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SUPERVISORS' INFLUENCE ON THE DEVELOPMENT OF  
PSYCHOTHERAPIST TRAINEES

*The University of Arizona*

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SUPERVISORS' INFLUENCE  
ON THE DEVELOPMENT  
OF PSYCHOTHERAPIST TRAINEES

by

Paul David Guest

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A Dissertation Submitted to the Faculty of the  
DEPARTMENT OF PSYCHOLOGY  
In Partial Fulfillment of the Requirements  
For the Degree of  
DOCTOR OF PHILOSOPHY  
In the Graduate College  
THE UNIVERSITY OF ARIZONA

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THE UNIVERSITY OF ARIZONA  
GRADUATE COLLEGE

As members of the Final Examination Committee, we certify that we have read  
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entitled Supervisors' Influence on the Development  
of Psychotherapist Trainees

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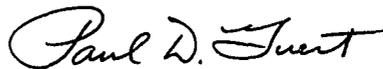
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## DEDICATION

I wish to dedicate this work to my parents in recognition of the contributions they have made to my development. While my mother's commitment to the pursuit of knowledge would have permitted her an interest in this manuscript beyond pride in a son's accomplishment, my father's pragmatic ingenuity provided a model for acquiring many of those skills which were essential to this undertaking. Thank you both.

## ACKNOWLEDGEMENTS

This document concludes a research project which represents the efforts of many individuals. Among these, I wish to thank Larry E. Beutler, Ph.D. who served as principal investigator for the larger project during which initial trainee data were gathered. I also wish to thank Stephen Shanfield, M.D., who directed the Outpatient Clinic at University of Arizona, College of Medicine, Department of Psychiatry during the period when those initial data were collected. I am indebted to the trainees and faculty members who made the effort to provide the follow-up data which was crucial to this study.

This work also signifies the culmination of graduate training. Among those who contributed to my professional and personal growth during the course of this larger process, Larry Beutler, Al Kaszniak, Syd Arkowitz, Peter Attarian, Peter Madison and George Hohmann are especially deserving of recognition. Each served as exemplars of their areas of expertise and all shared a readily apparent commitment to and enthusiasm for teaching. In addition, some offered a atmosphere of collegiality for which I am deeply appreciative. I also wish to recognize Neil Bartlett for the assistance he provided in the commencement and the conclusion of this process.

Thank you Pat, for remaining a friend through the changes this period has brought to both of our lives. Finally, I wish to express my appreciation to you April, without your sensitivity, courage and support, this ending and the beginning which follows would have much less meaning.

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## ABSTRACT

Supervision of psychotherapy constitutes a major component of the professional training undertaken by individuals pursuing careers in clinical psychology. The empirical literature has only recently begun to address the impact which supervision has on the development of its recipients. The present study explored relationships between changes in the theoretical orientations and personal values of therapist trainees and the theoretical orientations and values of the training faculty who provided them with supervision during a one year training program. Trainee theoretical orientation and personal values were assessed at the beginning and at the end of the training program for three successive training years, yielding a trainee sample  $N$  of 16. Follow-up assessment of theoretical orientation was obtained from this sample three to five years after they had completed this one year program. Background characteristics assessed included measures of personality functioning, locus of control and prior clinical experience. Parallel data were collected from 11 supervisory faculty. Regression analyses assessed the extent to which changes in trainee orientations and values could be predicted on the basis of the perspectives held by their supervisors. Trainees were found to enter the program with a positive bias toward psychoanalytic and experiential forms of therapy and a negative bias toward cognitive-behavioral therapy. Through the follow-up assessment this psychoanalytic orientation was maintained and consolidated. Trainees also became more accepting of cognitive-behavioral treatment and less supportive of

experiential therapy. While supervisors' orientations were generally found to be unrelated to changes in trainee orientation during the training period, follow-up data suggested that supervisors had influenced the orientations currently held by former trainees. Changes in orientation were found to be unrelated to trainee background characteristics or level of prior clinical experience. Current findings suggested that trainee perceptions of supervisors' influence were related to supervisor status within the training program. Trainees entered the program with value systems that were similar to those of their supervisors. These values did not change substantially during the course of training. Trainee personality characteristics were more frequent predictors of those value changes which did occur than were supervisor values.

## INTRODUCTION

Supervision of the clinical work of novice therapists is held as a central feature of the professional development of psychotherapists. Although there is universal consensus that beginning therapists require supervision, it is only recently that this enterprise has received empirical attention (Hess, 1980a). The goals of supervision may be broadly classed into two categories, skill development and personal growth (Lambert, 1980).

Early efforts to quantify outcomes of the skills development aspects of supervision were based primarily on training in the Rogerian therapy model (Carkhuff & Truax, 1965). Mattarazzo (1986) reviewed research on a number of approaches developed to teach basic therapeutic skills. These approaches generally have focused on skills which are associated with very rudimentary therapeutic techniques and have not targeted the professional development which takes place as therapists begin to integrate basic skills into a therapeutic style concordant with their own personality and value systems.

A separate line of investigation has focused on the interpersonal process of supervision. This research resulted in efforts to quantify differences in supervisory style and to bring theoretical coherence to the supervisory enterprise (Friedlander & Ward, 1984; Heppner & Roehlke, 1984; Hess, 1980b; Loganbill, Hardy, & Delworth, 1982; Worthington, 1984). Heppner and Roehlke found that effective supervision was in part dependent on supervisors' ability to respond to the needs of supervisees

at different levels of development. Beginning level students were found to respond most positively to skills focused supervision, while more advanced trainees required more attention to the way in which personal issues influence their therapeutic capacities. In a study of staff members in community mental health centers, Cherniss & Egnatios (1977) found that supervisees preferred didactic-consultative, insight-oriented and feelings oriented supervision over supervision which was authoritarian or laissez faire. While the didactic-consultative format was most common in these settings, supervisees reported receiving less insight-oriented and feelings-oriented supervision than they ideally desired. In a recent national survey of clinical and counseling psychology graduate students, Allen, Szollos and Williams (1986) developed a profile of supervisors who provided the best supervision experience to the respondents. These supervisors were perceived to manifest high levels of expertise and trustworthiness, and emphasized personal growth over teaching technical skills. They also tended to be psychodynamically rather than behaviorally oriented, established supportive supervisory relationships, and clearly communicated expectations and feedback.

While this growing body of research has begun to delineate aspects of the process and outcome of supervision, the relationship between supervision and the outcome of treatment conducted by psychotherapy trainees has not been substantially addressed. In part, this situation relates to the status of research on psychotherapy process and outcome more generally. Over the course of the past two decades, investigators have begun to define the variables which appear to contribute to successful therapeutic outcome (Beutler, Crago & Arizmendi, 1986; Beutler,

Johnson, Neville, Elkins & Jobe, 1975; Garfield, 1977; Luborsky, Chandler, Auerbach, Cohen & Bachrach, 1971). Fixed characteristics such as sex, race, and professional discipline have been found to exert relatively little influence on therapeutic outcome (Beutler & Anderson, 1979). Neither has level of experience uniformly proved to be an important variable (Auerbach & Johnson, 1977). More recently, a good deal has been written about the "non-specific" factors which are likely to influence therapeutic outcome (Frank, 1971; Lambert, DeJulio, & Stein, 1978; Strupp & Hadley, 1979; Yalom, 1975), as well as the importance of assessing interactions among multiple therapist attributes as these relate to therapy process and outcome (Pope, 1977; Schaffer, 1982).

In a sense, the research on supervision parallels this more extensive, yet inconclusive, research on psychotherapy process and outcome. A good deal of the inconsistency within the psychotherapy outcome literature stems from the diversity of concepts which define the psychotherapy process itself. Strupp (1977) commented that the domain of psychotherapy covers a conceptual spectrum ranging from a technique for modifying behavior to a means for dealing with existential problems. Given the extensive range of expectations concerning the therapeutic process, it is not surprising that psychotherapy outcome research has generated such a diversity of results.

Although research exploring the outcome of supervision with regard to trainee development is not extensive, it provided some direction for the current exploration. Pierce and Schauble (1970, 1971) reported that the level of supervisory interpersonal skill, defined by measures of Rogerian facilitative characteristics, was related to skill

development among trainees. High levels of supervisory skill tended to be associated with skill increases among trainees, while low supervisory skill levels tended to result in no change or a decline in skill among supervisees. Sundland and Garfield found that students both tended to adopt the theoretical orientations of their supervisors as well as move toward the theoretical orientation of their director of clinical training (cited in Sundland, 1977b). These findings are consistent with those of Beutler and McNabb (1981). An earlier study, however, found that supervisors' theoretical orientation exerted relatively little influence on changes in trainees' theoretical orientations (Vickers, 1974).

The results of a national survey indicate that therapists' theoretical orientations were developed based on clinical experience, personal values and philosophy, graduate training, and post graduate training, in that order of importance (Norcross & Prochaska, 1983). These findings paralleled Rothman's (1971) suggestion that therapist orientation tends to change as a result of the expediency borne of therapeutic experience. While Lionells (cited in Sundland 1977b) reported a relationship between theoretical orientation, personality and belief systems, Schwartz (1978) found little relationship between one's personality and the development of a theoretical posture. Tremblay, Herron & Schultz (1986) described a core therapist personality based on attributes derived from the Personal Orientation Inventory (POI) which indicated that, as a group, therapists tend to be relatively high functioning persons who manifest strong self-acceptance, self-regard, and a constructive view of human nature. Some differences associated with self-reported theoretical orientation were also found. Behavioral therapists tended to be somewhat less flexible,

less accepting of their own feelings and less relationship oriented than experiential or psychoanalytically oriented therapists.

On a broader scale, findings concerning the salience of therapist's theoretical orientation are not consistent. An early study by Wrenn (1960) found that specific therapeutic responses tend to be determined by factors other than theoretical orientation, while Norcross and Prochaska's (1983) national sample of therapists indicated that their clinical practices are strongly influenced by their theoretical orientation. Although the sources of data were not comparable in these studies, they serve to illustrate the period of time during which this variable has commanded attention, and the continuing salience which theoretical orientation has to clinical practice.

While Strupp (1978) minimized the importance of theoretical orientation with respect to therapy outcome, his position was advanced to reaffirm the therapeutic salience of broad clinical skills, as well as to acknowledge findings which indicated little differential therapeutic efficacy among various theoretical orientations (Howard, Orlinsky & Trattner, 1970). Thus, while therapist theoretical orientation manifests no clear-cut relationship to therapy outcome, it does appear to remain an important variable in therapists' self-definition.

Empirical study of the impact which therapist's values have on psychotherapy process and outcome has been relatively sparse to date. A recent review indicated that while patient and therapist value systems tend to be different, these differences do not appear to be associated with patients' selections of therapists (Beutler, Crago & Arizmendi, 1986). However, a study reported by Rokeach (1973) found that value

dissimilarity between patients and therapists was related to premature termination of therapy. More recent findings suggest that in successful therapy there may be an initial optimal dissimilarity between patient and therapist values and attitudes (cf. Beutler, 1983). During the course of such successful treatment, patients' values and attitudes tend to converge toward the values and attitudes of their therapists. However, the relationship between therapist and patient values and therapy outcome has been found to depend in part on patient characteristics including defensive style and presenting pathology (Arizmendi, 1983). These findings underscore the recent acknowledgement that the practice of psychotherapy is not a value free enterprise (Bergin, 1980). None of the empirical therapy supervision literature reviewed for the current study addressed the possibility of a similar convergence phenomena occurring in the context of therapy supervision.

The relative lack of research addressing the impact which supervision has on the development of trainee theoretical orientation and personal values, prompted the current investigation. Specifically, this study was designed to evaluate the degree to which changes in trainee orientation and values could be predicted based on the orientations and values of their clinical supervisors. Supervisors were expected to overtly and covertly model their own particular orientations and values.

Defining the impact of supervision involved assessing variables which may have mediated changes occurring as a novice therapists gained experience and developed therapeutic competence. Given the multitude of demands placed on the supervisory relationship, i.e. training in technique, fostering a sense of professional identity and professional

standards of conduct, as well as training in the "non-specific" aspects of treatment, no single investigation could define and assess the entire range of potentially relevant variables. The present study focused on changes which occurred within the theoretical orientations and value systems of therapists-in-training following a year of intensively supervised psychotherapy training within a medical school clinical psychology training program. Assessment of change was made immediately at the conclusion of, and at an interval three to five years following, this one-year supervised psychotherapy training experience. Measures of therapist theoretical orientation (Sundland, 1977a) and personal values (Rokeach, 1973) served as primary dependent measures. While the sum of trainee's experience during his or her entire course of training was expected to influence changes in these measures, supervisor variables were targeted as major contributions to this global experience. Characteristics of the supervisors who provided this experience were quantified through a variety of independent measures. These included supervisors' theoretical orientations and values, locus of perceived control and personality characteristics. Additionally, therapist trainees provided a retrospective estimate of the amount of therapy conducted prior to the current study, as well as ratings of their supervision experiences.

#### Hypotheses

1) Over the course of the training year, trainees were expected to undergo change in theoretical orientation in the direction of the general orientation of the training program, as expressed by the orientation of the director of training. These changes were expected to be maintained at follow-up assessment. While this hypothesis is

supported by the previous work of Beutler and McNabb (1981), it stands in contrast to the findings of Vickers (1974). A regressed change score approach was utilized in order to eliminate findings whose significance might have been due to the type of measurement error which underlies the "regression toward the mean" phenomenon.

2) Trainees with less prior clinical experience at the beginning of training, relative to other individuals within the training cohort, were expected to undergo greater change in the direction of the orientations manifested by their supervisors over the course of the training year. This hypothesis was suggested by previous work which indicated that trainees at earlier stages of professional development tend to be more focused on acquiring case conceptualization and intervention skills (Heppner & Roehlke, 1984). Again, Vickers' (1974) findings suggest that relatively little change would occur. This hypothesis, like the first hypothesis, was evaluated by a regressed change score method. In the parlance of regression analyses, prior clinical experience was expected to act as a suppressor of the relationship between supervisors' orientations and values and changes in trainees' orientations and values. Thus supervisor characteristics were expected to manifest more highly significant relationships to changes in trainee orientation and values when variance attributable to prior experience was removed. The current study afforded two measures of prior experience. A quantitative measure of prior therapy experience was obtained, together with a categorical measure which denoted whether trainees were receiving training as predoctoral interns or advanced practica level externs.

## METHOD

### Overview of the Design

The professional development of therapist trainees was explored through the use of pre, post and follow-up measures of theoretical orientation (Sundland, 1977a), and pre and post measures of personal values (Rokeach, 1973). Additionally, pretraining measures of locus of control (Rotter, 1966), and personality functioning (Eysenck & Eysenck, 1963) were evaluated for ability to predict the degree and direction of change manifested during the training year. The influence which supervisory relationships had during the course of this development were evaluated through the use of ratings of supervisory relationships provided by the therapist trainees, and through an assessment of those supervisors' theoretical orientations and personal values.

### Instruments

The Theoretical Orientation Questionnaire (TOQ, Form 1972) yields 14 scores, 11 factor scores and 3 second order factor or cluster scores derived from the analysis of normative sample data reported by Sundland (1977a). These factors have been labeled as follows: Factor 1) gestalt, release of emotions, guided daydream; Factor 2) attention to unconscious process, intensive therapy, analysis of transference; Factor 3) treatment plan important, adjustment to society important; Factor 4) be active, confront, use knowledge, interrupt; Factor 5) becoming more aware of feelings crucial; Factor 6) personal involvement and caring are crucial; Factor 7) patients have no innate drive toward health; Factor 8)

therapist feels secure has little countertransference difficulty; Factor 9) therapy is an art, therapist's personality is crucial; Factor 10) crucial process is verbal and conceptual learning; Factor 11) physical touch, marathons and the sensitivity movement are seen negatively. The three clusters, which represent second order factor analytically derived combinations of the eleven first order factors, are labeled as follows: Cluster 1) experiential; Cluster 2) psychoanalytic; Cluster 3) cognitive-behavioral. The TOQ was scored using the method described by Sundland (1977a). Raw data were transformed into normalized factor and cluster scores each having a mean of 5000 and a standard deviation of 1000.

The current questionnaire represents an update of an earlier version of the theoretical orientation questionnaire (Sundland & Barker, 1962). The subscale factor structure of the current instrument was reported to duplicate this earlier questionnaire. While subscale reliabilities of the present questionnaire have not been reported, the mean reliability for subscales of the earlier version was .74. The current questionnaire displays adequate independence among subscales. Intercorrelations among factors was low. Across the 55 correlations among the eleven factor scores, all but 7 were found to be less than .30. Intercorrelations among the three cluster scores were -.10 (Cluster 1 - Cluster 2), -.31 (Cluster 1 - Cluster 3), and .17 (Cluster 2 - Cluster 3). Loadings of individual factors on the three clusters was reported as follows (factor number, loading): Cluster 1 [(1, .55), (5, .51), (7, -.49), (6, .41), (9, .39), (11, -.37), (2, .16)]; Cluster 2 [(11, .64), (2, .58), (4, -.44), (6, -.24), (1, -.22)]; Cluster 3 [(9, -.52), (10, .41), (8, .40), (6, -.36), (11, .26), (1, -.25), (3, .24)].

Analyses conducted on both versions of the questionnaire suggest a reasonable degree of construct validity. The most consistent discriminations were made between analytically oriented therapists (Freudian and neo-Freudian) and experientially oriented therapists (Rogerian).

The Value Survey (Rokeach, 1973) yields two sets of 18 rank ordered values. The first set of 18 values, labeled terminal values refer to goals or end states. The second set, labeled instrumental values, refer to modes of behavior or means for achieving desired ends. Median test-retest reliabilities over a 14 to 16 month interval among college students were reported as .69 for terminal values, and .61 for instrumental values. Reliabilities over shorter periods were higher. Extensive normative data for a variety of samples has been reported (Rokeach, 1973, 1979).

The Eysenck Personality Inventory (EPI; Eysenck & Eysenck, 1963) yields three scale scores, named extraversion, neuroticism and lie. Reliabilities of the extraversion and neuroticism scales are reported to be between .81 and .85. The authors report no reliability data for the lie scale, which like the lie scale on the MMPI (Minnesota Multiphasic Personality Inventory) seems to tap social desirability and a naive conventionality more than dishonesty. Both neuroticism and extraversion were conceptualized as representing general personality dimensions. Neuroticism relates to a general emotional overresponsiveness, while extraversion relates to general tendencies toward gregariousness, sensation seeking and impulsiveness. The authors report intercorrelations with other self-report inventories in the EPI manual.

The Locus of Control scale (LOC; Rotter, 1966) yields a single score with high scores representing a style which places relatively greater emphasis on the importance of external reinforcement contingencies. Measures of internal consistency cluster around .70, while reported test-retest reliabilities are only slightly lower. This variable, which exhibits relatively low correlations with intelligence and social desirability, has received considerable attention in past psychotherapy research efforts (cf. Baker, 1979).

#### Procedure

The TOQ, Value Survey, EPI and LOC scale were administered to psychotherapist trainees at the beginning of the training year. These same instruments, with the exception of the EPI were also administered at the end of the training year. Initial data were collected on all trainees from three consecutive training years. At follow-up assessment, trainees on whom initial data were collected completed a questionnaire dealing with their perceptions of the experience of supervision (Appendix A) as well as a TOQ. The follow-up data were simultaneously collected on trainees from all three initial training cohorts. Thus, the amount of time since completion of training varied from three years for the most recent trainee cohort to five years for the first trainee cohort on whom initial data were collected. Supervisors, identified by trainees as providing influential supervision experiences, completed the TOQ, Value Survey, EPI, LOC and a Supervisory Relationship Questionnaire (Appendix B) designed to assess supervision style. All data obtained from supervisors were collected during the period in which trainees provided follow-up data. The post hoc data collection from supervisors made the

assumption that the faculty members who provided trainee supervision were sufficiently seasoned as clinicians to have established relatively stable values and orientations toward therapy.

### Subjects

#### Initial Sample

Initial data were collected from 17 psychology trainees who took part in the training program at a university medical center over the course of three years. These individuals were either psychology interns, who were engaged in full time appointments, or pre-internship graduate students appointed to half-time positions. Nine Ph.D. psychologists provided supervision during the course of this training period, with each trainee typically assigned to three primary psychologist supervisors throughout the training year. A limited amount of psychotherapy supervision was also provided to psychology trainees by psychiatrist members of the psychiatry department faculty. The Director of Training for Clinical Psychology provided one of the three supervisory hours for each trainee, with the other two supervisors being assigned according to trainees's interests and schedules.

#### Characteristics of the Current Trainee Sample

Data were obtained from sixteen of the seventeen individuals who received training in psychotherapy during the initial three training years. The rate of response for follow-up data collected from trainees is 94%. Descriptive data for trainee therapist characteristics are presented in Tables 1-1 and 1-2.

Table 1-1

## Background Characteristics of Therapist Trainees - Demographics

Trainee Status	Age		Sex		Prior Hours Therapy Conducted	
	Mean	SD	Male	Female	Mean	SD
			N	N		
Interns	30.5	5.0	4	4	672	809
Externs	28.6	4.3	5	3	800	655
Entire Sample	29.6	4.7	9	7	736	714

Table 1-2

## Background Characteristics of Therapist Trainees - Personality Variables

Trainee Status	Eysenck Personality Inventory							
	Extra- version		Neurot- icism		Lie Scale		Locus of Control	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Interns	13.3	4.4	6.8	2.4	1.0	1.2	4.8	4.6
Externs	11.0	3.8	6.9	5.1	0.8	1.4	4.6	2.9
Entire Sample	12.1	4.1	6.8	3.9	0.9	1.3	4.7	3.7

Given the relatively small size ( $N = 16$ ) of the total sample, an initial concern focused on the possibility that training status (intern/extern) might represent a significant grouping variable, thereby necessitating separate analyses for each sub-group of trainees. Background characteristics were evaluated in order to determine the nature and extent of differences between these components of the total sample. The variables evaluated included age, sex, amount of psychotherapy conducted prior to the beginning of the training year, locus of control, and the scores derived from the Eysenck Personality Inventory (neuroticism, extraversion, and lie scale scores). Independent  $t$  tests using training status as a grouping variable yielded no significant differences between trainee categories on any of the background variables. Thus, the sample was considered to be homogeneous with respect to these characteristics.

#### Characteristics of the Supervisor Sample

Faculty members who provided significant supervision experiences during the original training interval were ultimately identified on the basis of responses to the follow-up questionnaire completed by trainees. Each trainee rated, in order of importance, the three faculty supervisors whom they felt had made the most influential contributions to his or her psychotherapy training experience. Supervisors identified by this method were designated as the supervisor sample. A total of eleven different faculty members were identified as providing influential supervision experiences by the sixteen trainees who responded to the follow-up questionnaires. From these eleven faculty, complete data were collected from nine individuals, a tenth returned data that were only partially usable. Both the faculty member who provided incomplete data and the faculty

member who failed to respond to requests for participation, were each cited by a single trainee as providing the third most influential supervision experience. None of the psychology faculty who provided supervision for adult psychotherapy cases failed to be ranked by at least one trainee.

While the nominal rate of response among faculty was ten out of eleven, or 91%, the current study involved a within subjects design focused on the effects which individual supervisors had on psychotherapy trainees. Thus, the effective rate of response for purposes of data analysis was determined by the frequency of empty cells in the 16 x 3 matrix of supervisors rated as providing the first, second or third most influential experiences. Within this 48 cell matrix, missing data comprised 2 cells. When considered in this manner the effective rate of response among supervisory faculty was 96%.

A total of six different faculty members were identified as providing the most influential supervision experience. The Director of Clinical Training was strongly overrepresented among those individuals ranked as most influential, accounting for ten of the sixteen cells within this category. The director provided psychotherapy supervision for all trainees, yet failed to receive a ranking within one of the three categories from only two of the sixteen trainee respondents. This individual's overrepresentation within the most influential category, relative to the remaining two categories, was statistically significant  $\chi^2(2, n=14) = 9.57, p < .01$ .

Eight different faculty members were identified as providing the second most influential supervision experience. Among supervisors ranked

as second most influential, two faculty members accounted for ten of the sixteen cells, with six other faculty receiving a single rating in this category. The Chief of Psychology was ranked within this category by six trainees, and thus served as the modal individual among psychotherapy supervisors ranked as second most influential.

Nine separate faculty members were identified as providing the third most influential supervision experience. The frequencies associated with individual supervisors within this category were more evenly distributed. Two faculty ranked in this category attained a frequency of three ratings, while three additional faculty attained a frequency of two. Thus, there was no clear modal individual within this category. Descriptive data for the supervisor sample are presented in Tables 1-3 through 1-8. Data in these tables are based on contributions of individual supervisors which are proportional to the frequency with which they were rated within a given category of influence. The data in Table 1-4 suggest that faculty who provided trainee supervision were generally well established as clinicians and had considerable prior experience as supervisors.

In the two sections which immediately follow, descriptive data are presented for supervisors' theoretical orientations and personal values within the three cohorts defined by trainee rankings. These data serve to globally define the relative levels of the independent variables employed in the analysis of changes in trainee orientations and values. They also provide a characterization of the theoretical orientations and values which characterize supervisory faculty within the present training setting. The theoretical orientations represented among these faculty

Table 1-3

Characteristics of Supervisors within Rated  
Categories of Influence - Demographics

Supervisor Rating	Age		Sex	
	Mean	SD	Male	Female
			N	N
Most Influential	40.4	5.1	3	13
Second Most Influential	37.5	3.4	12	4
Third Most Influential	38.8	6.9	8	8

Table 1-4

Characteristics of Supervisors within Rated  
Categories of Influence - Professional Experience

Supervisor Rating	Years of Clinical Practice		Years Conducting Supervision	
	Mean	SD	Mean	SD
Most Influential	15.7	3.2	8.7	5.1
Second Most Influential	11.3	2.6	9.0	2.3
Third Most Influential	12.6	5.6	9.3	5.2

were well within the range of normative values presented by Sundland (1977a). While normative data do not exist for psychotherapists on the survey of values used within this study, the pattern of values is consistent with the humanistic-idealism outlook which Bergin (1980) described as a major values perspective among psychotherapists. Taken together, these data indicate that the present sample is reasonably representative of psychotherapists more generally.

#### Supervisors' Theoretical Orientation

Table 1-5 displays theoretical orientation scores for the three supervisory categories. Differences between mean faculty scores on the eleven TOQ factors and three TOQ cluster scores were evaluated using a repeated measures MANOVA. While this is a statistically conservative procedure for assessing group differences, the variables assessed (supervisors' TOQ scores), across supervisory categories (groups), were collected as a function of trainees' ranking of supervisors, and thus the supervisory categories (between groups effect) could not be treated as meeting the criteria for independent random sampling demanded by univariate analyses. Based on averaged multivariate tests for significance [  $F(2,26)$ ,  $p < .01$  ], a single difference between supervisory groups was found. Supervisors ranked as most influential were less committed to the use of experiential therapy techniques than were supervisors ranked second. Supervisors ranked third did not differ from supervisors in either of the other two categories. Several trends toward differences between first and second most influential groups were also found [  $F(2,26)$ ,  $p < .05$  ]. Most influential supervisors tended to be more psychoanalytic, more invested in personal involvement and caring, and more strongly

Table 1-5

## Theoretical Orientation Scores - Supervisory Faculty

TOQ Variables	Supervisors Ranked 1		Supervisors Ranked 2		Supervisors Ranked 3	
	Mean	SD	Mean	SD	Mean	SD
<b>TOQ Factors Scores</b>						
1 - use of expressive techniques	4439 <sub>a</sub>	381	4957 <sub>a</sub>	259	4719	354
2 - attend to unconscious material	5702	490	5095	370	5275	494
3 - adjust to society	5144	113	5114	206	5160	263
4 - confront, be active	4828	166	4807	168	4750	240
5 - be aware of feelings	5101	359	5126	325	5129	425
6 - involvement, caring	5343	379	5077	236	5272	216
7 - no drive to health	5791	553	4992	423	5165	538
8 - secure therapist	4934	105	4935	209	5025	276
9 - personality crucial	5264	559	5264	652	5097	678
10 - learning is verbal	4948	411	5559	551	5202	566
11 - against physical touch	5629	195	5405	313	5456	305
<b>TOQ Cluster Scores</b>						
1 - experiential	4758	243	5058	249	4960	287
2 - psychoanalytic	5611	226	5323	190	5398	272
3 - cognitive-behavioral	4782	263	5049	271	5005	343

Note: Factor and cluster definitions and labels from Sundland (1977a).  
Means sharing a common subscript differ with the following probabilities a)  $p < .01$  [ Univariate  $F(1,13)$  ].

convinced that people do not manifest an inherent drive toward health. These contrasts suggest that the second supervisory group is more favorably disposed toward experiential therapy than the first group, who maintain a coherent psychoanalytic stance.

#### Supervisors' Personal Values

Mean rankings for instrumental and terminal values across supervisory faculty within the three categories of influence are presented in Tables 1-6 and 1-7. Friedman two-way analyses of variance were conducted to determine overall rank order differences in values across all three supervisor categories. Variables manifesting a significant overall  $\chi^2$  were then subjected to pairwise Friedman analyses. These results are displayed in Table 1-8. Supervisors ranked as most influential more highly valued a world of beauty and being courageous than did supervisors' rated as second most influential. As was the case with theoretical orientation, analyses based on comparisons of means across the three supervisor groups, revealed few significant differences.

#### Analysis of Trainee Data

The central focus of this study concerned the relationships between supervisors' values and orientations and changes in the values and orientations of the trainees whom they supervised. Three groups of analyses were conducted to evaluate these relationships. Changes in trainee theoretical orientation were evaluated from the beginning to the end of the training year, and from the beginning of the training year to follow-up. Changes in trainee values were evaluated from the beginning

Table 1-6

## Terminal Value Rankings Among Trainee Rated Supervisor Cohorts

Mean Rank	Most Influential		Second Most Influential		Third Most Influential	
	Value	Mean <u>z</u>	Value	Mean <u>z</u>	Value	Mean <u>z</u>
1	Self-respect	1.45	Self-respect	1.39	Self-respect	1.33
2	Mature Love	1.12	Mature Love	.94	Mature Love	.83
3	A Sense of Accomplishment	1.02	A Sense of Accomplishment	.75	Family Security	.79
4	An Exciting Life	.68	Wisdom	.64	A Sense of Accomplishment	.68
5	True Friendship	.48	Family Security	.60	True Friendship	.28
6	Inner Harmony	.35	Freedom	.37	Wisdom	.24
7	Family Security	.26	Happiness	.29	Freedom	.22
8	A World of Beauty	.22	Inner Harmony	.23	Happiness	.12
9	A World at Peace	.06	Social Recognition	.07	Social Recognition	.07
10	Freedom	-.11	A World at Peace	-.01	A Comfortable Life	-.09
11	Wisdom	-.18	A Comfortable Life	-.15	Inner Harmony	-.16
12	Pleasure	-.20	True Friendship	-.15	A World at Peace	-.23
13	Social Recognition	-.28	Pleasure	-.16	An Exciting Life	-.32

Note: Table 1-6 continues on the following page.

Table 1-6 (continued)

Mean Rank	Most Influential		Second Most Influential		Third Most Influential	
	Value	Mean $\underline{z}$	Value	Mean $\underline{z}$	Value	Mean $\underline{z}$
14	A Comfortable Life	-.71	Equality	-.66	A World of Beauty	-.39
15	Happiness	-.80	An Exciting Life	-.67	Equality	-.47
16	National Security	-.84	A World of Beauty	-.74	Pleasure	-.47
17	Equality	-.94	National Security	-1.17	National Security	-.87
18	Salvation	-1.59	Salvation	-1.58	Salvation	-1.57

to the end of training. All analyses utilized the SPSS statistical package (SPSS Inc. & Norusis, 1986).

In the analyses of change in theoretical orientation, separate analyses were conducted for each of the eleven factors and three clusters. Dependent variables were the individual orientation scores, obtained from the end-of-year and follow-up assessments. The principal independent variables were the corresponding factor and cluster scores obtained from those supervisors ranked by each trainee. Thus, individual trainees' orientation scores were paired with the orientation scores of their respective supervisors. Additional independent variables consisted of trainee background characteristics including locus of control, EPI scale scores, amount of prior therapy experience and training status.

Table 1-7

## Instrumental Value Rankings Among Trainee Rated Supervisor Cohorts

Mean Rank	Most Influential		Second Most Influential		Third Most Influential	
	Value	Mean <u>z</u>	Value	Mean <u>z</u>	Value	Mean <u>z</u>
1	Courageous	1.29	Honest	1.37	Honest	1.26
2	Honest	1.11	Capable	.87	Capable	.83
3	Loving	.88	Responsible	.68	Responsible	.81
4	Imaginative	.82	Imaginative	.66	Imaginative	.69
5	Broadminded	.69	Independent	.63	Loving	.67
6	Responsible	.60	Intellectual	.46	Independent	.57
7	Capable	.49	Ambitious	.15	Courageous	.56
8	Independent	.46	Broadminded	.12	Broadminded	.26
9	Intellectual	.14	Courageous	.02	Helpful	.21
10	Helpful	.12	Logical	-.04	Intellectual	.11
11	Forgiving	-.23	Forgiving	-.13	Ambitious	-.21
12	Ambitious	-.23	Helpful	-.13	Forgiving	-.24
13	Logical	-.57	Loving	-.20	Logical	-.46
14	Self-controlled	-.75	Cheerful	-.53	Cheerful	-.67
15	Cheerful	-1.01	Self-controlled	-.62	Self-controlled	-.97
16	Polite	-1.18	Polite	-.91	Polite	-.98
17	Clean	-1.19	Clean	-1.36	Clean	-1.19
18	Obedient	-1.53	Obedient	-1.51	Obedient	-1.48

Table 1-8

## Differences in Mean Value Rankings Among Supervisors

	Supervisors Ranked First	Supervisors Ranked Second	Supervisors Ranked Third
	Mean <u>z</u> score	Mean <u>z</u> score	Mean <u>z</u> score
<b>Terminal Values</b>			
A World of Beauty	.22 b	- .74 b	- .39
<b>Instrumental Values</b>			
Courageous	1.29 b	- .02 b	.56

Note: Values sharing a common subscript differ with the indicated  $\chi^2$  probabilities (Friedman 2 way Analysis of Variance).  
 a)  $p < .01$ , b)  $p < .005$

In a traditional analysis of variance model, these secondary independent variables would be treated as covariates.

The analyses of trainee values proceeded along similar lines. Dependent variables were the end-of-year ranks assigned to individual values within the instrumental and terminal value hierarchies. Independent variables consisted of trainees' three supervisors' rank scores for the corresponding value. In addition to the potential covariates used in the analyses of the TOQ, trainee marital status was entered as an independent variable in the analyses of value survey data. This latter variable was added due to the strong interpersonal relationship focus connoted by a number of the individual values.

Outcome analyses were conducted utilizing a stepwise multiple regression approach to the variables expected to be predictive of the

dependent measures. A major consideration in this analysis involved dealing with the impact which pretest scores have on posttest scores. In order to avoid spuriously inflated estimates of the influence which independent variables have on theoretical orientation and value change, the variance in end-of-year and follow-up scores attributable to beginning-of-year scores had to be removed (cf. Cohen & Cohen, 1975). These regressed change scores then served as the dependent measures for further data analysis. This process was accomplished by forcing entry of pretest scores as the first variable in the regression analysis prior to subsequent stepwise analyses. This process of redidualization also had the effect of removing the covariance between predictor variables and the initial (beginning-of-training) levels of the dependent variables.

For purposes of analysis of the Value Survey, z score transformations (Cohen & Cohen, 1975) of rank scores for individual values were undertaken in order to normalize the distribution of scores for a specific subject within a given scale of ranked values. This transformation procedure was based on conceptual considerations beyond mathematical convenience. The task of rank ordering a relatively large number of items according to preference generally proceeds by identifying and ordering the most and least preferred items. The items ranked at the extremes of the distribution tend to be more readily ordered than those items falling between the extremes. Conceptually, this suggests that there is a greater difference in preferences between items at the extremes of a rank ordered distribution than in the middle, where precise ordering is likely to be somewhat more arbitrary. Z transformations assign just this type of differential numerical weight to distances

between those values ranked at the extremes of the distribution while assigning less weight to the distance between items in the middle of the distribution.

#### Power and Error Rate Considerations

Investigations which employ a large number of variables, and thus involve a large number of comparisons require that due consideration be given to the problem of the increase in Type I error rate for the entire study, despite the use of a traditional significance level for each comparison. These experiment-wise or family-wise error rates (Myers, 1979) represent the combined probability that at least one comparison will be found significant solely by chance. Family-wise error rates are an exponential function  $[1-(1-\alpha)^n]$  of the number of comparisons undertaken and the per comparison error rate or alpha level. For instance, when fourteen comparisons are made, each using the traditional  $p < .05$  significance level, the combined error rate for the entire fourteen comparisons rises to  $p < .52$ . This indicates that the combined probability of identifying at least one significant difference across the fourteen comparisons, strictly due to chance, has risen from 1 out of 20, to 1 out of 2.

The problem of error rate inflation can be addressed in one of two ways. First, if the theoretical model on which an individual comparison is based provides a strong basis for predicting a given outcome, greater confidence can be placed in the efficacy of the original per-comparison error rate as a means for controlling spurious findings. In the absence of such strong theoretical direction, a second approach involving the reduction in the per-comparison significance level will

afford some protection against spurious findings. Thus, setting the per-comparison significance level to  $p < .01$  reduces the family-wise error rate across fourteen comparisons to  $p < .14$ , which is certainly less than ideal, but also better than a 1 out of 2 potential error rate.

The power to detect true underlying differences (Type II error) is also influenced by the per-comparison error rate as well as the sample size (Cohen & Cohen, 1975; Cohen, 1969). Given a sample  $N$  of 16, the power to detect a true multiple regression  $R^2$  of .50, based on contributions made by two variables, each tested at the  $p < .01$  significance level, results in an approximate power of .75. For the identical circumstance, when individual significance tests are conducted at the  $p < .05$  level, the approximate power rises to .90. However, in the case where an initial predictor variable produces an  $R^2$  of .45, the power associated with detecting a second variable contributing an additional .20 to total explained variance is approximately .30 based on a  $p < .01$  alpha level. Raising the alpha level to  $p < .05$  results in a increase in power, for the above example, to approximately .65, which still falls below the recommended minimum power level of .80.

This discussion of statistical power analysis illustrates the cost of maintaining the integrity of family-wise error rates in terms of the power of the individual analyses. The analyses conducted within this study were primarily based on comparisons among variables which, taken individually, offered little in the way of strong a priori theoretical justification for making specific predictions concerning individual comparisons. Consequently, significance testing utilized a per-comparison error rate of  $p < .01$  throughout. This represents a compromise

between producing unacceptably high family-wise error rates and unacceptably low power for individual analyses.

In order to evaluate trends in the data which failed to surpass the relatively conservative criteria established for statistical significance, exploratory analyses were conducted employing the traditional  $p < .05$  significance level. The findings generated from these exploratory analyses are treated separately in the sections which follow.

## RESULTS

### Theoretical Orientation

Descriptive data for trainee theoretical orientation are presented in Tables 2-1. This table contains trainee TOQ scores at each of the three assessment times. Separate multivariate analyses of variance (MANOVAs) were used for the group of eleven factor scores and the group of three cluster scores to evaluate whether trainees' individual factor and cluster scores deviated significantly from the expected normative mean score of 5000. At the beginning of training, the multivariate test for differences among the eleven factors was significant  $F(11,5) = 10.03$ ,  $p < .01$ . Univariate tests for individual factors [ $F(1,15)$ ,  $p < .05$ ] indicated that trainees were more oriented toward the importance of awareness of feelings, the importance of personal involvement and caring, the importance of the therapist's personality, and were more passive in their therapeutic style than the normative mean for these factors. The MANOVA for the three cluster scores was also significant [ $F(3,13) = 6.69$ ,  $p < .01$ ]. Trainees were found to be more psychoanalytically oriented and less cognitive-behaviorally oriented than the norm [Univariate  $F(1,15)$ ,  $p < .05$ ]. At both the end-of-year and follow-up assessments, the MANOVA for the group of eleven factor scores were not found to be significant. However, the MANOVA for cluster scores at both of these assessment points was significant, [ $F(3,13)$ ,  $p < .005$ ]. At the end-of-year assessment trainees continued to be more psychoanalytically oriented (cluster 2) and were now more experientially oriented (cluster 1) than the norm.

Table 2-1

## Theoretical Orientation Scores - Trainees

TOQ Variables	Beginning of Training		End of Training		Follow-up	
	Mean	SD	Mean	SD	Mean	SD
<b>TOQ Factor Scores</b>						
1 - use of expressive techniques	5107	573	5073	734	4802	451
2 - attend to unconscious material	5151	725	5520	706	5345	252
3 - adjust to society	5277	569	5665	690	5263	284
4 - confront, be active	4569	782	4770	600	4850	313
5 - be aware of feelings	5542	782	5628	783	5193	411
6 - involvement, caring	5831 <sub>c</sub>	985	5629 <sub>b</sub>	793	5088 <sub>b,c</sub>	304
7 - no drive to health	4964	828	4622 <sub>b</sub>	967	5014 <sub>b</sub>	645
8 - secure therapist	4597	1049	4768	678	4934	207
9 - personality crucial	5483	883	5300	914	4922	550
10 - learning is verbal	4911	961	5169	960	5171	583
11 - against physical touch	5350	711	5552	525	5406	298
<b>TOQ Cluster Scores</b>						
1 - experiential	5320	604	5435 <sub>c</sub>	590	5010 <sub>c</sub>	372
2 - psychoanalytic	5435	551	5624	512	5373	270
3 - cognitive-behavioral	4672 <sub>a,b</sub>	528	4956 <sub>a</sub>	397	5095 <sub>b</sub>	252

Note: Factor and cluster definitions and labels from Sundland (1977a). Means sharing a common subscript differ with the following probabilities: a)  $p < .01$ , b)  $p < .005$ , c)  $p < .001$  [ Univariate  $F(1,15)$  ].

At follow-up the sample differed from the norm only in being more psychoanalytically oriented.

Changes in TOQ scores across the three assessment points were evaluated using a repeated measures MANOVA. From the pretest assessment to follow-up assessment, two factor scores and two cluster scores underwent significant change [averaged multivariate  $F(2,30)$ ,  $p < .01$ ]. During the course of the training year, trainees became more cognitive-behaviorally oriented (Cluster 3), moving from relative disinterest in rationally oriented treatment to a position similar to the normative mean for this general factor. Most of the significant changes, however, occurred between the end of training and the follow-up assessment. During this interval, trainees became less committed to belief in personal involvement and caring and less experientially oriented in their style. They also reverted to their former perspective about the presence of an innate drive toward health while maintaining their posttraining commitment to cognitive-behaviorally oriented therapy.

#### Prediction of Trainee Theoretical Orientation

Multiple regression was employed to identify those variables which significantly contributed to the prediction of end-of-year values on the eleven factor and the three cluster scores. In all cases, pretest scores were forced as the first entry into the regression equation. Within the same regression procedure, additional predictor variables were then entered in a stepwise fashion. This two-part procedure assured that variance in posttest scores attributable to pretest scores was partialled out prior to examination of the contribution to posttest scores made by other predictor variables.

During the stepwise procedure, the probability level required for a variable to enter the equation was set at  $p < .01$  throughout. Variables previously entered during the stepwise segment of the procedure were removed from the equation if the probability value associated with their contribution to total explained variance fell below  $p < .05$ . Variables forced to enter the equation were not subject to stepwise removal.

Tables 2-2 and 2-3 present the results of the multiple regression analyses conducted on end-of-year and follow-up TOQ data. As was expected, beginning of the year scores were the most frequent significant predictors of end of year scores on the same variable. However, these findings were somewhat surprising in that pre-scores on TOQ variables made significant contributions to only six of the eleven TOQ factor scores and two of the three TOQ cluster scores. In these analyses of end-of-year and follow-up TOQ data, Eysenck Personality Inventory scores were found to have no predictive value for either of the two repeated TOQ assessments. Training status (intern/extern) was unrelated to any of the end-of-year TOQ measures. Similarly, the length of time since completion of training was unrelated to theoretical orientation at follow-up. Locus of control entered into several regression equations, but was judged to be an unreliable predictor due to large standard errors of  $B$ . Evidently, the distribution of LOC scores within the trainee sample is such that regression coefficients for LOC tend to be unstable. Within the confines of the conservative significance level employed to detect reliable relationships, supervisors' scores contributed to the prediction of two factor scores. Trainees became more dissimilar to supervisors rated as second most influential on the factor related to therapist security and

Table 2-2

Predictors for Trainee Theoretical Orientation Scores  
at the End of the Training Year

TOQ Variable	Predictor	Cumulative $R^2$	$F$	Change in $R^2$	$F$ Change
1 - use of expressive techniques	Pre-score	.37	7.10*		
2 - attend to unconscious material	Pre-score	.45	9.70**		
3 - adjust to society	Pre-score	.07	0.93		
4 - confront, be active	Pre-score	.27	4.38		
5 - be aware of feelings	Pre-score	.01	0.09		
6 - involvement caring	Pre-score	.47	10.51**		
7 - no drive toward health	Pre-score	.68	25.71****		
8 - secure therapist	Pre-score	.21	3.25		
	(-)Supervisor 2	.62	9.02***	.41	11.86**
9 - personality is crucial	Pre-score	.46	10.11**		
	Supervisor 2	.72	14.06****	.26	10.23**
	Supervisor 3	.89	25.86****	.17	14.63***
10 - learning is verbal	Pre-score	.003	0.04		
11 - against physical touch	Pre-score	.52	12.79***		

Note: Table 2-2 continues on the following page

Table 2-2 (continued)

TOQ Variable	Predictor	Cumulative $R^2$	$F$	Change in $R^2$	$F$ Change
TOQ Cluster Scores					
1 - experiential	Pre-score	.29	4.86*		
2 - psychoanalytic	Pre-score	.52	12.88***		
3 - cognitive-behavioral	Pre-score	.24	3.78		
* $p < .05$ , ** $p < .01$ , *** $p < .005$ , **** $p < .001$					

Table 2-3

Predictors for Trainee Theoretical Orientation Scores at Three to Five Year Post-training Follow-up

TOQ Variable	Predictor	Cumulative $R^2$	$F$	Change in $R^2$	$F$ Change
1 - use of expressive techniques	Pre-score	.07	0.94		
2 - attend to unconscious material	Pre-score	.48	11.10**		
3 - adjust to society	Pre-score	.37	7.00*		
4 - confront, be active	Pre-score	.13	1.86		
5 - be aware of feelings	Pre-score	.01	0.14		

Note: Table 2-3 continues on the following page

Table 2-3 (continued)

TOQ Variable	Predictor	Cumulative $R^2$	$F$	Change in $R^2$	$F$ Change
6 - involvement caring	Pre-score	.19	2.74		
7 - no drive to health	Pre-score	.59	17.19***		
8 - secure therapist	Pre-score	.42	8.67*		
9 - personality is crucial	Pre-score	.13	1.81		
	Supervisor 2	.70	13.14***	.57	21.37****
10 - learning is verbal	Pre-score	0.0	0.003		
11 - against physical touch	Pre-score	.10	1.31		
TOQ Cluster Scores					
1 - experiential	Pre-score	.23	3.55		
	(-)Supervisor 3	.73	14.98****	.50	20.61****
2 - psychoanalytic	Pre-score	.13	1.72		
3 - cognitive-behavioral	Pre-score	.16	2.34		

Note: (-) indicates a negative relationship.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .005$ , \*\*\*\*  $p < .001$

concern about countertransference (factor 8). However, trainees became more like both second and third most influential supervisors in their views regarding the importance of therapists' personality.

The hypothesis which predicted that trainees who had less clinical experience relative to their colleagues would undergo greater change was not supported. Regression analyses were conducted which used two successive forced-entry steps prior to the stepwise entry of predictor variables. Initial forced-entry of beginning-of-training dependent variable scores produced residualized change scores. The second step forced-entry of prior experience conducting therapy produced scores residualized for this suspected covariate. The hypothesis predicted that this additional residualization would enhance predictive relationships among trainee orientation scores and the corresponding orientation scores of their supervisors. This additional step was found to have no influence on the prediction of any of the orientation variables.

Multiple regression analyses of follow-up TOQ data were conducted using the same two component procedure as that used for the end-of-year analyses. The beginning-of-training dependent variable scores were again forced to enter in at the first step of the regression model. Beginning-of-training scores were entered at this step in favor of end-of-training scores, which might be expected to be more highly correlated to follow-up scores. However, end-of-training scores theoretically contain variance attributable to change which may have occurred during the training year in relation to supervisors' influence. Thus, building a predictive model from a procedure which residualizes change by removing variance due to end-of-training scores, may mask the presence of the very relationships in which the study is most interested. One additional variable, length of time since end-of-training-year was entered into the regression equation to evaluate the differential contribution of passage of time

and/or effects due to relative differences in amount of post training experience. This latter variable, representing time since completion of training was found to make no contribution to predicting current TOQ scores.

In the analysis of follow-up data, beginning-of-training scores were found to be significant predictors for only four of the eleven follow-up factor scores and none of the three cluster scores. Supervisors' scores significantly contributed to predicting two orientation variables (factor 9 and cluster 1) at this point in time. The similarity to second most influential supervisors' perspective on the importance of the therapists' personality, which developed during the training year, was maintained at follow-up. However, the decrease in support for experiential therapy (cluster 1) was marked by a significant dissimilarity with third most influential supervisors' orientations concerning this modality. No other variables were found to be predictive of theoretical orientation at follow-up.

#### Predictive Trends for Theoretical Orientation

While statistical conservatism provides considerable safeguards against spurious findings, as the earlier discussion indicated, within the context of a relatively small  $N$ , a conservative approach to Type I error rates severely reduces the power to detect non-spurious findings. Consequently, this section will report trends which emerged from secondary exploratory analyses in which relationships were evaluated using the more traditional  $p < .05$  significance level. While any such findings can only be taken as suggestive, that is precisely where their value lies, in providing suggestions for future investigations which afford the power to

detect significant relationships of somewhat smaller magnitude. Tables 2-4 and 2-5, display these exploratory findings.

In the reanalysis of end-of-training orientation scores, only two additional predictors emerged. In addition to becoming more similar to second and third most influential supervisors concerning belief in the importance of therapist personality in effective psychotherapy, trainees also became somewhat less like their most influential supervisors on that variable. The amount of therapy which trainees had conducted prior to the beginning of the present training experience also was found to be negatively related to their sense of therapeutic security (factor 8), but positively related to their increasing acceptance of a cognitive-behavioral approach to treatment. Throughout the study, these findings are the only incidence in which a variable reflecting relative experience predicted any facet of trainee orientation or personal values, or improved the predictive power of other independent variables.

At follow-up, supervisors' scores made additional contributions to explained variance on four orientation variables. TOQ scores of supervisors rated as most influential accounted for 34% of the variability on factor 11 (against physical touch) and cluster 2 (psychoanalytic). Trainees became more similar to their most preferred supervisor on both of these variables. Trainees also became more similar to their most influential supervisors in their belief concerning an innate drive toward health (factor 7).

The single remaining predictive contribution made by supervisors' TOQ scores was in a negative direction. Former trainees became less like

the supervisors whom they rated second in influence on their view of the importance of becoming aware of feelings (factor 5).

Table 2-4

Additional Predictors for Trainee Theoretical Orientation from Beginning of Training to End of the Training Year

TOQ Variable	Predictor	Cumulative $R^2$	$F$	Change in $R^2$	$F$ Change
TOQ Factor Scores					
8 - secure therapist	Pre-score	.21	3.25		
	(-)Supervisor 2	.62	9.02***	.41	11.86**
	(-)Prior amount of therapy conducted	.77	10.99***	.15	6.27*
9 - personality is crucial	Pre-score	.46	10.11**		
	Supervisor 2	.72	14.06****	.26	10.23**
	Supervisor 3	.89	25.86****	.17	14.63***
	(-)Supervisor 1	.93	31.99****	.04	6.64*
TOQ Cluster Scores					
3 - cognitive-behavioral	Pre-score	.24	3.78		
	Prior amount of therapy conducted	.58	7.52**	.34	8.80*

Note: (-) indicates a negative relationship.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .005$ , \*\*\*\*  $p < .001$

Table 2-5

Additional Predictors for Trainee Theoretical Orientation from Beginning of Training to Three to Five Year Post-training Follow-up

TOQ Variable	Predictor	Cumulative $R^2$	$F$	Change in $R^2$	$F$ Change
TOQ Factor Scores					
5 - be aware of feelings	Pre-score	.01	0.12		
	(-)Supervisor 2	.37	3.25	.36	6.31*
7 - no drive toward health	Pre-score	.59	14.33***		
	Supervisor 1	.75	16.18****	.16	6.82*
11 - against physical touch	Pre-score	.10	1.31		
	Supervisor 1	.44	4.37*	.34	6.80*
TOQ Cluster Scores					
2 - psychoanalytic	Pre-score	.13	1.72		
	Supervisor 1	.47	4.83*	.34	7.06*
3 - cognitive-behavioral	Pre-score	.16	2.34		
	Supervisor 2	.53	6.16*	.37	8.51*

Note: (-) indicates a negative relationship.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .005$ , \*\*\*\*  $p < .001$

The suggestive finding that trainees developed dissimilarities to supervisors' orientations contradicted the general expectation that trainees were likely to converge with supervisors' orientations and values. In order to more fully assess the bases of these relationships, the data contributing to them were more closely examined. Zero order

correlations among independent variables were inspected to evaluate the possibility of suppression effects. Suppression, in the present analyses, would represent a situation in which a variable which was found to be a significant predictor was itself highly correlated with one or more other independent variables, which themselves were highly correlated with the dependent measure. In such a case of multicollinearity the predictor identified by the regression analysis could not be interpreted as unique, but more of a designated representative for a complex relationship.

Fortunately, for the sake of interpretation, predictors tended not to be highly confounded. Both the correlations among independent variables and the correlations between independent variables not found to be significant predictors and the dependent measure were relatively low, generally on the order of  $r=(+/-).30$  or less.<sup>1</sup> This was true both within the end-of-year analyses and the follow-up analyses, residualized for beginning-of-training scores.

The finding of a greater number of predictive relationships between supervisors' orientations and trainee orientations at follow-up as compared to the end-of-training assessment raises an additional set of questions. Is there a simple time lag effect for such influence to appear, or are other mediating variables contributing to these findings?

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1. It is interesting to note that within individual trainees, supervisors rated across different categories of influence are, on the whole, not homogeneous with respect to specific aspects of theoretical orientation. Correlations among supervisor theoretical orientation scores across categories of influence tended to be low, suggesting that individual trainees were exposed to supervisors who represented relatively diverse theoretical perspectives. This contrasts with the descriptive finding of few significant differences in orientation when supervisors are grouped by ranked categories.

While the current analysis cannot evaluate variables which have not been measured, a second means to assess the stability of these findings is to evaluate changes occurring from end-of-training to follow-up. Follow-up scores, residualized by end-of-training scores provide the best means available within this study to assess changes which occurred following completion of training. The procedure used to accomplish the analysis of change occurring between end-of-training and follow-up is identical to previous regression analyses, except that end-of-training scores (post-scores) were entered at the first step of all regression equations. This procedure theoretically controls for change which occurred during the year in that post-scores contain variance due both to pre-scores and to other variables which exerted an influence on individual change from the initial to the end-of-year assessment. Thus, influence exerted by supervisors on trainees' theoretical orientation during the actual training period should be contained in post-score variability. The results from these analyses are displayed in Table 2-6.

The pattern of relationships in Table 2-6 speaks, in general terms to the reliability of the TOQ. Post-scores were significant predictors for seven of the eleven factor scores and one of the three cluster scores. This pattern provides a contrast to the analyses in which pretraining scores were found to be significantly related only four TOQ factors at follow-up, to seven end-of-year TOQ dimensions. Theoretical orientation appears both to change over time and to remain somewhat stable between adjacent assessment points.

The suggestion concerning the presence of an apparent time-lagged influence of supervisors on trainees' theoretical orientation was

Table 2-6

Predictors for Trainee Theoretical Orientation  
from the End of Training to Follow-up

TOQ Variable	Predictor	Cumulative $R^2$	$F$	Change in $R^2$	$F$ Change
<b>TOQ Factor Scores</b>					
1 - use of expressive techniques	Post-score	.45	9.80**		
2 - attend to unconscious material	Post-score	.44	9.57**		
3 - adjust to society	Post-score	.05	0.61		
	Supervisor 2	.35	2.99	.30	5.15*
4 - be active, confront	Post-score	.37	6.94*		
	Supervisor 2	.66	10.45***	.29	9.21*
5 - be aware of feelings	Post-score	.52	12.90***		
6 - involvement caring	Post-score	.53	13.56**		
7 - no drive toward health	Post-score	.81	49.89****		
8 - secure therapist	Post-score	.51	12.33***		
9 - personality is crucial	Post-score	.12	1.63		
	(-)Supervisor 3	.49	5.22*	.37	7.88*
10 - learning is verbal	Post-score	.04	0.54		
11 - against physical touch	Post-score	.02	0.30		
	Supervisor 1	.42	4.03*	.40	7.60*

Note: Table 2-6 continues on the following page

Table 2-6 (continued)

TOQ Variable	Predictor	Cumulative $R^2$	$F$	Change in $R^2$	$F$ Change
TOQ Cluster Scores					
1 - experiential	Post-score	.65	21.95****		
	(-)Supervisor 3	.79	20.76****	.14	7.57*
	(-)Supervisor 2	.88	24.25****	.09	7.33*
2 - psychoanalytic	Post-score	.09	1.22		
	Supervisor 1	.48	5.03*	.39	8.12*
3 - cognitive-behavioral	Post-score	.19	2.84		
	Supervisor 2	.46	4.72*	.27	5.53*

Note: (-) indicates a negative relationship.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .005$ , \*\*\*\*  $p < .001$

generally supported by the results presented in Table 2-6. The relationships on each of the three cluster scores, which each represent trends across multiple factors, remained constant with the exception of an additional predictor contributing to the experiential cluster. The predictive relationship for factor 11 also remained constant. The stability of these relationships suggests a time-lag effect. The predictive relationship for factor 7 disappeared, while new predictive relationships emerged for factors 3 and 4. Finally, the predictor variable changed for factor 9.

The inconsistencies among predictors for factors 4, 5, and 7 were due primarily to differences resulting from two separate processes of residualization. For instance, on factor 5 (be aware of feelings), trainees began training exhibiting a positive correlation with the orientation of their second most influential supervisor. Over time, trainees consistently became more dissimilar to this supervisor on this factor. However, more of total change relative to supervisor 2 occurred during training. Thus the greater relative magnitude of change from the beginning to the end of training was reflected in the negative relationship with supervisor 2 when follow-up scores were residualized by beginning scores. This relationship dropped out when the prior negative relationship with supervisor 2 was removed by residualizing follow-up scores by end-of-year scores. The presence of supervisor 2 as a predictor for factor 3 in Table 2-6 is an erroneous product of residualization. Trainees were similar to these supervisors on that factor at the beginning of training, showed a near zero correlation at the end of training, and had become similar once again by follow-up.

The single notable exception occurred in the prediction of the rated importance of therapists' personality (factor 9). The negative relationship on this factor with supervisors ranked third found in Table 2-6 as well as the positive relationship for the third most influential supervisors found in Table 2-3 was based primarily on a case of multicollinearity. The only significant zero order correlations on this factor were found between second most influential supervisors' and trainees' scores. The relatively high correlation ( $r = .54$ ,  $p < .02$ ) between scores of second and third most influential supervisors permitted spurious

predictive relationships to emerge on factor 9 due principally to the lack of independence of predictor variables. The pattern of these results serve to underscore the utility and robustness of the residualized change measures when evaluating repeated measures data, as well as the need for vigilance regarding interdependence among predictor variables.

### Personal Values

Beginning and end-of-year rankings for trainee terminal values are displayed in Table 3-1. None of the terminal value mean ranks changed significantly from the beginning to the end of the training year. Instrumental value rankings are displayed in Table 3-2. Friedman two-way analysis of variance disclosed only two instrumental values whose mean ranks changed significantly from the beginning to the end of the training year. Ambitious become more highly ranked  $\chi^2 (1, N=16) = 4.0, p < .05$  while polite declined in rank  $\chi^2 (1, N=16) = 6.25, p < .05$ .

### Prediction of Trainee Personal Values

Multiple regression was employed to establish an optimal model for predicting end-of-year value rankings. Initial analyses were conducted to explore the relationship between therapist background characteristics and end-of-year value rankings. As in the analyses of theoretical orientation, pretest ranks for a given variable were forced as the first entry in the regression equation. Remaining variables were available for entry during the stepwise segment of the regression procedure. The criteria for stepwise entry was set at  $p < .01$ . Background variables retained for final analyses included marital status and the three Eysenck Personality Inventory scale scores. Locus of control was found unrelated

Table 3-1

## Value Survey Rankings Among Trainees - Terminal Values

Rank	Beginning of Training Year		End of Training Year	
	Value	Mean <u>z</u>	Value	Mean <u>z</u>
1	Mature Love	.96	Self-respect	1.00
2	Self-respect	.80	Mature Love	.81
3	Inner Harmony	.73	Freedom	.71
4	Wisdom	.62	Inner Harmony	.71
5	True Friendship	.53	True Friendship	.70
6	A Sense of Accomplishment	.43	Wisdom	.68
7	Freedom	.50	Happiness	.36
8	Happiness	.37	A Sense of Accomplishment	.09
9	A World at Peace	.30	An Exciting Life	-.07
10	Equality	-.05	A World at Peace	-.14
11	Family Security	-.12	Family Security	-.26
12	An Exciting Life	-.21	Equality	-.26
13	A Comfortable Life	-.48	Pleasure	-.43
14	A World of Beauty	-.52	A Comfortable Life	-.50
15	Social Recognition	-.70	A World of Beauty	-.53
16	Pleasure	-.77	Social Recognition	-.62
17	Salvation	-1.19	Salvation	-1.07
18	National Security	-1.21	National Security	-1.19

Table 3-2

## Value Survey Rankings Among Trainees - Instrumental Values

Rank	Beginning of Training Year		End of Training Year	
	Value	Mean <u>z</u>	Value	Mean <u>z</u>
1	Loving	1.10	Loving	1.19
2	Honest	1.01	Honest	.98
3	Independent	.75	Capable	.78
4	Responsible	.62	Broadminded	.60
5	Capable	.59	Independent	.54
6	Intellectual	.47	Responsible	.46
7	Broadminded	.32	Courageous	.33
8	Courageous	.30	Imaginative	.25
9	Helpful	.29	Intellectual	.22
10	Imaginative	.25	Forgiving	.00
11	Forgiving	-.15	Helpful	-.02
12	Ambitious	-.41	Ambitious	-.13
13	Cheerful	-.52	Cheerful	-.41
14	Logical	-.53	Logical	-.67
15	Polite	-.75	Self-controlled	-.77
16	Self-controlled	-.80	Polite	-1.00
17	Clean	-1.10	Obedient	-1.19
18	Obedient	-1.44	Clean	-1.16

to any of the value rankings. Supervisors' rank scores for each paired value variable were included as the predictors of interest. The outcomes of these regression procedures are presented in Tables 3-3 and 3-4.

Table 3-3 displays the findings for those values reflecting terminal or end states. Trainee beginning-of-year value rankings were positively and significantly predictive of end-of-year rankings for nine of the eighteen terminal values. Trainees' Eysenck Personality Inventory scale scores contributed to predicting changes in rankings of family security and social recognition. Supervisors' value rankings positively contributed to the prediction of change in a single value, salvation.

Table 3-4 displays the findings for the eighteen instrumental values. Among these values, therapist trainee beginning-of-year rankings made only five significant contributions to predicting end-of-year rankings. Trainee EPI scores and supervisor value rankings each contributed to a single prediction. Trainee rankings of courageous became more similar to rankings of that value by supervisors rated as most influential. On the whole, instrumental values showed fewer patterned relationships than did terminal values.

#### Predictive Trends for Personal Values

Secondary analyses were again conducted to explore predictive trends within the two value hierarchies. These analyses utilized the same rationale presented in the section dealing with theoretical orientation. Regression analyses were implemented with a  $p < .05$  criterion for inclusion of variables during the stepwise segment of the regression procedure. The results of these analyses are summarized in Tables 3-5 and 3-6.

Table 3-3

Predictors for Trainee Terminal Values at the End of the Training Year  
Listed in Descending Order of Mean Rank

Value	Predictor	Cumulative $R^2$	$F$	Change in $R^2$	$F$ Change
Self-respect	Pre-score	.17	2.70		
Mature Love	Pre-score	.48	12.13***		
Freedom	Pre-score	.004	0.05		
Inner Harmony	Pre-score	.11	1.66		
True Friendship	Pre-score	.27	4.91*		
Wisdom	Pre-score	.44	10.17**		
Happiness	Pre-score	.45	10.71**		
A Sense of Accomplishment	Pre-score	.08	1.17		
An Exciting Life	Pre-score	.23	3.86		
A World at Peace	Pre-score	.29	5.32*		
Family Security	Pre-score	.38	7.89*		
	(-)EPI Lie	.71	14.40****	.33	13.40***
Equality	Pre-score	.68	27.93****		
Pleasure	Pre-score	.02	0.30		
A Comfortable Life	Pre-score	.23	3.92		
A World of Beauty	Pre-score	.02	0.27		
Social Recognition	Pre-score	.17	2.58		
	EPI Neuroticism	.63	10.18***	.46	15.00***

Note: Table 3-3 continues on following page.

Table 3-3 (continued)

Value	Predictor	Cumulative $R^2$	F	Change in $R^2$	F Change
Salvation	Pre-score	.67	26.85****		
	Supervisor 3	.89	50.87****	.22	25.10****
National Security	Pre-score	.80	51.62****		

Note: (-) indicates a negative relationship.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .005$ , \*\*\*\*  $p < .001$

Among terminal values, value rankings of supervisors contributed to predicting change in a single trainee terminal value, social recognition. Eysenck personality characteristics made additional contributions to predicting changes in four terminal values (mature love, inner harmony, true friendship, and a world of beauty), while marital status emerged as an additional predictor for inner harmony.

Within the instrumental value hierarchy, supervisors' value rankings made a single additional contribution to the prediction of changes in trainees' instrumental value rankings. Changes in trainees' ranking of imaginative were found to be negatively related to the rankings of this value by supervisors rated as second most influential. Marital status was found to be related to the rankings of two instrumental values, and the EPI neuroticism scale was found to predict change in single instrumental value.

Table 3-4

Predictors for Trainee Instrumental Values at the End of the Training Year Listed in Descending Order of Mean Rank

Value	Predictor	Cumulative $R^2$	$F$	Change in $R^2$	$F$ Change
Loving	Pre-score	.23	3.81		
Honest	Pre-score	.53	14.41***		
Capable	Pre-score	.05	0.70		
Broadminded	Pre-score	.14	2.06		
Independent	Pre-score	.25	4.27		
Responsible	Pre-score	.15	2.23		
Courageous	Pre-score	.19	3.13		
	Supervisor 1	.61	9.45***	.42	12.91***
Imaginative	Pre-score	.22	3.69		
Intellectual	Pre-score	.09	1.34		
Forgiving	Pre-score	.14	2.15		
Helpful	Pre-score	.29	5.20*		
Ambitious	Pre-score	.14	2.10		
Cheerful	Pre-score	.26	4.51		
Logical	Pre-score	.05	0.67		
Self-controlled	Pre-score	.37	7.59*		
Polite	Pre-score	.56	16.70***		
Obedient	Pre-score	.05	0.64		
Clean	Pre-score	.41	9.07**		
	EPI Extraversion	.70	14.30****	.29	11.91***

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .005$ , \*\*\*\*  $p < .001$

Table 3-5

Additional Predictors for Trainee Terminal Values  
at the End of the Training Year

Value	Predictor	Cumulative R <sup>2</sup>	F	Change in R <sup>2</sup>	F Change
Mature Love	Pre-score	.48	12.13**		
	(-)EPI Lie	.67	12.10***	.19	6.73*
Inner Harmony	Pre-score	.11	1.66		
	EPI Lie	.38	3.46	.27	5.13*
	Marital Status	.65	6.96**	.27	8.79*
	EPI Extraversion	.77	8.68**	.12	5.43*
True Friendship	Pre-score	.27	4.91		
	(-)EPI Lie	.52	6.66*	.25	6.38*
A World of Beauty	Pre-score	.02	0.27		
	(-)EPI Neuroticism	.37	3.46	.35	6.54*
	EPI Lie	.64	6.56**	.27	8.46*
Social Recognition	Pre-score	.17	2.58		
	EPI Neuroticism	.63	10.18***	.46	15.00***
	Supervisor 1	.80	14.30****	.17	8.99*
	Supervisor 2	.90	23.20****	.10	10.97**

Note: (-) indicates a negative relationship.

\* p.<.05, \*\* p.<.01, \*\*\* p.<.005, \*\*\*\* p.<.001

Table 3-6

Additional Predictors for Trainee Instrumental Values  
at the End of the Training Year

Value	Predictor	Cumulative $R^2$	$F$	Change in $R^2$	$F$ Change
Loving	Pre-score	.23	3.81		
	Marital Status	.52	6.44*	.29	7.24*
Imaginative	Pre-score	.22	3.69		
	(-)Supervisor 2	.44	4.76*	.22	4.76*
Polite	Pre-score	.56	16.70***		
	(-)EPI Neuroticism	.74	17.23****	.18	8.34*
Clean	Pre-score	.41	9.07**		
	EPI Extraversion	.70	14.30****	.29	10.91***
	(-)Marital Status	.82	16.75****	.12	7.10*

Note: (-) indicates a negative relationship.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .005$ , \*\*\*\*  $p < .001$

Viewed as a group, trainees' values remained relatively stable during the assessment interval evaluated within this study. However, it is clear from the relatively weak overall relationships between beginning and end-of-training scores that individual value rankings were likely to undergo unpatterned but small changes during the course of the year. While in a majority of cases, the changes which occurred were unrelated to the supervisor variables employed by the present analyses, a number of values were found related to concurrent intrapersonal variables,

including personality characteristics and marital status. However, it must be recalled that the majority of these relationships emerged only in the context of a liberal criterion for statistical significance.

Within the terminal value hierarchy, trainee's EPI lie scale scores were found to be negatively related to changes in three values (mature love, true friendship, family security), and positively related to two values (inner harmony, a world of beauty). Trainee's neuroticism scores were positively related to changes in the ranking of social recognition and negatively to the ranking of polite. Trainee's extraversion scores were positively related to change on a single value, inner harmony. Among instrumental values, extraversion was found to relate to change in the ranking of clean, while neuroticism was predictive of change in polite. Trainees who were married tended more highly rank loving and less highly rank clean at the end of the training year. This pattern of results suggests that trainee personality characteristics are more influential with respect to changes in their values than are supervisor values. Relationships between changes in initial trainee value rankings and supervisors' value rankings were found on only two instrumental and two terminal values.

## DISCUSSION

### Overview

The current study was undertaken to assess the impact which clinical supervisors have on the therapy and value orientations of clinical psychology trainees within the context of a one year psychotherapy training experience. Because this study employed a within subjects design, straightforward interpretations of the results are dependent on the convergence of several patterns within the data. First, subjects have to undergo change. Change can be most easily seen in group mean differences across repeated measurements of specific dependent variables. In the absence of significant changes in group means, the finding that relatively little common variance exists between repeated assessments of a variable also indicates that changes have occurred. Of course, this latter finding may also reflect on the reliability of the specific variable in question. In the absence of group mean changes within the sample, the interpretation of significant predictive relationships among dependent and independent variables becomes more difficult. However, since this study is based on a naturalistic rather than a strict experimental design, changes among individual subjects are less likely to be consistently reflected in changes within the total sample means.

Secondly, since the independent variables reflecting supervisors' values and orientations were derived based on trainees' rankings of supervisors, these predictor variables are not homogeneous across trainees. Thus, interpretation of the relationships between trainee

variables and supervisor variables is, in part, dependent on the degree to which supervisors assigned to different categories reflect coherent differences in orientation.

Finally, interpretation of the findings must be informed by an awareness that sources of developmental influence extended beyond supervisory relationships. Moving toward levels of increasing generality within a systems perspective, sensitivity to contextual issues such as the status of individual supervisors within the training program, the overall theoretical biases of the supervisory faculty and the theoretical bias of the setting becomes important (Beutler & McNabb, 1981; Sundland, 1977b). The subsequent discussion will attempt to delineate the degree to which the findings within the present study were able to address these concerns.

#### Characteristics of the Training Setting

Before an attempt is made to impose coherence on the findings concerning changes in trainees' theoretical orientations and values relative to supervising faculty members, a few comments on the theoretical bias associated with the training setting are in order. The psychology training program in which the present sample participated is housed within a medical college department of psychiatry which also supports a psychiatric residency program. Evidence of a broadly defined psychoanalytic orientation can be readily obtained through sources such as syllabi for the residency training program seminars. The bias associated with the training setting itself can be viewed as generally psychoanalytic in character.

### Characteristics of the Supervisor Sample

While factors such as institutional bias address the most general level of influence in the contextual hierarchy under consideration, the next most general level in the hierarchy concerns characteristics of the supervisory faculty, taken as a group. Referring to Table 1-5, which displays theoretical orientation for supervisory faculty, supervisors across all three supervisory categories displayed relatively strong adherence to a psychoanalytic stance as seen by scores on cluster 2 and factors 2 and 11. The joint elevations on these scores is not surprising in that factors 2 and 11 are major contributors to the psychoanalytic cluster. This commonality reflects the formality of the psychoanalytic stance which inveighs against forms of overt therapist behavior that could confound interpretation of the transference relationship. The development and analysis of this "as if", or transference relationship is a core component of psychoanalytically oriented treatment. Commonalities among supervisors which reflect a general psychoanalytic orientation are consistent with the general bias of the training setting.

Beyond the broad commonalities that existed across all supervisors, the composite orientations of supervisor groups, categorized by trainee rankings, also manifested some unique characteristics. The group ranked as most influential tended to be more psychoanalytic and more committed to personal involvement and caring. They believed less in the use of expressive techniques and less in the presence of an innate drive toward health. They were also less cognitive-behaviorally oriented than Sundland's (1977a) normative sample of therapists. Second ranked supervisors, by contrast, tended to be more invested in the importance of

verbal and conceptual learning than the norm. Third ranked supervisors displayed a lower emphasis on therapist activity while they maintained a relatively strong interest in personal involvement and caring. However, it should be remembered that these characterizations were dependent upon frequency of occurrence of individual supervisors within a given ranked category. Thus the Director of Clinical Training contributed disproportionately to the first category, while the Chief of Psychology and one other faculty member dominated the second category. The relative lack of unique attributes within the third category very likely was related to greater uniformity of frequencies with which individual faculty were ranked. The skew of the frequency distributions within the first two categories prompts a discussion of the biases which may have been associated with the differential ranking of supervisors.

#### Trainee Perception of Supervisor Influence

Among variables based in the organizational characteristics of training settings, supervisor status has been cited as an important determinant of supervisor influence (Beutler & McNabb, 1981; Sundland, 1977b). Professional and personal characteristics of supervisors have also been found related to trainee perceived quality of supervision and to expressed preferences for particular types of supervision (Allen, Szollos & Williams, 1986; Cherniss & Egnatios, 1977; Heppner & Roehlke, 1984). Most preferred supervisors are more likely to be psychoanalytically or insight oriented than behaviorally oriented. They are also more likely to focus on feelings and personal growth issues rather than providing instruction in technique. As a group, preferred supervisors

are also perceived as being highly expert and trustworthy, and as offering supportive supervisory relationships.

While no direct measurement of status was employed in this study, the frequency of "most influential" ratings assigned to the Director of Clinical Training suggest that the status associated with that position may have played a role in trainees' assignment of supervisors to categories of influence. Three of the six "most influential" ratings, not assigned to the Director of Clinical Training, were given to M.D. psychiatry faculty. These individuals were also psychoanalytically oriented, thus manifesting a theoretical stance which was similar both to the Director of Clinical Training and the to the general orientation of the setting. These findings are also consistent with the expectation that most preferred supervisors are likely to be psychoanalytically oriented. Supervisors rated as "most influential" in the present study also placed a greater emphasis on personal involvement and caring than is the norm.

The Chief of Psychology was the most frequently ranked supervisor within the "second most influential" category. This finding again argues for the presence of a faculty status bias reflected in the ranking of supervisors. However, the supervisor ranked second most frequently within this category was an adjunct faculty member with no designated administrative title within the training program.

The current pattern of results strongly suggests that supervisor's status may have played a role in the perception of the supervision experience. The conjunction of psychoanalytic theoretical orientation and faculty status may have been highly salient in trainee designation of most influential supervisors. While the role of theoretical orientation

is less clear for the remaining two supervisor categories, status appears to have played a role in the designation of second most influential supervisors. However, the apparent relationship between status and designated rankings may have been mediated by personal and professional characteristics of supervisors beyond their ex officio status within the training program or their professed theoretical orientation.

### Trainee Evolution

#### Initial Trainee Characteristics

As a group, trainees began their supervision experience with a psychoanalytic bias, characterized by a passive and formal stance and a mildly heightened sensitivity to differences between therapeutic and casual social relationships. In contrast to the analytic perspective, they also strongly endorsed personal involvement and caring as crucial elements to therapy. However, their endorsement of the importance of feelings, as well as belief in the role of therapist personality in effective therapy is concordant with the emphasis placed on personal involvement. The combination of these latter dimensions of orientation are also consistent with an endorsement of experiential, here and now forms of therapy.

This apparent mixture of perspectives, rather than representing theoretical anarchy, may well represent a pattern in which relatively novice therapists are endorsing those attributes which they bring with them at an early stage of professional development. Armed with nascent expertise in the areas of therapeutic relationship management and intervention technique, what better way might there be to manage the stress of

therapeutic responsibility than to believe in the salience of those personal qualities and behaviors which are readily available.

In contrast to theoretical orientation, which underwent some change over time, trainee value hierarchies tended to remain quite constant. At the beginning and end of training, these developing professionals hoped to attain self-respect, mature love, inner harmony, true friendship, and wisdom through loving, honest, capable, independent, and responsible behavior. They were much less concerned with national security, salvation, social recognition, a world of beauty, or a comfortable life. They also portrayed a relative lack of concern for overt social convention which places an emphasis on being obedient, clean, self-controlled, polite, logical, and cheerful. Three of these latter six instrumental values load on a factor analytically derived dimension which Rokeach (1973) calls "self-constriction vs. self-expansion". By and large, trainee mean value rankings paralleled the mean value rankings of supervisor sample. Supervisors, however, more highly valued a sense of accomplishment and being imaginative, two attributes which may be experienced as contrary to the formal demands and rewards of graduate training. This pattern of values portrays individuals for whom issues related to self-identity have high salience and who prefer intensive rather than extensive interpersonal relationships. While this constellation is quite distinct from the value patterns reported by Rokeach (1973) for a variety of occupational, political and religious groups, it is consistent with the humanistic-idealism characteristic of supervisors within the current sample, and psychotherapists more generally (Bergin, 1980).

The absence of a predictive relationship between training status (intern/extern) and end-of-year value rankings, taken together with the relative overall stability of the value hierarchies suggest that values tend to become established relatively early in, or possibly prior to, training. The question of whether this characteristic pattern of values has an a priori correlation with entry into graduate training in clinical psychology would provide the basis for an interesting study.

#### Subsequent Trainee Characteristics

From the beginning to the end of the training year, as a group, trainees tended to maintain components of theoretical orientation present at the beginning of training. They displayed a trend toward further consolidating a psychoanalytic orientation through increased support for, and familiarity with, psychoanalytic technique while maintaining a formal attitude toward therapeutic relationships which is also characteristic of a psychoanalytic stance. Interest in experiential therapy was also maintained over the course of the training year as evidenced by adherence to the importance of awareness of feelings and personal involvement and caring, a trend toward firmer belief in the presence of an innate drive toward health, and maintenance of the belief in the importance of the therapist's personality to the conduct of therapy.

In this light, it is interesting that the only significant change in trainee theoretical orientation from the beginning to the end of the training year across the entire trainee group, was an increase in adherence to a cognitive-behavioral orientation (cluster 3). Since cluster scores are derived from weighted combinations of factor scores, they are potentially more sensitive to patterns of change among individual

components of theoretical orientation, which, when assessed separately may not manifest sufficient change to attain significance. This movement toward increased acceptance of the cognitive-behavioral perspective appears to be based on uniform but small changes in the individual factor scores which contribute to the cognitive-behavioral cluster. These small trends included movement in the direction of becoming more supportive of the need to adjust to societal demands, more secure, more supportive of verbal learning, and more convinced of the importance of avoiding informal or physical relationships with patients. They also tended to be slightly less invested in the importance of personality and personal involvement. When evaluated individually, none of these components changed significantly, each changed in the direction associated with increased acceptance of the cognitive-behavioral perspective.

At three to five years after the completion of the one year training program, this trainee sample appears to have adopted a more moderate stance on several orientation dimensions. Trainees became significantly less committed to the importance of personal involvement and caring as well as less experientially oriented. They also reverted to their pretraining view on the presence of an innate drive toward health, while maintaining the achieved level of support for cognitive-behavioral treatment which had developed during the training year.

Overall, both significant and nonsignificant changes in individual factor scores were highly consistent with the consolidation of a broadly psychoanalytic stance, and in which a concomitant interest in experiential modes of therapy had diminished. These changes are also

indicative of movement from relative disinterest in cognitive-behavioral forms of therapy to a neutral position concerning this type of treatment.

### Correlates of Change

#### Trainee Theoretical Orientation

The present findings indicate that across the three assessments, trainee sample mean changes in theoretical orientation were neither dramatic nor entirely uniform. As might be anticipated from this finding, the most salient predictors of subsequent theoretical orientations held by clinical psychology trainees were their current orientations. The lack of significant relationships between theoretical orientation and personality factors, measured by the EPI, is consistent with Schwartz's (1978) findings. Locus of control was found to be a significant but unreliable predictor of change within the present sample. Increased acceptance of cognitive-behavioral modalities during the course of training tended to be associated with greater prior experience in conducting therapy. This latter result was the only finding which supported a relationship between experience per se and any aspect of theoretical orientation. Additionally, no interactions between prior experience and supervisors' influence were found. Thus the hypothesis that prior experience would mediate the degree of change in theoretical orientation was not supported. This finding may relate to the relatively high levels of prior training found throughout the trainee sample. Previous research suggests that the type of finding expected, but not found, within the current study might be more likely to occur in a sample which contained trainees at the beginning practicum level of development together with

more advanced trainees. Within the present sample, the extern group was indistinguishable from the intern group with regard to prior experience.

Across all the predictive relationships found between supervisors' and trainees' theoretical orientation, the relationships occurring on the cluster scores tended to be least ambiguous. As a group, trainees brought a psychoanalytic bias into the training setting and maintained this bias through follow-up assessment. However, the relative strength of this orientation underwent change within individuals in the group. The presence of these changes is apparent in the small common variance found between beginning and follow-up scores for this cluster. Individuals' changes on this cluster from initial to follow-up assessment reflected an increased similarity to supervisors rated as most influential. As a group the most influential supervisors were the most psychoanalytically oriented among the three supervisor cohorts. Finally, consolidation of this similarity appeared to take place following the conclusion of training. Supervisors' orientation scores were not predictive of changes in trainee scores at the end of training, but were predictive of change from the beginning of training to follow-up as well as from the end of training to follow-up. In both analyses of follow-up data, supervisors' scores explained more variance in trainee scores than did trainees' previous scores.

A similar pattern was found for the cognitive-behavioral cluster. As group, trainees entered the training program with a negative bias toward cognitive-behavioral therapy. This bias changed significantly during the course of training, becoming neutral relative to normative group means. By the follow-up assessment, individuals' changes on this

cluster were found to be more highly related to the orientations of second most influential supervisors than to the individuals' previous score on this cluster. Again, consolidation of these similarities occurred in the interim between the conclusion of training and follow-up assessment.

The pattern for the experiential cluster is somewhat different. Between the end of training and follow-up, as a group, trainees lost their previous enthusiasm for experiential therapy. This significant group change was reflected, among individual trainees, in the development of a strong dissimilarity to the orientations of supervisors rated third most influential. While this dissimilarity increased between the end of training and follow-up, the trend in this direction began during training. Additionally, a portion of the change occurring between the end of training and follow-up reflected the development of dissimilarity to supervisors rated second most influential.

Taken together, this group of findings represents an interesting pattern. From the beginning of training to follow-up assessment, changes around the trainee group's dominant psychoanalytic bias were most strongly related to the orientation of the cohort of supervisors who most strongly held a psychoanalytic bias. These supervisors were also rated by trainees as being most influential. Over time, trainees developed a greater interest in cognitive-behaviorally oriented therapy, relative to their initial lack of enthusiasm for this modality. This change was most strongly related to the orientations of supervisors rated as second most influential. Trainees also became less enthusiastic about experiential therapy. While this change may reflect a consolidation of the contrasting psychoanalytic orientation, orientations of supervisors in

the third ranked cohort were negatively related to these changes. The meaning of this negative relationship is the least clear of any of the relationships suggesting supervisor influence on trainee orientation.

However, just as a polynomial of sufficiently high order can perfectly describe any set of data, speculation of sufficiently high order can accommodate any set of findings. So, on to a brief bit of speculation about perceptual reductionism employed as trainees related to supervisors. In this model, trainees seek to obtain exposure to a multiple of therapy models, but limit themselves to exploring one model per supervisor. They also establish one-supervisor-per-model relationships. This scheme eliminates confusion from week to week with the same supervisor, and from hour to hour across different supervisors. Supervisors with high status, or who have a particularly strong identification with a specific model get to choose the model they will represent. Remaining supervisors have the model they will ultimately be perceived to represent defined by a process of negotiation with their trainees. Thus in the present study, trainees may have negotiated an experiential focus to the time spent with their least influential supervisors. Perhaps after being squeezed into an otherwise uncharacteristic stance these supervisors served as negative models for experiential treatment. Or, the experiential components of these supervisors orientations may have served as springboards for trainees' mainstream consolidation of a psychoanalytic perspective. In the absence of data to test these musings we shall return to the business of interpreting those data which are present.

The pattern of predictive relationships between supervisors' theoretical orientation and changes in trainee orientation represented in

individual factor scores is more difficult to interpret. This difficulty is founded on the relative homogeneity of supervisor cohort mean scores compared to normative values for these individual factors and the ipsative nature of the data employed to answer questions about predictive relationships. Thus, all analyses of supervisors' influence employed current and past trainee scores as the basis of comparison rather than the relation between trainee scores and a fixed external normative reference point. The process of creating change scores residualized by "pretest" score simultaneously removes a priori covariance with other predictor variables. However, this residualization of predictor variables is not reflected in the supervisory cohort descriptive data. Thus the bases for significant predictive relationships relative to normative values is obscured by the differences between the ipsative and normative frames of reference. The previous discussion of predictive relationships among cluster scores illustrates an instance where discriminations between the distributions of predictor variables was possible on the basis of normative comparisons. In the case of individual factor scores such discriminations between supervisory cohorts is not possible. For purposes of the current discussion, a solution to this interpretive problem can be based on the consistency between relationships found on individual factor scores and the relationships on cluster scores to which the factor scores contribute. Thus, individual factors which contribute to the psychoanalytic cluster would be expected to be predicted by the most influential supervisors' scores.

By and large, relationships between changes in trainees' orientation and supervisors' orientation corresponded to the relationships found

among the cluster scores. Most influential supervisors' perspectives were predictive of changes in trainees' conviction about the importance of avoiding casual relationships with therapy clients (factor 11). This factor loads on the psychoanalytic cluster (cluster 2). These supervisors outlook was also related to changes in trainees' perspectives at follow-up concerning the existence of an innate drive toward health (factor 7). While factor 7 loads on the experiential cluster, the predictive relationship appears consistent with a consolidation of an analytic orientation and a concomitant decline in preference for experiential modes of treatment.

The predictive relationships found between trainee change on individual factors and the orientations of second most influential supervisors was generally consistent with the relationship found between these supervisors and trainee change on cluster 2. The predictive relationship on factor 9 (therapists' personality is important) with second most influential supervisors is an example of this consistency. As was stated previously, the predictors for factor 9 which entered after second most influential supervisors' scores must be considered as spurious due to multicollinearity among predictor variables. Factor 9 loads negatively on cluster 3. Over time, trainees scores tended to decrease on this factor. Although this trend was nonsignificant, the pattern is consistent with increased acceptance of a cognitive-behavioral orientation and increasing similarity to supervisors in the second most influential cohort. Factor 8 (secure therapist) also loads positively on cluster 2, thus, the relationship between trainee change from beginning of treatment to follow-up and the scores of second most influential supervisors should

also be positive. It is unclear why this relationship is opposite of the one expected. The negative relationship between changes in trainees' perspectives on the importance of the awareness of feelings (factor 5) at follow-up, and second most influential supervisors' scores is consistent with the negative relationship found for these supervisors and changes in trainee scores between the end of training and follow-up. Trainees appear to have been selective in choosing the aspects of their second most influential supervisors' orientation which they ultimately came to emulate. The two additional predictive relationships which emerged between the end of training and follow-up are also consistent with changes toward becoming more cognitive-behaviorally oriented. Factor 3 (adjust to societal expectations) loads on cluster 3. The relationship on this factor paralleled the decreased interest in experiential therapy as indicated by cluster 3. While factor 4 (active therapist, use confrontation) does not load on any of the three clusters, greater therapist activity is consistent with cognitive-behavioral techniques in contrast to the relative passivity of the psychoanalytic approach.

The only reliable relationships between trainee change and third most influential supervisors were found on the experiential cluster. Thus the influence of these least influential supervisors appears to have been more diffuse across individual components of orientation.

The total pattern of these relationships suggests a simplistic summary. Most influential supervisors fostered consolidation of preexisting orientations, second most influential supervisors taught trainees something new and third most influential supervisors helped trainees

become aware that their early enthusiasm for experiential therapy was inconsistent with their ongoing development as therapists.

The current findings provided some support for the hypothesis that supervisors' orientations are influential in the development of trainee orientation. However, a substantial proportion of the relationships which support a convergence in orientation toward supervisors' orientations emerged from follow-up data. Consequently, generalizations from the current findings must be made with caution, due to the potential multitude of variables which may have affected trainees' orientations during the period from the end of training to the follow-up assessment. In spite of this caveat, the current findings do suggest a delayed emergence of supervisors' influence on trainee values. This finding contrasts with earlier work which suggested that graduate training experiences were relatively uninfluential in the formation of professional orientation. Personality and postgraduate experience were believed to be the salient variables which contribute to postgraduate professional characteristics (Weissman, Goldschmid & Stein, 1971).

#### Trainee Personal Values

The majority of predictors for changes in trainee value rankings were found among other trainee variables. Consequently the hypothesized prediction that changes in trainee values would reflect a convergence with supervisors' values was not confirmed. Trainee personality characteristics, measured by the three Eysenck Personality Inventory scales entered into the prediction of six terminal values (mature love, inner harmony, true friendship, family security, a world of beauty, and social recognition), and two instrumental values (polite, and clean). Marital

status entered into the prediction of change on one terminal value (clean), and one instrumental value (loving). Value rankings of supervisors entered into the prediction of a single terminal value (social recognition) and a single terminal value (courageous).

The EPI lie scale, which may be seen as representing a measure of socially desirable responsiveness, was the most prominent predictor among trainee personality variables. Trainees with low lie scores tended to increase their rankings of mature love, true friendship, and family security over the course of the training year. High lie scores tended to be associated with assigning higher value to inner harmony and a world of beauty. While these findings are interesting, they may be relatively unreliable. The distribution of trainee scores on the lie scale was very narrow. The mean and standard deviation for the entire sample were 0.9 and 1.3, respectively. Furthermore, the nine item length of this scale is likely to impair its' general reliability. Consequently, the entire group of relationships between lie scale scores and changes in value rankings is suspect, and may be entirely the product of a sampling artifact.

An elevation in neuroticism was related to an increased ranking of social recognition and to a decreased ranking of a world of beauty. Both of these terminal values were given relatively low mean rankings within the trainee sample, and the rankings of neither one changed significantly over the course of training.

Extraversion was related to changes in two values, inner harmony and clean. The relationship between extraversion and increased valuation of inner harmony appears to be the product of colinearity with the lie

scale and thus is likely to be spurious. More extraverted trainees came to more highly value the instrumental value clean over the course of the training year. While the trainee group placed relatively little value on cleanliness, extraverted trainees who were also single tended to increase their valuation of clean. This value change doubtless enhanced their dating prospects. Married trainees came to more highly value loving and inner harmony over the course of the training year.

The single interesting, reliable and interpretable relationship to changes in trainee value rankings occurred on the instrumental value courageous. Trainees became more similar to their most influential supervisors' rankings of courageous. Most influential supervisors were found to place significantly greater value on being courageous than did second most influential supervisors. Supervisors who highly valued courage may have promoted an atmosphere in supervision which was particularly conducive to the task of developing new skills. An atmosphere which encouraged efforts to define, test and ultimately move beyond one's current limitations was likely to have been particularly appreciated by individuals undertaking the arduous task of professional development.

#### Summary

The present study investigated relationships between changes in the theoretical orientations and personal values of predoctoral clinical psychology trainees and the orientations and personal values of the clinical psychology faculty who had provided psychotherapy supervision for these students during a one-year training program. A number of relationships were found between supervisor orientation and trainee orientation, assessed three to five years following the conclusion of the training

experience. Similar relationships were not found immediately at the conclusion of training. These findings suggest that trainees may undergo a period following training during which the influence of supervisors on professional orientations was consolidated and integrated. The presence of such a gestation period underscores the necessity for longitudinal study of similar processes. In contrast to trainee theoretical orientation, which underwent change, trainee personal values remained quite constant from the beginning to the end of their training experience. The patterns of personal values among these trainees were quite similar to the values of their supervisors.

The current findings further suggested that a confluence of factors was important in shaping the pathway which culminated in similarities between trainee and supervisor orientations. Trainees tended to enter the training program with a psychoanalytic predisposition. While specific components of this a priori bias changed over time, the trainee sample maintained a psychoanalytic orientation through follow-up assessment. This predisposition may also have played a role in the perception of supervisors' influence. With few exceptions, supervisors designated as most influential were psychoanalytically oriented. This orientation also more generally characterized the training setting.

Trainee rankings of supervisors also appeared to be influenced by the status of supervisors within the administrative structure of the program. Those clinical faculty holding administrative titles were clearly overrepresented among supervisors ranked as most or second most influential. Thus, administrative status may have increased the salience of these individuals as professional models.

While supervisor status may have influenced the designation of supervisors as second most influential, the theoretical perspectives represented among those individuals may also have influenced trainee perceptions of their influence. Across time, trainees' theoretical orientation became more coherent. If this developing coherence is taken as the fundamental basis of change, we would expect to see a decline in adherence to experiential forms of therapy. This expectation is based on the conceptual and technical incompatibilities between these two treatment perspectives. On the other hand, cognitive-behavioral and psychoanalytically oriented therapies share some conceptual though not technical features. Both allow for a focus on internal events and processes which are somewhat removed from immediate affective experience. As a consequence, supervisors who represented a perspective that was compatible (cognitive-behavioral) with trainees' dominant and increasingly coherent orientation (psychoanalytic) may have been perceived as more influential than supervisors who were perceived as representing an incompatible (experiential) perspective. Regardless of the mechanisms underlying trainee designations of relative influence across supervisors, the current results strongly suggest that these designations had meaningful correlations with changes in trainee orientation. While the ultimate motive underlying changes in trainee orientation across time may represent efforts to achieve a coherent perspective toward the conduct of psychotherapy, supervisors appear to play a measurable role in the shape of those perspectives.

APPENDIX A

SUPERVISORY RELATIONSHIP QUESTIONNAIRE

ID Number \_\_\_\_\_

The purpose of this questionnaire is to gather information about the impact which psychotherapy supervision, encountered during the course of training, had on your professional development. First, several questions will ask you to make retrospective self ratings, and then a number of questions will address your supervision experience.

1. At the beginning of the training year, approximately how many hours of psychotherapy had you previously conducted? \_\_\_\_\_ hours
2. Please rate your self perceived level of therapeutic independence at the beginning of the training year on the following scale.

1-----2-----3-----4-----5-----6-----7

highly  
dependent on  
supervision

moderately  
dependent on  
supervision

able to  
perform  
independently

3. Using the same rating scale above, rate your self-perceived level of therapeutic independence at the end of the training year.

1-----2-----3-----4-----5-----6-----7

4. Now, please rate your self perceived level of therapeutic skill at the beginning of the training year on the following scale.

1-----2-----3-----4-----5-----6-----7

relatively  
lacking in  
skills

moderately  
skilled

highly  
skilled therapy

5. Using the scale from question 4, please rate your self perceived level of therapeutic skill at the end of the training year.

1-----2-----3-----4-----5-----6-----7

The questions on the following pages deal with the nature of the supervisory experiences which you encountered during the course of your training year. Please provide ratings for the three psychotherapy supervisors you felt to be most influential on your development. The questions for each of the three will be identical. Start with the supervisory relationship you perceived to be most influential and proceed, in order, through the other two relationships.

I. Most Influential Supervisory Relationship

A. How many months did you meet individually with this supervisor? \_\_\_\_\_ (Months)

B. Please indicate the types of cases dealt with in supervision, based on the following ratings: (Rate only those which apply)

1= primary focus; 2= secondary major focus; 3= occasional focus

- Individual, long term . . . \_\_\_\_\_
- Individual, brief . . . . . \_\_\_\_\_
- Marital . . . . . \_\_\_\_\_
- Family . . . . . \_\_\_\_\_
- Group . . . . . \_\_\_\_\_
- Other . . . . . \_\_\_\_\_ Specify \_\_\_\_\_

C. Please rank in order of importance the activities which characterized this supervisory relationship:

1=most important; 2=next most important; 3=next most; etc.  
(0 = not at all important, or not a part of this supervision experience)

- Receiving specific and timely feedback regarding therapy skills . . . . . \_\_\_\_\_
- Receiving instruction in specific therapeutic interventions . . . . . \_\_\_\_\_
- Receiving emotional support for treating difficult cases . . . \_\_\_\_\_
- Formulating or refining a specific set of treatment goals . . . \_\_\_\_\_
- Formulating or refining an intervention strategy based on treatment goals . . . . . \_\_\_\_\_
- Formulating personality dynamics of a particular patient . . . \_\_\_\_\_
- Exploring your affective responses to the patient . . . . . \_\_\_\_\_
- Exploring transference and countertransference issues . . . . . \_\_\_\_\_
- Exploring the interpersonal dynamics of the supervision relationship . . . . . \_\_\_\_\_
- Exploring the development of your career identity, including issues such as therapeutic orientation, specialization and adaptation to working in organizational environments . . . . . \_\_\_\_\_

( Most Influential Supervisory Relationship - Continued )

D. On the average, across supervision sessions, how often was time devoted to these activities?

- 1 = every session; 2 = every other session;
- 3 = every third session; 4 = 1 out of 4 sessions;
- 5 = less than once in four sessions

Receiving specific and timely feedback regarding  
therapy skills . . . . . \_\_\_\_\_

Receiving instruction in specific therapeutic interventions . . . . . \_\_\_\_\_

Receiving emotional support for treating difficult cases . . . . . \_\_\_\_\_

Formulating or refining a specific set of treatment goals . . . . . \_\_\_\_\_

Formulating or refining an intervention strategy  
based on treatment goals . . . . . \_\_\_\_\_

Formulating personality dynamics of a particular patient . . . . . \_\_\_\_\_

Exploring your affective responses to the patient . . . . . \_\_\_\_\_

Exploring transference and countertransference issues . . . . . \_\_\_\_\_

Exploring the interpersonal dynamics of the  
supervision relationship . . . . . \_\_\_\_\_

Exploring the development of your career identity, including  
issues such as therapeutic orientation, specialization and  
adaptation to working in organizational environments . . . . . \_\_\_\_\_

E. Since objective ratings certainly will fail to identify many of the unique and potentially important aspects of the supervision experience, I would appreciate having you briefly note any other characteristics of this particular supervisory relationship which you found to be important.

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\_\_\_\_\_

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\_\_\_\_\_

\_\_\_\_\_

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II. Second Most Influential Supervisory Relationship

- A. How many months did you meet individually with this supervisor? \_\_\_\_\_ (Months)
- B. Please indicate the types of cases dealt with in supervision, based on the following ratings: (Rate only those which apply)

1= primary focus; 2= secondary major focus; 3= occasional focus

- Individual, long term . . . \_\_\_\_\_
- Individual, brief . . . . . \_\_\_\_\_
- Marital . . . . . \_\_\_\_\_
- Family . . . . . \_\_\_\_\_
- Group . . . . . \_\_\_\_\_
- Other . . . . . \_\_\_\_\_ Specify \_\_\_\_\_

- C. Please rank in order of importance the activities which characterized this supervisory relationship:

1=most important; 2=next most important; 3=next most; etc.  
(0 = not at all important, or not a part of this supervision experience)

- Receiving specific and timely feedback regarding therapy skills . . . . . \_\_\_\_\_
- Receiving instruction in specific therapeutic interventions . . . . . \_\_\_\_\_
- Receiving emotional support for treating difficult cases . . . \_\_\_\_\_
- Formulating or refining a specific set of treatment goals . . . \_\_\_\_\_
- Formulating or refining an intervention strategy based on treatment goals . . . . . \_\_\_\_\_
- Formulating personality dynamics of a particular patient . . . \_\_\_\_\_
- Exploring your affective responses to the patient . . . . . \_\_\_\_\_
- Exploring transference and countertransference issues . . . . . \_\_\_\_\_
- Exploring the interpersonal dynamics of the supervision relationship . . . . . \_\_\_\_\_
- Exploring the development of your career identity, including issues such as therapeutic orientation, specialization and adaptation to working in organizational environments . . . . . \_\_\_\_\_

( Second Most Influential Supervisory Relationship - Continued )

D. On the average, across supervision sessions, how often was time devoted to these activities?

- 1 = every session; 2 = every other session;
- 3 = every third session; 4 = 1 out of 4 sessions;
- 5 = less than once in four sessions

- Receiving specific and timely feedback regarding therapy skills . . . . . \_\_\_\_\_
- Receiving instruction in specific therapeutic interventions . . . . . \_\_\_\_\_
- Receiving emotional support for treating difficult cases . . . . . \_\_\_\_\_
- Formulating or refining a specific set of treatment goals . . . . . \_\_\_\_\_
- Formulating or refining an intervention strategy based on treatment goals . . . . . \_\_\_\_\_
- Formulating personality dynamics of a particular patient . . . . . \_\_\_\_\_
- Exploring your affective responses to the patient . . . . . \_\_\_\_\_
- Exploring transference and countertransference issues . . . . . \_\_\_\_\_
- Exploring the interpersonal dynamics of the supervision relationship . . . . . \_\_\_\_\_
- Exploring the development of your career identity, including issues such as therapeutic orientation, specialization and adaptation to working in organizational environments . . . . . \_\_\_\_\_

E. Since objective ratings certainly will fail to identify many of the unique and potentially important aspects of the supervision experience, I would appreciate having you briefly note any other characteristics of this particular supervisory relationship which you found to be important.

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III. Third Most Influential Supervisory Relationship

A. How many months did you meet individually with this supervisor? \_\_\_\_\_ (Months)

B. Please indicate the types of cases dealt with in supervision, based on the following ratings: (Rate only those which apply)

1= primary focus; 2= secondary major focus; 3= occasional focus

- Individual, long term . . . \_\_\_\_\_
- Individual, brief . . . . . \_\_\_\_\_
- Marital . . . . . \_\_\_\_\_
- Family . . . . . \_\_\_\_\_
- Group . . . . . \_\_\_\_\_
- Other . . . . . \_\_\_\_\_ Specify \_\_\_\_\_

C. Please rank in order of importance the activities which characterized this supervisory relationship:

1=most important; 2=next most important; 3=next most; etc.  
(0 = not at all important, or not a part of this supervision experience)

- Receiving specific and timely feedback regarding therapy skills . . . . . \_\_\_\_\_
- Receiving instruction in specific therapeutic interventions . . . . . \_\_\_\_\_
- Receiving emotional support for treating difficult cases . . . \_\_\_\_\_
- Formulating or refining a specific set of treatment goals . . . \_\_\_\_\_
- Formulating or refining an intervention strategy based on treatment goals . . . . . \_\_\_\_\_
- Formulating personality dynamics of a particular patient . . . \_\_\_\_\_
- Exploring your affective responses to the patient . . . . . \_\_\_\_\_
- Exploring transference and countertransference issues . . . . . \_\_\_\_\_
- Exploring the interpersonal dynamics of the supervision relationship . . . . . \_\_\_\_\_
- Exploring the development of your career identity, including issues such as therapeutic orientation, specialization and adaptation to working in organizational environments . . . . . \_\_\_\_\_

( Third Most Influential Supervisory Relationship - Continued )

D. On the average, across supervision sessions, how often was time devoted to these activities?

- 1 = every session; 2 = every other session;
- 3 = every third session; 4 = 1 out of 4 sessions;
- 5 = less than once in four sessions

- Receiving specific and timely feedback regarding therapy skills . . . . . \_\_\_\_\_
- Receiving instruction in specific therapeutic interventions . . . . . \_\_\_\_\_
- Receiving emotional support for treating difficult cases . . . . . \_\_\_\_\_
- Formulating or refining a specific set of treatment goals . . . . . \_\_\_\_\_
- Formulating or refining an intervention strategy based on treatment goals . . . . . \_\_\_\_\_
- Formulating personality dynamics of a particular patient . . . . . \_\_\_\_\_
- Exploring your affective responses to the patient . . . . . \_\_\_\_\_
- Exploring transference and countertransference issues . . . . . \_\_\_\_\_
- Exploring the interpersonal dynamics of the supervision relationship . . . . . \_\_\_\_\_
- Exploring the development of your career identity, including issues such as therapeutic orientation, specialization and adaptation to working in organizational environments . . . . . \_\_\_\_\_

E. Since objective ratings certainly will fail to identify many of the unique and potentially important aspects of the supervision experience, I would appreciate having you briefly note any other characteristics of this particular supervisory relationship which you found to be important.

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A major focus of this investigation is to explore the relationship between supervisors' orientations and changes in your therapeutic outlook during the course of your training. Consequently, the next question asks that you identify the supervisors whom you rated in sections I, II and III above.

IV. From the list below, please indicate which supervisor you rated as:

Most influential \_\_\_\_\_  
Second most influential \_\_\_\_\_  
Third most influential \_\_\_\_\_

1. (Alphabetically Named Faculty Member)
2. (Alphabetically Named Faculty Member)
3. (Alphabetically Named Faculty Member)
4. (Alphabetically Named Faculty Member)
5. (Alphabetically Named Faculty Member)
6. (Alphabetically Named Faculty Member)
7. (Alphabetically Named Faculty Member)
8. (Alphabetically Named Faculty Member)
9. (Alphabetically Named Faculty Member)
10. Other . . . . . Please Specify a) \_\_\_\_\_  
b) \_\_\_\_\_  
c) \_\_\_\_\_



APPENDIX B

PSYCHOTHERAPY SUPERVISION QUESTIONNAIRE

ID Number \_\_\_\_\_

Background Questions

1. How many years have you been a practicing clinician? . . . . . \_\_\_\_\_
2. How many years have you been supervising therapist trainees? . \_\_\_\_\_
3. How many hours per week do you typically devote to therapy supervision? . . . . . \_\_\_\_\_
6. If you conduct supervision in a group setting, how many hours per week are devoted to this activity? . . . . . \_\_\_\_\_
5. How many therapy cases does each trainee typically conduct under your supervision? . . . . . \_\_\_\_\_
6. What percentage of the cases you supervise typically fall into the following categories?
  - Individual, long term . . . . . \_\_\_\_\_ %
  - Individual, brief . . . . . \_\_\_\_\_ %
  - Marital . . . . . \_\_\_\_\_ %
  - Family . . . . . \_\_\_\_\_ %
  - Group . . . . . \_\_\_\_\_ %
  - Other . . . . . \_\_\_\_\_ %      Specify \_\_\_\_\_
7. Have you received formal training in conducting supervision? . \_\_\_\_\_
8. Have you, as part of your training or on your own initiative, undertaken supervision for your supervisory activities? . . . \_\_\_\_\_

The following questions deal with aspects of supervisory style.

9. Please rank order the types of case material which you typically use in supervision:

1 = most extensively used; 2 = next most used; etc.  
Please enter 9 for materials seldom or never used.

- Written progress notes . . . . . \_\_\_\_\_
- Written process notes . . . . . \_\_\_\_\_
- Videotape . . . . . \_\_\_\_\_
- Audiotape . . . . . \_\_\_\_\_
- Therapist's verbal report of material from session . . . \_\_\_\_\_

10. Please rank in order of importance the following supervisory activities: 1 = most important; 2 = next most important; 3 = next most; etc. (0 = not at all important, or not a part of my supervisory style)

- Providing specific and timely feedback regarding therapy skills \_\_\_\_\_
- Providing instruction in specific therapeutic interventions . \_\_\_\_\_
- Providing emotional support for treating difficult cases . . . \_\_\_\_\_
- Formulating or refining a specific set of treatment goals . . \_\_\_\_\_
- Formulating or refining an intervention strategy based on treatment goals . . . . . \_\_\_\_\_
- Formulating personality dynamics of a particular patient . . . \_\_\_\_\_
- Exploring the trainee's affective responses to the patient . . \_\_\_\_\_
- Exploring transference and countertransference issues . . . . \_\_\_\_\_
- Exploring the interpersonal dynamics of the supervision relationship . . . . . \_\_\_\_\_
- Exploring the development of the trainee's career identity, including issues such as therapeutic orientation, specialization and adaptation to working in organizational settings \_\_\_\_\_

11. On the average, across supervision sessions, how often is time devoted to these activities? 1= every session; 2= every other session; 3= every third session; 4= 1 out of 4 sessions; 5= less than once in four sessions

- Providing specific and timely feedback regarding therapy skills \_\_\_\_\_
- Providing instruction in specific therapeutic interventions . \_\_\_\_\_
- Providing emotional support for treating difficult cases . . . \_\_\_\_\_
- Formulating or refining a specific set of treatment goals . . \_\_\_\_\_
- Formulating or refining an intervention strategy based on treatment goals . . . . . \_\_\_\_\_
- Formulating personality dynamics of a particular patient . . . \_\_\_\_\_
- Exploring the trainee's affective responses to the patient . . \_\_\_\_\_
- Exploring transference and countertransference issues . . . . \_\_\_\_\_
- Exploring the interpersonal dynamics of the supervision relationship . . . . . \_\_\_\_\_
- Exploring the development of the trainee's career identity, including issues such as therapeutic orientation, specialization and adaptation to working in organizational settings \_\_\_\_\_



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