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RELATIONSHIP BETWEEN COUNSELOR TRAINEE PATHOGENESIS, CERTAIN PERSONALITY TRAITS, IN-THERAPY COUNSELOR BEHAVIORS, AND ABILITY TO OFFER EMPATHIC UNDERSTANDING

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By

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ABSTRACT

RELATIONSHIP BETWEEN COUNSELOR TRAINEE PATHOGENESIS, CERTAIN PERSONALITY TRAITS, IN-THERAPY COUNSELOR BEHAVIORS, AND ABILITY TO OFFER EMPATHIC UNDERSTANDING

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The purpose of this study was to determine the effect of a specific counselor personality characteristic--counselor pathogenesis--on the counseling process. The subjects were 20 graduate students from the MA counselor training program at Michigan State University. Subjects were enrolled in the second of two required counseling practicums and had successfully completed a minimum of 75% of the necessary degree requirements. The 20 subjects were accepted on a volunteer basis from a population of 23 students eligible for inclusion in the study.

Criteria for acceptance into the study were each subject's commitment to two 1-1/2 hour testing sessions and the submission of one audiotape of a practicum interview. The testing sessions generated data from which the criterion measure and two personality variables were

derived. These three variables were the pathogenesis rating, MMPI scale scores, and the Mach V Attitude Inventory score.

Counselor performance was measured by ratings of each subject's audiotaped interview with a practicum client. Three trained raters assessed each subject's counseling effectiveness on three process variables: empathic understanding, frequency of pathogenic behavior, and the negative impact of pathogenic behavior on client self-exploration. Hoyt reliability coefficients computed for ratings on the three process variables were .800, .806, and .651.

A single-group multiple-measures design was employed in the study. Pairwise comparisons were made between pathogenesis and all independent measures. Additional correlations were calculated for counselor process variables to assess the impact of the practicum setting.

Utilizing the research evidence presented by VandenBos and Karon (1971) regarding the impact of pathogenesis on counselor effectiveness, seven research hypotheses were generated for this study. For each of the three counselor process ratings, it was hypothesized that increased pathogenesis would result in decreased counselor trainee effectiveness (i.e., decreased empathic understanding, increased frequency, and negative impact of pathogenic behavior). It was further predicted that counselor trainee pathogenesis ratings would be correlated

significantly with other personality measures which determine one's need to dominate, manipulate, and otherwise be interpersonally insensitive.

Product-moment correlations, the predominant statistical procedure used in analyzing the data and testing hypotheses, were calculated for all pairwise comparisons. Multiple correlation and partial correlation techniques were used when the effect of two or more variables was simultaneously evaluated. Supplementary analyses were performed to explore the effects of uncontrolled covariates on pathogenesis ratings and the three counselor effectiveness ratings.

The research hypotheses were supported by varying proportions of the data. Relationships between pathogenesis and measures of counselor effectiveness and between pathogenesis and the Mach V Attitude Inventory were not significant for the total sample. However, when the effect of sex was statistically controlled, it was found that male pathogenesis ratings had a significant negative correlation with ratings of empathic understanding. The tests supported the hypothesis predicting a significant relationship between pathogenesis and scales of the MMPI. In addition, the hypothesized inverse relationships between the counselor process variable of empathic understanding and the variables frequency of pathogenic behavior and negative impact were supported.

The supplementary analyses, used to explore the confounding effects of uncontrolled covariates, revealed that subject sex and elementary-nonelementary status of client were potential contributors to the lack of statistical significance. Additional relationships of significance were identified by employing the subjects' practicum grades as a criterion variable and computing product-moment correlations across ratings of pathogenesis, empathic understanding, frequency of pathogenic behavior, and negative impact of pathogenic behavior.

Results of this research are not conclusive with respect to the impact of counselor trainee pathogenesis on counselor trainee effectiveness. The findings should be viewed as a step in the further examination of dimensions of counselor trainee effectiveness and those factors which may inhibit effectiveness.

DEDICATION

To Carol

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CHAPTER I

INTRODUCTION AND REVIEW OF THE LITERATURE

Purpose

The purpose of this study was to determine whether counselor trainee personality, as reflected in characteristic modes of interacting with clients, had a perceptible impact on the therapeutic relationship and/or the therapeutic process. There is little, if any, disagreement among therapists that a successful counseling process should include the establishment of a warm, accepting, and respectful client-counselor relationship (Betz & Whitehorn, 1956; Fiedler, 1950; Ullman & Krasner, 1964). Rogers (1957) and Rogers, Gendlin, Kiesler, and Truax (1967) go so far as to suggest that three necessary and sufficient conditions for constructive personality change are an integral part of the client-therapist relationship. Rogers et al. (1967) suggest that their three conditions--congruence, unconditional positive regard, and empathic understanding--are specific to the therapy situation, and therefore support the notion that emotional and attitudinal factors in the therapist have substantial influence on in-therapy behaviors and effectiveness. It was

hypothesized in this study that the absence of these facilitative conditions, thereby producing reduced therapeutic effectiveness, might be a by-product of pervasive counselor personality characteristics. More specifically, pervasive counselor personality characteristics might motivate the intentional, or inadvertent, use of the client to satisfy the counselor's personal needs.

VandenBos and Karon (1971) suggest that in a counseling relationship the inability to suspend personal judgments, place priority on client concerns, and function in a nonexploitative manner will reduce counselor effectiveness:

> Psychotherapy, at least in the eyes of the client, is a relationship between two unequals . . . within this context therapists who consciously or unconsciously utilize dependent individuals (in this case, their clients) to satisfy the therapists' own personal needs will be less clinically effective than therapists who put the needs of the client first. (pp. 253-254)

Dr. Bertram Karon (1963) has formulated what some feel is a possible alternative in differentiating individuals who function in a psychologically detrimental manner in a dependent relationship. He labels this construct of psychological destructiveness "pathogenesis." As applied to the counseling situation, this construct would suggest that counselors who are highly pathogenic foster a climate which impedes the development of a facilitative client-therapist relationship, thereby reducing their own effectiveness.

Of course, not all counselor needs that are gratified through the counseling relationship should be viewed as pathogenic. Bugental (1964) discusses several appropriate and inappropriate gratifications for psychotherapists. Among those motives that if satisfied would tend to be detrimental to the client's progress in therapy, Bugental considers one-way intimacy, protected and disguised giving of tenderness, vicarious life processing (the client acting as a guide through the mine field), and personal striving for omnipotence and omniscience the most dangerous. Having identified neurotic gratifications, Bugental (1964) cites creative needs which are also realized in therapy: personal growth for both participants, gain in client functioning, participation in a unique relationship, and the observation and guidance of psychological processing. Thus, the therapeutic process focuses on client needs and gratification and provides the counselor ample opportunity for professional and personal development through the gratification of certain creative needs.

The definitive purpose of this study was to determine whether an analysis of the relationship between counselor trainee pathogenesis and process variables assessing counselor effectiveness would support VandenBos and Karon's (1971) position.

Definition of Pathogenesis

Karon (1963) hypothesizes that in a dependence relationship where one individual is dominant and the needs of the individuals conflict, if the dominant individual indirectly satisfies his needs without regard for the needs of the subordinate individual, he is acting in a psychologically destructive manner. Specifically, such an individual is demonstrating a high degree of pathogenesis. This concept of the unconscious utilization of a dependent person evolved from Karon's early work on oral trauma and schizophrenia. Karon (1960) maintains that oral trauma, which he considers fundamental in the genesis of the schizophrenic process, consists of a sequence of interactions which continue throughout the schizophrenic individual's life. It involves the schizophrenogenic mother's inability to feed her child without becoming angry, thus causing the feeding situation to become threatening for the child. The result of this continued malevolent mothering is a series of rejections whose end effect is the incorporation of feelings of worthlessness and unlovability on the part of the child. While the problems of the schizophrenic are basically oral, in the sense that they were first manifest in the relationship between mother and child in the early oral period, they are not primarily zone-related. Rather, it is the pattern of relating to the schizophrenogenic mother which is primary.

Karon (1963) notes that the schizophrenogenic mother "compensates for her inadequacies by making demands on the child in terms of her own pathological needs without regard for the welfare of the child whenever her needs conflict with his" (p. 29). The research of Meyer and Karon (1967) successfully used a measure of pathogenesis which clearly differentiated mothers of schizophrenics from mothers of normals. Subsequently, the measure of pathogenesis was used to differentiate child-abusive mothers from nonabusive mothers (Melnick & Hurley, 1969); to differentiate mothers and fathers of schizophrenics, delinquents, and normals (Mitchell, 1968); and to differentiate more effective and less effective psychotherapists (VandenBos & Karon, 1971).

A clear similarity exists between the dependent relationship described by Karon and the relationship found in counseling. As seen from the client's perspective, counseling is a situation in which the client, as a dependent-imploring person, seeks the help of a dominant-giving person (counselor) through the establishment of a facilitative (dependent) relationship. These parallel relationships suggest that counselors who consciously or unconsciously seek the satisfaction of personal needs at the expense of the client's needs will be less effective than counselors who exercise caution and restraint when gratifying personal needs through client contact.

To measure pathogenesis, it is necessary to assess an individual's global and characteristic manner of interacting. It is evident that self-report measures would have serious limitations in providing an accurate assessment and yet control for socially desirable response sets. Meyer and Karon (1967) noted that individuals who are pathogenic should, as the result of a conscious or unconscious motivation pattern, reflect this characteristic in their fantasies regarding the relationship between dominant and dependent figures. It should, therefore, be possible to derive a measure of pathogenesis from the Thematic Apperception Test (TAT), inasmuch as the TAT is assumed to measure both conscious and unconscious motivations which represent underlying and pervasive characteristics of personality (Tomkins, 1947). Pathogenesis, when measured, is assumed to be a continuous variable having a linear relationship with its negative psychological impact. All individuals, if tested on this dimension, would be on a continuum from nonpathogenic (.00) to highly pathogenic (1.00).

Through the work of Meyer and Karon (1967), VandenBos and Karon (1971), and Mitchell (1968), objective criteria have been devised for scoring TATs and determining degree of pathogenesis. The general scoring criteria are as follows: (a) Is there an interaction between a dominant and a dependent person, both with somewhat

conflicting needs? If not, the story is unscorable. (b) If there is an interaction, does the dominant individual behave in an attending manner to the dependent figure's needs? If not, the story is scored "pathogenic." (c) If there is an interaction and the dominant figure behaves in such a manner as to take the dependent figure's needs into account, the story is scored "benign." On the basis of these classifications (pathogenic, benign, unscorable), the TAT protocols are scored by using the following formula: P/(P+B), where P is the number of stories rated pathogenic and B the number of stories judged benign. The resulting decimal is the individual's pathogenic rating.

Theory and Related Research

There is widespread agreement on the part of virtually every theorist in counseling that the personality of the counselor is one of the pivotal variables in determining the effectiveness of his counseling behavior (Polmantier, 1966; Wehr & Witmer, 1973; Stripling & Lister, 1963; Weitz, 1957; Maskin, 1974). The continuing interest in the area of counselor personality characteristics rests on the assumption that certain personality variables are associated with, or are the cause of, existing differences in the level of counselor competence.

Patterson (1967) reviewed the literature in the area of personality characteristics of counselors and

noted that the research is sporadic, inadequate, and often irrelevant. The review of research into counselor characteristics and effectiveness by Rowe, Murphy, and DeCsipkes (1975) bears much of the same pessimistic tone expressed by other reviewers (Patterson, 1967; Whiteley, 1969). Rowe and his co-authors suggest that the criterion measures and research designs used in these studies have prevented the presentation of a clear picture of personality characteristics that appear to be the most effective in counseling. Gomes-Schwartz, Hadley, & Strupp (1978) cite research (Donner & Schonfield, 1975; Selfridge & VanderKolk, 1976; Garetz & Garetz, 1974) indicating that the personality adjustment of the therapist may be expected to exert influence on the effectiveness of therapy.

In general, three basic research approaches have been used to study the impact of counselor personality on the outcomes of counseling. The first approach is largely a subjective and nonquantitative identification of global personality characteristics of successful counselors. The second approach assesses testable differences on self-report questionnaires among therapists of varying degrees of effectiveness. The third approach examines higher-order personality variables attached to a specific theoretical stance and relates these variables to effective in-therapy behaviors or client outcomes. The third

approach shifts the focus from techniques, patient characteristics, and therapist characteristics to the nature of the therapeutic relationship.

Several early studies attempted to differentiate "counselor types" from noncounselors and effective from ineffective therapists (Cottle, 1953; Stefflre, King, & Leafgren, 1962; Wicas & Mahan, 1966). Cottle and Lewis (1954) used the Minnesota Multiphasic Personality Inventory (MMPI) and demonstrated that most counselors in college counseling centers scored significantly above the mean on the Validity and Masculinity-feminity scales, and below the mean on the Hypomania and Social Introversion scales. The work of Cottle (1953) and Cottle and Lewis (1954a, 1954b) indicates that the needs of counselors differ from the needs of teachers and administrators and that nurturance and affiliation, are significant variables in the assessment of counselor personality.

Frequently, studies have been conducted using such criterion measures of counselor effectiveness as supervisor ratings, faculty member evaluation, or assessment by peers (Stefflre, King, & Leafgren, 1962; Blocher, 1963; Combs & Soper, 1963). Kazienko and Neidt (1962) developed a composite personality of the "good" counselor from their analysis of data collected on the Bennett Polydiagnostic Index, administered to subjects designated as "good" or "poor" counselors. Their analysis generated a list of

adjectives describing the "good" counselor along the parameters of self-concept, motivation, values, and feelings about other people.

Wicas and Mahan (1966) compared the performance of eight high and eight low NDEA institute students on three instruments: the Ways of Life Test, Self-Description (a forced choice adjective checklist), and the Structured Objective Rorschach Test (SORT). Subsequent analysis of the Ways of Life Test suggested that high-rated counselors were concerned with improving society and maintaining appropriate control over self and others, whereas low-rated counselors had somewhat the same orientation, but to a lesser degree, and also had a desire for activity and manipulation. Both groups rejected a passive, receptive orientation to experience and inner life. On the SORT, high-rated counselors seemed more conforming and less persistent, while the low-rated counselors seemed less anxious and more emotionally responsive. The adjective checklist (Self-Description) suggested that those rated high tended to be less controlling in an active manner, more alert and sensitive to the needs of others, and more yielding to the demands of others. The low-rated group, in contrast, was likely to reduce anxiety by preserving the status quo and was more rigid and stubborn in the face of pressure.

Wehr and Wittmer (1973) used the 16 Personality Factor Questionnaire (16PF) in comparing counselor

education students enrolled in a counseling practicum with counselor aides who were also enrolled in a training practicum. They found significant differences between the two groups on eight of the 16 dimensions. They also found that more professional than paraprofessional trainees were predicted to be effective counselors, using the 16PF specification equation.

These studies are cited to note the rather sparse findings available through the "trait-factor," matching approach used in identifying counselor characteristics. The studies provide minimal support for the value of further nonquantitative personality investigations but do focus attention on some critical issues regarding the design of such studies: (a) intuitive "global" judgments of effectiveness are often used, making replication of such studies impossible; (b) there is generally no specification of what kinds of behavior are used to differentiate trainees; and (c) there is an obvious deficiency in the guidelines and theoretical justifications for how trainees are rated. While such research efforts have been informative, they do not readily lend themselves to the development of procedures for screening potential therapists on the basis of maximum future effectiveness, nor do they suggest any particular types of training that will change the candidates' basic orientation and manner of interacting or that will improve their effectiveness.

The second line of inquiry, assessing testable differences in therapists of varying levels of effectiveness, was initiated by Whitehorn and Betz (1954) in which they identified two groups of therapists who were differentially successful in their treatment of schizophrenics. While both groups were equally successful in treating neurotics, one group (A) was more successful than the other group (B) in treating schizophrenics. In the A group 75% of 48 patients were improved at discharge, whereas only 27% of 52 patients of B group therapists were improved. Additional research using this A-B differential has led to equivocal findings (Chartier, 1974; Chartier & Weiss, 1974; Seidman, Golding, Hoban, & Lebow, 1974; Geller & Beezins, 1976; Matthews & Burkhart, 1977). One interesting ancillary finding in the Seidman et al. (1974) research on the multidimensional comparison of subjects on the A-B scales is that A therapists have a high need for human relationships even in the face of much resistance and are directed by a "people orientation" not shared by the complex, cognitively impersonal orientation of B therapists. (This finding may be of some value in future pathogenesis research.) Given the ambiguity about what qualities the A-B dimension is tapping, and the failure to find consistent effects of A-B status upon process or outcomes of psychotherapy, it appears that this dimension is of little practical value either in the selection or training of counselors.

Myrick, Kelly, and Wittmer (1972) compared 40 student counselors using the 16PF and rated them effective or ineffective, using supervisor ratings on the Counselor Evaluation Rating Scale (CERS). The CERS is composed of 27 items that are believed to be representative of a counselor's understanding of a counseling rationale, counseling practice with counselors, and exploration of self and counseling relationships. Results indicate that four of the 16 factors consistently differentiate effective from ineffective counselors. These results supported earlier findings of McClain (1968) and Donnan, Harlan, and Thompson (1969).

Demos and Zuwaylif (1966) studied the personal characteristics of effective high school counselors. Counselors were rated as high (n=15) or low (n=11) in effectiveness on three process measures and one client rating. These ratings were then compared to scores on the Allport-Vernon-Lindzey Study of Values, the Kuder Preference Record, and the Edwards Personal Preference Schedule (EPPS). Analysis of data showed a significant differentiation between the two groups on five of the 16 EPPS scales. The findings suggest that the more effective group had significantly lower needs for autonomy, abasement, and aggression and significantly higher needs for nurturance and affiliation when compared to their less effective peers. However, subsequent research by Mills

and Mencke (1967) casts serious doubt on the findings of Demos and Zuwaylif and adds to the concern regarding design and criteria used in such studies.

Rowe et al. (1975) and Whiteley (1969) have concluded that continued inquiry into personality traits per se, while popular, will not clarify the relationship between human qualities and effective counseling. Several conclusions can be stated about the research in this second approach: (a) most variables investigated were not significantly related to the criterion employed; (b) where a variable was found to be significant once but was investigated more than once, contrary results were often shown; (c) investigators failed to link a specific rationale for particular traits to a theory of counseling; and (d) although efforts were made to define counseling effectiveness more precisely, a clear relationship was lacking between the measures employed and client outcome.

One of the more promising research directions is the investigation of "higher-order" personality variables, rather than traits, and relating these variables to behavioral outcomes (Sprinthall, Whiteley, & Mosher, 1966; Allen, 1967; Jackson & Thompson, 1971; VandenBos & Karon, 1971).

Cognitive Flexibility

Sprinthall, Whiteley, Mosher, and Donaghy (1967) investigated "cognitive flexibility" as a dimension of

counselor effectiveness. Cognitive flexibility as defined by the researchers is "an ability or capacity to think and act simultaneously and appropriately in a given situation" (p. 227). In the counseling situation the cognitively flexible counselor responds fluidly to substantive content and affect offered by the client. The counselor leaves open the opportunity for client self-exploration through both directive and nondirective techniques. The sample for this study consisted of 19 master's degree candidates in guidance whose scores on two projective tests (Rorschach and TAT), the personal differentiation test, and critical incident cases were related to scores on the Counselor Rating Blank. The major result of this effort was to demonstrate that cognitive flexibility-rigidity, as predicted by the projective tests, had a reasonably high positive relationship to supervisor ratings on the same dimension. The correlation coefficient (r=.78) accounted for over one-half the variance in rated performance of counselors in training. Another study investigating cognitive flexibility as a variant of effectiveness was done by Passons and Olsen (1969). The resulting data indicated that cognitive flexibility was highly correlated with trained judges' ratings of counselor responses to a filmed client.

Psychological Openness

Allen's (1967) study demonstrated that the higher order personality variable of "psychological openness" was significantly related to subsequent supervisor ratings of general competence. Therefore, Allen concluded that the effective counselor is one who is on relatively good terms with his own emotional experience and that the ineffective counselor is one who is relatively uneasy with regard to his internal state of being. Relying heavily on the work of Rogers (1957), Allen suggests that the psychologically open person is one in whom there is a relatively high degree of self-communication, while the "closed" person reflects a limited self-awareness regarding his own feelings, impulses, and imaginings. This parallels Rogers' (1957) assertion that counselor congruence is one of the necessary and sufficient conditions of therapeutic change. Results of Allen's investigation supported the following predictions: (a) there is a direct relationship between the freedom with which subjects respond to the Rorschach and the overall competence ratings of supervisors; (b) more "open" subjects will respond with greater frequency to the feelings of clients than will their less open peers; (c) subjects acknowledging their own feelings as a result of the counseling experience will be rated more competent by their supervisors; and (d) the more subjects freely express their

feelings about their counseling experiences, the more likely they will be to receive high ratings on A-sort items describing responses to client affect. Russo, Kelz, and Hudson (1964) investigated openmindedness and found that subjects' scores on the Rokeach Dogmatism Scale (RDS) had a high positive correlation with counselor effectiveness, as demonstrated by judges' ratings on the Interview Counselor Performance Rating Scale devised by Kelz.

Psychological Destructiveness and Pathogenesis

Another high-order personality variable of primary interest to this study is psychological destructiveness. Studies investigating the impact of high and low functioning counselors (Piaget, Berenson, & Carkhuff, 1969; Pierce, Carkhuff, & Berenson, 1967; Alexik & Carkhuff, 1967) demonstrate that high-functioning clients function independently of therapist-offered facilitative conditions, but low-functioning clients deteriorate in the presence of low-level functioning therapists. These studies and others involving therapist-offered facilitative conditions (Holder, Carkhuff, & Berenson, 1967; VanDerVeen, 1965; Martin, Carkhuff, & Berenson, 1966) led Carkhuff and Berenson (1967) to conclude that "clients of those counselors offering the highest levels of facilitative dimensions improve, while those of counselors offering the lowest levels deteriorate" (p. 23).

Another measure of psychological destructiveness of particular import to this study is pathogenesis. During the early exploration of pathogenesis (Karon, 1963; Meyer & Karon, 1967; Mitchell, 1965), it was hypothesized that the schizophrenogenic mother has underlying problems (i.e., feelings of worthlessness, being unlovable, being abandoned, a fear of death) similar to those of her schizophrenic offspring. Her relationship to her child or children is fashioned to satisfy her dependency needs. The satisfaction is wrought by coercing the child to submit to her dominance in situations where their needs conflict. This pathological relationship, typically one of dominating dependence, can be general (with all her children), or it may be specific (only with sons, only with daughters, only the oldest child, etc.). An interesting by-product of this pathology is the mother's frequent admission that this child is her favorite. This is clearly understandable theoretically, since the child has helped her maintain her equilibrium at the expense of his own psychological health. Thus, a situation is created in which the "pathogenic" mother contributes to her child's psychological deterioration, while the normal (benign) mother responds for the most part in the best interest of the child.

An investigation by Meyer (1964) involved an attempt to differentiate between six mothers of

schizophrenics and six mothers of normals along the dimension of pathogenesis. All subjects were administered 24 pictures: the entire female TAT set and four Symonds adolescent fantasy cards. Each story was transcribed on a separate sheet, randomized, and subsequently presented to two different judges for classification as pathogenic, benign, or unscorable. The first judge, a clinical psychologist whose judgments were made with long-standing familiarity in regard to this particular theory, correctly differentiated the subjects at the .002 level of significance. Judge 2, a fourth-year clinical psychology student using criteria established by Judge 1, correctly differentiated the subjects at the .02 level. For Judge 1, the control (normal) mothers varied from .23 to .69 with a mean pathogenesis rating of .40. The experimental mothers varied from .65 to .87 with a mean pathogenesis rating of .77. For Judge 2, the control mothers varied from .30 to .71 with a mean of .48. The experimental mothers varied from .50 to .75 with a mean pathogenesis rating of .65. The interrater reliability coefficient among judges (product-moment correlation) was .89. Meyer concluded that mothers of schizophrenics can be significantly differentiated from mothers of normals through stories produced on TAT cards and that objective criteria needed for this differentiation can be formulated and communicated.

Mitchell (1965) replicated Meyer's (1964) study using a larger N and attempted to further refine the existing pathogenesis scoring criteria. Subjects for the study were 20 mothers of schizophrenics and 20 mothers of normals. Each subject was administered the entire TAT sequence except card XVI (card XVI is a blank card upon which the subject projects any picture of his choice; it was felt that this card elicited anxiety which would obstruct the necessary examiner-examinee rapport). Thematic criteria (Meyer, 1964) and the randomized stories were presented to two judges and subsequently rated. Judge 1 attributed a higher pathogenic score to 17 of 20 experimental mothers in comparison to their matched control mothers, while Judge 2 did so for 19 of 20 experimental mothers in comparison to their matched control mothers. Using a t-test for matched pairs, differentiation between experimental and control pairs of mothers was significant beyond the .001 level for both judges. In addition, scorer reliability via the product-moment correlation was .87. Once again, the results cited indicate support for the differentiating capability of the pathogenesis scale. Thus, the research (Meyer, 1964; Mitchell, 1965) indicates that both the criteria and process of differentiation are communicable.

Still another study attempting to differentiate psychologically destructive individuals from more normally

constructive individuals was conducted by Melnick and Hurley (1967). In comparing 10 child-abusive mothers (As) and 10 control mothers (Cs) matched for age, social class, and education on 18 personality variables (including two pathogenicity measures) the subjects were successfully differentiated on the pathogenesis index at the .002 level of significance. Melnick and Hurley used the Meyer (1964) scoring criteria but departed from previous procedure by administering only 12 of 20 TAT cards. Analysis of the data demonstrated that (a) family satisfaction, (b) self-esteem and an inability to empathize with and accept others, and (c) need to give nurturance were inversely related to pathogenicity ($p<.10$). Melnick and Hurley concluded that "child abusive mothers may have a deficient capacity for empathizing with and administering to their children's needs" (p. 748). Furthermore, "child abusive mothers' psychopathology is associated with and perhaps contributed to this very poor family adjustment" (p. 748).

Since differentiation between psychologically destructive individuals and more constructive individuals is possible, it is conceivable that the theoretical construct of pathogenesis could be broadened to include dependent relationships other than parental relationships. The findings of VandenBos (1969) and VandenBos and Karon (1971) utilizing 10 therapists in training (five

psychiatric residents and five pre-doctoral interns in clinical psychology) showed that the patients of more pathogenic therapists did significantly poorer than patients of more benign therapists on four of eight outcome measures. All eight outcome measures were pre- and post-measures of client improvement.

Prior to treating patients, each therapist took a full 20-card TAT (self-administered). Each therapist's verbal responses to the TAT cards were tape-recorded and subsequently transcribed for rating. As in previous studies (Meyer & Karon, 1967; Mitchell, 1965, 1968), two judges were secured to rate the TAT protocols. The judges were clinically naive undergraduate students (one a general experimental psychology major, the other an elementary education major) trained in the use of the Karon system (Meyer & Karon, 1967) for determining pathogenicity. The product-moment correlation between judges' ratings was .91. The pathogenesis scores for the 10 therapists ranged from .00 to .82 with a mean of .47.

On three of the four intellectual tests (Porteus Maze, WAIS, and Visual-Verbal TEST) there were significant correlations of patients functioning at higher levels with less pathogenic therapists. The correlation between therapist pathogenesis and patient Porteus Maze scores was $-.64$ ($p<.02$), indicating that patients of more pathogenic therapists demonstrate less foresight than patients

of more benign therapists. The correlation between the Visual-Verbal Test score and therapist pathogenesis was .74 ($p<.005$). The correlation between therapist pathogenesis and the WAIS score was -.71 ($p<.01$). All correlations were significant in the hypothesized direction. Thus, on all three intellectual tests that research indicates are sensitive to schizophrenic thought disorder, the more benign therapists appeared to move patients to higher levels of functioning than did their more pathogenic peers.

The fourth outcome measure of statistical significance ($r=-.69$, $p<.01$) was the diagnostic interview, indicating that patients of more pathogenic therapists were functioning at lower levels. The four remaining outcome measures (vocabulary test, Rorschach, TAT, and days hospitalized) showed no significant correlation with therapist pathogenesis, though there was a trend toward longer hospitalization for patients of more pathogenic therapists ($p<.08$). VandenBos and Karon (1971) suggest that more effective and less effective therapists can be differentiated by the pathogenesis-benign dimension, that the scoring criteria are clearly communicable, and that it may be possible to predict, before training and before treatment, whether a given individual will be a successful therapist in treating schizophrenics. Moreover, in a generalized statement regarding the nature of therapist pathogenesis, VandenBos and Karon (1971) note that:

> This therapist relevant personality characteristic is neither a situation-specific aspect of effective psychotherapy, nor simply a professed system of values, techniques, and/or behaviors. Rather it represents a general personality dimension or characteristic manner of interacting with others in this specific type of relationship (i.e., patient perceived dependency relations). (p. 253)

If this measure of counselor pathogenicity can significantly differentiate effective and ineffective counselors, then its use in the training and selection of counselor trainees warrants consideration. Economically, pathogenesis may provide a pragmatic approach to attrition in counseling and clinical psychology programs, and may, in an indirect manner, improve psychological services in general as it screens ineffective counselors prior to their investment in the field. Should pathogenesis be modifiable, then development of training and supervision packages designed to reduce pathogenicity among counselor trainees would be professionally advantageous.

In summary, this chapter has presented a statement of the problem, a statement of purpose, the definition of pathogenesis, and a review of the research in the areas of counselor characteristics, cognitive flexibility, psychological openness, and psychological destructiveness. The research on pathogenesis and counselor pathogenicity appears promising. Its impact on the therapeutic relationship and process has theoretical support and pragmatic significance, but currently has limited research support.

In the next chapter, demographic data regarding the sample, literature related to independent and dependent measures, procedures used in securing subjects and raters, training provided for raters, the hypotheses, the design, and the procedure for analyzing results will be presented and discussed.

CHAPTER II

METHOD

Population and Sample

Subjects (Ss) were selected from the Michigan State University MA counselor training program. A sample of 20 subjects volunteered for the study from a population of 23 students enrolled in the second of two required practicums during the period September 23 through December 15, 1977. Each student was required to find an acceptable practicum site and complete a minimum of four cases.

Participation in the experiment was presented as an opportunity for research exposure and professional development (see Appendix A). Post-study compensation included a personal letter of recommendation (Appendix B) to be placed in the participants' academic and/or placement file(s), additional nongraded practicum supervision from the researcher, and a written summary of the research upon completion.

The following demographic summary of subject characteristics will aid the reader in determining the extent to which present results can be generalized to other populations.

Among the 20 subjects, 35% (7) were male and 65% (13) female. Nineteen individuals were Caucasian and one subject was Chicano. The mean age for all subjects was 31.1 years, with a range of 24 to 50 years of age. Educationally, 50% (10) of the subjects had an undergraduate degree from Michigan State University, 35% (7) had undergraduate degrees from out-of-state institutions, and 30% (6) had attended more than one institution while completing their bachelor's degree. Forty-five percent (9) of those in the study had undergraduate concentrations in English, while 20% (4) had majored or minored in psychology. Additional undergraduate majors included biological sciences, communication arts, home economics, language arts, mathematics, music, and physical education. The subjects' mean grade point average during the last two years of undergraduate work was 3.35, with a range of 2.85 to 4.00.

Vocationally, 90% (18) of all subjects had professional teaching experience totaling 89 years, with a mean of 5.6 years and a range of 2 to 14 years. Fifteen percent (3) had professional counseling experience totaling 6 years.

Criterion Measure

Pathogenesis Index

Pathogenicity, the criterion variable, was established by using the Meyer & Karon (1967) Pathogenesis Index. As previously discussed, pathogenesis ratings are derived from TAT protocols. The TAT as noted by Murray (cited in Zubin, Eron, & Schumer, 1965):

> is based on the fact that when a person interrupts an ambiguous social situation he is apt to expose his own personality as much as the phenomenon to which he is attending. Absorbed in his attempt to explain the objective occurrence, he becomes unconscious of himself and the scrutiny of others, and, therefore, less vigilant about his defenses. (p. 396)

The underlying assumption is that the TAT measures both conscious and unconscious motivation from which, through the subject's imaginative projections, the therapist or researcher can make reasonable inferences regarding the subject's personality (Rappaport, Gill, & Schafer, 1968; Tomkins, 1947). As in all projective techniques the methodological problems lie in scoring and in assessing validity and reliability. While objective testing and attitude scaling techniques lend themselves to statistical manipulation and detection of subtle differences in counselor effectiveness (Selfridge & VanderKolk, 1976; Maskin, 1974), projective testing may be more adequate in probing the dynamic considerations of effectiveness. Consequently, projective tests have been used to get at the more dynamic, as opposed to descriptive aspects of

counselor functioning (Sprinthall, Mosher, & Donaghy, 1967; Allen, 1967; VandenBos & Karon, 1971).

The most serious objections raised against the use of the TAT as a differential diagnostic tool are those of Murstein (1963). He points out that no comprehensive TAT scoring system has received universal approval, and those qualitative scoring schema which have been developed depend too much on the originator's skill. Such scoring systems make replication difficult. Among the more prominent scoring and interpretive methods are those of Rotter, Rappaport, Henry, and Tomkins (cited in Bellak, 1954), but the quantitative nature of these systems is too intricate and complex for use in popular research. The more specific scoring systems of Feld and Smith (1958); Veroff, Atkinson, and Gurin (1960); and Meyer and Karon (1967) yield higher reliabilities and facilitate replication.

The scoring criteria used in this study (Appendix C) have demonstrated their validity and reliability in four previous investigations: Meyer and Karon (1967), Melnick and Hurley (1969), VandenBos and Karon (1971), and Mitchell (1968). Having successfully differentiated psychologically constructive from psychologically destructive individuals at both the .003 and .02 levels, the scoring system has proven communicable by producing interrater

reliabilities of .89 (Meyer & Karon, 1967), .90 (Mitchell, 1968), .91 (VandenBos & Karon, 1971), and .94 (Melnick & Hurley, 1969).

In developing the scoring criteria, Meyer (1964) carefully attended to the manner in which TAT stories were categorized as benign, pathogenic, or unscorable so that communicability of procedures and results could be replicated.

Independent Measures

Machiavellianism Scales (Mach Scales)

The Machiavellianism Scales (Mach Scales) are a paper-and-pencil measure attempting to tap an individual's general strategy for dealing with people, especially the degree to which he feels other people are manipulable in interpersonal situations (Robinson & Shaver, 1973). Developed by Christie and Geis (1970), the Mach Scales are used largely with adult populations, with a modified version available for children. A Machiavellian, as defined by Christie and Geis (1970), is one who maintains an amoral impersonal perspective toward others and evaluates others in light of their usefulness for his purposes. Machiavellianism, therefore, reflects a perceptual and attitudinal personality disposition involving the maximizing of one's own welfare at the possible expense of another.

Originally the Mach Scale was a 71-statement attitude scale drawn from the writings of Machiavelli (The Prince and The Discourses). These 71 statements were item analyzed and yielded three substantive areas in which high and low scorers differed: (a) tactics in handling others (32 items), (b) a cynical view of life (28 items), and (c) a moral philosophy of life (11 items) (Lake, Miles, & Earle, 1973). Forty of the original 71 items were found to successfully discriminate between high and low Machs at the .05 level. The 10 highest related items worded in the Machiavellian direction and the 10 highest related items worded in the opposite direction were included in the final 20-item scale.

There are two Mach Scales currently in use (Mach IV and V). For purposes of this study Mach V will be used since it attempts to control for socially desirable response sets. The Mach V presents 20 forced-choice triads (Appendix E) from which the respondent must select the statement which he perceives to be most like him and the one least like him. The scoring system (Appendix F) offers a range of scores between 40 and 160. The Mach V has a corrected split-half reliability of .56 and .54 (this is low presumably because of the rigorous control for social desirability). Sampling norms are based on 1,500 undergraduate students in psychology, sociology, and political science.

Lake, Miles, and Earle (1973) report five studies that establish predictive validity for the instrument. Robinson and Shaver (1973) note that "in 12 or 13 instances (research investigations) . . . the high Machs won more, were persuaded less, persuaded others more, or behaved as predicted significantly compared to low Machs" (p. 591). It was also noted that in over 50 studies the Mach Scales have successfully differentiated groups of high and low scorers on behavioral and perceptual levels.

For purposes of this study the Machiavellianism Scales were introduced to subjects as the Mach V scale, and the pejorative implications surrounding the term "Machiavellianism" were avoided. Subjects were given a vague statement regarding the personality dimension measured by the scale and requested to read all instructions preceding the scale items. Any questions regarding procedure were clarified, while questions regarding content were left unanswered.

On the surface pathogenesis and Machiavellianism have the appearance of being parallel constructs. It is assumed that the two dimensions may be sufficiently similar to establish concurrent validity for the criterion measure.

Minnesota Multiphasic Personality Inventory (MMPI)

The Minnesota Multiphasic Personality Inventory (MMPI), developed by Hathaway and McKinley (1943),

currently maintains its position as the most widely used diagnostic and research instrument in the field of psychodiagnostic practice. While the MMPI has suffered increasing criticism (Norman, 1972; Goldberg, 1978) regarding its structure and content, it remains a viable tool for assessment research and clinical practice (Duckworth & Duckworth, 1975).

The MMPI consists of 14 standard scales and 12 research scales. Four of the scales are validity indicators: ? (cannot say), L (lie), F (validity), and K (correction). The cannot say score, while handled like the other test components on the MMPI, is not a scale in the usual sense. The number of unanswered items constitutes the raw score on cannot say, and the only inference made when inflated scores occur is the existing possibility of subject defensiveness or indecisiveness (Dahlstrom, Welsh, & Dahlstrom, 1972). The remaining clinical scales are: Scale 1 - Hypochondriasis (Hs); Scale 2 - Depression (D); Scale 3 - Hysteria (Hy); Scale 4 - Psychopathic deviancy (Pd); Scale 5 - Masculinity-feminity (Mf); Scale 6 - Paranois (Pa); Scale 7 - Psychasthenia (Pt); Scale 8 - Schizophrenia (Sc); Scale 9 - Hypomania (Ma); and Scale 0 - Social Introversion (Si). The 11 research scales are: Scale 1 - Self-Acceptance, First Factor (A); Scale 2 - Conscious Repression, Second Factor (R); Scale 3 - Ego Strength (Es); Scale 4 - Low Back Pain

(Lb); Scale 5 - Caudality (Ca); Scale 6 - Dependency (Dy); Scale 7 - Dominance (Do); Scale 8 - Social Responsibility (Re); Scale 9 - Prejudice (Pr); Scale 10 - Social Status (St); Scale 11 - Control (Cn) (Hathaway & McKinley, 1967).

Research literature gives no indication of which MMPI scales should relate to pathogenesis, and experience offers no additional help in speculating the direction of possible correlations. The use of all 26 available scales may spuriously inflate correlation coefficients, making the validity of subsequent interpretations of statistically significant correlations questionable. To control for statistical significance by chance, and yet provide the broadest base for assessing pathogenicity's relationship to specific personality traits, all but the cannot say scale, of the 14 standard scales, and research Scale 2 (R) will be used in computing the necessary correlation coefficients.

Scale 2, the Conscious Repression Scale (R), was established to measure the degree to which a person is consciously repressing, or more accurately suppressing feelings or attitudes (Welsh, 1956). More specifically, this scale appears to measure the use of denial and rationalization as coping behaviors and a lack of effective self-insight. It should be noted that the R scale assesses conscious repression and denial, as contrasted with scale 3 (Hy), which tends to measure unconscious

denial. People with high scores on this scale seem to be saying, "some areas of my life are none of your business." A low R score indicates a lack of conscious repression and perhaps a willingness to be open and self-disclosing to others (Duckworth & Duckworth, 1975). This scale seems logically related to elements of the therapeutic relationship and may provide assistance in determining the degree of subject openness during the research situation.

Empathic Understanding in Interpersonal Processes Rating Scale

Ratings of the subject's empathic understanding were employed as an operational definition of the subject's counseling competence.

Empathic understanding is an attempt by the therapist to respond accurately to the client's feelings at both superficial and intimate levels. The implication is that counselor effectiveness is a function of the therapist's understanding of the client's changing needs. The therapist's ability to communicate high levels of empathic understanding involves his capacity to experience the experience of the client by suspending his personal judgments, tolerating his own anxiety, and placing priority on the client's concerns.

Extensive validity research has been developed for this dimension and its relationship to therapeutic

effectiveness (Rogers et al., 1967; Truax & Carkhuff, 1967; Melnick, 1970; Truax & Mitchell, 1971; Hayden, 1975). Although there is little disagreement regarding the relationship of therapist-offered conditions of empathy, warmth, and genuineness and therapeutic effectiveness, there is mounting criticism regarding the use of the Truax (1961) and/or Carkhuff (1969) scales in measuring these dimensions (Avery, D'Avgelli, & Danish, 1976; Rappaport & Chinsky, 1972; Chinsky & Rappaport, 1970; Beultler et al., 1973; Beultler, 1976). The most serious criticisms focus on (a) the nonindependence of scales (Muehlberg, Pierce, & Drasgow, 1969), (b) the level of functioning and experience of raters (Shapiro, 1968; Cannon & Carkhuff, 1969; Burstein & Carkhuff, 1968), and (c) the construct validity of what the scale purports to measure (Avery, D'Avgelli, & Danish, 1976; Thoresen, 1976). As Hayden (1975) suggests,

> Although the Carkhuff scales are not ideal measures of therapist effectiveness, they are often used as such in this type of research (correlational). The remarkable high correlations between the scale scores of effectiveness and . . . the offered conditions . . . do suggest that there is a commonality of properties determining an individual's effectiveness as a therapist that was discernible independently by judges. (p. 388)

The scale uses a five-point rating continuum with 5 representing the highest level of therapeutic functioning. Delineations between the five possible ratings are based on the additive, subtractive, or interchangeable

nature of the therapist's response. Should the counselor trainee's response significantly detract from the affect or cognitions presented by the client, a rating of 1 or 2 would be recorded. When the trainee's response accurately adds to, or clarifies, the content and affect of the client's remarks, a rating of 4 or 5 is recorded. Level 3 represents the minimum level of facilitative functioning and connotes a therapist response which is essentially the same in both content and affect as that of the client. For additional information regarding discriminations used in the ratings, see Appendix G.

Research indicates that rater characteristics may influence the accuracy and objectivity of ratings. Cannon and Carkhuff (1969) found that graduate trainees and experienced therapists were significantly more accurate in their ratings of counselor responses than undergraduate students and untrained laymen. The studies reviewed show that raters' experience, level of functioning, and sex effect rating accuracy and that graduate students with professional or practicum experience in counseling have acceptable skills for rating.

Studies using the Carkhuff scales have produced rate-rerate reliabilities between .82 and .96 and inter-rater reliabilities between .64 and .93 (Martin & Carkhuff, 1968; Alexik & Carkhuff, 1967; Pierce, Carkhuff, & Berenson, 1967; Bozarth & Krauft, 1972). Procedures

used in training raters and controlling for independence of segment ratings will be discussed in the procedures section of the study.

Counselor Pathogenesis Rating Scale

In an attempt to isolate behavioral correlates of counselor pathogenicity, a rating scale identifying specific in-therapy counselor-client interactions logically related to pathogenesis was devised. In consulting four professional counselors, two of whom have substantial supervisory experience, nine interaction factors surfaced as having apparent face validity for the assessment of pathogenesis. To the investigator's knowledge, there have been no previous attempts to classify specific therapist behaviors as pathogenic.

The Counselor Pathogenesis Rating Scale (Appendix H) assesses both the frequency and impact of the following nine counselor behaviors: interrupting the client (IC); soliciting reinforcement (SR); inaccurate reflections (IR); termination of silence (RS); accentuating client weaknesses (ACW); not yielding to client interruptions (NY); shifting focus to counselor (FS); taking direction and flow from client (TD); and advice giving and moralizing (AGM). Behavioral definitions of these behaviors (Appendix G) were created to facilitate rating and maximize interrater reliabilities.

Since there is substantial evidence (Truax & Carkhuff, 1964; Tomlinson & Hart, 1962; Truax & Carkhuff, 1967; Carkhuff & Berenson, 1977) demonstrating that successful outcomes in counseling differ from nonsuccessful outcomes in the extent to which clients engage in self-exploration, it is logical to assume that the manifestation of pathogenesis (i.e., pathogenic behaviors) would have a deleterious effect on client self-exploration. For each interaction category, one rating scale is provided to record the level of negative impact on client self-exploration of the specified behavior. The rating scale (Appendix F) ranges from Level 1 (no perceptible impact) to Level 5 (significant impact). Criteria were developed for each of the five levels (see Appendix G). The rating scale and the discriminations between levels incorporate elements from Carkhuff's Self-Exploration in Interpersonal Processes Scale (Carkhuff, 1969b).

The Counselor Pathogenesis Rating Scale thus contains nine specific and observable (i.e., via audiotape) behaviors which relate to the construct of therapist pathogenesis as defined earlier by VandenBos and Karon (1971). The frequency counts should provide appropriate and valid data regarding the relatedness of the specified behaviors and counselor pathogenicity. The accompanying negative impact scale should confirm the influence of these behaviors on therapist effectiveness as indicated by degree of client self-exploration.

Research Hypotheses

The primary purpose of this study was to examine the relationship between counselor trainee pathogenesis and counselor trainee effectiveness, as measured by process variables. Specifically, it was questioned whether the findings of VandenBos and Karon (1971) would generalize to an educational setting. Karon's construct has obvious implications for the selection, supervision, and instruction of counselors-in-training. Briefly, the research questions and hypotheses of this study are:

Question 1:

Do counselor pathogenesis and counselor effectiveness have an inverse relationship? The probability of an inverse relationship is clearly related to the hypothesized obstructive nature of the client-counselor relationship when the counselor is interacting in a self-serving manner.

Hypothesis 1:

Pathogenesis ratings of counselor trainees will be negatively correlated with ratings of empathic understanding.

Hypothesis 2:

Pathogenesis ratings of counselor trainees will be positively correlated with the observed frequency of in-therapy pathogenic behavior.

Hypothesis 3:

Pathogenesis ratings of counselor trainees will be positively correlated with ratings of the negative impact of pathogenic behavior on client self-exploration.

Question 2:

Inasmuch as pathogenesis is a construct defining a pervasive personality characteristic which manifests itself as a manipulative mode of interaction, is it related to other previously defined personality dimensions?

Existing research provides insufficient evidence to predict the direction of possible correlations between pathogenesis and well-established personality assessment instruments such as the MMPI. It is suspected, however, that scales and instruments specifically designed to measure traits reflecting needs to dominate, manipulate, exercise control, and otherwise indicate self-concern would significantly correlate with pathogenesis ratings. Inasmuch as the Mach V Scale purportedly measures an amoral interactional motivation maximizing one's own welfare at the expense of another, a directional hypothesis involving this instrument seems appropriate.

Hypothesis 4:

Pathogenesis ratings will be positively correlated with subject scores on the Mach V.

Hypothesis 5:

Pathogenesis ratings will be correlated with the included MMPI clinical scales and research scale.

Question 3:

Is counselor-trainee effectiveness related to the structure of the practicum setting, thereby influencing the assessment of the degree of relatedness between pathogenesis and effectiveness?

Hypothesis 6:

Ratings of counselor-trainee empathic understanding will be negatively correlated with frequency of pathogenic behavior and with ratings of negative impact on client self-exploration.

Hypothesis 7:

Ratings of negative impact on client self-exploration will be positively correlated with frequency of pathogenic behavior.

Procedures

Data Collection

The initial step in data collection was the arrangement of two 1-1/2 hour testing sessions with each of the 20 Ss. All Ss were required to complete the MMPI, Mach V, and TAT during these two sessions. Ss were not made aware of the hypothesis being tested, and through indirect inquiry regarding their previous exposure to the TAT their naivete regarding pathogenesis was confirmed. With one exception, each S was tested either at the investigator's office at Holmes Hall or in other offices provided for such purposes at Michigan State University.

TAT. Each S was interviewed for approximately 15 minutes prior to the administration of the TAT to allay anxiety, establish minimum rapport, and offer assurances regarding the confidentiality of the test responses. Ss were reminded that the TAT is a projective measure and that the information available through its

administration is best interpreted as an element of ongoing therapy. Therefore, the researcher would not provide a posttest diagnostic interpretation. All Ss were told that the purpose of the study was to learn more about counselor characteristics. The statement of purpose was intentionally vague, but all Ss were assured that the results would have no impact on the disposition of their practicum grade.

Each S was administered the entire 20-card TAT sequence in two 10-card series. One 50-minute period was devoted to each series, the two sessions being separated by a day or more. The following instructions suggested by Murray (1943) were used to introduce each 10-card series:

> Series 1 - This is a test of imagination and creativity. I am going to show you some pictures, one at a time; and your task will be to make up as dramatic a story as you can for each. Tell what has led up to the event shown in the picture, describe what is happening at the moment, what the characters are feeling and thinking; and then give the outcome. Speak your thoughts as they come to mind. Do you understand? Since you have fifty minutes for ten pictures, you can devote about five minutes to each story. Here is the first picture. (p. 3)
>
> Series 2 - The procedure today is the same as before, only this time you can give freer rein to your imagination. Your first ten stories were excellent, but you confined yourself pretty much to the facts of everyday life. Now let your imagination have its way, as in a myth, fairy tale, or allegory. Are there any questions? Here is picture 1. (p. 5)

Card XVI (a blank card) was accompanied by a special instruction. The examiner requested the following: "See what you can see on this blank card. Imagine some picture there and describe it to me in detail. If necessary feel free to close your eyes and picture something." After the S had succeeded in giving a description of his imagery, the examiner said, "Now tell me a story about it."

Questions were nondirective and were used sparingly--only when it appeared that the S had become confused in his response (e.g., "And what happens next in your story?" or "How does the story end?"). At no time did the examiner question the S in order to facilitate the subsequently used scoring system.

Ss' responses were tape recorded and later transcribed, typing one story per page with no identification clues available. All stories were coded (see Appendix D) and then presented in random order to each of two judges. During the transcription phase of the procedures, the investigator was informed that three of the Ss' taped responses had been inadvertently erased. All three Ss were then recontacted and consented to a second administration of the TAT. The following instructions were uniformly offered to each S.

1. Please attempt to recall the storyline you provided for each of the 20 cards.

2. Embellish the story with as many of the details as you can accurately recall.

3. In the event that you cannot recall the story-line for a particular card, please indicate that and create a new story for that card.

Subsequent to this retesting one of the three Ss' original TAT response sets was found intact and provided data regarding the similarity of the second TAT response sets to those of the original responses.

The S accurately recalled the storyline in 19 of 20 card presentations. The recalled stories were faithful reproductions of the original responses, varying only in the length of time the S used to recreate the story and the vividness of extraneous details. In each story the number of characters, the relationship between characters, and the overt behavior of principal characters were successfully replicated by the S. The S indicated that one card (Card XIX) was not familiar and that the storyline could not be remembered. A new story was offered for the card. Subsequently, in reviewing the original taped responses, the investigator found that Card XIX had been inadvertently omitted from the initial administration of the TAT. The S's failure to recall a card that had not been presented may be interpreted as a further affirmation of the accuracy of the second set of responses. The investigator suggests, therefore, that concern regarding

variance of pathogenesis ratings due to inaccurate subject recall of original projections may be unwarranted.

MMPI. Ss were administered the MMPI - Form R (booklet) during the first testing session. Administration procedures suggested by Hathaway and McKinley (1967) were followed, and Ss were allowed to work until completion. The answer sheets were visually skimmed to insure that gross response sets such as answering all items true, alternating true-false, failing to answer several items, etc., had not occurred. All answer sheets were scored by National Computer Systems, Minneapolis, Minnesota.

Ss were reminded that the MMPI is a clinical tool and as such requires expert interpretation. Such expert interpretation could not be offered by the investigator, and ethical consideration required that MMPI profiles be released only to therapists whom the Ss had engaged professionally.

Mach V Attitude Inventory. The Mach V was administered to each S during the second testing session, following both series of the TAT. Ss were requested to read the instructions preceding the 20 forced-choice items. Procedural questions regarding the forced-choice nature of the 20 triads were clarified by the examiner. The Mach V inventories were manually scored according to the scoring key provided by Robinson and Shaver (1973) as shown in Appendix F.

Practicum case tape. All Ss were requested to submit one audiotape, at least 20 minutes in length, of a counseling interview occurring during the practicum. Counselor trainees at Michigan State University are expected to implement a systematic approach in their client contacts. Systematic counseling is an "approach in which the various aspects of the counseling process are clearly identified and organized into a sequence designed to resolve the clients' concerns efficiently and effectively" (Stewart, Winborn, Johnson, Burks, & Engelkes, 1978, p. 50). A skill emphasized in the Systematic Counseling model is the ability to identify a client's important concerns through listening and questioning. Counselors are expected to monitor their awareness of client concerns through the use of restatement, reflection, and summarization (Taylor, 1978). The counselor is also expected to identify the temporal and situational aspects of the client's concern. Consensual agreement among faculty and students indicates that accurate identification of client concerns is a pivotal variable in effecting positive therapeutic outcomes. For this reason all Ss were required to submit case tapes having their focus on 5.1 (identifying client concerns) of the Systematic Counseling flowchart (Stewart, Winborn, Johnson, Burks, & Engelkes, 1978). Intake interviews,

interpretive interviews (in the test and analysis sense), and termination interviews were not accepted for purposes of rating.

Following procedures used in previous studies (Melnick, 1970; Beulter, Johnson, Neville, & Workman, 1973), three three-minute excerpts were randomly selected from the first third, middle third, and last third of each interview. The validity of such ratings has been challenged by Gurman (1973) and Beultler et al. (1973). They concluded that a great deal of variation in counselor behavior would be obscured by average ratings or ratings of a few short excerpts. The primary concern is that counselor-offered facilitative conditions may not be stable throughout the interview. Gormally and Hill (1974) suggested that when excerpts are used, it may be best to report data on 5- to 10-minute segments across three parts of the interview, thus establishing a more representative picture of helper functioning. Given the brevity of several tapes submitted for rating, an excerpt length greater than five minutes would have made randomization of excerpts impossible. Therefore, a modification of the suggested segment length (from five to three minutes) across three sections of the interview was used in transferring counselor-client interactions to master tapes for rating by trained raters. To eliminate most sources of systematic rater variance, the counselor-client

excerpts were randomly ordered both with respect to subjects and also by section--first third, middle third, last third--of the interview (it should be noted, however, that randomly ordering sections of the interview increased the difficulty of the rating task inasmuch as the flow or continuity of interviews was disrupted). It was not possible to control for all sources of rater bias for or against a given subject. Control for rater bias due to audio identification of subjects would have required a single prolonged excerpt or printed transcriptions of audio segments. Such controls would have created additional sources of rating variance (Gurman, 1973; Butler & Hansen, 1973; Gormally & Hill, 1974). After transferral of counselor-client interactions to master tapes, there was a total of 200 minutes of audiotape to be listened to and rated by trained raters.

Summary of Data Collection

All 20 subjects completed the entire 20-card set of the TAT, the MMPI - Form R, and the Mach V Attitude Inventory and submitted one tape (dealing with Function 5.1 of the Systematic Counseling flowchart) of a current case for purposes of rating. Three of the Ss were required to retake the TAT because of a mechanical error during transcription.

None of the psychometric information (TAT, MMPI, Mach V) generated by the testing sessions or the

evaluation of counselor-trainee tape excerpts was available to the raters prior to the completion of their specific task in the study.

Raters

A total of five raters, three men and two women, participated in the study. All of the raters held an MA degree in counseling, counseling psychology, or a related discipline; and all but one were currently enrolled in the Ph.D. counselor education program at Michigan State University. Raters were secured on a volunteer basis and trained by the investigator. Two of the raters were involved in the rating of counselor pathogenesis from subject TAT protocols, and three of the raters consented to evaluate counselor trainee tape recordings.

The two raters responsible for the pathogenesis ratings were employed by the Department of Counseling, Personnel Services, and Educational Psychology as practicum supervisors during the quarter in which data were collected. It should be noted that the identity of subjects was not known by the raters, since the separately typed stories were presented in random order and contained no identifying data. Prior to training, both judges were clinically naive regarding the construct to be rated. After training, the judges were presented TAT protocols of differing random orders and were requested to classify all stories as (a) pathogenic, (b) benign, or

(c) unscorable. On the basis of classifications made separately by Judges I and II, two scores were tabulated for each subject using the formula: P/P+B, where P is the number of stories judged pathogenic and B is the number of stories judged benign. The average of these two pathogenesis scores was used to order the counselor trainees on the pathogenic-benign dimension.

The ratings of empathic understanding, negative impact of pathogenic interactions on client self-exploration, and frequency of pathogenic interactions were independently made by two third-year doctoral students in Counselor Education and an MA graduate in family and child sciences. All three raters had had considerable prior experience in crisis intervention and clinical interviewing. Two of three raters had had prior experience with rating scales similar to those used in the study.

Training the Raters

The pathogenesis judges' training consisted of two two-hour sessions. The first of the training segments was a presentation by the researcher of the theoretical construct and research evidence supporting pathogenesis. Meyer (1964) and Meyer and Karon's (1967) thematic scoring criteria and their development were summarized, and the judges were furnished copies of the Pathogenesis Index-scoring criteria (Appendix C).

Approximately 60 sample TAT protocols were secured from Dr. Bertram Karon and Mr. Dan Robbins for purposes of training. These sample TAT stories were typed on separate pages and used as a stimulus in generating discussion regarding the objectivity of the scoring criteria (sample stories presented in this manner also provided a close approximation to the final task).

The second training session began with a brief review of the first session and a discussion of materials judges had been furnished to study (see Appendix D). Both judges had been requested to score all sample TAT protocols on the pathogenic-benign dimension. Specific questions and concerns were responded to, and problematic issues were clarified. When it was concluded that judges understood what was expected of them and that their understanding of the construct was correct, separate copies of the Ss' TAT protocols were made available for their ratings. Independent ratings were then made by both judges following the procedures established at the second session (see Appendix D).

Inter-rater reliability was established by computing a Pearson product-moment correlation across subject scores. This procedure yielded a product-moment correlation of .79.

Training for judges rating empathic understanding, negative impact of pathogenic interaction, and

frequency of pathogenic behavior was held in one four-hour session. The investigator used the following training schema in preparing raters for the task:

1. Introduction
    a. Introduction to the construct of pathogenesis
    b. Explanation of pathogenic counselor-client interactions
    c. Introduction to the rating task
    d. Instruction on the criteria for each of the three judgments
    e. Discussion of the criteria
2. Graduated approximations to the task
    a. Written and verbal examples of varying levels of each rating task
    b. Abbreviated individual audiotaped examples of counselor-client interactions
    c. Discussion of ratings made by judges
    d. Three-minute audiotaped examples of counselor-client interactions
    e. Discussion of ratings

Materials used in the training are included in Appendix G.

The judges' ratings of empathic understanding and negative impact of pathogenic behavior were averaged across the segments for each subject and subsequently

averaged across the three judges, providing a single rating for each of these two dimensions. The judges' ratings of the frequency of pathogenic behavior were summed across three segments for each subject and across the three judges for a single frequency count per subject. Interrater reliability for this segment of the study was determined by computing a Hoyt coefficient (Hoyt, 1941) for each of the three dimensions, using subject scale scores and frequency counts. The reliabilities obtained are reported in Table 2.1. All computations were performed by computer with the SPSS program (Vogelback Computing Center, 1975).

Table 2.1

Interrater Reliability Coefficients for Audiotape Ratings

Scale	Reliability Coefficient
Empathy	.80
Frequency of Pathogenic Behavior	.81
Negative Impact	.65

Design

One-Group-Multiple Measures

In this study a one-group-with-multiple-measures design was employed, as shown in Figure 2.1. Individual

		INDEPENDENT MEASURES				
		Counselor Performance			Personality	
S's	P	M_1	M_2	M_3	M_4	M_5
S_1	P_1					
S_2	P_2					
S_3	P_3					
.	.					
.	.					
.	.					
S_{20}	P_{20}					

Legend: S = Subjects

P = Pathogenesis

M_1 = Frequence of Pathogenic Behavior

M_2 = Negative Impact on Client Self-Exploration

M_3 = Empathic Understanding

M_4 = MMPI

M_5 = Mach V

Figure 2.1. Research design

subjects' scores were contrasted across three personality assessments (Pathogenesis Index, MMPI, and Mach V) and across three dimensions of counselor performance (Pathogenic Behavior, Negative Impact on Client Self-Exploration, and Empathic Understanding). The nature of the statistical model is such that it establishes the degree of relationship existing between the criterion and independent measures.

Substantial support has been offered for the pragmatic and exploratory value of the correlational study (Borg & Gall, 1976; Ary, Jacobs, & Razavieh, 1972; McGrath, Jelinek, & Wochner, 1963). Borg and Gall (1976) suggest that the primary advantage of the correlational study is its capacity to measure large numbers of variables and assess their interrelationships simultaneously. While there are undeniable advantages of experimental design in educational and psychological research (Campbell & Stanley, 1963), factors of efficiency and economy require that identification be made of variables whose inclusion is critical to the assessment of treatment impact (Travers, 1964).

Data Analysis

The data were analyzed by correlational techniques designed to assess the degree of relationship between two or more continuous variables. Through the use of three different analytical procedures, the hypotheses were tested as follows:

1. The hypotheses involving pairwise comparisons of continuous scores were tested by the Pearson product-moment correlation and differential analysis techniques.

2. The hypotheses addressing the relatedness of the dependent variable and two or more independent variables were tested by multiple correlation and step-wise regression analysis.

3. The hypotheses addressing the relatedness of two or more independent process variables were tested by a variety of analytical procedures including the product-moment correlation, multiple regression, and partial correlation.

Hypotheses 1-4: A correlational analysis was performed to determine the degree of relationship between pathogenesis and the independent measures. The Pearson product-moment correlation was used since all correlations were made on continuous scores and since the product-moment correlation is the most stable, generating the smallest standard error. In analyzing the data, the alpha level of significance was set at .05.

It was speculated that homogeneous subgroups (e.g., male, female) might obscure significant relationships among variables when correlations were computed for the entire sample. Thus, it was decided to differentially analyze the sample on the male-female dimension.

Hypothesis 5: Multiple correlation and stepwise regression were employed to determine the degree of relationship between pathogenesis and the scales of the MMPI. Initially a product-moment correlation between pathogenesis and each of the 14 MMPI scales which were selected for inclusion was computed for the sample. By chance alone two of these coefficients should reach statistical significance at the .10 level. Multiple correlation and a stepwise regression analysis were employed in an attempt to confirm the statistical significance of product-moment correlations. In analyzing the data, the alpha level of significance was set at .025, accounting for the nondirectional nature of the hypothesis.

Hypotheses 6 and 7: A Pearson product-moment correlation and a multiple regression analysis, with empathic understanding as the criterion variable, were performed to test the two hypotheses addressing the relatedness of the independent process variables. The alpha level for each of these hypotheses was set at .05.

Supplementary analyses were computed to provide additional information about the data. The supplementary analyses addressed the possible obscuring of statistically significant relationships by uncontrolled rater bias and extreme subject variance. Correlational techniques parallel to those employed in testing hypotheses concerning the criterion measure were performed.

In summary, this chapter has presented a description of the population and sample, a review of the instrumentation and related literature, the procedures used in data collection, a description of the raters and their training, the design, the research hypotheses, and the statistical procedures used in analyzing the data.

In the next chapter, the results of the performance of all subjects across all measures will be described. Certain supplementary findings from the data will then be presented.

CHAPTER III

RESULTS

Chapter III contains the statistical analyses of the results of the study. The analyses relevant to each of the seven hypotheses will be reported in turn. The hypotheses focusing on the relationship between pathogenesis and the counseling process variables are of primary importance and will be reported first. The hypotheses addressing the relationship between the criterion variable and other personality dimensions will then be reported. Following the presentation of the results of hypotheses testing, the chapter will conclude with a summary of supplemental findings.

Many of the statistical analyses reported in Chapter III were calculated on the Michigan State University Hustler 2 computer system, utilizing the SPSS program (Michigan State University, 1978).

Primary Hypothesis

Five of the seven hypotheses are of primary importance to the research questions considered in

Chapters I and II. These five hypotheses addressed the relationship between counselor trainee pathogenesis and the counseling process. Further, these hypotheses serve as a basis for several additional findings reported in the supplementary analyses portion of this chapter. The results of the analyses which tested these five hypotheses are presented below.

Hypothesis 1:

The counselor trainee's effectiveness as determined by ratings of empathic understanding is negatively correlated with counselor trainee pathogenicity.

It was predicted that counselor trainees demonstrating higher levels of empathic understanding during client contact would receive lower pathogenesis ratings. Using subjects' ratings on empathic understanding (Table 3.1) and subjects' pathogenesis scores (Table 3.2), product-moment correlations were computed for the total sample (N=20), the subgroup-females (N=13), and the subgroup-males (N=7). While the product-moment correlation was in the predicted direction for the total sample, statistical significance was not reached for either the total sample (r=.06, p<.40) or the female subjects (r=.17, p<.29). It may be observed in Table 3.3 that among males, decreased ratings of empathic understanding were significantly correlated with increased pathogenicity (r=-.80, p<.02). Thus, pathogenesis ratings among male

Table 3.1

Empathic Understanding Ratings Attributed to Subjects by Raters I, II, and III

S	R_1	R_2	R_3	R_{123}
1	3.33	3.67	2.67	3.22
2	3.00	3.33	2.67	3.00
3	3.00	3.00	1.67	2.56
4	3.67	3.67	2.67	3.34
5	2.00	2.67	1.33	2.00
6	4.00	3.67	3.33	3.67
7	2.33	2.33	2.00	2.22
8	3.00	2.67	1.33	2.33
9	3.00	2.67	1.00	2.22
10	3.00	2.67	2.33	2.67
11	2.33	2.33	1.00	1.89
12	2.33	3.00	1.67	2.33
13	2.67	2.67	1.67	2.34
14	2.00	1.00	1.00	1.33
15	2.33	3.00	2.00	2.44
16	3.67	2.00	1.00	2.22
17	3.00	2.33	2.00	2.44
18	3.00	2.67	2.00	2.56
19	3.00	2.00	2.33	2.44
20	2.67	2.67	1.33	2.22

	Mean Rating	Standard Deviation
R_1	2.867	.546
R_2	2.701	.640
R_3	1.850	.671
R_{123}	2.473	.525

Note. Hoyt reliability coefficient for Raters I, II, and III; alpha = .800; S = Subject; R = Rater.

Table 3.2

Pathogenesis Ratings Attributed to Subjects by Judges I and II

S	J_1	J_2	J_{12}
1	.667	.643	.655
2	.500	.375	.438
3	.667	.600	.634
4	.467	.438	.453
5	.588	.500	.544
6	.600	.545	.573
7	.667	.364	.515
8	.750	.600	.675
9	.643	.692	.668
10	.571	.462	.517
11	.625	.583	.604
12	.455	.500	.478
13	.818	.700	.759
14	.529	.421	.475
15	.800	.800	.800
16	.733	.688	.710
17	.500	.538	.519
18	.917	.800	.859
19	.571	.462	.517
20	.615	.600	.608

	Mean Rating	Standard Deviation
J_1	.643	.123
J_2	.566	.129
J_{12}	.600	.119

Note. Range of scores = .438 - .859; Pearson r = .792; $p < .001$; S = Subject; J = Judge.

Table 3.3

Pearson Product-moment Correlations Showing the Relationship between Pathogenesis and Counselor Characteristics

Counselor Characteristics	Pathogenesis		
	Total Sample N=20	Females N=13	Males N=7
Empathy	-.060	.168	-.798**
Frequency of Pathogenic Behavior	-.035	-.193	.112
Negative Impact	-.057	-.223	.497
Mach V Attitude Inventory	.108	.020	.383
MMPI[a]			
Scale 1 (L)	.176	.092	.711**
Scale 2 (F)	-.210	-.249	.160
Scale 3 (K)	.375*	.532**	.165
Scale 4 (Hs)	-.328*	-.356	.377
Scale 5 (D)	.378*	.372	.700**
Scale 6 (Hy)	.231	.238	.419
Scale 7 (Pd)	.157	.105	.363
Scale 8 (Mf)	.185	.167	.510
Scale 9 (Pa)	-.419**	-.237	-.298
Scale 10 (Pt)	-.069	.156	-.355
Scale 11 (Sc)	.178	.254	.419
Scale 12 (Ma)	.189	.312	.271
Scale 13 (Si)	.304*	.629**	-.186
Scale 14 (R)	.318	.326	.430

[a]Minnesota Multiphasic Personality Inventory

*$p < .10$

**$p < .05$

subjects accounted for 63.7% of the variance in ratings of empathic understanding. This result is particularly crucial to the study. Additional data analyses will be presented in the supplementary findings which offer statistical explanations for these correlations.

Hypothesis 2:

> The counselor trainee's pathogenicity will manifest itself in specified in-therapy behaviors whose frequency will vary directly with the level of counselor trainee pathogenesis.

The frequency of counselor trainees' in-therapy pathogenic behavior was monitored by audiotape. Ratings of frequency of pathogenic behavior are presented in Table 3.4. Product-moment correlations for the frequency of pathogenic behavior and subject pathogenesis were computed for the total sample ($r=-.04$, $p<.44$), female subjects ($r=-.19$, $p<.26$), and male subjects ($r=.11$, $p<.41$). An examination of Table 3.3 reveals that the frequency of pathogenic behavior was not associated with degree of subject pathogenesis.

Hypothesis 3:

> The negative impact of the counselor trainee's pathogenic behavior on client self-exploration is positively correlated with the degree of counselor trainee pathogenesis.

Hypothesis 2 predicted that increased pathogenic counselor-client interaction was a manifestation of

Table 3.4

Frequency of Pathogenic Behavior Ratings Attributed to Subjects by Raters I, II, and III

S	R_1	R_2	R_3	R_{123}
1	0	6	5	11
2	2	4	4	10
3	4	9	9	22
4	2	3	6	11
5	3	4	3	10
6	7	5	8	20
7	6	11	9	26
8	1	9	5	15
9	2	6	6	14
10	3	6	3	12
11	3	4	3	10
12	6	11	7	24
13	4	7	8	19
14	9	18	11	38
15	4	6	3	13
16	9	14	11	34
17	6	7	5	18
18	7	7	3	17
19	6	8	2	16
20	5	5	9	19

	Mean Rating	Standard Deviation
R_1	4.450	2.523
R_2	7.500	3.706
R_3	6.000	2.847
R_{123}	5.983	2.603

Note. Hoyt reliability coefficient for Raters I, II, and III: alpha = .800; S = Subject; R = Rater.

pathogenicity. It was therefore predicted that, because of the nature of the specified behaviors, negative impact would also vary directly with subject pathogenesis. Product-moment correlations between the negative impact of subject behavior and subject pathogenesis were computed across the sample and for male and female subgroups. Ratings of negative impact of pathogenic behavior are presented in Table 3.5. As indicated in Table 3.3, the ratings of subjects' negative impact on client self-exploration were uncorrelated with the subjects' pathogenesis scores (r=-.06, p<.41). It was also demonstrated that relationships between pathogenesis and negative impact for male subjects (r=.50, p<.13) and female subjects (r=-.22, p<.23) were nonsignificant. Thus, Hypothesis 3 remained unconfirmed.

On the assumption that the degree of subject pathogenesis has a causal influence on both the frequency and negative impact of pathogenic behavior, a partial correlation was computed, holding the counselor process variable negative impact of pathogenic behavior constant. The result of the partial correlation calculation is presented in Table 3.6. In controlling for the influence of negative impact, the relationship between pathogenesis and frequency was found to be nonsignificant (r=-.01, p<.48). Inspection of the partial correlation further confirmed the uncorrelated nature of pathogenesis, frequency of pathogenic behavior, and negative impact.

Table 3.5

Pearson Product-moment Correlations Showing Negative Impact on Client Self-exploration Ratings Attributed to Subjects by Raters I, II, and III

S	R_1	R_2	R_3	R_{123}
1	.75	1.50	1.33	.94
2	2.00	2.00	3.00	2.33
3	3.67	2.67	3.00	3.11
4	1.50	1.00	1.50	1.50
5	5.00	3.00	3.00	3.67
6	1.33	1.67	1.67	1.56
7	3.00	3.00	3.00	3.00
8	1.00	3.67	3.33	2.67
9	4.00	2.33	2.33	2.89
10	1.67	2.00	2.00	1.89
11	2.50	2.67	2.00	2.39
12	3.67	2.00	2.00	2.56
13	2.33	2.67	2.00	2.33
14	4.67	4.33	3.00	4.00
15	3.33	3.00	1.67	2.67
16	1.67	3.33	2.33	2.44
17	2.33	3.67	3.00	2.67
18	3.00	3.33	2.00	2.78
19	3.50	3.67	3.00	3.39
20	3.50	1.67	2.00	2.39

	Mean Rating	Standard Deviation
R_1	2.684	1.278
R_2	2.684	.832
R_3	2.308	.607
R_{123}	2.559	.727

Note. Hoyt reliability coefficient for Raters I, II, and III: alpha = .651; S = Subject; R = Rater.

Table 3.6

Partial Correlation between Pathogenesis and Frequency and Negative Impact of Pathogenic Behavior

Variable to be correlated with pathogenesis	Variable to be controlled	r	p
Frequency of Pathogenic Behavior	Negative Impact	-.013	.478

To further examine the relationship between pathogenesis and frequency and negative impact of pathogenic behavior, a multiple correlation analysis was employed. The correlational analysis indicated that frequency and negative impact of pathogenic behavior accounted for less than .4% (multiple R = .06) of the variance of pathogenesis ratings (F=.03, p<.97). These results further confirmed the lack of meaningful interaction between the criterion variable and the two process variables.

Hypothesis 6:

> The counselor trainee's effectiveness as measured by his empathic understanding is negatively correlated with the frequency and impact of behavior judged detrimental to positive therapeutic outcome.

It was predicted that increased ratings of counselor competence (i.e., ratings of empathic understanding) would be accompanied by decreased numbers, and by decreased negative impact, of behaviors defined as pathogenic. This hypothesis was tested by product-moment correlations and a

stepwise regression analysis. Table 3.7 presents a product-moment correlation matrix for the three variables.

Table 3.7

Product-moment Correlation Matrix of Counseling Process Variables

Scale	Empathy	Frequency of Pathogenic Behavior	Negative Impact
Empathy	---	-.436*	-.787**
Frequency of Pathogenic Behavior	-.436*	---	.401*
Negative Impact	-.787**	.401*	---

*$p < .05$

**$p < .01$

Empathic understanding was found to be significantly correlated with frequency of pathogenic behavior (r=-.44, p<.03) and negative impact (r=-.79, p<.001). Both variables were correlated with empathic understanding in the hypothesized direction. Frequency of pathogenic behavior accounted for 19% of the variance in ratings of empathic understanding, while ratings of negative impact accounted for 62% of the variance in ratings of empathic understanding.

It was speculated that the significance between frequency of pathogenic behavior and empathic understanding was an artifact of the frequency measure's relationship

with negative impact. Stepwise regression analysis procedures were employed to analyze the contribution of each factor. The results indicated that, of the two variables, only negative impact contributed significantly to the prediction of empathic understanding (F=29.36, p<.0001). The results are presented in Table 3.8.

Table 3.8

Stepwise Regression F Statistics for Frequency and Negative Impact of Pathogenic Behavior on Empathic Understanding

Order of Entry	F	Multiple R	R Square	p
Step 1: Negative Impact	29.359	.787	.620	.0001
Step 2: Frequency	.805	.798	.637	.382

The frequency of behavior did not make a significant contribution when entered after, or conditioned on, the negative impact measure. The contribution of the frequency of pathogenic behavior to the multiple correlation with empathy was such that it increased the multiple R from .787 to .798 (F=.81, p<.38).

These findings support the initial assumption that empathic understanding and the frequency and negative impact of pathogenic behavior are inversely related. At the same time, the relationship between empathic understanding and the negative impact of pathogenic behavior is clearly of greater statistical significance.

Hypothesis 7:

The frequency of counselor trainee pathogenic behavior is positively correlated with the degree of negative impact that this behavior has on client self-exploration.

Counselor trainees' frequency of pathogenic behavior, and the negative impact of this behavior, were assessed by external judges' ratings of taped counseling interviews. The judges used the Counselor Pathogenesis Rating Scale in determining the frequency and impact of the nine defined interaction factors. The resulting product-moment correlation of .40 had the probability of occurrence of .04 and was therefore significant at the .05 level (Table 3.7). Thus, the hypothesized positive correlation between frequency of pathogenic behavior and negative impact of pathogenic behavior was supported.

Secondary Hypotheses

Two hypotheses addressed the relationship between pathogenesis and existing measures of personality traits which parallel the primary construct. The results of the analyses which tested these hypotheses are presented below.

Hypothesis 4:

Pathogenesis ratings of counselor trainees are positively correlated with subject scores on the Mach V Attitude Inventory.

Hypothesizing that the Mach V and the Pathogenesis Index assess similar constructs, if not the same, it was predicted that increased scores on one measure would be accompanied by increased scores on the other measure. As shown in Table 3.3, although the product-moment correlations computed for the total sample (r=.11, p<.33), females (r=.02, p<.47), and males (r=.38, p<.20) are in the hypothesized direction, they failed to reach statistical significance. Therefore, the predicted utility of the Mach V Inventory as a tool in determining counselor trainee pathogenicity is unconfirmed.

Hypothesis 5:

The counselor trainee scores on selected scales of the MMPI are correlated with counselor trainee pathogenicity.

The nondirectional nature of the hypothesis reflects the exploratory inclusion of the MMPI in this study. This hypothesis was tested by product-moment correlations and a stepwise multiple regression analysis. Table 3.3 contains the product-moment correlations across the total sample and for male and female subgroups.

In the total sample, pathogenesis was significantly correlated with the Pa scale (r=.42, p<.03) and approached significance with the K scale (r=.38, p<.05), the Hs scale (r=-.33, p<.08), the D scale (r=.38, p<.05), the Si scale (r=.30, p<.10), and the R scale

(r=.32, p<.09). Among females, pathogenesis was significantly correlated with the K scale (r=.53, p<.03) and the Si scale (r=.63, p<.01). The scales showing statistical significance for males were the L scale (r= .71, p<.04) and the D scale (r=.70, p<.04). However, the scales of the MMPI are not independent and as a result the estimation of r has been inflated by utilizing chance. The degree of the overestimation of r is affected by the ratio of the number of independent variables to the size of the sample. In the present study, if a .05 level of significance is employed, then one of every 14 correlations will be significant by chance. Therefore, among the statistically significant correlations calculated for the sample and two subsamples, three of the correlations would be significant at the .05 level by chance. Consequently, for five of the 14 scales Hypothesis 5 was supported by the data from the total sample or one of the two subgroups, but it is estimated that three of the significant correlations may be a result of chance.

A stepwise regression analysis was employed to determine the maximum possible positive correlation between pathogenesis and any linear combination of the 14 MMPI scales. The value of such an analysis lies in its capacity to predict and explain the variability of pathogenesis scores when provided a meaningful combination

of predictor variables. Inasmuch as the selection of the MMPI was not determined by any previous theoretical association with the criterion measure, the predictive value of the regression analysis was of greater consequence than the explanatory value of the procedure.

The sample size (N=20) severely limited the number of degrees of freedom and, therefore, restricted the possibility of obtaining statistical significance. Borg and Gall (1976) and Kerlinger and Pedhazur (1973) recommend that a criterion of meaningfulness be considered in those cases where statistically significant increments may not be meaningful. For the contribution of a variable to be substantively meaningful, Borg and Gall (1976) suggest that individual predictors should correlate .35 or more with the criterion variable.

The recommended level of correlation, $r=.35$, was, therefore, accepted as a basis for reporting MMPI scales as meaningful contributors. The stepwise regression analysis indicated that scales Ps ($F=3.83$, $p<.07$), D ($F=4.28$, $p<.05$), and Pd ($F=3.50$, $p<.08$) made meaningful contributions to the coefficient of determination $R=.69$, $p<.02$. The results of the regression analysis are presented in Table 3.9.

Table 3.9

Stepwise Regression F Statistics for MMPI Scales on Pathogenesis

Order of Entry	F	Multiple R	R Square	p
Step 1: MMPI 9 (Pa)	3.83	.419	.176	.066
Step 2: MMPI 5 (D)	4.28	.584	.342	.054
Step 3: MMPI 7 (Pd)	3.50	.678	.460	.080

It should be noted that, in computing the maximum coefficient of determination, it is assumed that all included predictor variables have zero-order correlations. This, of course, is not the case for MMPI scales. Consequently, there is a certain amount of capitalization on chance, which creates an inflated multiple R. In estimating the amount of "shrinkage" (overestimation of R) necessary to compensate for chance correlation, the following formula was used (Kerlinger & Pedhazur, 1973):

$$\hat{R}^2 = \frac{1-(1-R^2)\ (N-1)}{(N-k-1)}$$

where $\hat{R}^2$ = estimated squared multiple correlation in the population, R^2 = obtained squared multiple correlation, N = size of the sample, and k = the number of independent variables. The application of the formula resulted in an estimated $\hat{R}^2$ = .36 and a corrected multiple correlation coefficient equal to .60.

Supplementary Analyses

To control for confounding variables imbedded in the instrumentation and/or the sample, the following statistical analyses were conducted to explore subject differences on the criterion and counseling process measures.

Test Bias

Pathogenesis index. This analysis investigated an observed difference in the mean pathogenesis ratings of the male and female subgroups. It was speculated that the inflation of female pathogenesis ratings is attributable to the difference in the male and female specimen sets of the TAT. All subjects were administered a 20-card battery, and eight of the cards were determined by the sex of the examinee. The work of VandenBos and Karon (1971) indicated that there were no significant differences in pathogenesis ratings attributable to the sex of subjects.

To examine possible significant differences with respect to sex, a test statistic (ν) was calculated. This statistic, which was used for testing the difference between male (n_2=7) and female (n_1=13) mean ratings of pathogenesis, was developed by Welch (1937). The statistic allows an investigator to test significant differences between means when the assumption of homoscedascity is violated. The formula utilized was as follows (Welch, 1937):

$$\nu = \frac{(\bar{x}_1 - \bar{x}_2)}{\sqrt{\frac{s_1^2}{n_1(n_1-1)} + \frac{s_2^2}{n_2(n_2-1)}}}$$

where ν = sampling distribution of the two samples, $\bar{x}_1$ and $\bar{x}_2$ = respective mean pathogenesis ratings of the two samples, S_1^2 and S_2^2 = respective variances of the two samples, and n_1 and n_2 = sizes of the two samples. The application of the formula resulted in a test statistic of 1.816 with 18df, which was significant beyond the .05 level of significance.

The mean pathogenesis ratings by sex of subject are presented in Table 3.10.

Table 3.10

Means and Standard Deviations of Pathogenesis Ratings by Sex of Subject

Pathogenesis Judges	Mean		Standard Deviation	
	Females N=13	Males N=7	Females N=13	Males N=7
Judge I	.667	.574	.132	.082
Judge II	.594	.513	.127	.124
Judges I + II	.630	.543	.126	.086

Inasmuch as judges could not determine the sex of the subject being rated, these results support the speculation that sex is a confounding factor in pathogenesis ratings.

Rater Bias

Elementary client-contact. In six of the 20 audiotaped counselor-client interactions, the counselors interviewed students who were less than 14 years of age. It was observed that interrater reliabilities for frequency of pathogenic behavior and negative impact were virtually unaffected by the elementary or post-elementary status of the client. It was, however, noted that the ability of raters to accurately assess empathic understanding fell off sharply when rating counselor-elementary client interactions. The interrater reliabilities of empathic understanding, frequency of pathogenic behavior, and negative impact across elementary and nonelementary interactions are reported in Table 3.11 (see page 81).

This analysis indicated that a reliable assessment of empathic understanding was not obtained for subjects who submitted a case involving elementary-age clients.

Sampling Bias

Extreme subject scores. In further observations regarding obscured sources of error, it was discovered that one subject consistently scored 2 or more standard

deviations from the mean on all counselor process variables. Specifically, this subject was 2.60 standard deviations above the mean on frequency of pathogenic behavior ($\bar{X}_f$= 17.95, s_{14}=38), 2.00 standard deviations above the mean on ratings of negative impact ($\bar{X}_n$=2.55, s_{14}=4.00), and 3.82 standard deviations below the mean on ratings of empathic understanding ($\bar{X}_e$=2.47, s_{14}=1.33). Table 3.12 indicates the impact of this subject upon the total sample and female subgroup correlations.

Tukey suggests that the deletion of such subjects permits a more accurate interpretation of results. An examination of the results in Table 3.12 reveals that deleting the subject does not generate relationships of statistical significance, but for all variables the revised correlations have clearly moved in the hypothesized direction. The implications of this analysis will be discussed in Chapter IV.

Ancillary Analysis

Relationship between practicum grade and pathogenesis, ratings of empathic understanding, frequency of pathogenic behavior, and negative impact. With exploration in mind, practicum grades for all subjects were secured and subsequently correlated with variables having an hypothesized impact on the counseling process. Product-moment correlations were computed to determine the degree

Table 3.11

Hoyt Reliability Coefficients for Ratings of Empathic Understanding, Frequency of Pathogenic Behavior, and Negative Impact for Elementary and Non-elementary Clients

Scale	Total Sample N=20	Nonelementary N=14	Elementary N=6
Empathic Understanding	.800	.902	.371
Frequency of Pathogenic Behavior	.806	.830	.817
Negative Impact	.651	.731	.635

Table 3.12

Pearson Product-moment Correlations Showing the Impact on the Relationship between Pathogenesis and Independent Process Variables When Extreme Subject Is Alternately Removed and Included

Scale	Pathogenesis			
	Subject Removed		Subject Included	
	Total Sample N=19	Females N=12	Total Sample N=20	Females N=13
Empathy	-.223	-.083	-.060	.168
Frequency of Pathogenic Behavior	.148	.071	-.035	-.193
Negative Impact	.068	-.049	-.057	-.223

of relationship between the subjects' practicum grade and pathogenesis and each of the process variables. The product-moment correlations are reported in Table 3.13.

Table 3.13

Pearson Product-moment Correlations Showing the Relationship between Practicum Grade and Measures Related to the Counseling Process

Measure of Counselor Impact	Practicum Grade		
	Total Sample N=20	Females N=13	Males N=7
Empathy	-.018	-.116	.144
Frequency of Pathogenic Behavior	.444**	.391*	.471
Negative Impact	.078	.026	.105
Pathogenesis Rating	.425**	.559**	-.059

*$p < .10$

**$p < .05$

The results of this analysis indicated that the frequency of pathogenic behavior (r=.44, p<.03) and pathogenicity (r=.42, p<.03) had a significant positive relationship to practicum grades. Ratings of empathic understanding varied inversely (r=-.02, p<.47), but not significantly, with practicum grades. A discussion of these findings will be presented in Chapter IV.

Summary

Product-moment correlations were performed on pair-wise comparisons of the criterion variable and all other process and personality variables. Stepwise regression and partial correlation procedures were employed to identify the unique contribution of each variable in correlation with, or prediction of, the criterion variable.

The findings of the study may be summarized as follows:

Hypothesis 1:

Pathogenesis ratings of counselor trainees will be negatively correlated with ratings of empathic understanding.

Finding:

The ratings of pathogenesis and empathic understanding were not significantly related for the total sample and the female subgroup. However, there was a significant negative correlation between pathogenesis and ratings of empathic understanding among male subjects (r=-.80, p<.02).

Hypothesis 2:

Pathogenesis ratings of counselor trainees will be positively correlated with the observed frequency of in-therapy pathogenic behavior.

Finding:

The frequency of pathogenic behavior was not associated with the degree of subject pathogenesis.

Hypothesis 3:

Pathogenesis ratings of counselor trainees will be positively correlated with ratings of the negative impact of pathogenic behavior on client self-exploration.

Finding:

The ratings of subjects' negative impact on client self-exploration were not significantly related to the subjects' pathogenesis scores.

Hypothesis 4:

Pathogenesis ratings will be positively correlated with subject scores on the Mach V.

Finding:

The relationship between subject pathogenesis and the Mach V scores was in the hypothesized direction but failed to reach significance.

Hypothesis 5:

Pathogenesis ratings will be correlated with the included MMPI clinical scales and research scale.

Finding:

The following MMPI scales were significantly related to subject pathogenesis scores in the total sample and the male and female subgroups: Paranoia (r=.42), Correction (r=.53), Social Introversion (r=.63), Lie (r=.71), and Depression (r=.70).

Hypothesis 6:

Ratings of counselor trainee empathic understanding will be negatively correlated with frequency of pathogenic behavior and with ratings of negative impact of pathogenic behavior on client self-exploration.

Finding:

Empathic understanding was found to be significantly correlated with frequency of pathogenic behavior (r=-.44) and negative impact of pathogenic behavior (r=-.79). The relationship between empathic understanding and the negative impact of pathogenic behavior is more meaningfully significant than the relationship between empathic understanding and the frequency of pathogenic behavior.

Hypothesis 7:

Ratings of negative impact of pathogenic behavior on client self-exploration will be positively correlated with frequency of pathogenic behavior.

Finding:

The hypothesized positive relationship between frequency of pathogenic behavior and negative impact of pathogenic behavior was confirmed (r=.40).

Thus, data from the total sample supported three of the seven hypotheses but failed to confirm a significant relationship between pathogenesis and empathic understanding, the Mach V Attitude Inventory, frequency of pathogenic behavior, or negative impact. The inclusion of male and female subgroups generated support for the first hypothesis. The supplemental analyses controlled for confounding variables and offered statistical explanation for the nonsignificance of specific correlations. The interpretation, discussion, and implications of the findings are presented in Chapter IV.

CHAPTER IV

DISCUSSION

Summary

The purpose of this study was to determine the effect of a specific counselor personality characteristic--counselor pathogenesis--on the counseling process. The subjects were 20 graduate students from the MA counselor training program at Michigan State University. Subjects were enrolled in the second of two required counseling practicums and had successfully completed a minimum of 75% of the necessary degree requirements. The 20 subjects were accepted on a volunteer basis from a population of 23 students eligible for inclusion in the study.

Criteria for acceptance into the study were each subject's commitment to two 1-1/2 hour testing sessions and the submission of one audiotape of a practicum interview. The average time commitment per subject was 3-1/2 hours, with a range from 2-1/2 to 4 hours. The difference in the time required of each subject was a by-product of the time required to complete one of the two standardized

tests and the length of stories created for the projective measure. The testing sessions generated data from which the criterion measure and two personality variables were derived. These three variables were the pathogenesis rating, MMPI scale scores, and the Mach V Attitude Inventory score. The interrater reliability coefficient for the judges' ratings of pathogenesis was a Pearson *r* of .79.

Counselor performance was measured by ratings of each subject's audiotaped interview with a practicum client. Three trained raters assessed each subject's counseling effectiveness on three process variables: empathic understanding, frequency of pathogenic behavior, and negative impact of pathogenic behavior on client self-exploration. Hoyt reliability coefficients computed for ratings on the three process variables were .80, .81, and .65, respectively.

A single-group multiple-measures design was employed in the study. Pairwise comparisons were made between pathogenesis and all independent measures. Additional correlations were calculated for counselor process variables to assess the impact of the practicum setting.

Utilizing the research evidence presented by VandenBos and Karon (1971) regarding the impact of pathogenesis on counselor effectiveness, seven research hypotheses were generated for this study. For each of the three

counselor process ratings, it was hypothesized that increased pathogenesis would result in decreased counselor trainee effectiveness (i.e., decreased empathic understanding, increased frequency of pathogenic behavior, and negative impact of pathogenic behavior). It was further predicted that counselor trainee pathogenesis ratings would be correlated significantly with other personality measures which determine one's need to dominate, manipulate, and otherwise be interpersonally insensitive.

Product-moment correlations, the predominant statistical procedure used in analyzing the data and testing hypotheses, were calculated for all pairwise comparisons. Multiple correlation and partial correlation techniques were used when the effects of two or more variables were simultaneously evaluated. Supplementary analyses were performed to explore the effects of uncontrolled covariates on pathogenesis ratings and the three counselor effectiveness ratings.

The research hypotheses were supported by varying proportions of the data. Relationships between pathogenesis and measures of counselor effectiveness and between pathogenesis and the Mach V Attitude Inventory were not significant for the total sample. However, when the effect of sex was statistically controlled, it was found that male pathogenesis ratings had a significant negative correlation with ratings of empathic understanding. The tests supported the hypothesis predicting a

significant relationship between pathogenesis and scales of the MMPI. In addition, the hypothesized inverse relationships between the counselor process variable of empathic understanding and the variables frequency of pathogenic behavior and negative impact of such behavior were supported.

The supplementary analyses, used to explore the confounding effects of uncontrolled covariates, revealed that subject sex and elementary-nonelementary school status of client were potential contributors to the lack of statistical significance. Additional relationships of significance were identified by employing the subjects' practicum grades as a criterion variable and computing product-moment correlations across ratings of pathogenesis, empathic understanding, frequency of pathogenic behavior, and negative impact of pathogenic behavior.

Limitations

Three major areas of limitation appear relevant to an understanding of this research. These limitations concern the sample, the design and statistical analyses, and the nature of the instrumentation.

Sample

Subjects in this study were MA counselor trainees who were actively engaged in client contact through a required second practicum. All subjects were majoring

in school counseling with a community college, secondary, or elementary school emphasis. The program in which the subjects were enrolled has a behavioral emphasis. It was not possible to obtain a random sample because of the limited number of subjects available and because of the voluntary nature of the sample. (A true random sample is one in which each individual in the population has an equal and independent chance of being included. Simple random sampling prevents any systematic bias. The subjects' volitional involvement in the present study would constitute a systematic bias.) The use of a nonrandom sample represents a possible threat to the study's external validity (generalizability). However, using the Cornfield-Tukey (1956) bridge argument, the reader may generalize these results to populations having characteristics similar to those of the sample. The Cornfield-Tukey bridge argument suggests that in a non-random sample careful description of subject characteristics, identification of variables related to dependent measures, and identification of variables likely to interact with independent measures permit a researcher to generalize to similar present and future populations. One of the necessary assumptions of this argument is that the nature of the present population (counselor trainees) will not be unlike that of future populations (of counselor trainees). Thus, the present population

is assumed to be representative of a larger present and future population to which results may be generalized. The Cornfield-Tukey bridge argument is used, either implicitly or explicitly, in most educational research.

The subjects' participation in the study was an adjunct element of the practicum experience and, as such, had no impact on the determination of the subjects' practicum grades. Consequently, subject participation was voluntary and primarily motivated by a post-study letter of recommendation and the opportunity for exposure to the measures being used. However, beyond the question of the research sample being representative, there exists the inherent weakness of a voluntary sample. Borg and Gall (1976) suggest that volunteers can rarely be used as an unbiased sample of a population containing both persons who would, and those who would not, volunteer for a study. Therefore, samples of volunteers can be assumed to be biased, and generalizability of results must be limited to volunteers from the same population.

Although the possibility of sampling bias exists because of the voluntary nature of the sample, such bias seems unlikely for two reasons. First, the subjects in this sample represent 87% of the immediate population to which results would be generalized. Second, there is no evidence in the literature to suggest an interaction between motivation for participating and the measures used in the study.

Another sample limitation was the number of subjects used in the study. While the effects of a small N were minimized by selecting subjects from a narrowly defined population (which was highly homogeneous on the variables being studied), the small sample size could not prevent the systematic effect that uncontrolled variables might have exerted upon the results. A large sample would have insured, to some extent, that uncontrolled variables would operate randomly among subjects and measures.

A further limitation attributable to sample size is the necessarily restricted interpretation of statistical significance for sample subgroups. As the sample was divided into subgroups, and further comparisons made, statistically significant relationships were identified for subgroup samples having an N of fewer than 10 subjects. The interpretation and generalizability of such findings must be made with an appropriate degree of caution. Clearly, a larger sample would have been desirable.

Design and Methodology

Inherent in all research designs employing correlational procedures is the lack of experimental control necessary to establish causation. Results can be interpreted as assessing the degree of relationship existing between specified variables and focusing attention on

possible causal factors, but definitive conclusions regarding cause-and-effect interaction require experimental design.

A limitation that occurs in most educational research conducted in institutional settings also applies to this study. Measures of subject performance are often affected by instructional demands not related to specific research needs. Thus, some of the case tapes submitted for ratings of counselor effectiveness might have reflected counselor response sets which would differ both qualitatively and quantitatively from counselor response sets found in more clinically relevant settings. This speculation presupposes a possible interaction between the motivation of the counselor trainees' in-therapy responses and the effect of having practicum interviews monitored and subsequently evaluated (for purposes of grading).

Instrumentation

The validity and reliability of the criterion measure (pathogenesis) and the three process measures of counselor effectiveness (empathic understanding, frequency of pathogenic behavior, and negative impact) used in this study may legitimately be questioned.

Evidence for the validity of pathogenesis as a measure of psychological destructiveness was presented in Chapters I and II. The research results clearly

confirm its differentiating capacity and its communicability. However, its formulation as an instrument assessing schizophrenia-producing parental pressures (VandenBos, 1969) may limit its value with counselors and clients who fall into a relatively "normal" range. Although both conceptually and empirically the Pathogenesis Index reflects pathology-producing pressures of which schizophrenia is simply the most severe, research findings have not yet validated its generalization to "normal" counselor-client relationships.

An indication of the criterion validity of the pathogenic behavior process variables (frequency of pathogenic behavior and negative impact of such behavior) as measures of therapeutic effectiveness is presented in Chapter II. The fact that these variables bear a significant negative relationship to empathic understanding offers evidence regarding their validity as measures of therapeutic effectiveness.

However, the Counselor Pathogenesis Rating Scale has two notable limitations. First, the nine interaction factors may not be so representative of pathogenic behavior (as the nonsignificant correlations would suggest) as they are representative of nonempathic behavior (as would be suggested by their significant negative correlation with empathic understanding). Secondly, the variables frequency of pathogenic behavior and negative

impact of pathogenic behavior on client self-exploration are not independent scales. Negative impact of pathogenic behavior is only interpretable in the presence of the defined pathogenic behaviors. As such, the negative impact scale does not assess the effect of all counselor behaviors--only those included among the nine interaction categories. Thus, a question of construct validity relates to all instruments used in assessing the degree of pathogenesis and the in-therapy behaviors related to pathogenesis.

Finally, it should be noted that there was a major difference between the VandenBos and Karon (1971) research and the present study. VandenBos and Karon used eight measures of client outcome to assess counselor effectiveness. The eight outcome measures included pre- and post-subject testing on the Porteus Maze, the WAIS, the Visual-Verbal Test, a diagnostic clinical interview, the Rorschach, the TAT, a specially devised vocabulary test, and a record of the number of days each subject was hospitalized. Three process measures were employed in the present study to infer counselor effectiveness. Although long-term client outcome measures appear to be a more reliable and valid index of counselor competence, the uniformity available through the practicum structure mitigated against the use of such outcome measures. Clients were "counseled" by counselor trainees whether

clinically relevant (serious) problems were present or not. To the extent that some clients might have been motivated to seek counseling or to collaborate in it for reasons other than self-improvement, it might be presumed that such clients would not progress therapeutically in the same manner as clients who voluntarily sought the aid of, or had been willingly referred to, a counselor. Thus, the difference in counselor effectiveness measures and the motivation of clients should be considered as possible alternative explanations for the differences in the results of the two studies.

Discussion of Results

Primary Hypotheses

The central aim of the study was to ascertain whether counselor trainee pathogenicity would be significantly related to measures of counselor effectiveness.

The data from the total sample did not support the predicted relationships between pathogenesis and measures of counselor effectiveness. Rated measures of empathic understanding, frequency of pathogenic behavior, and negative impact of pathogenic behavior were correlated with pathogenesis in the hypothesized direction, but failed to reach significance. Thus, these results do not support the findings of VandenBos and Karon (1971).

Several hypotheses may be formulated regarding the nonsignificance of these findings. First, the

nonsignificant relationship between pathogenesis and counselor process variables may reflect uncontrolled confounding factors imbedded in the data and/or the sample. Secondly, elements of the theoretical construct may be nonreactive with the sample and/or the constraints that were employed in the study. Finally, the set of measures used to assess therapeutic effectiveness might have lacked the potency to evaluate accurately the impact of pathogenicity upon counselor trainee effectiveness.

By supplementary analysis, three explanatory sources of possible error variance were identified: (a) significant differences in male and female mean pathogenesis ratings, (b) the effect of an extreme subject score, and (c) rater bias in ratings of empathic understanding.

Pathogenesis research has been primarily concerned with the successful differentiation of psychologically destructive mothers from so-called "normal" mothers (Melnick & Hurley, 1969; Meyer & Karon, 1967; Mitchell, 1968). Thus, the primary focus was on female subjects. Unlike previous investigators, VandenBos and Karon (1971) generated pathogenesis ratings for both male and female subjects. In their study, analysis of the mean differences in pathogenesis ratings by therapist sex indicated that there were no significant differences between ratings of males and females. Closer examination of the

data, however, suggests that this nonsignificant difference in means might have been a function of the small sample size (males = 7, females = 3). In contrast, the results of the present study indicate that the difference between mean pathogenesis ratings by sex of subjects is statistically significant. This difference in male and female pathogenesis ratings may be attributable to one or both of the following sources: (a) an existing significant difference in the pathogenicity of male and female subgroups, or (b) an artificial elevation of female pathogenesis ratings which may be an inherent weakness of the female TAT specimen set. (The presentation of eight of the 20 TAT cards is determined by the sex of the examinee. The number of pathogenic stories generated by the eight female cards is substantially higher than that of the male cards.) Inasmuch as the male and female subgroups were not randomly selected from a random sample, we cannot assume that systematic differences between subsamples had been controlled. Therefore, until a random sample of males and females can be selected, the attribution of significant differences in mean pathogenesis ratings to the difference in specimen sets remains a matter of conjecture. It may be that future investigation of this effect would help to explain nonsignificant product-moment correlations between pathogenesis ratings and measures of counselor effectiveness.

Upon further examination of confounding factors imbedded in the data, it was observed that a single subject (ID-14) consistently received the most extreme ratings on all counselor process variables. In each case, the score recorded placed her two or more standard deviations from the mean. Table 3.12 indicates that her deletion from the sample alters each of the process variable correlations substantially, although not to the point of statistical significance.

A third confounding factor surfaced when statistical controls were employed to assess the impact of client age on counselor process measures. Specifically, the interrater reliability of empathic understanding was significantly affected by the elementary or nonelementary status of the client. Prior research has indicated that rater characteristics may influence the accuracy and objectivity of ratings (Cannon & Carkhuff, 1969; Shapiro, 1968), but there is little information regarding the effect of client age on ratings.

An explanation for this finding could be that, since Rater 1 was an experienced elementary counselor, she reflected this bias in her consistently high ratings of counselor-client interactions involving elementary students. However, the inability to establish a significant correlation between the remaining two raters would suggest an inherent difficulty in employing the

Carkhuff rating scale with interviews involving elementary students. The inability of raters to assess reliably the quality of empathic understanding offered to preadolescents seems related to either inadequate training (presupposing a difference in rater perception of empathic understanding when offered to preadolescents) or a qualitative difference in the manner in which empathic understanding is offered to, and perceived by, preadolescents. In either event the raters were unable to use the Carkhuff scale reliably to evaluate empathic understanding for subjects who were counseling preadolescents. The effect of this factor was inseparable from the nature of the particular sample and the male and female subgroups utilized. Statistical procedures could not be identified which would have controlled the impact of this factor on product-moment correlations computed across the sample and for male and female subgroups. Once again, the effect of this confounding factor was embedded primarily in the sample and the female subgroup, inasmuch as five of the six elementary clients were interviewed by a female counselor trainee.

In summary, the reactive effects of the subjects' sex, the extreme scores of one subject, and elementary client status do not independently account for nonsignificant correlations among females and the total sample, but in combination they may obscure meaningful differences

among female subjects on ratings of pathogenesis and empathic understanding. If so, the probability of finding statistically significant relationships between variables is thereby reduced.

The second explanatory source of failure to obtain a statistically significant relationship between pathogenesis and empathic understanding may be intrinsic to the theoretical construct under investigation. By definition, pathogenesis requires an active dependency between a dominant individual and a dependent individual in order for its impact to be perceptible (Meyer & Karon, 1967; Karon, 1963). The study by VandenBos and Karon (1971) utilized 10 therapists treating 15 hospitalized schizophrenics. It is speculated that the nature of the therapeutic relationship between experienced psychotherapists and institutionalized schizophrenics may be substantively different from that developed between counselor trainees and "normal" clients. Further examination of the construct indicates that "pathogenesis may be more significant for (the treatment of) schizophrenic patients, as the TAT scale was originally established to reflect schizophrenic-producing parental pressures" (VandenBos, 1969, pp. 24-25). Therefore, it should not be assumed that the in-therapy impact of therapist pathogenesis would be similar across schizophrenic, neurotic, and normal clients.

The foregoing discussion and conclusions were of primary importance to Hypothesis 1 but will also contribute to clarifying the discussion now presented for the unconfirmed predictions of Hypotheses 2 and 3. Hypotheses 2 and 3 predicted a positive correlation between counselor trainee pathogenesis and the frequency and negative impact of pathogenic behaviors. All statistical procedures employed (i.e., product-moment correlation, stepwise regression, and partial correlation) indicated a nonsignificant association between pathogenesis ratings and the frequency and negative impact of pathogenic behavior. At least two explanations can be offered for these findings: (a) the specified behaviors have insufficient construct validity to detect pathogenicity, or (b) pathogenesis does not have a consistent behavioral index (or indices) from which it may be evaluated.

The construct calls for "conflicting" needs to be in evidence for the dominant individual to respond in a pathogenic manner. However, the nine defined interactions may not represent a sufficient conflict of needs to prompt pathogenic responses. It is conceivable that the conflict of needs necessary for the observable manifestation of counselor pathogenicity is so infrequent as to be missed when assessed in brief tape segments. In short, should therapist and client needs

come into direct conflict infrequently, the perceptible impact of pathogenic resolution of such conflicts would be behaviorally difficult to trace.

The second possibility was discussed in personal communication with Dr. Bertram Karon (November, 1977). Dr. Karon was of the opinion that a behavioral component of pathogenicity across therapists could not be identified. He stated that "there would be no therapist response set which would universally emanate from the same intent. The dynamic interpretation of behavior connotes the probability of unique motives for similar behavior." Therefore, two therapists acting in a predefined pathogenic manner (e.g., interrupting the client) would be doing so from unique constellations of personality characteristics. The subsequent client perceptions of these similar behaviors might be different. In summary, it appears that the nonsignificant relationships between pathogenesis and the frequency and negative impact of pathogenic behavior reflect an inaccurate classification of the nine counselor-client interactions as pathogenic. Therefore, closer observation of extended therapy is suggested in order to identify therapist-client conflicts which may provide an operational definition of pathogenicity.

The preceding discussion summarizes the unconfirmed predictions of Hypotheses 1-3. In contrast, data

from the sample support a predicted inverse relationship between empathic understanding and the frequency and negative impact of pathogenic behavior (Hypothesis 6). Specifically, the findings suggest that the nine counselor-client interactions defined as pathogenic were perceived by raters as behaviors that were negatively interacting with the offering of empathic understanding. In addition, as raters observed an increasing negative impact of pathogenic behaviors, they perceived a reduction in the quality of empathic understanding offered by the counselor. To some extent this finding supports the conclusion that the behaviors defined as pathogenic may better be defined as nonempathic behaviors. In partialing out the effect of the negative impact variable in the relationship between empathic understanding and the two pathogenesis variables, it was observed that frequency of pathogenic behavior and empathic understanding were not significantly related to each other. That is, when the negative impact of pathogenic behavior was not considered, the frequency did not account for a significant portion of the ratings of empathic understanding. Such conclusions are in agreement with, and lend support to, the basic premises underlying Carkhuff's (1969) definition of empathic understanding. If the counselor's behavior is not detracting noticeably from client affect, or from the expression of such affect,

the counselor is functioning at minimally facilitative levels. The fact that the frequency of pathogenic behavior was negatively related to empathic understanding suggests that counselor trainees might have been engaging in behaviors which did not facilitate the identification and resolution of the client's concern. This possibility will receive further discussion in the ancillary findings portion of this chapter. It is statistically inadvisable to interpret the relationship between negative impact and empathic understanding, when controlling for frequency, inasmuch as the presence of a pathogenic behavior (i.e., a frequency) is necessary in order for the impact of the behavior to be assessed.

Finally, the significant positive relationship between the frequency of pathogenic behavior and its negative impact supports the presupposition that the defined behaviors have a detrimental effect on client self-exploration (see Appendix G). This is not to say that any single pathogenic behavior may not have a greater negative impact on therapy than two or more pathogenic behaviors in combination. However, the results indicate that increasing the number of pathogenic behaviors is associated with an increasing overall negative impact of these behaviors.

Summarizing the discussion of the primary hypotheses, it can be concluded that counselor trainee pathogenicity did not relate significantly to process variables

from which counselor effectiveness could be inferred. These findings do not support a generalization of the previous research involving clinical psychology interns and psychiatric residents (VandenBos & Karon, 1971) to the counselor trainee. However, the findings do indicate that the Counselor Pathogenesis Rating Scale, specifically devised for the present study, has a significant relationship to counselor effectiveness via the research regarding empathic understanding (Carkhuff, 1969a; Truax & Carkhuff, 1967; Avery, D'Avgelli, & Danish, 1976).

Secondary Hypotheses

The counselor trainee's degree of pathogenesis had no significant relationship with the amoral, manipulatable, interpersonal insensitivities purportedly measured by the Mach V Attitude Inventory. Neither the discriminating power of the instrument nor its capacity to predict the criterion measure was demonstrated in the present study. In part, this inventory was chosen for inclusion because of the broad range of scores (40-160) it could potentially generate and thereby make possible the detection of subtle differences within a homogeneous sample. However, the range of scores fell between 68 and 100, and with the two extreme scores removed the range was restricted to 72-90. There were 10 unique scores among 20 subjects, with four subjects receiving a single score. These scores suggest that the

utility of this instrument for discriminating among subjects in the present study was severely limited.

An additional source of explanation for the lack of significance may lie in a substantive theoretical difference in the two constructs, pathogenesis and Machiavellianism. The Mach V attempts to assess a general strategy for dealing with people that is willfully implemented by an individual (Christie & Geis, 1970). Essentially, Christie and Geis suggest that this interpersonal strategy is subject to the control of the individual utilizing it. Such control presupposes the ability to suspend or employ this strategy as needed. In contrast, pathogenicity is thought to be an unconscious pervasive personality characteristic which is not volitionally controlled (Karon, 1963). The pathogenic individual is not necessarily aware of nor intending to generate pathogenic interaction. Such theoretical differences may account for the nonsignificant correlation between the two measures. It should be noted that in the researcher's extended contact with subjects, the predicted attitudinal dispositions of high Machs (S>82) were observed. These subjects were less emotionally involved with clients, less concerned with sensitive issues, and less interested in saving face when placed in a personally sensitive situation (as also indicated by their low MMPI-R scale scores). Generally, the emotional detachment of high Machs bordered on abruptness.

These observations, while not documented statistically, offer a degree of subjective credibility to the Mach V's capacity to evaluate the suggested personality dimension.

It was also predicted that counselor pathogenicity would be significantly correlated with established measures of psychopathology. Although significant relationships between pathogenesis and certain MMPI scales (Pa, K, Si, L, and D) were identified, the statistical procedures employed were inadequate to raise the significance of these relationships above the level of chance. Therefore, any inferences would be purely conjectural. Further investigations employing a substantially larger sample might shed light upon the relationships tentatively confirmed in the present study.

Two additional observations concerning the relationship between the MMPI scales and pathogenesis may have implications for further research. First, it is noteworthy that increased pathogenesis was meaningfully related to the L (Lie) Scale among men and the K (Correction) Scale among women. Duckworth and Duckworth (1975) suggest that both scales evaluate somewhat the same behavior (presenting a less-than-accurate image of oneself), but that the K scale evaluates the behavior much more subtly. Scores on the L scale frequently indicate the degree to which an individual is trying to look good in an obvious way. Elevated scores on the K scale

indicate a cautiousness about revealing oneself. These findings may lend support to Karon's (1963) hypothesis that the highly pathogenic individual is resistant to self-disclosure, since such disclosure might lead to personal vulnerability which could subsequently weaken the dependency or domination being utilized in the relationship. A second observation is the counter-intuitive finding which indicated an inverse relationship between pathogenesis and the Pa (Paranoia) Scale. Researchers have concluded that elevated Pa scale scores reflect an interpersonal insensitivity which frequently manifests itself as a disinterest in the reactions of others to oneself (Dahlstrom & Welsh, 1972; Duckworth & Duckworth, 1975). Thus, it seems uncertain what, if anything, could be offered as a logical tie to the construct of pathogenesis.

Ancillary Findings

In keeping with the exploratory nature of the study, it was recommended that records of the subjects' practicum grades be obtained and included in the examination of results. When practicum grade was made the criterion measure, results indicated that there were significant positive relationships between practicum grade and ratings of counselor trainee pathogenesis, and between practicum grade and the frequency of pathogenic behavior. More specifically, pathogenesis ratings

accounted for 18% of the variability in practicum grades, and ratings of frequency of pathogenic behavior accounted for an additional 19% of the variability in the criterion measure.

On the basis of Karon's assumption (1963), the highly pathogenic counselor trainee would attempt to meet his needs at the expense of, or without regard for, a subordinately dependent individual. It is conceivable that as a result of the constraints inherent in the practicum setting an artificial conflict between the needs of the counselor trainee and his client may be generated (e.g., the client requires more interviews for problem identification than is normal, versus the counselor being required to submit a completed case within a specified time period). Inasmuch as the practicum grade may be adversely affected by systematic departure from the prescribed interviewing requirements, some counselor trainees may conceivably find themselves manifesting pathogenicity in their pursuit of an optimum grade. Thus, as counselor trainee pathogenesis increases, so does the probability that the counselor trainee will overcome conflicting obstacles and secure a higher practicum grade. In contrast, it is possible to speculate that a better explanation for the significant positive correlation between pathogenesis and practicum grade is that the more highly pathogenic counselor trainees are generally

the more effective counselors. However, such speculation is not supported by the limited data provided by the current study. For highly pathogenic counselor trainees to be the more effective counselors (as measured by practicum grade), the relationship between other measures of effectiveness and practicum grade should be significant. The results indicate that ratings of empathic understanding (one measure of counselor effectiveness) account for a negligible amount of the variance in the practicum grade. Therefore, it may be questioned whether the common variability of pathogenesis and practicum grade is necessarily attributable to the counseling competence of a given subject.

The significant positive correlation between the frequency of pathogenic behavior and practicum grade suggests that additional attention be given to the nature of counselor behaviors defined as pathogenic. The nine pathogenic interaction categories have been logically and empirically shown to have a detrimental impact on therapy (Berenson, Mitchell, & Laney, 1968; Alexik & Carkhuff, 1967; Truax & Mitchell, 1971). As previously mentioned, the findings of the present study also indicate that the frequency of these pathogenic behaviors has a significant inverse relationship with certain process measures of counselor effectiveness. Thus, it was hypothesized that increasing the frequency of these

in-therapy behaviors would adversely affect supervisory evaluation of trainee interviewing performance. The findings indicate a contradiction in the direction of this hypothesized relationship between supervisory evaluations and the frequency of counselor trainee pathogenic behavior. This contradiction may be partially explained in examining the criteria employed in the determination of practicum grades.

The practicum grade, while having a primary focus on counselor trainee interviewing behavior, also reflects supervisory evaluations not exclusively focused upon the interview setting. Factors affecting the practicum grade but not restricted to interviewing behavior include: (a) quality of the written model developed in relation to the client's concern; (b) quality of the written learning objectives developed in relation to the client's concern; (c) quality of the written strategy utilized; and (d) the counselor trainee's attendance and quality of participation in the practicum class meetings, should the trainee's grade be of borderline status (Burks, 1977).

Inasmuch as the practicum grade is more than an assessment of in-therapy behavior, interpretations regarding the significant inverse relationship between the frequency of pathogenic behavior and the practicum grade must remain tentative. To the extent that the practicum grade accurately reflects the counselor

trainees' level of facilitative functioning, the present findings may be useful in providing a direction for further examination of the relationship between counselor trainee effectiveness and the criteria employed for evaluating the counseling practicum.

In summary, the significant positive relationship between practicum grade and ratings of counselor trainee pathogenesis and between practicum grade and frequency of pathogenic behavior, as well as the nonsignificant relationship between ratings of empathic understanding and the practicum grade, suggest that the practicum setting may be eliciting in-therapy counselor trainee behaviors which are not positively related to certain process measures of counselor effectiveness.

Implications

Few clear implications can be drawn from this research. The purpose of the study was to determine the degree of relationship between counselor trainee pathogenesis and counselor trainee effectiveness. The results indicate that there was a significant relationship between counselor trainee pathogenesis and ratings of empathic understanding for males, but not for the total sample or for the female subgroup. The size of the male subgroup (N=7) and the nonsignificant relationships for the remainder of the sample prohibit definitive implications regarding the use of pathogenesis ratings as a

tool in the selection or training of counselor trainees. In discussing the results, several explanatory sources of the failure to find hypothesized relationships were considered. The limited implications that may be offered relate to the rating of empathic understanding when interviewing preadolescent clients, the review of current modes of assessing counselor trainee interviewing competence, and the need for additional research addressing the potential impact of counselor pathogenicity.

To a certain degree, the results of this study indicate that the training methods employed were effective in preparing raters to reliably assess empathic understanding, frequency of pathogenic behaviors, negative impact of pathogenic behavior, and pathogenicity among counselor trainees. However, attention needs to be given to the development of a training package facilitating the reliable rating of empathic understanding for counselor contact with preadolescents. Such a package needs to focus on the qualitative and quantitative differences in counselor-client dialogue. The findings also suggest the need for a rating scale that does not rely so heavily on reflective, nondirective, and mildly interpretive counselor responses.

The data of this study also suggest that further examination of practicum grading criteria may help determine which, if any, elements of the interviewing criteria may be fostering counterproductive therapeutic behavior.

Suggestions for Future Research

The results of the research in the area of counselor pathogenesis and counselor competence are at best equivocal. The exact nature of the construct (pathogenesis) is far from being refined, let alone researched. Much of the preceding discussion has indicated directions for future research. Several specific additional areas will be identified that seem to be of consequence for such research:

1. The definition of pathogenesis should be further refined to include behavioral indices of dependence, conflict of needs, and the interpersonal dimensions of dominance and subordinance. These refinements would help to identify the measurable components of the counselor-client relationship.

2. The greatest need is to develop instruments that can measure client outcomes and assess the clinical relevance of client problems. These instruments should be more sensitive to the counselor behaviors addressed in the definition of pathogenesis. With reliable measuring instruments, it may be possible to determine the degree to which the necessary components of pathogenesis (i.e., dependency, dominance and subordinance, and conflicting needs) are present.

3. Closely associated with assessing the clinical relevance of client problems is the need to conduct

related studies in settings other than the practicum. Counseling settings which secure clients through internal and external agency referral, offer counselors-in-training extended client contact, and are nonevaluative (in the graded sense) may minimize the confounding effect of the academic and time constraints inherent in the practicum experience. Examination of counselor effectiveness in such settings has the added benefit of extending the generalizability of results further into the practitioner's domain.

4. Research is needed to explore the role of client perception in assessing the impact of pathogenesis in the counseling relationship. The client's detection of pathogenic behavior may facilitate the assessment of the counselor trainee's therapeutic effectiveness. For example, Selfridge and VanderKolk (1976) found a significant positive relationship between client perception of counselor facilitativeness and the counselor's level of personal functioning (as measured by the Personal Orientation Inventory). In addition, Maskin (1974) found that counselors who were evaluated as more psychologically adjusted were perceived by clients as more effective. Clients who viewed their therapists as caring and as generally attractive people were more successful in therapy whether the criterion was their own satisfaction or therapists' ratings of change (Bent, Putnam, Kiesler,

& Nowicki, 1976; Werman, Agle, McDaniel, & Schoof, 1976). The evidence would seem to support the position that client perception is an important element of the therapeutic process.

5. Research is needed to explore the reactive effects of pathogenesis and (a) the time necessary to develop a dependent therapeutic relationship, (b) the extent of the counselor trainee's counseling experience, and (c) the theoretical orientation of the counselor trainee.

In Retrospect

As a learning experience, this dissertation prompted a series of intermediate formative evaluations regarding factors potentially affecting the outcome of the research. If the study were to be repeated, a number of modifications would be needed:

1. In perusing the results of the analysis of data it was apparent that additional information regarding the subjects' previous counseling experience and the subjects' pre-research attitudes toward the practicum experience would have permitted greater certainty when interpreting the data.

Previous pathogenesis research by VandenBos & Karon (1971) did not indicate an interaction effect between pathogenesis and therapist experience. However, that study was conducted with therapists who, while having

varied numbers of years of clinical experience, had a minimum of two years of counseling experience. It is possible that the varied experience among counselors-in-training who have minimal levels of experience would obscure significant differences in performance attributable to pathogenesis.

To enhance the interpretation of results related to the practicum grade, a pre-research item checklist identifying specific counselor trainee practicum concerns would be devised and employed. An instrument of this nature might indicate the breadth and depth of specific counselor trainee concerns and allow intragroup comparisons.

2. Clearer expectations regarding the focus and length of case tapes submitted for rating would be provided. The rating scales employed were measures whose reliability is somewhat dependent on the length and number of counselor-client interactions in each rated segment. The length of counseling interviews submitted for rating varied from 16 minutes to 75 minutes. Thus, random time sampling was limited to segments of three minutes or less. As previously noted, the impact of preadolescent clients on reliability was substantial, suggesting that the rating of such interactions might have been facilitated by clearer guidelines concerning issues and clients that were acceptable for submitted tapes.

3. The subjects engaged in the present study had been recently involved in other doctoral research through a required M.A. counseling course. Some of the subjects appeared to have been adversely affected by what they perceived as a communication breakdown between themselves and the researchers. This residual negative effect might have inadvertently influenced the results of this study inasmuch as the criterion measure (TAT) and one of the independent measures (MMPI) were sensitive to subject resistance. The use of subjects adversely affected by previous research involvement should be avoided where possible.

Results of this research are not conclusive with respect to the impact of counselor trainee pathogenesis on counselor trainee effectiveness. The findings should be viewed as a step in the further examination of dimensions of counselor trainee effectiveness and those factors which may inhibit effectiveness. It is hoped that this study will prove valuable to others interested in monitoring the development of counselors-in-training and in examining the factors that contribute to that development.

APPENDICES

APPENDIX A

MEMORANDUMS FOR SUBJECTS

APPENDIX A

MEMORANDUMS FOR SUBJECTS

MEMORANDUM

To: Graduate Students in Counseling
From: Ray Husband
Re: Research Investigation of Counselor Effectiveness

The following information provides a thumb-nail sketch of the proposed study and what your part might be as a participant.

Purpose: Identification of hypothesized personality dimensions which affect counselor effectiveness.

Design: One group with multiple measures. The study is correlational, not experimental.

Measures to be used: Thematic Apperception Test, Mach Scales, Minnesota Multiphasic Personality Inventory, Scales for the Assessment of Interpersonal Functioning (Carkhuff), and a Counselor Response Inventory

Expected time investment: 2-3 hours, arranged with each participant

Benefits: Letter of recommendation for each participant's professional and academic file.

Exposure to the aforementioned tests.

Willingness on the researcher's part to provide written feedback upon completion of the analysis of data.

Willingness on the researcher's part to provide additional supervision during practicum, upon request.

Faculty supporting the study: Dr. Herbert Burks Jr., Dr. Bob Winborn, Dr. Richard Johnson, Dr. John Powell, Dr. Thomas Gunnings

Researcher's address & phone number:

Raymond Husband
2125 Ray St. off. E-33 Holmes Hall
Lansing, MI. Campus
484-3018 off. 353-6367

M E M O R A N D U M

I have enclosed a copy of the letter that has been sent to Dr. Bob B. Winborn for your academic file. Your academic file is kept at Erickson Hall in the event that graduate schools and/or employers contact the College of Education for a recommendation.

While this file is available at Erickson, that may not be the location of greatest visibility for you. Should you need one additional copy of this letter forwarded to the MSU Placement Office, or another office that is currently holding your academic and professional credentials, please detach the form at the bottom and return to me.

Once again, thanks for your cooperation and assistance, and I'll look forward to any additional contact we might have.

Detach and send to: Ray Husband
Director of Student Affairs
E-33 Holmes Hall
Michigan State University
East Lansing, MI 48824

Name _____

( ) Please send copy to MSU Placement Office, under the following name (if different from above) _____

( ) Please send copy to the following office:

office _____
address _____
_____

( ) Please forward one more copy to me.

Should you not need an additional copy, please do not feel compelled to return this form.

APPENDIX B

LETTER OF RECOMMENDATION

MICHIGAN STATE UNIVERSITY

LYMAN BRIGGS COLLEGE · HOLMES HALL EAST LANSING · MICHIGAN · 48824

December 9, 1977

APPENDIX B

LETTER OF RECOMMENDATION

Dr. Bob B. Winborn
Professor, College of Education
436 Erickson Hall
Michigan State University
East Lansing, Michigan 48824

Dear Bob:

In recognition of outstanding cooperation and voluntary involvement in doctoral dissertation research, we are submitting the following professional recommendation for (name of subject).

(name of subject)'s participation in this study required a substantial investment of out-of-class personal time, including exposure to several personality measures. His contribution to the project reflects an overt commitment to counseling research and an obvious interest in academic self-development. Graduate students seldom have time for even minimal involvement in co-curricular projects, and we find (name of subject)'s sense of professional commitment and responsibility noteworthy.

While individual scores and profiles are confidential, should you have questions regarding other aspects of this study, please feel free to call.

Sincerely,

Raymond L. Husband
Director of Student Affairs
Lyman Briggs College

Herbert M. Burks, Jr.
Professor, College of Education
Michigan State University

rd

cc: (name of subject)

APPENDIX C

PATHOGENESIS SCORING SCHEMA

APPENDIX C

PATHOGENESIS SCORING SCHEMA

Karon Pathogenesis Scoring System
(from Meyer & Karon, 1967)

Pathogenic themes

1. Murder.
2. Boss driving workers hard.
3. Parents make boy study or practice when he doesn't want to.
4. Mother supposedly kind, but not meeting expressed needs of child.
5. Mother showing particularity for one daughter or son over another.
6. Any kind of talking to as a form of punishment.
7. Mother warning child on things that can harm him in growing up.
8. Mother telling child he hasn't worked up to ability.
9. Going to cemetery to scare people.
10. Husband gives wife news he is leaving town (or her).
11. Spying on girlfriend, or being stood-up.
12. Monster ready to attack child or smaller animal.
13. Happy old witch and pretty young woman.
14. Man telling wife something to hurt her, e.g., took secretary to dinner.
15. Mother reading to child from Bible to teach her a lesson.
16. Woman and evil conscience; devil behind her; etc.
17. Mother feels what she has said to daughter has done little good.
18. Husband interrupts something wife is interested in.
19. Nasty remarks to a subordinate, making him or her unhappy.
20. King or leader leading nation to ruin.
21. Mother doesn't like something about daughter or son (looks, make-up, attitudes, etc.) even though daughter or son likes it.
22. Refusal of marriage bid; one is interested, one is not.
23. Mother checking up on son or daughter (study, etc.).
24. Destructive witch themes.
25. Family ruled or dominated.
26. Husband or father jealous or forbidding.
27. Woman harming child by punishment.
28. Suicide attempt to frighten someone.
29. Man pulling out of extra-marital affair and woman doesn't want to.
30. Losing interest in playing the violin. (It is assumed that Card 1 reveals parental relations even if the parent is not mentioned. The child playing the violin against his will is assumed to imply coercion).

Neutral Themes - unscorable

1. No interaction between two people, though somewhat conflicting needs.
2. One person enjoying himself.
3. No people or living things.
4. Two people, but no indication of interaction.
5. Conflict with person's own needs, not other people's.
6. Thinking about a mother who was kind to her. (It is assumed that this indicates such a fantasy--but it is at least as likely to be defensive as it is to be a reflection of reality).
7. Wanting to join a dead person--an intrapsychic problem.

Benign Themes

1. Parents force child to do something; he is unhappy, they change.
2. Teacher consoling a problem child; helping a gifted child.
3. Guides leading animals across difficult area, etc.
4. Reunion of two people--both people pleased.
5. Person springing a pleasant surprise on another one.
6. Parent interrupts punishment of child by another parent.
7. Stopping children from activity in which they would be likely to get hurt.
8. Woman trying to console man in trouble.
9. Father and daughter consoling each other after death of mother.
10. Helping people at a disaster.
11. Son or daughter interested in advice from parents (or stories).
12. Woman working hard for benefit of her children.
13. Mother thinking about children and is happy.
14. Accepted protestation of love, or evidence of mutual love.
15. Mother admiring work of children or making something they like.
16. Man heeds woman's wish not to leave.
17. Any attempt to help or console with no ulterior motive.
18. Prevention of disaster (suicide, murder, etc.).
19. Mother enlightening child about the birds and the bees.

These scoring criteria appeared in Meyer, R.G. & Karon, B.P. The schizophrenogenic mother concept and the TAT. Psychiatry, 1967, 30, 173-179.

An enlarged modified scale appears in Mitchell, K.M. & Karon, B.P. A scale for the measurement of pathogenesis in mothers of schizophrenic children. Discussion Papers, Arkansas Rehabilitation Research and Training Center, University of Arkansas, 1967.

APPENDIX D

TRAINING MATERIALS FOR RATING PATHOGENESIS

APPENDIX D

TRAINING MATERIALS FOR RATING PATHOGENESIS

Pathogenesis Scoring

The pathogenic (psychologically destructive) individual is one who, when in the dominant position in a dependence relationship in which the needs of the two individuals conflict, indirectly satisfies his needs without regard for the needs of the dependent person. Behaviorally, this may be accomplished in a number of manners such as manipulating (without acknowledging the manipulation) the "other" to satisfy one's own needs rather than the "other's" needs, ignoring the expressed needs and wishes of the "other", not allowing the "other" to express his negative feelings when his needs are frustrated, or making the "other" feel he is evil for having negative feelings at all. Such ways of functioning may be conscious or unconscious; obviously, they are typically occurring unconsciously (and frequently with a great deal of verbalized concern about the well-being of the "other").

The most frequent difficulty scorers have in making Pathogenesis ratings is ignoring the rationalizations given for behaviors described in TAT stories. The rater must pay strict attention to the behavior and relationship described, not the (socially acceptable) rationalizations for the behavior. For example, most punishment is scored as pathogenic. Such child-rearing practices are frequently institutionalized sadism which provide an outlet for the parent's frustration over not being able to control the child or anger caused by the inconvenience the child's misbehaving has caused. Children seldom see punishment as "help training"; it is only after the parent has instilled this view in the child that children verbalize such cultural rationalizations. Prisons and mental institutions are frequently viewed in the same light by those placed in them; the stated reason for placing individuals in such institutions is to help them, but this rationale is also frequently not factual.

Two studies (Nichols, 1970; VandenBos, 1971) have compared the Karon scoring system (as appeared in Meyer & Karon) and the Mitchell-Karon scoring system. In both cases, the original scoring system proved to be the more powerful one, with the Mitchell-Karon revision having lower correlations. Recently, the original scoring system was shown to differentiate parents even within a group of

mothers of schizophrenics. The mother's pathogenesis ratings significantly correlated with rated pathology of the patient and length of total hospitalization. The original scoring system is recommended. However, additional comparison of the two scoring systems may be useful to more clearly determine the specific differences in functioning assessed by each criteria.

Gary R. VandenBos, Ph.D.

Mitchell-Karon Pathogenesis Scale

Pathogenic Themes

Note: The general criteria for scoring stories pathogenic at first included only those themes in which there was an interaction between a dominant individual and dependent individual and in which the dominant either refused to meet the needs of the dependent person or used the dependent person to satisfy his own needs.

Later, the criteria came to include those themes which implied the above interactions although there was only one person in the story. Finally, the criteria came to include themes of loneliness, impotence, despondency, and helplessness, even if intrapsychic.

1. Murder.
2. Boss drives worker too hard.
3. Parents make boy study or practice when he doesn't want to.
4. Mother supposedly is kind, but does not meet expressed needs of her child.
5. Mother shows partiality for one daughter over another.
6. Any kind of talking to as a form of punishment.
7. Mother warns her child of all the things that can happen to him when he grows up.
8. Mother tells her child he hasn't worked to ability.
9. A worker loses his job.
10. Spying on girlfriend or being left alone.
11. Husband gives his wife the news he is leaving town (or her).
12. Monster ready to attack a smaller animal.
13. Mother reads to her child from the Bible in order to teach her a lesson.
14. A woman with an evil conscience or the devil behind her.
15. Mother feels that what she has just said to her daughter hasn't done much good.
16. Husband interrupts a TV show in which his wife is interested.
17. Nasty remarks made to a subordinate.
18. King leads his nation to ruin.
19. Refusal of a marriage proposal; he's interested and she's not or vice versa.
20. Mother checks up on her son.
21. Destructive witch themes.
22. Family rules dominating in opposition to certain individual's needs.
23. Husband or family jealous or forbidding.
24. Suicide attempt.
25. A man pulls out of an extramarital affair, and the emphasis is upon hurting the person he is leaving.
26. Losing interest in playing the violin.
27. An evil man prays to God for forgiveness but is not forgiven.
28. Mother puts her child out for adoption.
29. Boy shoots his father for beating his mother.
30. Hypnotizing in order to do harm.

31. A son wants to help an alcoholic mother but he doesn't know what to do.
32. Wife rejects her husband.
33. A minister prays but it doesn't help.
34. Surgery without anesthesia.
35. Mother doesn't approve of some plan of her daughter and the story is left at that.
36. Scared to call police because they will think he did it.
37. Implication that surgery is doing harm to the patient.
38. Child must solve family's problems.
39. The implication that no one cares for someone in the story.
40. Slave and master themes.
41. Dungeon themes.
42. A doctor or policeman tells a man bad news and the story is left at that.
43. Implication of quack doctor or hypnotist.
44. Mother tells her daughter that she is too old for dolls.
45. Impotence as a theme where the hero "can't" or is "bored."
46. Having "no interest" where this is specifically stated.
47. Despondency specifically stated.
48. Loneliness whether another person is involved in the story or not.
49. Something is missing and the person attempting to find it does not.
50. "Escape" story with no attempt at reconciliation or mention of personal growth.
51. Specifically stating a wish for a better life without mentioning any possibility of its being attained.
52. Specifically stating that there is nothing between two characters.

Benign Themes

1. Parents force their child to do something but he is unhappy about it and they change.
2. Teacher consoles a problem child or helps a gifted child.
3. A guide leads animals across a difficult area.
4. Reunion of two people and both are pleased.
5. A person springs a pleasant surprise on another person.
6. One parent interrupts the punishment of his child by another parent.
7. Stopping children from an activity in which it is likely they would be hurt.
8. A woman tries to console a man in trouble.
9. Father and daughter console each other after the death of her mother.
10. Son or daughter interested in advice from parent.
11. Woman works hard for the benefit of her children.
12. Mother thinks about her children and she is happy.
13. Accepted proposal or protestation of love or mutual love.
14. Man heeds a woman's wish not to leave.
15. Prevention of disaster.

16. Mother enlightens child about sexual matters.
17. Son is worried and his father helps him make a decision but doesn't make it for him.
18. A mother, even though it reflects on her, seeks help for her child at a child guidance clinic.
19. Performer makes audience happy or audience makes performer happy.
20. Father gives approval to his son.
21. Priest gives last rites to man and man feels relieved even though he may still die.
22. Children graduate from college, leave, and parents embrace each other over the good job they have done.
23. Becoming a surgeon or missionary to help people.
24. A family picnic that is fun.
25. Preparing dinner for the family.
26. Husband wants to help. His wife restrains him for his own good but he goes anyway and helps.
27. Child seeks help with the presumption that he will get it.
28. A person is able to help himself although others do not.
29. A man leaves his mistress and it is specifically stated that he returns to his wife.
30. A boy becomes a successful doctor by his own initiative and without mention of his helping anyone or anyone helping him.
31. A wife dies and it is specifically stated that the husband and children carry on.
32. Finding something to do specifically stated.
33. Escape story with subsequent reconciliation or personal growth.
34. A tacked-on ending which mitigates a previous pathogenic theme.

RESEARCH ON PATHOGENESIS

Meyer, R. G., & Karon, B. P. The schizophrenic mother concept and the TAT. Psychiatry, 1967, 30, 173-179.

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VandenBos, G. R., & Karon, B. P. Pathogenesis: A new therapist personality dimension related to therapeutic effectiveness. J. Personality Assessment, 1971, 35, 252-260.

VandenBos, G. R. A comparison of two "pathogenesis" scoring systems, 1971. Unpublished manuscript, Michigan State University.

Mitchell, K. M. The concept of "pathogenesis" among parents of schizophrenic, delinquent, and normal children, 1971, unpublished manuscript, University of Georgia, Athens, Georgia. (Later published as two separate articles. Write author for references and reprints.)

NOTES TAKEN DURING PHONE CONVERSATION
BETWEEN GARY VANDENBOS AND CISSY
SELFRIDGE JANUARY 9, 1978 REGARDING
PATHOGENESIS SCORING OF TAT

1. Question: Does it require an unequal status relationship to have a dependency--i.e. mother-daughter, mother-son, older-younger person?

   Answer : No. We can assume that in a friendship or peer relationship there is mutual dependency, that a relationship is meant to be mutually rewarding and nurturing.

2. Question: Is a son leaving an older parent pathogenic?

   Answer : The role of the mother is to help the son grow up and separate. If she doesn't do that it's pathogenic.

   Issue : Are the needs of the people talked about, articulated? You see, hear, appreciate what the other person wants and make a decision on that basis. The TOTAL PACKAGE of behaviors is important--not just the final behavior. The emphasis is on behavior, intentions don't matter. It has to be acted. Taking the other person's needs into account has to be done actively.

3. Boredom--how to score:

   Answer : If people are bored with someone else doing something and it continues to occur, it's pathogenic. If it's a temporary situation where someone is bored and it's not an on-going thing, it's not pathogenic. The issue is if the one person continues not to take the other's feeling into account or not.

4. Startle reaction--how to score:

   Answer : In and of itself this is not scored pathogenic.

5. Two methods of analysis:

   1) regular scoring -- P + P? = P B + B? = B

   2) rigorous scoring -- throw out all ?'s
      solid B + solid P used only

6. How to score triangle love affair situation:

   Answer : Starting with a relationship that is basically pathogenic, is there anything in the card that indicates that the people are benignly handling it?

   Example : Relationship focuses on the two people on the card. There's some evidence that he's articulating his needs and feelings about duty, obligation, and family. She doesn't acknowledge these, she manipulates him. His behavior is influenced out of guilt. She used his guilt. Nothing benign in either's behavior.

7. Question: If something happens with someone pictured on the card and someone off the card, does that get scored as benign or pathogenic?

   Answer : Deal with the figures on the card, the "on-stage" relationship. In card 1 we assume the parental figure either in the background or internalized in the child. In that card, then, there is an assumed "on-stage" parent. Otherwise, we deal with the figures pictured on the card.

8. Question: There seem to be a lot of cards where the story is told to people being unhappy, feeling badly, yet nothing is resolved. How is that scored?

   Answer : It is pathogenic when members of a family are silently unhappy and they don't interact to attempt to resolve it.

   Example : Nobody is talking about what's going on. Both are thinking the action is going to occur. It's all going on inside their heads. Nobody has permission to say he or she is hurting. Both are silently hurting and he's going to make an autonomous decision.

8. continued. . . . When people are related and are unhappy, when there's no communication. . . the question is, Do they actively take each other's needs into account?

9. Unscorable - Nothing in the story speaks to be shared bond, conflicting needs. . . nothing to indicate that the people know each other. (This is one unscorable kind of situation.)

10. How to score pathogenic situation followed by hope:

    Answer : Possibilities, hope is not sufficient unless there is concrete evidence that the possibilities are based on some reality, that they might really occur. Just a wish or a hope is not sufficient.

11. Child trying to please parents by doing something he/she doesn't really want to do is pathogenic. Child not saying something out of fear of hurting parent's feelings is pathogenic.

PATHOGENESIS SCORING PROCEDURES

The following scoring procedures should be used when scoring TAT protocols with the Meyer-Karon Scoring Key. Exact implementation of these steps should produce greatest interrater reliability and maximum accuracy of ratings.

Read all suggested steps prior to initial rating. Should you have questions regarding any of the procedures please contact me before proceeding.

1. Attempt to score no more than 100 stories per scoring session (fatigue factors reduce efficiency) - attempt to score no fewer than 40 stories per scoring session.

2. Read the Meyer-Karon Scoring Key before each scoring session--helps make transition to the task and refreshes your thinking with regard to the concept of pathogenesis.

3. When scoring stories please use the letters P=pathogenic; B=benign; U=unscorable. Place the letter corresponding to your rating in the top right hand corner of the page.

4. During scoring sessions advance through the TAT cards by rating those stories which are clearly related to one of the themes, and therefore easy to rate, returning to those cards which represent more complex story lines. All stories must be rated.

5. Our primary concern is with "on-stage" action, should additional characters be brought into the stories (likely on monomial character cards, i.e., 3BM, 14, 5, etc.) they can be considered. But, action and deeds are more important than what people may be thinking! The only exception is card one, where a parental figure is almost always inferred.

6. General rules of thumb:
   a) prostitution is always pathogenic unless it is an Irma La Duce fantasy.
   b) suicide attempts are always pathogenic or unscorable (dependent on story line), while suicide rescues are always benign.
   c) punishment is always considered pathogenic.
   d) parent-child interactions take precedence over peers interacting in same story.
   e) violence in human interaction is always considered pathogenic.
   f) score impact & effect, not intent (i.e. hope)
   g) guilt production is not benign, but concern leading to appropriate behavior is not pathogenic.

PATHOGENESIS SCORING CODE

In reassembling the TAT protocols for scoring, the following coding has been used:

(1) The first digit indicates which pair of numbers in the four remaining digits is sought. That pair of digits corresponds to the subject's assigned number.

(2) The number three is used for further complicating the code and is to be treated as the number two when it is in the first position.

Examples: the number 11306 would be subject 13. The number 1 directs attention to the first pair of digits after 1 (13).

the number 23508 would be subject 8. The number 2 directs attention to the second pair of digits after 2 (08).

the number 30202 would be subject 2. The number 3 is used as if it were a 2, directing attention to the second pair of digits after the 3 (02).

All subjects are assigned a two-digit number between 01-20.

APPENDIX E

MACH V ATTITUDE INVENTORY

APPENDIX E

MACH V ATTITUDE INVENTORY

You will find 20 groups of statements listed below. Each group is composed of three statements. Each statement refers to a way of thinking about people or things in general. They reflect opinions and not matters of fact -- there are no "right" or "wrong" answers and different people have been found to agree with different statements.

Please read each of the three statements in each group. Then decide first which of the statements is most true or comes the closest to describing your own beliefs. Circle a plus (+) in the space provided on the answer sheet.

Just decide which of the remaining two statements is most false or is the farthest from your own beliefs. Circle the minus (-) in the space provided on the answer sheet.

Here is an example:

	Most True	Most False
A. It is easy to persuade people but hard to keep them persuaded.	+	-
B. Theories that run counter to common sense are a waste of time.	⊕	-
C. It is only common sense to go along with what other people are doing and not be too different.	+	⊖

In this case, statement B would be the one you believe in most strongly and A and C would be ones that are not as characteristic of your opinion. Statement C would be the one you believe in least strongly and is least characteristic of your beliefs.

You will find some of the choices easy to make; others will be quite difficult. Do not fail to make a choice no matter how hard it may be. You will mark two statements in each group of three -- the one that comes the closest to your own beliefs with a + and the one farthest from your beliefs with a -. The remaining statement should be left unmarked.

Do not omit any groups of statements.

		Most True	Most False
1. A.	It takes more imagination to be a successful criminal than a successful business man.	+	-
B.	The phrase "the road to hell is paved with good intentions" contains a lot of truth.	+	-
C.	Most men forget more easily the death of their father than the loss of their property.	+	-
2. A.	Men are more concerned with the car they drive than with the clothes their wives wear.	+	-
B.	It is very important that imagination and creativity in children be cultivated.	+	-
C.	People suffering from incurable diseases should have the choice of being put painlessly to death.	+	-
3. A.	Never tell anyone the real reason you did something unless it is useful to do so.	+	-
B.	The well-being of the individual is the goal that should be worked for before anything else.	+	-
C.	Once a truly intelligent person makes up his mind about the answer to a problem he rarely continues to think about it.	+	-
4. A.	People are getting so lazy and self-indulgent that it is bad for our country.	+	-
B.	The best way to handle people is to tell them what they want to hear.	+	-
C.	It would be a good thing if people were kinder to others less fortunate than themselves.	+	-
5. A.	Most people are basically good and kind.	+	-
B.	The best criteria for a wife or husband is compatibility--other characteristics are nice but not essential.	+	-
C.	Only after a man has gotten what he wants from life should he concern himself with the injustices in the world.	+	-
6. A.	Most people who get ahead in the world lead clean, moral lives.	+	-
B.	Any man worth his salt shouldn't be blamed for putting his career above his family.	+	-
C.	People would be better off if they were concerned less with how to do things and more with what to do.	+	-
7. A.	A good teacher is one who points out unanswered questions rather than gives explicit answers.	+	-
B.	When you ask someone to do something for you, it is best to give the real reasons for wanting it rather than giving reasons which might carry more weight.	+	-
C.	A person's job is the best single guide as to the sort of person he is.	+	-

		Most True	Most False
8. A.	The construction of such monumental works as the Egyptian pyramids was worth the enslavement of the workers who built them.	+	-
B.	Once a way of handling problems has been worked out it is best to stick to it.	+	-
C.	One should take action only when sure that it is morally right.	+	-
9. A.	The world would be a much better place to live in if people would let the future take care of itself and concern themselves only with enjoying the present.	+	-
B.	It is wise to flatter important people.	+	-
C.	Once a decision has been made, it is best to keep changing it as new circumstances arise.	+	-
10. A.	It is a good policy to act as if you are doing the things you do because you have no other choice.	+	-
B.	The biggest difference between most criminals and other people is that criminals are stupid enough to get caught.	+	-
C.	Even the most hardened and vicious criminal has a spark of decency somewhere within him.	+	-
11. A.	All in all, it is better to be humble and honest than to be important and dishonest.	+	-
B.	A man who is able and willing to work hard has a good chance of succeeding in whatever he wants to do.	+	-
C.	If a thing does not help us in our daily lives, it isn't very important.	+	-
12. A.	A person shouldn't be punished for breaking a law which he thinks is unreasonable.	+	-
B.	Too many criminals are not punished for their crime.	+	-
C.	There is no excuse for lying to someone else.	+	-
13. A.	Generally speaking, men won't work hard unless they're forced to do so.	+	-
B.	Every person is entitled to a second chance, even after he commits a serious mistake.	+	-
C.	People who can't make up their minds aren't worth bothering about.	+	-
14. A.	A man's first responsibility is to his wife, not his mother.	+	-
B.	Most men are brave.	+	-
C.	It's best to pick friends that are intellectually stimulating rather than ones it is comfortable to be around.	+	-

		Most True	Most False
15. A.	There are very few people in the world worth concerning oneself about.	+	-
B.	It is hard to get ahead without cutting corners here and there.	+	-
C.	A capable person motivated for his own gain is more useful to society than a well-meaning but ineffective one.	+	-
16. A.	It is best to give others the impression that you can change your mind easily.	+	-
B.	It is a good working policy to keep on good terms with everyone.	+	-
C.	Honesty is the best policy in all cases.	+	-
17. A.	It is possible to be good in all respects.	+	-
B.	To help oneself is good: to help others even better.	+	-
C.	War and threats of war are unchangeable facts of human life.	+	-
18. A.	Barnum was probably right when he said that there's at least one sucker born every minute.	+	-
B.	Life is pretty dull unless one deliberately stirs up some excitement.	+	-
C.	Most people would be better off if they controlled their emotions.	+	-
19. A.	Sensitivity to the feelings of others is worth more than poise in social situations.	+	-
B.	The ideal society is one where everybody knows his place and accepts it.	+	-
C.	It is safest to assume that all people have a vicious streak and it will come out when they are given a chance.	+	-
20. A.	People who talk about abstract problems usually don't know what they are talking aobut.	+	-
B.	Anyone who completely trusts anyone else is asking for trouble.	+	-
C.	It is essential for the functioning of a democracy that everyone votes.	+	-

APPENDIX F

SCORING KEY FOR MACH V

APPENDIX F

SCORING KEY FOR MACH V
Points per Item by Response Patterns

Item #	1	3	5	7
1	A+ C-	B+ A+ C- B-	B+ C+ A- B-	C+ A-
2	A+ C-	B+ A+ C- B-	B+ C+ A- B-	C+ A-
3	C+ A-	B+ C+ A- B-	B+ A+ C- B-	A+ C-
4	A+ B-	C+ A+ B- C-	C+ B+ A- C-	B+ A-
5	A+ B-	C+ A+ B- C-	C+ B+ A- C-	B+ A-
6	A+ C-	B+ A+ C- B-	B+ C+ A- B-	C+ A-
7	B+ A-	C+ B+ A- C-	C+ A+ B- C-	A+ B-
8	C+ B-	A+ C+ B- A-	A+ B+ C- A-	B+ C-
9	C+ B-	A+ C+ B- A-	A+ B+ C- A-	B+ C-
10	A+ B-	C+ A+ B- C-	C+ B+ A- C-	B+ A-
11	A+ B-	C+ A+ B- C-	C+ B+ A- C-	B+ A-
12	C+ B-	A+ C+ B- A-	A+ B+ C- A-	B+ C-
13	C+ A-	B+ C+ A- B-	B+ A+ C- B-	A+ C-
14	B+ C-	A+ B+ C- A-	A+ C+ B- A-	C+ B-
15	C+ B-	A+ C+ B- A-	A+ B+ C- A-	B+ C-
16	C+ B-	A+ C+ B- A-	A+ B+ C- A-	B+ C-

SCORING KEY FOR MACH V continued

Item#	1	3	5	7
17	A+ C-	B+ A+ C- B-	B+ C+ A- B-	C+ A-
18	C+ A-	B+ C+ A- B-	B+ A+ C- B-	A+ C-
19	B+ C-	A+ B+ C- A-	A+ C+ B- A-	C+ B-
20	A+ B-	C+ A+ B- C-	C+ B+ A- C-	B+ A-

Sum for all 20 items and add constant of 20. Range: 40-160.

APPENDIX G

TRAINING MATERIALS FOR RATING COUNSELOR TRAINEE AUDIOTAPES

APPENDIX G

TRAINING MATERIALS FOR RATING COUNSELOR TRAINEE AUDIOTAPES

Procedures for Rating Audiotapes Pathogenesis Study

Introduction to Ratings

In an attempt to isolate behavioral correlates of "counselor pathogenesis" certain in-therapy counselor-client interactions have been tentatively identified as logically relating to pathogenicity. Hopefully this rating procedure will ascertain how often second practicum counselor trainees are involved in these specific interactions and what impact these interactions have on the counseling process. Audiotaped interviews of counselor trainee practicum cases have been made and will be presented to you in three-minute segments. One COUNSELOR PATHOGENESIS RATING SCALE should be used for each segment.

Rating of counselor-client interactions will be done in two stages. Stage one is a frequency count of counselor responses which can be included in any of the 10 interaction categories. Next, the negative impact and the empathic understanding of the counselor responses are rated. It is suggested that you listen to each situation twice; the first time record the frequencies of pathogenic interaction, the second time rate the negative impact and empathic understanding of the segment. (It is presupposed that counselor-client interactions categorized as potentially pathogenic have a negative impact on client self-exploration.)

Recording Frequencies of Interaction

Categories of pathogenic counselor-client interaction have been listed and defined (see Counselor Pathogenesis Rating Scale-Definitions and Symbols). For each counselor response which can be appropriately included in one of the 10 categories, record a mark in the frequency column. Should a response appropriately fit into more than one category (i.e., focus shifting to counselor by virtue of counselor giving personal advice) choose the most appropriate category and record a mark in the frequency column only once. After recording the frequencies for the entire segment, place the totals for each category in the Total column (T).

Rating Negative Impact on Client Self-Exploration

For each interaction category, one rating scale is provided. The rating scale ranges from level 1 (no perceptible impact) to level 5 (highly significant impact). The following discriminations will be used in evaluating the impact of each counselor-client interaction that can be rated:

Level 1 - The verbal and behavioral expressions of the counselor have no perceptible impact on client self-exploration. The client engages in discussions of volunteered relevant material spontaneously and with emotional proximity.

Level 2 - The verbal and behavioral expressions of the counselor have perceptible impact on client self-exploration. The client voluntarily discusses relevant material but at an increased emotional distance.

Level 3 - The verbal and behavioral expressions of the counselor have moderate impact on the client's self-exploration. The client does not volunteer information and responds to questions in a mechanical manner without demonstrating much affect.

Level 4 - The verbal and behavioral expressions of the counselor have significant impact on client self-exploration. The client responds to discussion of relevant material mechanically and remotely. The client seems to be emotionally detached from the counselor's responses.

Level 5 - The verbal and behavioral expressions of the counselor terminate client self-exploration. The client is permitted to avoid self-descriptions, self-disclosures, and the expression of feelings. Or, by virtue of counselor responses the client is not provided the opportunity to discuss relevant cognitive or affective concerns.

After listening to the segment for a second time, rate the negative impact of counselor-client interactions for which you have frequency counts. Should an interaction category have a frequency greater than one, you should consider all the interactions of that category as a group and provide a single rating. In rating the negative impact of counselor response you need to consider two factors: (a) whether the client seemed verbal or non-verbal at the beginning of the segment, and (b) the degree to which the counselor contributes to the client's verbal or non-verbal nature.

Rating Empathic Understanding

According to Truax and Carkhuff (1976), virtually all theories of psychotherapy emphasize that for the therapist to be helpful he must be accurately empathic. For our purposes empathic understanding will reflect the counselor's ability to "be with" the client, be understanding, and otherwise grasp the client's meaning. You will assess this dimension of counselor functioning with Carkhuff's (1969) Empathic Understanding in Interpersonal Processes Scale. The scale attends to the additive, subtractive, and interchangeable aspects of counselor response and ranges from Level 1 (least empathic) to Level 5 (most empathic). The following delineations should be used in determining the level of empathic understanding demonstrated by the counselor per segment:

Level 1 - The verbal expressions of the counselor either do not attend to, or significantly detract from, the verbal expressions of the client in that they communicate significantly less of the client's feeling than did the client himself.

Level 2 - The counselor responds to the expressed feelings of the client but does so in such a way that he subtracts noticeable affect from the communication of the client.

Level 3 - The expressions of the counselor and client are essentially interchangeable in that they express the same feeling and content.

Level 4 - The responses of the counselor noticeably add to the expressions of the client in such a way that a deeper level of feelings is identified than may have been expressed.

Level 5 - The counselor's responses add significantly to the feeling and meaning of the client's expressions in such a way as to (1) accurately express feelings levels below what the client himself was able to express, or (2) in the event of deep client self-exploration is able to "be with" him at his deepest moments.

Often counselor expressions which approximate the depth reflection of the client-centered approach and the moderate interpretation of the psychoanalytic orientation provide the most efficacious responses for rating. After listening to the segment a second time, rate the counselor's empathic understanding for the entire segment.

It is obvious that rating the negative impact and empathic understanding of counselor responses is difficult under the best of circumstances (i.e., monitoring visually and verbally an entire session), and I am sure that attempting these ratings on brief segments increases the difficulty dramatically. I would ask that you use all your experience in interviewing, and the delineations provided in an attempt to be as accurate as possible. Thanks for your willingness to invest your time and energy in this project. I hope your exposure to this form of evaluation will prove a useful experience.

COUNSELOR PATHOGENESIS RATING SCALE

Definitions and Symbols

IC-interrupting the client: Any time the client has engaged in a verbal response and the counselor begins speaking prior to the client's concluding, constitutes an interruption. If the client has paused, but not concluded the thought and intends to continue, and the counselor begins speaking, this would be an interruption.

SR-soliciting reinforcement: Any questions or statements made by the counselor regarding his/her performance or effectiveness which are intended to solicit evaluative responses by the client should be viewed as soliciting reinforcement.

IR-inaccurate reflections: Attempts at reflecting affective and/or cognitive expressions by the client, which result in the client noting that the reflection is not accurate (e.g., cl.-"That's not exactly the way I feel." or "No, actually I wasn't angry as much as I was hurt.").

TS-counselor terminates silence: Counselor attempts to reestablish dialogue after pauses of more than five seconds since the counselor's last response. Should the counselor terminate silence that the client is using to process information or feelings, regardless of who was the last respondent, it should be recorded.

ACW-accentuating client weaknesses: Evaluative reactions by the counselor which go beyond a simple level of identification of client weaknesses. The counselor allows or is more responsive to a focus emphasizing client liabilities.

NY-not yielding to client interruptions: Attempts by the client to interject verbal comment during the counselor's response, to which the counselor fails to yield. Or having heard the client's interruption, the counselor resumes his/her original comment, disregarding client's input.

FS-focus shifting to counselor: Any time the counselor permits, or promotes, the focus of the interview to shift to his/her personal opinions or experiences which goes beyond simple rapport-building, or identification.

TD-taking direction & flow from client: Any attempt by the counselor, through questions or statements, to change client-initiated topics or concerns. This is to be differentiated from occasions when the counselor routinely directs the client's attention to additional facets of the same presenting problem.

AGM-advice giving and moralizing: Reactions by the counselor indicating a value bias which may, or may not, be shared by the client. Any time the counselor uses personal opinion as a means of resolving client concern, rather than as an option for resolving concerns.

APPENDIX H

COUNSELOR PATHOGENESIS RATING SCALE

APPENDIX H

COUNSELOR PATHOGENESIS RATING SCALE

Rater_____ Segment #_____

The following in-therapy interactions are logically related to the concept of pathogenesis, and therefore may accurately reflect and correlate with the degree of counselor pathogenesis. Please enter the frequency of each specific client-counselor interaction, and circle its impact on client self-exploration.

INTERACTION	FREQUENCY		NEGATIVE IMPACE ON CLIENT SELF-EXPLORATION
IC (interrupting client)			1 2 3 4 5
SR (soliciting reinforcement)			1 2 3 4 5
IR (inaccurate reflections)			1 2 3 4 5
TS (terminates silence)			1 2 3 4 5
ACW (accentuates client weaknesses)			1 2 3 4 5
NY (not yielding to client interrupt)			1 2 3 4 5
FS (focus shifting to counselor)			1 2 3 4 5
TD (taking direction & flow from cl.)			1 2 3 4 5
AGM (advice giving & moralizing)			1 2 3 4 5
TOTALS			(average negative impact)

RATING OF EMPATHIC UNDERSTANDING (please circle)

1 2 3 4 5

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