-orientation
   4. Common problems treated by interpersonal skills counseling (examples)

B. Hand out practice questions to be completed by the following week

C. Assign reading of Interpersonal Skills Development (Berg, 1973), and announce a short examination to be given over the major concepts and vocabulary of interpersonal skills counseling
February 12

1st hour
A. Review of interpersonal skills vocabulary and concepts--30 minutes
B. Test over vocabulary and concepts--30 minutes

2nd hour
A. Exchange papers and grade, return papers
B. Trainees divide randomly into groups of 12, one trainer in each group. Group discussion and questions concerning the concepts and definitions on the test--30 minutes
C. Trainer demonstrations of the use of the concepts covered on the test, trainees regroup into large group. This will be video taped.
   1. First session, using fellow trainer--10 minutes
   2. Second session, using trainee volunteer--10 minutes
After each session there will be a 15 minute discussion period for trainers to explain their rationale for their counseling responses, and to answer questions. During this discussion the video tape will be replayed to stimulate questions in addition to those in notes taken by trainees during the session.

3rd hour (30 minutes of time remaining)
A. Trainees group into triads. The format for this procedure will be that one trainee is counselor, one is client, and the third will be an observer of the session for purposes of feedback to the counselor. Sessions will last approximately five minutes with the observer trainee using an interpersonal skills rating scale. The observer trainee will be instructed to look for responses that most represent the basic principles of interpersonal skills counseling. Trainers will randomly circulate among the seven triads and give feedback and suggestions on the sessions they observe. Discussion time after each session will be approximately five minutes, after which trainees will change roles until each has been counselor and received feedback.

February 19

1st hour
A. Trainees will group into triads. Each trainee will be in each of the three roles as on February 12. Sessions will last approximately five minutes, as will the feedback from the observer and client trainees to the counselor trainee. Trainers will randomly observe and critique sessions of the seven triads. Random video taping will also be done of sessions. The work schedule for the triads is 50 minutes.

2nd hour
A. Five randomly taped sessions will be replayed for the group. The tape will be stopped at points at which the trainers
feel other responses should have been made, and will make suggestions to the trainee counselor. Questions may also be asked by the group. Each taped segment will be five minutes, with intermittent discussion time an additional five minutes.

3rd hour
A. Hand out and discuss excerpts from Beyond Counseling and Therapy (Carkhuff and Berenson, 1967). Review basic concepts and points involved in Carkhuff's discussion of "the whole person." 30 minutes
B. Trainers will model appropriate counseling behaviors associated with the following concepts:
   1. The presenting problem
   2. Case summaries and reporting
   3. Payment for counseling services
   4. Limitations in counseling
      a. relationships
      b. time-limited counseling

February 26

1st hour
A. Trainees will be randomly divided into smaller groups of 10 for dyad practice and direct feedback from both small group members and trainers. Sessions and the immediate feedback periods will each last approximately five minutes. Total time required for the small group dyad work will be one hour and 40 minutes. During the dyad counseling time, random three minute excerpts will be video taped, using counselor trainees not previously taped.

2nd hour
A. Randomly taped three minute excerpts from counseling sessions will be replayed for the large group for general critiquing and suggestions from trainers, and questions from the group. Five tapes will be presented, with five minutes of intermittent discussion after each tape. Total time is 40 minutes.

3rd hour
A. Two-minute video tapes of a client speaking directly into the camera will be played for the group. Trainees will make an immediate written response after each tape indicating the response they would make to the client and a brief rationale for the response. After the presentation, the trainers will listen to random responses of trainees for critique. Finally, trainers will present the responses they consider to be most consistent with the principles of interpersonal skills counseling and the most appropriate in that counseling situation. They will also give their rationale for the responses. Trainer will have previewed the tapes ahead of time and will agree upon the correct responses. Five-minute periods will be
allowed for the feedback and discussion after each tape.

March 5
1st - 2nd hours

A. Trainees will be given a brief written synopsis of a client's background and statement of his presenting problem. They will be given a few minutes to read this, and be told that they will soon be meeting this client. Both counselor trainee and coached client will be told that this is their eighth meeting, i.e., they are past the initial stages of treatment. The purpose of this is to give the trainee every opportunity to exhibit confidence and understanding of the problem during the session to be taped for final evaluation.

Taping will be done in another room from the rest of the trainees, and will consist of a five-minute excerpt of the session, beginning approximately one minute after the session has begun. The coached client will be the same individual for both pre and posttaping, but will present a different problem for the final taping. Total time required for each taping of both groups will be approximately four hours.

After final taping is completed, the Group Embedded Figures Test, the semantic differential, and the Otis Quick-Scoring Test of Mental Ability, will be administered.
Training Schedule--Behavior Modification

Jan. 30 - Feb. 27, 1974

Trainers: Tom Spencer, Sherry Busbee

January 30

1st - 2nd hours

A. Two general presentations of the principles underlying the behavior modification approach to counseling
   1. Science and Technology
   2. Attitudes of science
   3. Learning theory in counseling
   4. General vocabulary
      a. Assignment in A Primer of Behavior Modification (Wenrich, 1970), pp. 77-85
      b. Definitions
         1. Operant
            a. free
            b. controlled
         2. Operant behavior
         3. Operant conditioning
         4. Reinforcement
            a. positive
            b. negative
         5. Punishment
         6. Extinction
         7. Fading
         8. Shaping
         9. Chaining
        10. Contingencies of reinforcement
        11. Schedules of reinforcement

B. Question-answer period over lectures and handouts--30 minutes

3rd hour

A. Trainer discussion covering the following behavior modification concepts:
   1. Contingency management
   2. Collection and recording of data, establishing goals
   3. Programs
   4. Stimulus control
   5. Verbal behavior
   6. Common problems treated with behavior modification counseling (examples)

B. Hand out practice questions to be completed by the following week

C. Assign the reading of A Primer of Behavior Modification, and announce a short examination to be given over the major concepts and vocabulary of behavior modification counseling
February 6
1st hour
A. Review of behavior modification vocabulary and concepts--30 minutes
B. Test over vocabulary and concepts--30 minutes

2nd hour
A. Exchange papers and grade, return papers
B. Trainees divide randomly into groups of 10, one trainer in each group. Group discussion and questions concerning the concepts and definitions on the test. 30 minutes
C. Trainer demonstrations of the use of the concepts covered on the test for the large group. This will be video taped.
   1. First session, using fellow trainer--10 minutes
   2. Second session, using trainee volunteer--10 minutes
After each session there will be a 15 minute discussion period for trainers to explain their rationale for their counseling responses, and to answer questions. During this discussion the video tape will be replayed to stimulate questions in addition to those in notes taken by trainees during the session.

3rd hour (30 minutes of time remaining)
A. Trainees group into triads. The format for this procedure will be that one trainee is counselor, one is client, and the third will be an observer of the session for feedback purposes for the counselor. Sessions will last approximately five minutes, with the observer taking notes during the session. The observer trainee will be instructed to look for responses that most represent the basic principles of behavior modification counseling. Trainers will randomly circulate among the seven triads and give feedback and suggestions on sessions they observe. Discussion time after each session will be approximately five minutes, after which trainees will change roles until each has been counselor and received feedback.

February 13
1st hour
A. Trainees will group into triads. Each trainee will be in each of the three roles as on February 6. Sessions will last approximately five minutes, as will the feedback from the observer and client trainees to the counselor trainee. Trainers will randomly observe and critique sessions of the seven triads. Random video taping will also be done of sessions. The work schedule for the triads is 50 minutes.

2nd hour
A. Five randomly taped sessions will be replayed for the group. The tape will be stopped at points where the trainers feel other responses should have been made, and will make suggestions to the trainee counselor. Questions may also be asked.
by the group. Each taped segment will be five minutes, with intermittent discussion time an additional five minutes.

3rd hour
A. Hand out and discuss excerpts from Whaley's notes for Psy. 651, Behavior Therapy. Review basic concepts and points involved in Whaley's discussion of behavior therapy.--30 minutes
B. Trainers will model appropriate counseling behaviors associated with the following concepts:
   1. Counselor-client relationships--considerations
   2. Reinforcers and punishers
   3. Payment for behavior modification counseling
   4. Techniques for collection, recording, and use of data

February 20
1st hour
A. Trainees will be randomly divided into smaller groups of 10 for dyad practice and direct feedback from both small group members and trainers. Sessions and the immediate feedback periods will each last approximately five minutes. Total time required for the small group dyad work will be one hour and 40 minutes. During the dyad counseling time, random three minute excerpts will be video taped, using counselor trainees not previously taped.

2nd hour
A. Randomly taped three minute excerpts from counseling sessions will be replayed for the large group for general critiquing and suggestions from trainers, and questions from the group. Five tapes will be presented, with five minutes of intermittent discussion after each tape. Total time is 40 minutes.

3rd hour
A. Two-minute video tapes of a client speaking directly into the camera will be played for the group. Trainees will make an immediate written response after each tape indicating the response they would make to the client and a brief rationale for the response. After the presentation, the trainers will listen to random responses of trainees for critique. Finally, trainers will present the responses they consider to be most consistent with the principles of behavior modification and the most appropriate in that counseling situation. They will also give their rationale for the responses. Trainers will have previewed the tapes ahead of time and will agree upon the correct responses. Five minute periods will be allowed for the feedback and discussion after each tape.

February 27
1st - 2nd hours
A. Trainees will be given a brief written synopsis of a client's
background and statement of his presenting problem. They will be given a few minutes to read this, and be told that they will soon be meeting this client. Both counselor trainee and coached client will be told that this is the eighth session that they have met, i. e., they are past the initial stages of treatment. The purpose of this is to give the trainee every opportunity to exhibit confidence and understanding of the problem during the session to be taped for final evaluation.

Taping will be done in another room from the rest of the trainees, and will consist of a five-minute excerpt of the session, beginning approximately one minute after the session has begun. The coached client will be the same individual for both pre and posttaping, but will present a different problem for the second taping. Total time required for taping will be approximately four hours.

After final taping is completed, the Group Embedded Figures Test, the semantic differential, and the Otis Quick-Scoring Test of Mental Ability, will be administered.
INTERPERSONAL SKILLS MATERIALS
EVALUATION OF OVERALL THERAPEUTIC FUNCTIONING

The facilitator is a person who is living effectively himself and who discloses himself in a genuine and constructive fashion in response to others. He communicates as accurate empathic understanding and respect for all of the feelings of other persons and guides discussions with these persons into specific feelings and experiences. He communicates confidence in what he is doing and is spontaneous and intense and is open and flexible in his relationships with others and committed to the welfare of the other person.

The scale below represents a continuum to rate the presence of the core facilitative conditions of empathy, respect, genuineness, and concreteness.

1.0   1.5   2.0   2.5   3.0   3.5   4.0   4.5   5.0

| None of these conditions are communicated to any noticeable degree in the person. | Some of the conditions are communicated and some are not. | All conditions are communicated at a minimally facilitative level. | All of the conditions are communicated fully, simultaneously and continuously. |

1 From R. Carkhuff, 1969
EMPATHY

A scale to measure its communication

The communication involves the helper communicating back to the helpee that he knows and understands both the feeling and meaning of the helpee's expression and experience.

LEVEL 1 The verbal and behavioral expressions of the helper do not attend to and detract significantly from the verbal and behavioral expressions of feeling of the helpee.

The helper communicates no awareness of even the expressed surface feelings of the helpee.

In summary the helper does everything but express that he is listening, understanding, and is being sensitive to the helpee's feelings.

LEVEL 2 The helper primarily responds to the content and problem area of the helpee while neglecting the helpee's feelings.

The helper may communicate some awareness of the helpee's surface feeling but does so in a manner that detracts affect and meaning from the helpee's expression.

In summary the helper tends to respond to the less relevant portions of the helpee's expression.

LEVEL 3 The helper responds to the expressed feelings of the helpee so that his expression is essentially interchangeable with those of the helpee expressing the same feeling and meaning.

The helper responds in a manner that reflects an understanding of the surface feelings expressed by the helpee.

In summary the helper is responding so as to neither level of facilitative functioning. The helper is responding so as to neither subtract from or add to the helpee's expression. This is the minimal level of facilitative functioning. The helper is responding to what the helpee is saying.

LEVEL 4 The helper's response adds noticeably to the expressions of the helpee in such a way as to express an understanding of the helpee's feelings at a deeper level than the helpee was able to express himself.

The helper's communication expresses a deeper level meaning and understanding and thus enables the helpee to express deeper feelings and meanings.

In summary the helper's expression reflects a deeper level understanding of the helpee. The helper is responding more to what the helpee is not saying.

LEVEL 5 The helper's responses add significantly to the feeling and meaning of the helpee's expression.

The helper responds with accuracy to all the helpee's surface and deep feelings. He is "together" and "tuned in" completely and fully.

In summary the helper is communicating full awareness of the helpee as a person.

This scale has been derived from "a Scale of Empathic Understanding in Interpersonal processes" by R. Carkhuff (1968).
RESPECT

A scale to measure its communication

The communication involves the helper communicating back to the helpee a concern and regard for the helpee - his feelings, potentials and experiences.

**LEVEL 1** The verbal and behavioral expressions of the helper communicate a lack of respect (or negative regard) for the helpee. The manner and tone of the helper's expressions communicates that the helpee's feelings and experiences are not worthy of consideration.

**LEVEL 2** The helper responds in a manner which shows little respect for the helpee's feelings, experiences and the potentials of the helpee. The helper may respond in a mechanical or passive manner and ignore many of the helpee's real concerns and feelings. He may give inappropriate advice indicating that the helpee has little potential to act on his own problems.

**LEVEL 3** The helper communicates a positive regard for the helpee's feelings, experience and potentials.

The helper communicates a concern for the helpee's ability to express himself and deal constructively with his life situation.

In summary the helper communicates that he really cares. This is the minimal effective level.

**LEVEL 4** The helper communicates a deep concern and respect for the helpee. The helper's responses enables the helpee to feel free to be himself and to experience being valued as an individual.

**LEVEL 5** The helper communicates the deepest respect for the helpee's worth as an individual and his potentials.

This scale is derived from "A scale of the communication of respect in interpersonal processes" by R. Carkhuff (1968)
GENUINENESS

A scale to measure its communication

The communication of genuineness consists of the helper expressing his honest feelings to the helpee in a constructive manner.

LEVEL 1  The helper's responses are clearly unrelated to what he is feeling in the moment OR his honest responses are completely destructive to the helpee.

In many respects the helper is defensive.

LEVEL 2  The helper's responses are slightly unrelated to what he is feeling in the moment OR if his responses are honest they are slightly negative and destructive so that the helpee can not react constructively as a basis of inquiry.

The helper may respond in a "professional" manner with a rehearsed quality. The helper just doesn't sound genuinely human (a monotone).

LEVEL 3  The helper provides no "negative" cues or "positive" cues to indicate a truly honest response.

The helper communicates he is listening but his responses do not reflect he is insincere or that he is deeply involved either.

This is the minimally facilitative level.

LEVEL 4  The helper presents cues indicating a genuine honest response (Whether positive or negative) in a non destructive manner.

The helper's responses express his honest feelings in a constructive manner.

LEVEL 5  The helper is freely and deeply expressing himself honestly.

The helper is totally honest and spontaneous - being constructive.

1This scale is derived from "A scale to measure facilitative genuineness in interpersonal processes" by R. Carkhuff (1968).
CONCRETENESS

A scale to measure its communication

In communicating concreteness, the helper guides and directs discussion into personally relevant material in specific and concrete terms.

**LEVEL 1** The helper allows all discussion with the helpee to deal only with vague generalities.

Both parties discuss everything on strictly an abstract and highly intellectual level. The helper makes no attempt to lead discussion into personally relevant specific situations and feelings.

**LEVEL 2** The helper may allow discussion of personally relevant material but deals with it on a vague and abstract level.

The helper may discuss "real" feelings but does so in an abstract and intellectualized level.

**LEVEL 3** The helper at times enables the helpee to discuss personally relevant material in specific terms.

The helper, while guiding the discussion in specific and concrete terms may not develop the area of inquiry fully. This is the **minimal facilitative level**.

**LEVEL 4** The helper is frequently helpful in enabling the helpee to fully develop in specific and concrete terms almost all instances of concern.

The helper frequently guides the discussion to specific feelings and experiences of personally relevant material.

**LEVEL 5** The helper is always helpful in guiding the discussion to specific feelings, situations and events so that the helpee may explore these areas in a concrete manner.

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1 This scale is derived from "A scale of personally relevant concreteness or specificity of expression in interpersonal processes" by R. Carkhuff (1965).
CONFRONTATION

A scale to measure its communication

Confrontation involves the helper focusing upon helpee discrepancies. Types of confrontation include: 1. real versus ideal self; 2. insight versus action; 3. helper versus helpee experiences; Modes of confrontation include: 1. experiential; 2. didactic; 3. confrontation to strength; 4. confrontation to weakness; 5. encouragement to act.

LEVEL 1 The verbal and behavioral expressions of the helper disregard the discrepancies in the helpee's behavior (ideal versus real self, insight versus action, helper versus helpee's experiences).

The helper may simply ignore all helpee discrepancies by passively accepting them.

In summary, the helper simply disregards all of those discrepancies in the helpee's behavior that might be fruitful areas for consideration.

LEVEL 2 The verbal and behavioral expressions of the helper disregard the discrepancies in the helpee's behavior.

The helper, although not explicitly accepting these discrepancies, may simply remain silent concerning most of them.

In summary, the helper disregards the discrepancies in the helpee's behavior, and, thus, potentially important areas of inquiry.

LEVEL 3 The verbal and behavioral expressions of the helper, while open to discrepancies in the helpee's behavior, do not relate directly and specifically to these discrepancies.

The helper may simply raise questions without pointing up the diverging directions of the possible answers.

In summary, while the helper does not disregard discrepancies in the helpee's behavior, he does not point up the directions of these discrepancies. Level 3 constitutes the minimum level of facilitative interpersonal functioning.

LEVEL 4 The verbal and behavioral expressions of the helper attend directly and specifically to the discrepancies in the helpee's behavior.

The helper confronts the helpee directly and explicitly with discrepancies in the helpee's behavior.

In summary, the helper specifically addresses himself to discrepancies in the helpee's behavior.

LEVEL 5 The verbal and behavioral expressions of the helper are keenly and continually attuned to the discrepancies in the helpee's behavior.

The helper confronts the helpee with helpee discrepancies in a sensitive and perceptive manner whenever they appear.

In summary, the helper does not neglect any potentially fruitful inquiry into the discrepancies in the helpee's behavior.

From R. Carkhuff, 1969.
IMMEDIACY

A scale to measure its communication.

The communication of immediacy involves the helper focusing upon the "here and now" ongoing relationship between himself and the helpee.

LEVEL 1 The verbal and behavioral expressions of the helper disregard the content and affect of the helpee's expressions that have the potential for relating to the helper. The helper may simply ignore all helpee communications, whether direct or indirect, that deal with the helper-helpee relationship. In summary, the helper simply disregards all of those helpee messages that are related to the helper.

LEVEL 2 The verbal and behavioral expressions of the helper disregard most of the helpee expressions that have the potential for relating to the helper. Even if the helpee is talking about helping personnel in general the helper may, in general, remain silent or just not relate the content to himself. In summary, the helper appears to choose to disregard most of those helpee messages that are related to the helper.

LEVEL 3 The verbal and behavioral expressions of the helper, while open to interpretations of immediacy, do not relate what the helpee is saying to what is going on between the helper and the helpee in the immediate moment. The helper may make literal responses to or reflections on the helpee's expressions or otherwise open-minded responses that refer to no one specifically but that might refer to the helper. In summary, while the helper does not extend the helpee's expressions to immediacy he is not closed to such interpretations. Level 3 constitutes the minimum level of facilitative interpersonal functioning.

LEVEL 4 The verbal and behavioral expressions of the helper appear cautiously to relate the helpee's expressions directly to the helper-helpee relationship. The helper attempts to relate the helpee's responses to himself, but he does so in a tentative manner. In summary, the helper relates the helpee's responses to himself in an open, cautious manner.

LEVEL 5 The verbal and behavioral expressions of the helper relate the helpee's expressions directly to the helper-helpee relationship. The helper in a direct and explicit manner relates the helpee's expressions to himself. In summary, the helper is not hesitant in making explicit interpretations of the helper-helpee relationship.

1 From R. Carkhuff 1969.
SELF DISCLOSURE

A scale to measure its communication

Communicating self disclosure involves the helper sharing his experiences and ideas in line with helpee interests and concerns.

LEVEL 1 The helper actively attempts to remain detached from disclosing anything of himself to the helpee.

The helper by avoiding to show the helpee who he is may cause the helpee to lose faith in him.

LEVEL 2 The helper, while not appearing to actively avoid self-disclosures never volunteers personal information about himself.

The helper may respond to direct questions from the helpee but does so in brief and vague manner.

LEVEL 3 The helper volunteers personal information about himself in keeping with the helpee's interests and concerns but this information is often vague and indicates little about the unique character of the helper.

While the helper volunteers personal information and ideas and never gives the impression that he doesn't wish to disclose more about himself, the content of his verbalizations are generally centered upon the reactions of the helpee and ideas concerning their interaction.

In summary, the helper volunteers personal information but the content does not stamp him as a unique person. This is the minimal facilitative level.

LEVEL 4 The helper freely volunteers information about his personal attitudes and experiences that are relevant to the helpee's concerns.

The helper's expressions reveal himself as a unique individual.

In summary, the helper is free and spontaneous in volunteering personal information which may reveal in a constructive fashion, quite intimate material about his own feelings, values and beliefs.

LEVEL 5 The helper volunteers very intimate and often detailed material about his own personality which is in keeping with the helpee's needs.

The helper gives the impression of holding nothing back in disclosing his feelings and ideas fully in a constructive fashion.

1The present scale is derived from "Facilitative Self Disclosure in Interpersonal Processes" by R. Carkhuff (1968).
Self-Exploration (by Client) in Interpersonal Processes

A Scale for Measurement

Robert R. Carkhuff

Level 1

The second person does not discuss personally relevant material, either because he has had no opportunity to do such or because he is actively evading the discussion even when it is introduced by the first person.

Example: The second person avoids any self-descriptions or self-exploration or direct expression of feelings that would lead him to reveal himself to the first person.

In summary, for a variety of possible reasons, the second person does not give any evidence of self-exploration.

Level 2

The second person responds with discussion to the introduction of personally relevant material by the first person but does so in a mechanical manner and without the demonstration of emotional feeling.

Example: The second person simply discusses the material without exploring the significance or the meaning of the material or attempting further exploration of that feeling in our effort to uncover related feelings of material.

In summary, the second person responds mechanically and remotely to the introduction of personally relevant material by the first person.

Level 3

The second person voluntarily introduces discussions of personally relevant material but does so in a mechanical manner and without the demonstration of emotional feeling.

Example: The emotional remoteness and mechanical manner of the discussion give the discussion a quality of being rehearsed.

In summary, the second person introduces personally relevant material but does so without spontaneity or emotional proximity and without an inward probing to newly discover feelings and experiences.

Level 4

The second person voluntarily introduces discussions of personally relevant material with both spontaneity and emotional proximity.

Example: The voice quality and other characteristics of the second person are very much "with" the feelings and other personal materials which are being verbalized.
In summary, the second person introduces personally relevant discussions with spontaneity and emotional proximity but without a distinct tendency toward inward probing to newly discover feelings and experiences.

**Level 5**

The second person actively and spontaneously engages in an inward probing to newly discover feelings or experiences about himself and his world.

Example: The second person is searching to discover new feelings concerning himself and his world even though at the moment he may be doing so, perhaps, fearfully and tentatively.

In summary, the second person is fully and actively focusing upon himself and exploring himself and his world.

1The present scale "Self-exploration in interpersonal processes" has been derived in part from "The measurement of depth of intrapersonal exploration (Truax, 1963) which has been validated in extensive process and outcome research on counseling and psychotherapy (Carkhuff and Truax, 1965, 1965a, 1965b; Rogers, 1962; Truax, 1963; Truax and Carkhuff, 1963, 1964, 1965). In addition, similar measures of similar constructs have received extensive support in the literature of counseling and therapy (Blau, 1953; Braaten, 1958; Peres, 19471, Seeman, 1949, Steele, 1948; Wolfson, 1949)."

The present scale represents a systematic attempt to reduce the ambiguity and increase the reliability of the scale. In the process many important delineations and additions have been made. For comparative purposes, Level 1 of the present scale is approximately equal to State 1 of the early scale. The remaining levels are approximately correspondent: Level 2 and Stages 2 and 3; Level 3 and Stages 4 and 5; Level 4 and Stage 6; Level 5 and Stages 7, 8, and 9.
Counseling as a Way of Life

The following points are excerpted from *Beyond Counseling and Therapy*, by R. R. Carkhuff and B. G. Berenson, New York, Holt Rinehart and Winston, Inc., 1967

Carkhuff's central thesis is that the life of the whole person is made up of actions fully integrating his emotional, intellectual, and physical resources in such a way that these actions lead to greater and greater self-definition. The counselor who accepts the responsibility for having impact on others will realize that counseling is as effective as the therapist is living effectively.

Effective counseling and therapy are not separate from life, but they do offer a unique and vivid contrast to the general life experience in society. To break free of roles, live "fully in the moment," and experience life at its deepest levels, carry the following implications of becoming a "whole person."

1. The only consistency for the whole person is internal.

2. Creativity and honesty are a way of life for the whole person.

3. Although the way the whole person lives his life is seen by others as too dangerous, too intense, and too profound, he is in tune with the fact that his real risk involves living life without risk.

4. The whole person realizes that life is empty without acting.

5. The whole person realizes that whatever he does is worth doing fully and well.

6. The whole and creative person functions at a high energy level.

7. The whole person comes to the realization that few men are large enough or whole enough to nourish and love the creative person.

8. The whole person is fully aware that any significant human relationship is in the process of deepening or deteriorating.
9. The whole person realizes that most men say "yes" out of fear of saying "no," and that most men say "no" out of fear of saying "yes."

10. The whole person is fully aware that in order to live life in such a way that it is a continuous learning and relearning process, he must periodically burn bridges behind him.

11. The whole person realizes that he is, and must be, his own pathfinder, and travel a road never traveled before.

12. The whole person does not fear living intensely.

13. The whole person is prepared to face the implications of functioning a step ahead or above most of those with whom he comes into contact.

14. The whole person is aware that for most people life is a cheap game.

15. The whole person is fully aware that many of society's rewards are designed to render the creative impotent.

16. The whole person realizes that to emerge within the acceptable levels tolerated by society means institutionalization.

17. The whole person realizes that he must escape traps to render him impotent.

18. The whole person is aware of the awesome responsibility which comes with freedom.
1. Briefly describe Carkhuff's "whole person." List the three major dimensions of man and describe the importance of each dimension.
2. Define and describe the primary helping dimensions of the Carkhuff model of counseling. Describe the core conditions under each.
3. Describe the five-point scale designed by Carkhuff-Truax to help measure the extent of the core dimensions in helping relationships. What are the characteristics of each level of these conditions?
4. How does Berg state that the discrimination dimension can be improved by an individual wishing to become an effective helper?
5. What is the role of the next dimension, communication, in the helping relationship, according to Berg?
6. Discuss the role of "concreteness" in the helping relationship. What is the value of this dimension, i.e., how does it help the client with his problems?
7. Some important facilitative aspects of high level "accurate empathy" responses are:
8. What are some various types of confrontation? How is the client helped by high level confrontation responses, i.e., what is the focus of this dimension?
9. What is the dimension of immediacy? How does it help when offered to the client at high facilitative levels?
10. Responses can be Additive, Interchangeable, or Subtractive. Describe what these terms mean in the counselor-client relationship.
11. According to the model of counseling which you are studying, what is the primary purpose of counseling, i.e., what are the goals. Use the language used in the Carkhuff model in describing the purposes of counseling.
Observer Rating Sheet

Client ___________________________ Counselor ___________________________

Observer ___________________________ Date _____________

1. Communicates an accurate understanding of the client
   Low ______ ______ ______ ______ ______ ______ ______ ______ ______ High

2. Communicates warmth, acceptance, and respect for the client
   Low ______ ______ ______ ______ ______ ______ ______ ______ ______ High

3. Exhibits constructive genuine verbalizations
   Low ______ ______ ______ ______ ______ ______ ______ ______ ______ High

4. Is spontaneous, personally open, and involved
   Low ______ ______ ______ ______ ______ ______ ______ ______ ______ high

5. Facilitates specific, direct, and concrete verbalizations and feelings
   Low ______ ______ ______ ______ ______ ______ ______ ______ ______ High

6. Confronts client with discrepancies in behavior and verbalizations
   Low ______ ______ ______ ______ ______ ______ ______ ______ ______ High

7. Capitalizes on and interprets the client-counselor interpersonal relationship
   Low ______ ______ ______ ______ ______ ______ ______ ______ ______ High

8. Facilitates client spontaneity, inward probing, and action-oriented behavior
   Low ______ ______ ______ ______ ______ ______ ______ ______ ______ High

Additional comments

________________________________________________________________________
________________________________________________________________________
BEHAVIOR MODIFICATION MATERIALS
Patient-problem variables

You must define the problem, (this is 50% of the problem). Remember: No one is there for the reason they say they are, and don't be fooled--when they do tell you the problem, that's not all the problem--the problem is different from what the referral source tells you it is, what the patient himself tells you it is, and what you originally think it is.

Important points

1. Who referred the patient--who is paying the bill, and who wants the patient changed. That person is the consumer of your services and he calls the shots. He determines whether or not you are successful. If the patient is self-referred, he must be happy with the criteria. If his rate of behavior doesn't change, you haven't treated the problem. But you must consider his criteria of change. You may ask the patient, "What would convince you that you're over the problem?" and use this as criteria.

2. The nature of the behavior--Is the behavior by necessity private? (e.g., pain, anxiety, hallucinations, obsessions, thoughts, feelings, etc.) If the patient is self-referred, then the only criterion is when he says he no longer is bothered or has these private behaviors. However, the patient's analysis of his problem is usually wrong, (e.g., "I can't find friends," could mean that he makes them but can't keep them. "I can't sleep," could mean that he can sleep but at the wrong times. Initially the therapist is very accepting and very friendly and may even reinforce the maladaptive behaviors in order to get an accurate description of it, since it is private behavior.

3. The rate of the problem behavior
   A. Is the problem behavior primarily a deficit problem or is it a problem of activity which should be eliminated? Does he do it when he shouldn't or not do it when he should?
   B. Is it a high rate or a low rate problem? (nature of the responses) A nice regular high-rate behavior is easier to deal with--a nondiscriminated high rate behavior is easier to clear up then are low rate behaviors (e.g., suicide, murder).
It is important to place the patient's problem on some dimension, after you've agreed with the patient on the problem you're going to work on, (which may not be the one he came in to have solved). All this is done in front--the therapist is a technician in an interpersonal relationship and this relationship must be kept on an even keel--you can lose with the patient in that he doesn't return for more therapy if he loses faith in you. You must take full responsibility for what happens--you are the controller of the relationship. In interpersonal control situations, it is good to know and define the controller and controllee--and since you are dispensing the services and getting paid for doing so, you are normally the controller.

Big mistakes often made by the therapist in an across-the-desk situation

1. Appeasing the client--Appeasement is an insidious, subtle change of consciousness which occurs because ambiguous information is given. Appeasement may be said to occur when the therapist allows the client to believe something will happen when it won't, (e. g., if a patient comes in and complains that although you had discussed three months as a minimum time for behavior changes to occur he feels that you're not making much progress. The natural inclination of the therapist might be to say, "Let's talk about that." The response should be instead that the client is not competent to judge that sort of thing--discussing things that are outside the realm of treatment or outside the patient's competency to judge is appeasement. When you as a therapist appease a patient you're actually afraid you're wrong or have done an injustice. Remember, patients have short vision and can't see the future--you as the therapist have that vision and if you appease them the patient will keep coming up with the same topics for conversation, impeding therapeutic progress. Even if you do help him, he won't believe that you did.

In countering appeasement, most of us must assume a hard, detached, punishing demeanor when we tell them something is "out of bounds." When you punish the patient, you are doing so to modify his behavior, not to let off aggression.

2. Therapist is afraid of the client--He is afraid to touch them, to show them he has clay feet, afraid to be human. But he must learn to let people know he cares about them. There are two main ways that therapists bind clients to them:
A. Hold the client through magic and misinformation—deceive them. Most do this.
B. Convince the client that you really do care about him—you denounce their problem but accept them as persons. There is no room for judgment in therapy!

Reasons therapists are afraid of their clients:
A. Lack of confidence because they think they're taking money under false pretenses.
B. Asking oneself, "Can I help him?" Be careful not to evaluate yourself as better or worse than the client.
C. Getting close to the client. It isn't necessary to keep a psychological distance between yourself and the client.
D. Letting him know you really care. Remember that you're both human beings, and you really care about him.

3. Control—How to get clients to stay in therapy
A. Always charge for your services—free therapy rarely works because of our histories in that we are reinforced through effort and effort is reduced to "cost." Patients will listen to you and do what you tell them if you are charging for your advice. If the patient cannot afford your services, an alternate solution is to give him back some of his money for doing outside programs. Give him credit slips for desired behaviors, and when he gets his bill for your services he submits his credit slips. Use the client's money to gain control over the client.
B. Reinforce the client for showing up.
C. The client must know that the services of therapy are more important to him than they are to you. If he ever feels differently, you've lost control. Note: Letting the client know he has options (dropping out of therapy) should not be used as a threat—keep this in front to keep the client honest.

Anxiety neuroses
1. There is usually a precipitating event—a time when the problem began. The patient can remember the onset—however, this report may be a function of the patient's expectations in terms of therapy.
2. All of these patients are above average in intelligence—they are very verbal.
3. Usually there is a history of traditional therapy and lots of talk of anxiety and fear—these patients are very
poor monitors of their own behavior.

The key to the problem lies in the fact that the problem itself has nothing to do with anxiety per se. As William James said: "It's not so much that you run because you're afraid, but rather you're afraid because you run." It's not the anxiety, but the avoidance response that the patient makes which is important.

The cue for the avoidance response is the monitoring of anxiety and the reinforcement for avoidance response is social condoning plus the fact that the client gets out of many situations. The avoidance paradox has set in--once he runs and he sets up running as a response pattern, anxiety cannot extinguish. Once he avoids, he is more likely to do it again because he has been reinforced.

Whether or not anxiety pervades is a function of what happens after it. If the client makes the avoidance response, it pervades--it is a function of the reinforcement matrix. Remember: Once avoidance is reinforced, detection of anxiety is also reinforced.
Definitions

1. *Operant*—a response which works on the environment and is controlled and maintained by it. For most purposes, "operant" is interchangeable with traditional "response," but the term allows making a distinction between an instance of behavior, (e.g., John smoked a cigarette at 2:15 yesterday), and a kind of behavior, (cigarette smoking). "Operant" is concerned with the prediction and control of a kind of behavior.

2. *Operant behavior*—activities which operate on the environment.

3. *Operant conditioning*—a way of controlling the probability of occurrence of a certain class of responses.

4. *Reinforcement*—that which follows a response and increases the future probability of the occurrence of that response.

5. *Punishment*—that which follows a response and decreases its future probability. An event is said to be a "punisher" only if it results in a reduction in the response which it follows. In order to be termed punishment, an event must be arranged to follow a particular response and also to result in a decrease in that response. There are two basic forms of punishment. The first form occurs when an aversive stimulus is presented as a consequence of a response. The second form occurs when a positive reinforcer is withheld or withdrawn as a consequence of a response.

6. *Extinction*—a method used to decrease the rate of occurrence of a response. The procedure consists of withholding the reinforcement for a conditioned response. This differs from "forgetting," in that when forgetting occurs the rate is decreased because the response does not occur, thus it cannot be reinforced. In extinction, the response does occur, but does not get reinforced.

7. *Fading*—a gradual change procedure used to get an organism to emit a response it already has in its repertoire to a new stimulus. The stimulus is gradually changed from one that has been previously paired with the reinforced response to an entirely novel stimulus. This is similar to the shaping procedure, except shaping varies the response, while fading varies the stimulus.
9. **Chaining**--a procedure of gradual change which uses systematic reinforcement of successive approximations of a desired target or terminal behavior to get the organism to emit the new response. The behavior reinforced at first may only resemble the terminal behavior in some small detail. As the procedure progresses, the reinforcement is given for a response which more closely resembles the desired response, until only the desired response is reinforced.

9. **Chaining**--the establishment of stimulus-response chains. These consist of a sequence of discriminative stimuli and responses. Each response produces some change in the environment which acts as a discriminative stimulus for the succeeding response. The discriminative stimuli in the chain become conditioned reinforcers for the responses which produce them.

10. **Discriminative stimuli**--the stimulus with which reinforcement is associated. This is commonly abbreviated "S^D" (pronounced "ess-dee"). The association is made by reinforcing responses in the presence of a specified stimulus and not in the presence of other stimuli. This can be thought of as a "cue" which causes the organism to respond.

11. **Contingency**--the situation in which the stimulus-response-reinforcement occurs. The interrelationships between these are **contingencies of reinforcement**.
1. Science and Technology
   A. Old fears
   B. Growth and development
   C. Look and see

2. Attitudes of Science
   A. Empiricism
   B. Parsimony
   C. Determinism
   D. Scientific manipulation

3. Learning theory in Counseling
   A. Principles of learned behavior
   B. Early learning theorists
   C. Contemporary learning theorists

4. Definitions
   A. Operant
      1. free
      2. controlled
   B. Operant behavior
   C. Operant conditioning
   D. Reinforcement
   E. Punishment
   F. Extinction
   G. Fading
   H. Shaping
   I. Chaining
   J. Contingencies of reinforcement
   K. Schedules of reinforcement

5. Modeling
Four Basic Attitudes of Science

Science, the hard-core physical kind, as well as that of behavior, has certain attitudes to which it ascribes. Four of these attitudes seem particularly important, and so we will address ourselves to them. The four attitudes are: empiricism, determinism, parsimony, and scientific manipulation. These have been singled out as being the most useful to the beginning behavioral scientist.

Empiricism

Basically this attitude dictates a "look and see," ideology. Rather than assuming relationships, science states that certain observable operations must be applied before concluding an assumption is obtainable. To be an empiricist, then, is to be an observer.

Determinism

The world, or the universe, is a lawful, orderly place—so states the attitude of determinism. Nothing occurs without the presence of certain naturalistic conditions which collectively constitute a scientific course. Psychologists assume that behavior is lawful, and by observing the causal factors, hope to be able to change the conditions, thus changing behavior patterns.

Parsimony

"Stingy" is a good synonym for parsimonious. In other words, the scientist should be stingy in their speculations or hypotheses about the causes of scientific phenomena. In essence the "Law of Parsimony" says that a scientist should never hypothesize a complicated or more abstract scientific explanation unless all of the simpler explanations have been experimentally ruled out.

One extremely parsimonious hypothesis deals with behavior, and states that behavior is controlled by its consequences. This means that people do or do not do things, because they have either been rewarded or punished for doing them.

Scientific Manipulation

If two things or events appear to be related and you want to know if the relation is happenstance or really a cause and effect one, the way to find out is to change or manipulate the occurrence of one event and see what happens to the other. This is scientific manipulation, and unless it is done, the scientist can never be sure of the kinds of relationships with which he is concerned.
Practice Questions

Name _____________________________

Multiple-Choice

1. A reinforcing stimulus is roughly the same as a (an) ___.
   A. result
   B. strengthened response
   C. reward
   D. specified behavior

2. The probability of future occurrences of a response is increased when that response is followed by a ___.
   A. reinforcer
   B. punisher
   C. avoidance contingency
   D. consequence

3. The first rule of contingency management is ___.
   A. nothing in excess
   B. nothing in moderation
   C. there is no such thing as contingency management

4. If one event occurs, then another event will follow. This relationship between a behavior and its consequences is known as a (an) ___.
   A. expectation
   B. fact
   C. contingency
   D. relevant relation

5. A (an) ___ approach to a question means to look at the situation and see what's happening.
   A. parsimonious
   B. deterministic
   C. empirical
   D. mentalistic

6. If a question is an empirical question, it means that it can only be answered by ___.
   A. observation
   B. ingenuity
   C. creative thought
7. ___ tells us why we do what we do.
   A. Psychology (science of behavior)
   B. Environment
   C. Conscience
   D. Contingency management

8. A punisher is:
   A. an event that increases the frequency of the behavior it follows
   B. an event that decreases the frequency of the behavior it follows
   C. an event that has no effect on the frequency of the behavior it follows
   D. a punishing consequence

9. A reinforcer is:
   A. an event that increases the frequency of the behavior it follows
   B. an event that decreases the frequency of the behavior it follows
   C. a reinforcing consequence

10. Consequence is:
    A. a general term which can refer to either reinforcement or punishment
    B. the presentation of the consequences
    C. a sequel relation between two events
    D. the behavior which is being strengthened
    E. A and B

11. An unconditioned reinforcer is:
    A. an event that does not require prior association with other reinforcers in order to have reinforcing properties
    B. an event which acquires its reinforcing properties through association with other reinforcers
    C. the same as a primary reinforcer
    D. A and C

12. A contingency is:
    A. the reinforcer or punisher that follows a behavior
    B. a sequential relation between two events
    C. the consequence that follows a specified behavior
13. Withholding the reinforcement that has been maintaining a response in the definition of
A. negative reinforcement
B. extinction procedure
C. extinction behavior
D. shaping
E. B and C

14. The method of differentially reinforcing responses which successively approximate the terminal response is the definition of:
A. the method of successive approximation
B. stimulus-response chaining
C. shaping
D. A and C

15. In the extinction procedure, reinforcement is ___; in the second type of punishment contingency, reinforcement is ___ contingent upon a response.
A. withheld
B. presented
C. contingent
D. withdrawn
E. delayed
Define the following and give one behavioral example of each one without an asterisk (*).

1. Operant
2. Reinforcement
3. Punishment
4. Extinction
5. Fading*
6. Shaping*
7. Chaining
8. Discriminative stimuli
9. Empiricism*
10. Parsimony*
11. Determinism*
12. Scientific manipulation*
Points to Remember in an Analysis of Behavior

1. Have you gotten all the personal data? (name, address, age, phone, family structure, etc.)

2. Are you and the client comfortable in the counseling setting? If not, what can you do to relieve the discomfort?

3. Have you gotten the client to define the problem behavior?
   A. When does the behavior occur
   B. What occurs before the behavior
   C. What occurs after the behavior
   D. How often does the behavior occur
   E. If the behavior is private in nature, what other behaviors occur at the same time which can be measured
   F. How long has the problem been occurring (duration, onset)
   G. How does the behavior affect other behaviors in the client's repertoire
   H. How does the behavior affect the people with whom the client interacts
   I. Does the client tell other people about the behavior? If so, how often, and how do they react?

4. What are the client's goals in terms of the problem behavior? Are they realistic? Are they in terms of measurable behavior? If not, what do you think is realistic?

5. What behaviors does your client have which are good and can be used on which to build, e.g., work skills, recreation, special skills.

6. What incompatible behavior (with the problem behavior) can be substituted for the problem behavior?

7. Who are the influential people in the client's life (his social community).

8. What reasons have you given the client for returning to see you? Has the client told you he will see you next week? Have you set an appointment time?

9. Have you ended on a positive note? Smiles, handshakes, pleasant words.
APPENDIX D
Rating Scale for Training Program

Please rate the training sessions according to the following adjectives. Note that the ratings are from +3 to -3 as illustrated below.

+3 +2 +1 N -1 -2 -3

Since there is no grade or other evaluation involved, please answer as honestly as you can. This will be of great help in our planning of future sessions. Thank you.

Fill in your answer in the space provided at the left of each item.

Training

1. Worthwhile __ __ __ __ __ __ Not worthwhile

2. Interesting __ __ __ __ __ __ Boring

3. Success __ __ __ __ __ __ Failure

4. Varied __ __ __ __ __ __ Repetitive

5. Difficult __ __ __ __ __ __ Easy

6. Good __ __ __ __ __ __ Bad

7. Relaxed __ __ __ __ __ __ Tense

8. Wise __ __ __ __ __ __ Foolish

9. Real __ __ __ __ __ __ Unreal

10. Safe __ __ __ __ __ __ Dangerous

11. Strong __ __ __ __ __ __ Weak

12. Hot __ __ __ __ __ __ Cold

13. Deep __ __ __ __ __ __ Shallow

14. Fair __ __ __ __ __ __ Unfair
15. Fast ___ ___ ___ ___ ___ ___ ___ Slow
16. Clear ___ ___ ___ ___ ___ ___ Muddy
17. Important ___ ___ ___ ___ ___ ___ Insignificant
18. Concrete ___ ___ ___ ___ ___ ___ Abstract
COUNSELOR EVALUATION RATING SCALE

Name of Counselor ________________________ Judge Code ______

Please evaluate counseling performance according to the statements below. Mark each statement in the left hand blank according to how strongly you agree or disagree. Write in +3, +2, +1, 0, -1, -2, or -3 to represent the following scores:

+3--I strongly agree
+2--I agree
+1--I slightly agree
0--Uncertain
-1 -- I slightly disagree
-2 -- I disagree
-3 -- I strongly disagree

1. Demonstrates an interest in client's problems.
2. Tends to approach clients in a mechanical, perfunctory manner.
3. Lacks sensitivity to dynamics of self in supervisory relationship.
4. Seeks and considers professional opinion of supervisors and other counselors when the need arises.
5. Tends to talk more than client during counseling.
6. Is sensitive to dynamics of self in counseling relationships.
7. Cannot accept constructive criticism.
8. Is genuinely relaxed and comfortable in the counseling session.
9. Is aware of both content and feeling in counseling sessions.
10. Keeps appointments on time and completes supervisory assignments.
11. Can deal with content and feeling during supervision.
12. Tends to be rigid in counseling behavior.
13. Lectures and moralizes in counseling.
14. Can critique counseling tapes and gain insights with minimum help from supervisor.
15. Is genuinely relaxed and comfortable in the supervisory relationship.
16. Works well with other professional personnel (e.g., teachers, counselors, etc.).
17. Can be spontaneous in counseling, yet behavior is relevant.
18. Lacks self-confidence in establishing counseling relationships.
19. Can explain what is involved in counseling and discuss intelligently its objectives.
21. Can express thoughts and feelings clearly in counseling.
22. Verbal behavior in counseling in appropriately flexible and varied, according to the situation.
23. Lacks basic knowledge of fundamental counseling principles and methodology.
24. Participates actively and willingly in supervisory sessions.
25. Is indifferent to personal development and professional growth.
26. Applies a consistent rationale of human behavior to counseling.
27. Can be recommended for a counseling position without reservation.
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**Reports**


**Unpublished Materials**


