

AN INVESTIGATION OF THE RELATIONSHIP BETWEEN
THERAPIST COMPETENCE AND CLIENT OUTCOME

Blake Douglas Wagner, Jr.

*Thesis proposal submitted to the Faculty of the Department of Psychology of
Virginia Polytechnic Institute and State University in partial fulfillment of the
requirements for the degree of*

MASTER OF SCIENCE

in

Psychology

Approved:

Dr. R. A. Winett, Chairman

Dr. E. S. Geller

Dr. R. M. Eisler

September, 1984

Blacksburg, Virginia

ACKNOWLEDGEMENTS

I would like to express my deepest appreciation to Dr. Richard Winett for providing me with the encouragement and guidance necessary to accomplish this research. Dr. Lee Fredericksen is extended my gratitude for his assistance and support. Also, I am grateful for the contributions of Dr. Scott Geller and his patience and thorough critique of this research. Finally, my appreciation is extended to Dr. Richard Eisler for his assistance and consideration.

This manuscript is dedicated to my wife, Sue, with appreciation for her unfailing support and boundless optimism.

TABLE OF CONTENTS

	<u>Page</u>
Acknowledgements	ii
Table of Contents	iii
List of Tables	v
Literature Review	1
Method	17
Setting	17
Participants	17
Measures	20
Procedures	22
Results	25
Descriptive Data	25
Reliability	32
Relationship Between Competency Ratings and Outcome	33
Variables Related to Positive Outcomes	38
Discussion	51
References	68
Appendix A: Practicum Student Evaluation	74
Appendix B: Assessment of Case Difficulty	77
Appendix C: Target Problems Severity Rating Form	79
Appendix D: Target Problems Improvement Rating Form	81
Appendix E: Progress Evaluation Scale	83
Appendix F: Client Satisfaction Questionnaire	85
Appendix G: Outline of Outcome Evaluation Procedures	87

TABLE OF CONTENTS
(Continued)

	<u>Page</u>
Appendix H: Letter Requesting Return of Mailings	92
Appendix I: Decision Rule Guidelines	94
Appendix J: Proposed Outcome Monitoring Procedure	98
Vita	101
Abstract	

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1	Characteristics of Therapists Participating in Study . . . 19
2	Outcome Indices by Client Case 27
3	Outcome Categorizations Listed by Type of Client Case. . . 29
4	Reasons Reported by Clients for Terminating Therapy . . 31
5	Pearson-Product Correlations Between Ratings of Therapist Competency by Supervisor Pairs 34
6	Interrater Agreement on Items of the Practicum Student Evaluation Form 35
7	Semi-Partial Correlations Between Competency Ratings of Therapists and Outcome Categorizations 37
8	The Relationship Between Type of Presenting Problem and Outcome 41
9	The Relationship Between Sessions Attended and Outcome Indices 42
10	Median Split Between Number of Sessions and Respective Outcome 43
11	Median Split of Pre-Therapy Progress Evaluation Scales Scores by Client and Respective Outcome 45
12	Median Split of Case Difficulty Ratings and Respective Outcome 46
13	The Relationship Between Client Ratings of Therapists and Outcome 48
14	The Relationship Between Type of Termination and Outcome. 50

LITERATURE REVIEW

Introduction

Clinical psychology is a discipline guided by a philosophy of empiricism. This commitment to research can be traced back to Shakow's (1947) proposal of the scientist-practitioner model of clinical training, which was accepted by the American Psychological Association at the Boulder Conference on clinical training in 1949. Still advocated, this model asserts that clinicians be trained to fulfill the dual role of scientist/researcher and practitioner/clinician.

In the spirit of this empirical-clinical model of training, clinical psychologists are service deliverers who systematically evaluate their intervention. Certainly one environment where this integration of clinical practice and research should be evidenced is at clinical psychology practicum training clinics whose three main objectives are clinical training, service delivery, and research. Thus, as will be discussed below, such clinics should have established evaluation procedures for monitoring trainee' competence and client outcome.

The Need to Evaluate Clinical Training

Evaluation of clinical training is important not only to obtain useful feedback on the progress of student-therapists

in developing clinical skills and to make informed procedural or policy changes, but also to provide empirical support of the program's functions. As Stevenson, Norcross, King, & Tobin (1984) have recently pointed out, as funding levels continue to tighten psychology training clinics must be prepared to provide empirical support for their functions (i.e., clinical training, service delivery) to attract funding from government, university, and private sources. Despite clinical psychology's strong research orientation, and both the value and need to evaluate clinical training, there has been a surprising dearth of research activity surrounding the evaluation of clinical training (Aronson, Akamatsu, & Page, 1982; Edelstein & Brasted, 1983; Bernstein, 1982; Ford, 1979; Korman, 1974; Matarazzo, 1978; Stevenson et al., 1984). For example, Korman (1974) reported in his synopsis of the Vail conference on clinical training in 1971 that:

"Considering the financial cost and human effort represented by professional education, there has been a curious lack of concern over product and program evaluation... Its absence is more remarkable in a discipline that prides itself on its expertise in evaluation research" (p.445).

In the decade or so following Korman's observations it is apparent that the situation has not changed, as confirmed by recent national surveys of psychology training clinics (Edelstein & Brasted, 1983; Stevenson et al., 1984). As Stevenson and his associates have stressed, "The field of

training evaluation is long overdue for greater attention and sophistication, and clinical training programs in particular are in need of systematic evaluation" (p.218). Similarly, Edelstein & Brasted (1983) have related that program evaluation is "perhaps the most important and most overlooked issue in clinical training" (p.50).

In response to the continued absence of evaluation research conducted at clinical training clinics, the American Psychological Association Task Force on Education, Training, and Service in Psychology has related in rather bleak terms:

The time is already late for psychology. Whether evidence for the effectiveness of its educational and training requirements can be developed in time to forestall the attacks now under way is not certain. The best hope for the profession may be in its ability to demonstrate that it has a serious, systematic program for evaluation that will produce a regular, dependable flow of information by means of which to validate and improve its practice and requirements. (APA, 1982,p.2)

As Edelstein & Brasted (1983) have emphasized, the possible negative implications for not having valid methods for evaluating clinical training effectiveness are legion. They have pointed out that clinical training programs must be accountable to their students, the university they are affiliated with, the individuals or agencies who will be recipients of graduates' clinical services, and the field of psychology. Further, Edelstein and Brasted have suggested

that the neglect of documenting training effectiveness may have likely been a contributing factor to the recent withdrawal of federal funds for training in clinical psychology.

Zarski, Bubenzer, & Walter (1980) have noted that evaluation of clinical training can be made on several dimensions, including assessment of trainees' conceptual knowledge of assessment and treatment techniques, trainee' in-therapy behavior, and therapy outcome. Although interest in comprehensive evaluation of clinical training effectiveness is high, the common practice of practicum training centers is to rely solely on faculty supervisor ratings of student-therapists to evaluate their competency, and thus the effectiveness of the clinical training provided (Edelstein & Brasted, 1983; Stevenson et al., 1984). However, while subjective supervisor evaluations are commonly used, White & Pollard (1982) have pointed out that there is a lack of empirical research establishing the validity of such ratings in relation to client outcome.

A review of the literature uncovered several studies which provide some indirect support for the validity and usefulness of subjective ratings of therapists. For example, in a study by Zarski et al., (1980), a significant positive relationship was found between faculty supervisor ratings of student-therapist effectiveness and client satisfaction with treatment. In addition, LaCosse (1980) reported a significant positive correlation between client

ratings of therapists on the Counselor Rating Form (Barrak & LaCosse, 1975) and therapeutic outcome. Finally, White & Pollard (1982) found that supervisor and peer ratings of trainee competence were significantly related to client session attendance data.

There are, however, possible sources of error associated with subjective assessments of competency which highlight the necessity of objective examination. One such potential source of error is the ensuing controversy and lack of consensus about what constitutes an "effective" therapist (e.g., Schaffer, 1982). A second factor which threatens the validity of supervisory ratings is that judgments of competency may often be based on limited observation of in-therapy functioning. Thus, often evaluations are based on subjective reports of behavior rather than samples of behavior.

Related to the reliance on student-therapists' accounts of therapy sessions and client progress is the problem of selective reporting of positive or negative case elements. This concern has recently received increased attention as Chevron & Rounsaville (1983) have related that "questions have been raised about the reliability of the information obtained by supervisors regarding what has taken place in psychotherapy sessions" (p.1129). More specifically, results of several studies (e.g., Bochler, 1966; Chevron & Rounsaville, 1983; Stein, Karasu, & Charles, 1975) have implicated that student-therapists either forget or distort

important aspects of therapy sessions when reporting to their supervisors both in progress notes and supervision sessions. For example, in the study by Chevron & Rounsaville (1983) a low level of agreement was found between supervisor ratings of competence based on trainees' reports of what occurred in therapy sessions and those based on observation of videotapes of the actual sessions.

A further potential source of error associated with supervisory ratings of trainees which is of significant importance, involves questions surrounding the reliability of ratings. Several researchers have noted that the interrater reliability of assessments of therapist skillfulness tends to be disappointingly low (Hill, 1978; Liston, Yager, & Strauss, 1981; Pinsof, 1981; Schaffer, 1983). Liston et al., (1981) have related that their research and other studies "raise serious questions about the reliability of current methods of determining competence in psychotherapy" (p. 1073).

Given the widespread use of subjective ratings of competency at practicum training centers and the importance of valid clinical training evaluation, the need for objective examination of evaluation methods is evident. While there is some indirect support for the validity of subjective competency ratings in relation to therapeutic effectiveness, further investigation is warranted, particularly in light of the potential sources of error which have been discussed.

Regardless of the well-documented complications involved in assessing client outcome, (e.g. Bergin & Lambert, 1978; Lambert, 1983), the importance of using outcome data in evaluating student-therapist competence should not be neglected (Aronson et al., 1982; Bond, 1974; Linehan, 1980; Zarski et al., 1980). In order to obtain direct substantiation of the validity of supervisory competence evaluations, the relationship between such ratings and client improvement variables requires demonstration.

The Need to Evaluate Client Outcome

As stated at the onset, just as it is important to monitor the effectiveness of clinical training, it is likewise important to assess client outcome. Hargreaves & Attkisson (1978) have emphasized that monitoring of client outcome is vital for assessing the quality and demonstrating the effectiveness of services delivered, and also for generating data to revise or improve service delivery. Further, as mentioned in the last section, client outcome data provide a useful index with which therapist effectiveness can be assessed.

Again it is ironic that although psychology is a discipline which prides itself in evaluation research and also there is both need and utility in collecting outcome data, there is a well-documented absence of outcome monitoring

procedures reported in the literature (Manthei, 1983; Schaffer & Atkinson, 1983; Schulberg, 1981). Even more surprising is that this absence occurs in the wake of mounting demands for accountability, as external pressures are inexorably moving the focus of evaluative study from process to outcome evaluation (Schulberg, 1981). This growing clamor for accountability through outcome evaluation has arisen in response to multiple factors including the impact of reduced funding levels, skyrocketing health care costs, and heightened public suspicion of misuse of monies allocated to social programming (Keppler-Seid, Windle, & Woy, 1980). Mattson (1984) has pointed out that as mental health service agencies become increasingly vulnerable to funding cutbacks, they must increase their accountability for both the cost and quality of services provided. Further, Lemoine & Carney (1984) have noted that it is becoming increasingly important that agencies have data on program effectiveness. They have reported that "without information about the effectiveness of services, program funding decisions are ultimately based on cost factors or service activity alone" (p.30).

According to Barlow, Hayes, & Nelson (1984), one of the clearest trends of the 1980's is a concentrated movement towards greater accountability. These authors predict that accountability will be required of all behavior change agents in the near future and "will necessitate, at the very least, demonstration of efficacy on every client or group of

clients for whom reimbursement is sought" (p.69). Similarly, Mattson (1984) has related expectations that efforts to demonstrate positive outcomes will be increasingly emphasized, as service centers will need to persuade third party payers of the cost-benefit of services provided.

Schaffer & Atkinson (1983) similarly have reported that therapists are increasingly being called upon to meet demands for accountability, and they predict that funding for thousands of positions probably will rest on the ability to meet these imposed standards. These authors have emphasized that the current accountability press is "pivotal to both the continued success and growth of the profession" (p.42).

In short, Congress, state legislatures, local Mental Health Boards, the insurance industry, and consumer groups have demanded an explicit commitment to ongoing monitoring procedures in return for continued financial, social, and political aid (Ihilevich, Glaser, Gritter, Kroman, & Watson 1981; VandeBos, 1980).

Markson (1976) has suggested that mental health programs have not been slow to respond due to inattention, but rather outcome research methods have suffered from complexities, diverse aims, differences in criteria, and variations in solution. Likewise, outcome monitoring efforts have been plagued by conceptual and methodological shortcomings, and remain as difficult as they are controversial (Neigher &

Schulberg, 1982). The dilemma faced by mental health administrators stems from receiving approximately 25 percent less funding from Washington for human service delivery (Neigher & Schulberg, 1982) while simultaneously having to stretch resources and energies further for outcome evaluation. Furthermore, past outcome evaluation efforts have proven to be complex, costly, and time-consuming (Schulberg, 1977).

Although no universally accepted, definitive system has been developed for conducting client outcome research, some innovative self-evaluation procedures have been successfully implemented more recently which minimize characteristic outcome evaluation inadequacies and also are economical and nondisruptive to service delivery. Examples include Johansson, Silverberg & Lilly (1980), Manthei (1983), Manthei, Vitalo, & Ivey (1982), and Sloane, Staples, Cristol, Yorkston, & Whipple (1975) who all applied multiple-criteria outcome measures and multiple raters in developing client outcome procedures at outpatient service delivery centers.

Ongoing Program Evaluation Through Information Management

In order to conduct an ongoing assessment of clinical training and service delivery it is necessary to establish a procedure to efficiently organize and monitor data flow. While mental health service agencies have access to a large volume of information in the form of clinical case records,

attendance statistics, etc., as Mitchell (1977) has pointed out, too often there is little effort to relate these data to pertinent program decision-making, planning, and organizational questions in a systematic way. Thus, clinical records are completed and kept, yet typically they are filed away and their information value is essentially lost.

Clearly the timing now seem propitious for mental health service agencies and practicum training centers in particular to develop management information capability in response to the growing clamor for accountability and quality assurance data. Bent (1982) has observed that, although slow to respond, mental health service agencies have begun to increasingly gather and utilize management data through automated reporting procedures. With a well-conceived information management system, relevant data can be selected and collected in an efficient way. The information can then be summarized and distilled into formats which are easily interpretable and responsive to decision-making needs. Further, formalized procedures can be established to ensure dissemination of the information to appropriate users.

For the purposes of the present investigation it was necessary to develop a client outcome measurement procedure for use at the Psychological Services Center (PSC). It was beyond the scope of the present investigation to design and implement a complete information management system. However, once developed, an ongoing monitoring procedure for

use at the PSC can serve as a major component of such an evaluative system and represents a significant initial step towards developing information management capability. Properly distilled and disseminated, such information as discussed earlier, can serve an important evaluative and feedback function for both the training and service delivery missions of the PSC.

The Present Investigation: Its Purpose and Significance

The present research project was a descriptive study conducted at a clinical psychology practicum center which investigated the relationship between supervisory ratings of student-therapist competency and respective client outcome. Once again, subjective supervisor ratings of student-therapists are commonly used at practicum training centers as the sole criterion for assessing the effects of clinical training. However, there is a lack of empirical research establishing the validity of such ratings in relation to client outcome. Thus, the present study involved a much needed attempt to examine this relationship along with a discussion of the implications as they apply to evaluation procedures of clinical training and intervention. Assuming that supervisor ratings are valid indicators of therapeutic effectiveness, it is hypothesized that a significant positive correlation with client outcome will emerge.

A significant component of the study was the design and

implementation of an ongoing procedure to monitor client outcome at the practicum center. Note that for the purposes of the present investigation--assessing the relationship between supervisor ratings of therapist competence and respective client outcome--data on outcome were collected but not disclosed to supervisors or therapists. This was necessary so that supervisors' ratings of therapists would not be biased. However, the development and piloting of an outcome procedure represents a significant step towards developing information management capability and can be used as part of normal clinic procedure to provide ongoing evaluative feedback on the center's two primary functions, clinical training and service delivery.

Specifically, important uses of ongoing outcome information include: (a) formative feedback to supervisors and student-therapists concerning the effectiveness of student-therapists and the effects of clinical training on client outcome; (b) formative feedback on the effectiveness of intervention procedures; (c) information for making informed recommendations for policy and procedural modifications of clinical training and intervention procedures; (d) empirical data to demonstrate the effectiveness of training and service delivery to meet external accountability demands--primarily from the APA, the university, and the National Institute of Mental Health; (e) enhancing clinical science and furthering the mandate to integrate clinical training,

research, and practice; (f) training for some clinical students in evaluation methods and exposure to all students to the ongoing use of evaluation procedures in clinical practice decision-making.

Development of Outcome Procedure

In establishing an ongoing client outcome assessment procedure for use at the Psychological Services Center (PSC) which is reliable, valid, comprehensive, and practical, it was decided that such a procedure should provide outcome data which: 1) have clinical relevance providing useful feedback to therapists and supervisors, 2) have utility for clinical, programmatic, and policy decision-making, 3) are economical to collect routinely in terms of time and expense, 4) are brief, simple, and nondisruptive to the therapeutic process or service provision.

In designing a therapy outcome procedure to best satisfy these objectives and to minimize common outcome evaluation deficiencies, several research strategy guidelines were followed. These included: 1) selecting outcome indices that are realistically related to the center's program and its specific clientele, (Markson, 1976); 2) using multiple outcome criteria which tap multiple sources (Bergin & Lambert, 1978; Clark & Friedman, 1982; Hargreaves & Attkisson, 1978; Kendall & Norton-Ford, 1982). Measuring multiple dimensions of client outcome was necessary due to the many possible

aspects of client change. Besides detecting an alleviation of presenting problems it was also important to assess other factors such as family interaction, social-occupational functioning, and satisfaction with the psychological services received. 3) inclusion of therapist and client in assessing outcome, (Bergin & Lambert, 1978; Mintz & Kiesler, 1982). Therapists have the expertise in evaluating improvement while only clients can report subjective feelings of well-being. The use of independent expert judges to assess change would have been optimal but was not practical for an ongoing outcome procedure at the PSC. 4) Including an idiographic measure of outcome sensitive to individual therapy goals (Bergin & Lambert, 1978; Mintz & Kiesler, 1982; Posavac, 1979; VandeBos, 1980). Often with a heterogeneous client population standardized outcome measures may be insensitive to an individual's particular complaints and assess him/her on irrelevant variables. In contrast, an "individualized" outcome measure allowed priority to the specific problem for which help was being sought. Such a measure was flexible for evaluating groups of patients while at the same time utilizing idiosyncratic content. Also, specifying problems and their severity aids in clarifying communication between the client and therapist, gives direction to therapeutic intervention, and provides the therapist with a basis from which to assess improvement. 5) Incorporating a core battery of objective and subjective measures (Bergin & Lam-

bert, 1978; Schulberg, 1977).

The proposed battery of outcome measures adequately satisfied these suggested criteria. The Target Problem measure and the Progress Evaluation Scales are appropriate for use with outpatient populations. The Target Problem measure is sensitive to idiosyncratic complaints while the Progress Evaluation Scales provide a broad, standardized measure of outcome useful for making comparisons across clients. The Client Satisfaction Questionnaire assesses still another domain relevant to outcome through involving the client in evaluating the treatment provided and verifying the extent to which any changes were attributable to therapy. Objective measures including session attendance and type of termination were included, and finally, both therapists and clients assessed change on both Target Problems and the Progress Evaluation Scales.

A rating scale procedure for assessing therapeutic competence was developed by combining items from the PSC's present evaluation form and one designed for student-therapist evaluation by Aronson et al., (1982), (Appendix A). In addition, because of the wide range of PSC client problems it was necessary to develop a rating scale to control for case difficulty, (Appendix B). Thus, when examining the relationship between client outcome and rated therapeutic effectiveness the difficulty of the case could be statistically controlled. Factors related to outcome which the

scale taps include difficulty of presenting problem/disorder, situational circumstances, past adaptive functioning, and motivation for change.

METHOD

Setting

The study was conducted at the clinical practicum clinic maintained by the Department of Psychology at Virginia Polytechnic Institute and State University. The Psychological Services Center (PSC) is an outpatient clinic which provides psychological services to the university and surrounding community, and clients are charged on a sliding scale. Services include: individual (child and adult) therapy, couples therapy, family therapy, and psychological evaluations. Supervision and clinical intervention is based on a social-learning/behavioral framework. Approximately 16 master's and doctoral students receive supervision at the PSC each year for various types of outpatient clinical intervention and are supervised by clinical faculty members.

Participants

A total of 14 student-therapists enrolled in supervised practicum during the 1983-1984 academic year who had client intakes during the duration of the study participated. As a matter of general clinic procedure, student-therapists are

divided into four teams, each headed by two faculty supervisors. At the onset of the study these groups had been in operation for over two months. Information about the student therapists is summarized in Table 1.

Place Table 1 About Here

Supervisors in the study included 8 full-time clinical faculty members (2 per team). All of the supervisors hold a doctoral degree in Clinical Psychology and have had a minimum of 3 semesters of previous supervisory experience. Supervision at the clinic is done through both live supervision and videotape. Each practicum team meets for a 3 hour weekly seminar in which intakes are conducted; videotapes are reviewed, cases are reviewed and critiqued, and various techniques are demonstrated.

Clients at the PSC are self-referred or prompted to seek psychological services through local professionals (e.g., physicians, clergy, social workers) or agencies (e.g., community mental health services). Forty-eight client cases (individual, couple, family) that were seen for 1 or more sessions during a 6 month period were included in the study. Clients were excluded if they only received psychological testing or evaluation, or if they were involved in a group treatment program offered by the clinic.

TABLE 1

CHARACTERISTICS OF THERAPISTS PARTICIPATING IN STUDY

<u>Therapist</u>	<u>Team</u>	<u>Gender</u>	<u>Year in Program</u>	<u>Education</u>	<u>Number of Cases Seen During Study</u>
A	A	F	Second	MA-Clinical Psychology	4
B	A	M	Second	MS-Clinical Psychology	1
C	A	F	Second	BA- Psychology	3
D	A	F	First	MPH-Public Health	1
E	B	F	Second	BA-Psychology	5
F	B	M	Second	BA-Psychology	3
G	B	M	First	MA-Clinical Psychology	4
H	B	F	First	BA-Psychology	3
I	C	M	Second	PhD-Biology	4
J	C	F	Second	BA-Psychology	5
K	C	F	First	MA-Clinical Psychology	2
L	D	M	Second	BA-Psychology	3
M	D	M	Second	MA-Clinical Psychology	6
N	D	M	First	MA-Clinical Psychology	4

Measures

The following battery of outcome measures was used.

1. Termination, planned/unplanned. Whether termination was a unilateral client decision or a mutual therapist-client decision was already normal clinical procedure, allowed cross-client comparison, and was relatively objective. Studies by Johansson et al., (1980) and Fiester (1979) have found more positive outcomes associated with cases where termination to therapy resulted from a mutual therapist-client decision.

2. Session attendance. The total number of sessions attended divided by the total number of scheduled sessions was used as an index of session attendance. The collection of attendance data like type of termination was already normal clinic procedure, objective, and allowed comparison across clients.

3. Individualized Target Problems. Based on the target-complaint technique of Battle, Imber, Hoehr-Saric, Stone, Nash, & Frank (1966), this measure required clients to rate in terms of severity the 3 problems for which they most wanted help. This was done at the first or second session on a 5-point scale (Appendix C). At the end of the session therapists rated the severity of each of the client-generated problems. Following either completion of the therapy of 10 sessions, whichever came first, clients and therapists re-rated the 3 presenting problems on the

same scale. Outcome was thus indexed via the alleviation or exacerbation of the presented problems as assessed by both the client and the therapist. Also at the conclusion of therapy target problem improvement was rated by both therapists and clients independently on a 5-point scale. (Appendix D).

Advantages to using this target problem approach include measuring change on idiosyncratic dimensions most important to the client, and its flexibility in being applicable across clients with divergent concerns. In addition, both the therapist and client independently assessed change, and finally the procedure facilitated assessment by clarifying client concerns and their severity to the therapist.

4. The Progress Evaluation Scale (PES). The PES (Appendix E) is composed of 7 scales "chosen to represent the major areas in which health and psychology reveal themselves" (Ihilevich et al, 1981, p.453). These dimensions include family interaction, school or work relationships, feelings and mood, use of free time, problems, and self-attitude. Clients and therapists were required to complete the scales before and after therapy. Different versions of the scales were used for children, adolescents, and adults. Thus the PES provided "an efficient measuring device for evaluating current functioning, setting treatment goals, and assessing change over time in clinically relevant aspects of personal, social, and community adjustment" (Ihilevich et

al., 1981, p.451). Furthermore, Ihilevich et al., (1981) have presented extensive evidence supporting the reliability and validity of the PES.

5. Client Satisfaction Questionnaire (CSQ). The CSQ (Larson, Attkisson, Hargreaves, & Nguyen, 1979) consists of 8 items (Appendix F) and was completed by clients after the tenth or final therapy session. The CSQ was distinct from the previous outcome measures. It allowed clients to give direct feedback about the services provided, how it matched his or her expectations, and the extent to which any change was attributable to the services received.

Procedures

Student-therapists were instructed by the experimenter both in groups and individually on how to administer the Target Problems form and the Progress Evaluation Scales. Written instructions for the procedure were also provided (Appendix G). Both the TP procedure and the PES were completed by clients and therapists independently at the conclusion of the first or second assessment session and again at termination or after 10 sessions, whichever came first. The Client Satisfaction Questionnaire was filled out by clients alone at termination or after 10 sessions. To reduce the influence of demand characteristics, clients were informed that their responses would not be reviewed by their therapist. This whole procedure was done in approximately 10 to 12 minutes.

Clients who terminated without notice were contacted by telephone by the experimenter and asked: 1) their reasons for terminating therapy 2) if therapy was beneficial, and 3) if they were satisfied with services received. Clients' responses to these questions were recorded verbatim. In addition, permission was requested to mail remaining outcome measures. The necessary measures along with a cover-letter requesting their return (Appendix H) was mailed along with a pre-addressed, stamped envelope. If after approximately two weeks the measures were not received at the PSC, a telephone call prompting their return was made by the experimenter.

The experimenter found it necessary to take special steps to remind a subset of therapists to complete measures or have their supervisors complete forms at the appropriate times. These included posting reminders in the clinic chart room, attaching notes to client charts, leaving messages with the PSC secretary, and contacting the therapists in person or by telephone just prior to sessions.

Ratings of case difficulty were made by the respective faculty supervisor after approximately two sessions, once a thorough assessment had been completed. Also, both faculty supervisors independently evaluated the competency of student-therapists on the Practicum Student Evaluation Forms at the inception of the study and again three months later. The average of the two supervisors' ratings was used as the index of competence for each time period. So for example,

if a client case spanned only the first half of the study, the first set of supervisor ratings were used. Likewise, the second set of ratings were used when clients were treated exclusively in the second half. For client cases which spanned both periods an average of both sets of supervisory ratings was used as the index of therapist competence.

Since the study required that outcome be determined for each individual client case, general guidelines and decision rules were used to make interpretation possible for each measure in single cases, and to assist determination of outcome based on all six measures for each client case separately (Appendix I). Special guidelines for assessing outcome for clients who dropped out unexpectedly were also included. These decision rules allowed reliable outcome determinations while at the same time permitted flexibility to accommodate consideration of relevant, case-specific factors.

To demonstrate the reliability of outcome categorization classification, two assessors independently followed the procedure and determined an outcome categorization for each client case. Training for the procedure included first reading-over and discussing the category system, and then making independent classifications with practice cases. These judgments were then compared and discrepancies were discussed. At the end of approximately 10 hours of train-

ing, a predetermined agreement level of 80% had been exceeded. At this point, the actual client cases included in the study were independently assessed and placed in one of the four outcome categories. In the case of a disagreement, the two judges discussed the discrepancy and arrived at a consensus agreement.

RESULTS

Descriptive Data

Outcome data for all clients are presented in Table 2, listed by each client case individually. For 23 of the 48 clients included in this research termination was planned, thus complete client and therapist pre and post-treatment measures were obtained. For the remaining 25 unplanned terminations, therapist post-treatment measures were obtained while clients had to be contacted by telephone and mailed the post-treatment measures. Two clients from an original sample of 50 could not be contacted and were excluded from the study. Also, two clients requested not to be mailed post-treatment measures during the telephone contact. Fourteen of the 23 clients who were mailed measures returned them, translating into 61% rate of return. In sum, client and therapist post-treatment data was obtained for 37 of the 48 cases. Although client post-treatment measures were not

received for the remaining 11 cases, the therapists' post-measures were obtained along with clients' responses to the outcome questions asked over the telephone.

Place Table 2 About Here

Presented in Table 2 in addition to the overall outcome data by client case is the total mean score for each outcome measure. As shown in Table 2, both clients and therapists reported a lessening of problem severity on the average as indexed by the Target Problems Severity Form. Clients reported an average positive change of .93 with an average post-treatment severity rating of 2.76, which suggests that their problems bothered them "pretty much". Therapists on the average indicated a change of 1.31 scale points with a mean rating of 2.22. This indicates that clients overall were distressed "a little" over their presenting problems after 10 sessions or termination.

Similarly, clients and therapists reported overall treatment gains on both the Progress Evaluation Scale and the Target Problems Improvement Form. Clients indicated an average gain of 3.08 scale points on the Progress Evaluation Scales and therapists reported a change of 5.09 scale points. The average client rating of 3.65 on the Target Problem Improvement Form indicates "little" to "moderate"

TABLE 2
OUTCOME INDEXES BY CLIENT CASE

Type of Case	Case of Difficulty	Client Target Problem Severity	Therapist Target Problem Severity	Client Progress Evaluation Scales	Therapist Progress Evaluation Scales	Client Target Problem Improvement	Therapist Target Problem Improvement	Client Satisfaction with Therapist	Therapist Satisfaction with Client	Sessions Attended	Type of Termination	
1	Adult	10	0,2,1	1,0,0		6	4,3,6	7,75	4	7	Unl	
2	Adult							3,5	5	1	Unl	
3	Adult	12	0,0,0	0,0,-1	-2	-2	2,2,2	2,3,3	5	10	Unl	
4	Family	12		1,1,0		7		3,4,2		5	Unl	
5	Adoles	13	0,0,0	1,2,2	-2	4	2,3,3	2,4,6	7	8,47	Unl	
6	Adoles	17	0,2	1,1	-1	4	2,3	4,4	7,4	3,47	Unl	
7	Couple	13	0,-1,2	2,2,2	-2	2	4,2,3	4,4,6	7	4	Unl	
8	Couple	13									Unl	
9	Child	8						0	0	1	Unl	
10	Couple	0						0,25	6,73	2	Unl	
11	Adult	18						5	5	1	Unl	
12	Adult	8	0,0,0	0,1,1	-1	4	2,2,2	2,2,2	7	6	Unl	
13	Adoles	12								10	Unl	
14	Couple	18								1	Unl	
15	Adult	7		1,1,2	2	3	4,3,4	3,3,3	0	0	10	Unl
16	Adult	10	0,2,1	2,3,1	3	5	3,4,4	4,5,5	7,75	7,47	10	Unl
17	Couple	15	1,-1,1	1,1,1	6	1	2,4,3	2,4,5	6,74	7	10	Unl
18	Adult	10	1,2,3	2,2,3	9	14	5,5,5	5,5,5	0,24	0	7	Unl
19	Adult	15	2,0,0	3,2,1	2	2	3,3,3	4,3,3	4,74	4	10	Unl
20	Child	13	2,1,2	3,2,1	3	3	3,4,4	4,4,5	7	7,47	7	Unl
21	Family	12	0,0,2	0,0,2	0	2	1,2,2	3,3,3	4,4	5,47	10	Unl
22	Child	12			0			8,75	0	1	Unl	
23	Family	15		2,1		4		3,3		4	Unl	
24	Adult	14		0,0,2		4		3,2,2		4	Unl	
25	Adult	10	1,1	1,1	5	6	5,5	3,4	8,4	0	10	Unl
26	Adoles	12	1,0	-1,-1		-10		3,2	6,75	6,47	1	Unl
27	Adult	15							6,5	6,73	1	Unl
28	Adult	8	2,0,1	2,1,2		5	4,2,3	4,2,3	7,75	6,47	4	Unl
29	Child	5		0,0,1		2		1,1,2		4	Unl	
30	Child	10	2,2,0	2,3,3		17	5,4,4	4,4,4	0	0	10	Unl
31	Adult	10	2,1,1	1,2,0	3	7	4,5,5	4,4,3	0	0	10	Unl
32	Adoles	14		3,2,2		10		5,5,3	7	8,47	5	Unl
33	Adult	6	1,2,2	3,2,3	11	15	5,4,4	5,4,4	8	0	8	Unl
34	Couple	11									2	Unl
35	Adult	6								1	Unl	
36	Adult	10	2,0,2	2,0,2	4	3	5,4,4	5,5,4	0,75	0,47	1	Unl
37	Adult	0	2,1,0	2,2,1	5	11	5,4,4	4,4,3	8,75	0,47	0	Unl
38	Family	18	0,1,1	1,1,2	1	1	4,4,5	4,3,4	7	7	10	Unl
39	Adult	8		-1,1,1								Unl
40	Adult	13	1,1,1	2,1,1	5	4	4,4,5	5,4,4	6,74	7	0	Unl
41	Adult	17	2,1,0	2,2,2		0	5,5,4	5,5,5	7	0,47	4	Unl
42	Adult	15	1,1,0	1,1,1	1	2	3,4,4	3,3,2	6	7	8	Unl
43	Adult	13										Unl
44	Adult	14	2,1,0	1,1,0	6	8	5,5,4	4,4,2	6,74	7	1	Unl
45	Adult	11										Unl
46	Child	10										Unl
47	Adult	12	0,2,1	0,2,0	0	1	3,4,3	2,1,2	6,74	7	1	Unl
48	Adult	14	0,1,1	2,2,2	12	8	5,4,3	4,3,4	6	0	10	Unl
TOTAL												
#	48	28	34	24	33	26	34	37	37			
MEAN	12.1	.93	1.31	3.08	5.09	3.45	3.40	6.77	7.10			
RANGE	5-19	-1-2	-1-3	-2-12	-10-17	2-5	2-5	3.1-8.0	3.1-8.0			

improvement while the average therapist rating of 4.0 suggests "moderate" improvement. Further, clients on the average reported satisfaction with the PSC's program and their therapist (\bar{x} =6.77 and 7.19 respectively on a 9-point scale).

Overall, of the 48 client cases included in the study, 13 or 27% were categorized as having an "excellent" outcome, and 8 or 17% were determined to have "good" outcomes. In the "fair" outcome category there were 9 cases representing 19% of the total, and finally 18 or 37% of the cases were determined to have "poor" outcomes.

Of the 48 client cases 26 (54%) were adult cases, 6 (12.5%) were adolescents, 6 (12.5%) were children, 6 (12.5%) were couples, and the remaining 4 (8%) were family cases. The frequency of each of the types of client cases is presented along with outcome classifications in Table 3.

 Place Table 3 About Here

For 25 (52%) of the client cases, session attendance exceeded 75%. Cancellations and no-shows were counted as missed sessions. In 13 cases, (27%), where clients attended more than one session, attendance was below 75%. The remaining 10 cases are those who dropped out of therapy after one session. Finally, four was the median number of

TABLE 3

OUTCOME CATEGORIZATIONS LISTED BY TYPE OF CLIENT CASE

Type of Client Case	Poor	Outcome Category			Total
		Fair	Good	Excellent	
Adult	9	3	5	9	26
Adolescent	4	1	0	1	6
Child	2	2	0	2	6
Couple	2	2	1	1	6
Family	<u>1</u>	<u>1</u>	<u>2</u>	<u>0</u>	<u>4</u>
	18	9	8	13	48

sessions attended for all clients.

Among the 48 cases, 26 (54%) were either mutually terminated or were ongoing in therapy in excess of 10 sessions at the time of this writing. For the remaining 22 (46%), termination was described by case therapists as unilateral client decisions. Of the 22 unilateral terminators, 10 (20%) dropped out of therapy after attending just one session.

Place Table 4 About Here

As presented in Table 4, the most frequent reason clients reported for discontinuing therapy was no longer feeling that therapy was necessary. The second reason most often given was attributed to the program, specifically having objections to the PSC being a training center (i.e., the team approach, being videotaped). The third most frequent reason cited was dissatisfaction with the treatment approach that was selected to work on their problems. The fourth grouping of explanations for terminating included feeling that no progress was being made. Finally, the remaining clients related that they discontinued therapy for personal reasons which they would not elaborate.

TABLE 4

REASONS REPORTED BY CLIENTS FOR TERMINATING THERAPY

<u>Category of Reason Given</u>	<u>All Clients Who Dropped</u>	<u>Clients Who Dropped after 1 Session</u>
Feeling Therapy no Longer Necessary	7	2
Objections to Training Approach	5	5
Dissatisfied with Treatment Approach	4	1
Not Making Progress	3	0
Personal Reasons	3	2

Reliability

Client Outcomes

Client cases were categorized by two independent assessors into the four outcome categories (i.e. poor, fair, good, excellent) according to their pattern of results on the six outcome indices. The rate of reliability of outcome categorizations was 92%, as agreement was obtained on 44 of the 48 cases. There was disagreement on 2 of the 11 cases for which client post-treatment measures were not received, which resulted in an 82% rate of reliability. To categorize the four cases on which there was disagreement, discrepancies were discussed and a consensus judgment was reached.

Therapist Competence

To gain an index of the reliability of ratings of therapist competence on the Practicum Student Evaluation Form, a Pearson correlation coefficient was calculated between the pairs of supervisor ratings for student-therapists. The results are presented in Table 5. For the first set of ratings the resulting correlation was found to be significant ($r=.66$, $p=.02$) while the second set of ratings was not significant ($r=.24$, $p=.41$). The correlation between rating pairs for both periods combined was also not significant

($r=.36$, $p=.06$). However, a point-by-point reliability check for each item as shown in Table 6 revealed that for the first set of ratings supervisors had complete agreement on 28% of the items, and were within 1 scale point on 78% of the items. For the second period ratings, there was complete agreement on 21% of the items, while on 67% of the items responses were within 1 scale point.

Place Tables 5 and 6 About Here

Relationship Between Supervisory Ratings of Therapist Competence and Client Outcome

To assess the relationship between supervisor ratings of therapist competence and client outcome, a Pearson correlation coefficient was calculated between the 48 pairs of therapist competence scores and client outcome scores (i.e., 1=poor, 2=fair, 3=good, 4=excellent). Each competence score was determined by taking the average of supervisors' total rating score of each therapist on the Practicum Student Evaluation Form for the time period in which the client case was treated. The mean competence score was 56.70 and the mean outcome score was 2.33. The resulting correlation between these 48 pairs of scores was not significant, ($r=-.11$, $p=.23$).

Next a semi-partial correlation was calculated to assess

TABLE 5

PEARSON-PRODUCT CORRELATIONS BETWEEN RATINGS OF
THERAPIST COMPETENCE BY SUPERVISOR PAIRS

<u>Time Period</u>	<u>Number of Ratings</u>	<u>Number of Raters</u>	<u>r</u>	<u>p</u>
First	26	8 (4 pairs)	.66	.02
Second	30	8 (4 pairs)	.24	.41
Combined	56	8 (4 pairs)	.36	.06

TABLE 6

INTERRATER AGREEMENT ON ITEMS OF THE
PRACTICUM STUDENT EVALUATION FORM

<u>Time Period</u>	<u>Number of Ratings</u>	<u>Number of Raters</u>	<u>Interrater Agreement</u>	
			<u>Complete</u>	<u>Within 1 Scale Point</u>
First	26	8 (4 pairs)	28%	78%
Second	30	8 (4 pairs)	21%	67%

the relationship between competence ratings and outcome with the effects of case difficulty partialled out of the outcome scores. Again significance was not found as is shown in Table 7, ($r = -.12$, $p > .05$). This procedure was then repeated using each of the 9 items on the Practicum Student Evaluation Form as an index of competence. However, no significant correlations emerged as shown in Table 7. Further, no significant semi-partial correlations were found between competency ratings and session attendance, ($r = -.150$, $p > .05$), type of termination, ($r = -.176$, $p > .05$), Target Problem Severity Form, ($r = -.076$, $p > .05$), and the Progress Evaluation Scale, ($r = .044$, $p > .05$).

Following this, the relationship between competency ratings and outcome was examined for each of the four practicum teams individually. Thus, a semi-partial correlation was calculated between each set of supervisory ratings and respective outcome scores. For one of the practicum teams a significant negative semi-partial correlation was found, ($r = -1.03$, $p < .01$). Significance was not obtained for the remaining three teams, ($r = -.062$, $p > .05$, $r = .054$, $p > .05$, $r = .179$, $p > .05$).

 Place Table 7 About Here

A median split of the competence scores revealed that

TABLE 7

SEMI-PARTIAL CORRELATIONS BETWEEN COMPETENCY RATINGS
OF THERAPISTS AND OUTCOME CATEGORIZATIONS

<u>Practicum Student Evaluation Form Index</u>	<u>rx(y-z)</u>	<u>t(45)</u>	<u>p</u>
Sum of all items	-.122	-0.775	.05
Item 1	-.214	-1.473	.05
Item 2	.002	0.010	.05
Item 3	-.066	-0.466	.05
Item 4	-.279	-1.950	.05
Item 5	-0.56	-0.376	.05
Item 6	-.185	-1.260	.05
Item 7	-.079	-0.536	.05
Item 8	-.104	-0.700	.05
Item 9	-.149	-1.020	.05

the average overall outcome score was slightly more favorable for the lower rated group of therapists ($\bar{x}=2.42$) than for the higher rated group ($\bar{x}=2.21$). Also, client cases seen by the higher rated therapists were judged by supervisors as less difficult, ($\bar{x}=12.71$), than cases seen by the lower group of therapists, ($\bar{x}=11.42$).

Variables Related to Positive Outcomes

In order to determine what variables were associated with positive outcomes a fine-grained analysis of the data and the various relationships was conducted.

Outcome/Type of Case, Type of Problem

The relationship between outcome and type of client case and also type of presenting problem was assessed. In Table 3 outcome categorizations are listed by type of client cases. However no significant differences between type of case and outcome were found, $\chi^2 (12, N=48)=10.86, p>.05$. Client cases are grouped according to type of presenting problem and are presented along with respective outcome indices in Table 8. Although the mean outcomes varied from 1.00 to 3.70, the relationship between type of presenting problem and outcome was not significant, $\chi^2 (10, N=44)=15.60, p>.05$. Note, however, that there are a small number of cases per category.

Place Table 8 About Here

Number of Sessions/Outcome

Next the relationship between number of sessions attended and outcome was assessed. Presented in Table 9 are outcome data corresponding to the number of sessions attended. As can be seen from inspecting Table 9, in general outcomes improved as sessions attended increased, with the most favorable outcomes attained by clients who attended between 5 and 7 sessions. A median split of client outcomes according to number of sessions attended is presented in Table 10. Again it is evident from inspecting these data that client improvement is associated with sessions attended. Outcome data for clients who attended up to 6 sessions ($\bar{x}=1.92$) and for those who attended for 7 or more sessions ($\bar{x}=2.82$) are presented in Table 10. Clients who attended 7 or more sessions achieved significantly better outcomes, $X^2(1, N=48)=6.814, p<.01$.

Place Tables 9 and 10 About Here

TABLE 3

THE RELATIONSHIP BETWEEN TYPE OF
PRESENTING PROBLEM AND OUTCOME

Category of Presenting Problem	Outcome Indices					
	N	\bar{x} no. of sessions	type of termination	outcome categories		\bar{y} outcome
1. Marital Conflict	7	5.3	U-3 M-4	F-3 F-2	G-1 P-1	2.9
2. Interpersonal (Difficulty in Social Relations)	6	4.8	U-5 M-1	F-0 F-1	G-1 P-4	1.5
3. Acting-Out Behaviors	8	7.3	U-2 M-4	F-2 F-0	G-1 P-3	2.3
4. Depression	5	7.4	U-0 M-5	F-2 F-0	G-2 P-1	3.0
5. Interpersonal (Conflicts in Intimacy)	4	3.25	U-2 M-2	F-2 F-0	G-0 P-2	2.5
6. Academic Underachievement	4	4.0	U-2 M-2	F-1 F-1	G-0 P-2	2.0
7. Decision-Making/Problem Solving	3	7.0	U-0 M-3	F-2 F-0	G-1 P-0	3.7
8. Sexual	3	4.3	U-2 M-1	F-0 F-1	G-0 P-2	1.33
9. Low Esteem	2	7.0	U-1 M-1	F-0 F-1	G-0 P-1	1.5
10. Somatic	2	5.0	U-1 M-1	F-0 F-0	G-1 P-1	2.0
11. Phobic	2	1.0	U-2 M-0	F-0 F-0	G-0 P-2	1.0
12. Other	4	7.0	U-2 M-2	F-1 F-1	G-1 P-1	2.5

TABLE 9

THE RELATIONSHIP BETWEEN SESSIONS ATTENDED AND OUTCOME INDICES

Number of Sessions Attended	OUTCOME INDICES											\bar{x} Outcome	
	N	Case Difficulty	Client Target Problem Severity	Therapist Target Problem Severity	Client Progress Evaluation Scale	Therapist Progress Evaluation Scale	Client Target Evaluation Improvement	Therapist Target Problem Improvement	Client Satisfaction with Program	Client Satisfaction with Therapist	Type of Termination		Outcome Categories
1	12	12.4							6.0	6.3	U-11 M-1	E-1 G-0 F-2 P-9	1.42
2	3	9.0							7.0	7.0	U-3 M-0	E-0 G-0 F-1 P-2	1.33
3	3	13.0	.5	.67	2.0	-1.4	4.0	3.5	6.8	6.6	U-2 M-1	E-1 G-0 F-1 P-1	2.33
4	6	13.0	1.2	1.0	4.0	4.5	3.0	2.4	7.7	8.0	U-3 M-3	E-2 G-2 F-0 P-2	2.66
5-7	5	12.0	1.3	1.7	6.0	9.0	4.3	4.2	6.0	6.3	U-2 M-3	E-3 G-0 F-2 P-0	3.20
8+	19	11.8	.9	1.4	3.0	5.0	3.5	3.5	6.7	7.3	U-1 M-18	E-6 G-6 F-3 P-4	2.74

TABLE 10

MEDIAN SPLIT BETWEEN NUMBER OF SESSIONS AND RESPECTIVE OUTCOME

<u>Number of Sessions Attended</u>	<u>N</u>	<u>OUTCOME INDICES</u>		<u>\bar{x} Outcome</u>
		<u>Type of Termination</u>	<u>Outcome Classifications</u>	
up to 6 sessions	26	U-20 M-6	E-5 G- 2 F-5 P-14	1.92
7 or more sessions	22	U- 2 M-20	E-8 G-6 F-4 P-4	2.82

Level of Functioning/Outcome

To determine whether clients' initial level of functioning was related to outcome, a median split was made between pre-therapy scores on the Progress Evaluation Scales. The data are shown in Table 11. A Chi-Square test of significance between high or low groups of scorers on the Progress Evaluation Scales prior to therapy and resulting outcome categorizations was conducted. It was found that clients who reported functioning at higher levels prior to therapy had significantly better outcomes, ($\bar{x}=2.70$), than those functioning at lower levels ($\bar{x}=1.86$), $X^2(1, N=48)=6.68$, $p<.01$. In addition, to address whether case difficulty as indexed by the Assessment of Case Difficulty Form related to outcome a median split was made between these scores. As the result presented in Table 12 illustrate, cases rated as less difficult were somewhat more associated with more favorable outcomes (mean of 2.62 and 2.11 respectively), but the difference was not significant $X^2(1, N=48)=3.42$, $p>.05$.

 Place Tables 11 and 12 About Here

Client Ratings of Therapist/Outcome

The next variable which was assessed to determine if it was related to outcome was client ratings of therapists as

TABLE 11

MEDIAN SPLIT OF PRE-THERAPY PROGRESS EVALUATION
 SCALES SCORES BY CLIENTS AND RESPECTIVE OUTCOME

<u>Pre-PES (level of adaptive functioning)</u>	<u>N</u>	<u>Type of Outcome</u>		<u>\bar{X} Outcome</u>
		<u>Type of Termination</u>	<u>Outcome Categories</u>	
under 24 (lower functioning)	21	U-10 M-11	E-2 G- 3 F-6 P-10	1.86
24 and above (higher functioning)	27	U-12 M-15	E-11 G-5 F- 3 P-8	2.70

TABLE 12

MEDIAN SPLIT OF CASE DIFFICULTY RATINGS AND RESPECTIVE OUTCOME

<u>Case Difficulty</u>	<u>N</u>	<u>Type of Outcome</u>		<u>\bar{X} Outcome</u>
		<u>Type of Termination</u>	<u>Outcome Categories</u>	
Under 13 (less conducive to change)	27	U- 14 M- 13	E-6 G- 3 F-6 P-12	2.11
13+ (more conducive to change)	21	U- 8 M-13	E-7 G-5 F-3 P-6	2.62

indexed by the therapist evaluation section of the Client Satisfaction Questionnaire. The relationship between these ratings of therapists by clients and respective outcome measures is shown in Table 13. Further analysis of these rating scores using median splits, (ratings of up to 7 and above 7), revealed that client ratings of therapists were not significantly related to number of sessions attended (means of 7.0 and 5.85 respectively), $X^2(1, N=37)=.60, p>=.05$. However, cases in which therapists received ratings above the median were significantly associated with both more favorable outcomes, (means of 3.29 and 1.95 respectively), $X^2(1, N=37)=6.14, p<.05$, and fewer unilateral client terminations, $X^2(1, N=37)=4.00, p<.05$, than cases where therapists were rated below the median.

 Place Table 13 About Here

Type of Termination/Outcome

A further relationship assessed was type of therapy termination and outcome of therapy. The outcome data for clients who terminated unilaterally and those who terminated following a mutual decision are shown in Table 14. Outcome categorizations were not presented since type of termination was one of the criteria included in the outcome battery. The relationship between type of termination and outcome as

TABLE 13

THE RELATIONSHIP BETWEEN CLIENT RATINGS OF THERAPISTS AND OUTCOME

<u>Client Ratings of Therapist</u>	<u>N</u>	<u>\bar{x} no. of Sessions</u>	<u>Outcome Indices</u>			<u>\bar{x} Out- come</u>
			<u>Type of Termina- tion</u>	<u>Outcome Categori- zations</u>		
Over 8	13	7.0	U- 2 M-11	E-8 F-4	G-1 P-0	3.31
7-8	10	6.9	U- 2 M- 8	E-4 F-1	G-4 P-1	3.10
6-below 7	7	6.1	U- 3 M- 4	E-0 F-3	G-2 P-2	2.00
below 6	7	5.0	U- 5 M- 2	E-0 F-0	G-0 P-7	1.00

indexed by the Target Problems Severity Form was found to be significant, $\chi^2(1, N=34)=12.46$, $p<.01$. Thus, clients who mutually terminated tended to have more favorable outcomes ($\bar{x}=3.15$) than those who unilaterally discontinued therapy ($\bar{x}=1.36$).

 Place Table 14 About Here

Level of Training/Outcome

The final variable which was assessed was whether student-therapists' level of training, as indexed by their year in the program, was related to outcome. It was found that cases seen by second year therapists had better outcomes than cases seen by first year trainees, (means of 2.41 and 2.07 respectively), and the difference was significant $\chi^2(1, N=48)=8.58$, $p<.01$. Additionally, cases handled by second year therapists were rated as more difficult on the average ($\bar{x}=11.29$) than cases seen by first year therapists, ($\bar{x}=13.93$), although the difference was not significant, ($t=.614$, $p>.05$).

TABLE 14

THE RELATIONSHIP BETWEEN TYPE OF TERMINATION AND OUTCOME

Type of Termination	<u>N</u>	<u>Outcome Indices</u>			
		<u>\bar{x} change Client Target Problem Severity</u>	<u>\bar{x} change Therapist Target Problem Severity</u>	<u>\bar{x} Sessions</u>	<u>Client Satisfaction with Therapist</u>
Unilateral Termination	22	1.1	.63	2.5	6.3
Mutual Termination	26	2.1	1.44	8.0	7.6

DISCUSSION

The major purpose of the present study was to investigate the relationship between supervisory ratings of student-therapist competence and respective client outcome. Although subjective supervisory ratings are commonly used, questions have been raised concerning their validity and evidence linking such assessments to client change is lacking. Considering the importance of valid training evaluation and competency assessment, the relationship between supervisory ratings of therapists and client outcome requires demonstration.

The utility and need for conducting systematic evaluation of clinical training and intervention has been emphasized throughout this manuscript. Administrative and clinical concerns of accountability and effectiveness confronting all mental health centers have never been greater. As funding levels diminish and vulnerability to cutbacks increases, it is up to programs to demonstrate accountability for both the quantity and quality of services. Evaluative data on the training and service functions of the PSC can be useful for the internal purposes of monitoring effectiveness and making improvements, as well as for satisfying external accountability concerns.

It is hoped that the outcome monitoring procedure developed for this study represents an initial step towards ongo-

ing program evaluation, and the development of information management capability at the PSC. For the purposes of the present investigation, ongoing feedback to therapists and supervisors on client progress could not be provided. However, the results of the fine grained analysis of the management data generated in the study will be discussed as it applies to training and service delivery.

It is important to note that the findings and implications of the present study are applicable to other practicum training centers and also to community mental health centers as well. The need for comprehensive program evaluation and information management is common to all service delivery programs. Also, informal, subjective evaluations of therapists are used not only at practicum centers, but also at community mental health agencies. Thus, it is important for all service delivery programs, not just practicum centers, to evaluate if therapists are providing effective service to clients, and if clients' needs are being met.

The Relationship Between Supervisory Ratings of Therapist Competence and Client Outcome

The major finding of this investigation was that supervisors' ratings of therapist competence were unrelated to the outcomes of clients. This was somewhat unexpected for several reasons. In addition to the intuitive reasoning that therapists judged more competent should have greater

success effecting change in clients, there is also the evidence from previous research cited earlier which provided indirect support for therapist competency ratings to be predictive of client outcome (e.g. LaCosse, 1980, White & Pollard, 1982; Zarski et al., 1980). Furthermore, it is surprising that supervisors' ratings were not predictive of outcome even though they supervised the same client cases that were used in the study. Thus, one would think that the competency ratings would have reflected the types of outcomes therapists had.

However, as has been emphasized, several explanations can be offered to explain the lack of relationship between competency ratings of therapists and the outcome of clients. First of all, the interrater reliability of the competency ratings was disappointingly low, particularly for the second rating period. It is worth noting that the lower level of agreement for the second set of ratings may be a more accurate sample of interrater reliability. This is because the first set of ratings were completed approximately one week after supervisor pairs met to complete similar rating forms for each trainee's semester evaluation.

As reported earlier, other researchers have noted the problem of poor interrater reliability surrounding assessments of competence, and thus have questioned the utility of traditional, informal methods of evaluation. Perhaps the lack of agreement between supervisors is somewhat attributa-

ble to the ongoing controversy and lack of consensus about what constitutes an "effective" therapist (e.g. Schaffer, 1982). Supervisors will undoubtedly have various personal biases as to what factors or skills are most important in affecting client change which will influence their ratings of competence.

Another explanation which may be partially responsible for the lack of relationship is that, as Bergin & Garfield (1978) have postulated, the largest proportion of variance in therapy outcome is accounted for by client variables. If this were true, then the level of therapist skill would be secondary to various client factors such as expectations of therapy, motivation for change, and so forth. Note however, in the present study the influence of client variables was presumably minimized since cases were arbitrarily assigned across therapists at the PSC, and case difficulty was statistically controlled.

It is quite plausible that a major factor responsible for the lack of relationship to outcome is that, due to time constraints, supervision is often limited to discussions of cases with only occasional observation. As a consequence, the impressions supervisors have of therapists and the extent to which their clients have changed can be strongly biased by many factors. For example, as mentioned earlier, in several studies it was found that supervisors received unreliable reports of therapy sessions from therapists.

Thus, it appears the influence of selective reporting of positive or negative case elements can be problematic. Particularly if observation of in-therapy behavior is limited, supervisors may not receive an accurate view of what has occurred in therapy sessions. Perhaps, in some instances, ratings reflect the student's verbal reporting skills, and not therapy skills.

Additional sources of error which can result from limited observation is that ratings may be affected by extraneous factors such as a therapists' performance in other areas of the training program.

Recommendations to Improve Competency Evaluations

Essentially, there appears to be two major problems with current procedures of subjectively assessing competence. First, due to practical constraints, assessments of competency are often based to a great extent on subjective reports of what occurs in therapy rather than samples of behavior. Consequently, supervisors may not always receive an accurate understanding of in-therapy behavior and client progress. Also, judgments are vulnerable to bias by factors extraneous to therapeutic functioning.

Secondly, evaluation methods and procedures are not explicated. Ironically, while it is characteristic of a behavioral conception to set precise behavioral goals, there

are no established behavioral objectives for competent performance or expected proficiency. The ratings of competency used are global, and additionally, observations of therapy sessions are done informally.

When proposing changes in a program's procedure, it is imperative to give full consideration to the feasibility of recommendations with regard to the limitations on available resources. In light of the major problem areas with evaluations of competence together with practical considerations, two specific recommendations seem appropriate.

First, it appears to be advisable to use client outcome as a criterion of competency to supplement general evaluation. There are problems in using client outcome as the sole criterion of competence including cases being of varying difficulty, the influence of supervisory input, and small samples of clients. However, numerous researchers (e.g. Aronson et al., 1982; Bent, 1982, Bond, 1974, Linehan, 1980; Stevenson et al., 1984; Zarski et al., 1980) have emphasized the value of evaluating therapists' development through monitoring their effectiveness in helping clients achieve clearly stated treatment goals. In fact, Linehan (1980) has stated that "in the final analysis, clinical data is the best source of evaluative information about how well the therapist is doing" (p.176). Importantly, a well-conceived outcome monitoring procedure can provide supervisors with an accurate understanding of any progress clients have

made. Further, Bent, (1982) and Linehan (1980) have pointed out that training students to think in terms of therapeutic results and look to their clients' behavior for validation of their clinical skills is crucial aspect of training if students are to maintain and develop their skills now and in the future.

A second step to improve competency evaluations would be to establish a formal procedure to sample and assess in-therapy behavior. This has been recommended by various researchers (e.g. Bent, 1982; Deets, Brown, & Saslow, 1979; Dustin, Engen, & Shymansky, 1982) and can be done by systematic observation of videotape segments of selected therapy sessions with a behavior performance scale congruent with the center's training objectives. Specific counts of selected therapy behaviors can provide accurate summary data for supervisors and students on in-therapy behaviors. In addition to supplementing evaluations, objective counts of therapy behaviors can be a powerful training device for students, since they can best benefit from specific feedback on particular skills. Thus, emphasis is placed on specific behaviors, rather than nebulous global competencies. Also, behavioral counts would be useful for measuring progress at different stages of training and making comparisons across therapists. Eventually, criterion levels of performance could be established.

To conserve staff energies the behavioral ratings could

be completed by advanced student supervisors since they are already involved in viewing session videotapes and giving feedback to therapists. The student supervisors could discuss the ratings and feedback given with faculty supervisors, and show representative samples of the taped sessions.

Variables Related to Positive Outcomes

Through analyzing the management data generated in this study, it appears that some factors of practical importance were related to favorable client outcomes. In particular, several of the variables associated with outcome made evident the need to focus on some of the structural aspects of the delivery system at the PSC.

First, consider the relationship between outcome and sessions attended and type of termination. It was found that as the number of sessions attended increased, client improvement increased. In general, 5 to 7 sessions were necessary for satisfactory therapeutic gains. Also, when clients discontinued therapy against the advice of therapists, outcomes tended to be unacceptable. Further, the two leading reasons given by clients for dropping out of therapy prematurely included feeling therapy was no longer necessary, and having objections to the PSC being a training center.

Recommendations

These findings strongly point to the importance of keeping clients in therapy for a sufficient number of sessions and reducing unilateral terminations. Not surprisingly, these concerns are common to mental health centers and have been dealt with in various ways. Orlynsky & Howard (1978) and Lambert (1979) have reviewed various methods of keeping clients in therapy and reducing premature termination. Based on their research, these authors have advocated the use of pre-therapy training procedures intended to modify client expectations. At the PSC it appears to be advisable and reasonable to establish a formal routine pre-therapy training procedure. This could be easily accomplished by case therapists at intake sessions. So for example, clients would be informed of the evidence from evaluating our services which strongly suggests that it is typically necessary to attend a minimum number of sessions. When this has occurred, improvement and satisfaction have been very satisfactory. It would also be emphasized that much more favorable results have been achieved when clients have remained in therapy until termination was mutually agreed upon. Additionally, concerns clients often have about the PSC being a training center might be disclaimed, with emphasis placed on the advantages the center offers (e.g. team approach, intensive supervision).

An additional method to attempt to increase client com-

mitment to therapy and reduce premature termination which could be used in conjunction with pre-therapy training, is time-limited therapeutic contracting. Some contracting is already used sporadically at the PSC, and could also be accomplished with minimal difficulty on a routine basis. Orlynsky & Howard (1978) concluded from an extensive review of field studies that contracting is often effective in reducing premature termination.

Outcome Monitoring at the PSC: Implications for Service Delivery and Training

Overall, the data obtained on the outcomes of client cases treated at the PSC were supportive of the therapy provided by the clinic. The finding that 30 or 63% of the clients cases treated during the duration of the study evidenced some improvement is comparable to results reported by other researchers such as Bergin, (1971), and Munford (1980). Also, the median number of sessions attended and percentage of unilateral terminators although disappointing, is equivalent to reported rates of other practicum training clinics (Bergin & Garfield, 1978).

Support for the program's training functions was provided by the finding that cases seen by second year therapists were rated as more difficult, yet had better outcomes on the average than cases handled by first year therapists. Note, however, students enter the program with varying lev-

els of practicum experience. Consequently, therapists' year in the program does not always reflect their psychotherapy experience.

Some interesting relationships were found between outcome and both type of client case and type of presenting problem. Differences in outcome found for these variables were not statistically significant, as there were small numbers of clients in the various categories. Nevertheless, from inspecting the data some trends are evident. For example, outcomes for adult client cases tended to be better than for other types of cases. Also, for some types of presenting problems, such as depression and difficulties with problem-solving, outcomes on the average were good. On the contrary, for clients presenting with problems such as difficulties in social relations or phobias, outcomes tended to be unsatisfactory. Continued monitoring of clinical data and outcome would allow further assessment of these and other variables related to clinical training and service delivery.

Recommendations: Improving Clinical Training and Intervention Through Information Management

Mental health centers are now more than ever confronted with administrative and clinical concerns of accountability and effectiveness. Increasingly vulnerable to funding cut-backs, mental health centers must meet growing accountabil-

ity demands for both the quantity and quality of services provided. A major recommendation resulting from the present study, is that a management information system be established at the PSC. An integral component of such a system would be an outcome procedure which focuses on monitoring progress toward therapeutic objectives. Such a procedure was developed for the center based on experience from conducting this study (Appendix J).

In response to administrative and clinical concerns for accountability and effectiveness, a management information system could be designed to record selected aspects of the center's functions, and provide appropriate data for various purposes. Properly developed, the system could serve clinical, evaluative, and administrative purposes by monitoring and making accessible information most pertinent to program needs.

First, an information system can provide a framework essential to answer questions of internal accountability such as, what is being done, how well is it being done, and at what cost? Without monitoring program functions it is impossible to assess overall performance, or to evaluate effectiveness of any part of the program. Secondly, external accountability data such as the number and types of clients seen and the amount and types of services delivered, are recorded and made accessible. As demonstrated through this study, management data can be used to identify program

strengths and trouble spots, and can supply information that leads to practical recommendations.

The design of a management information system should match the idiographic needs of a center. Consequently, different centers will choose different details for inclusion. For example, community mental health centers which receive Federal dollars must record in detail how staff time is utilized, and how much time is allocated on service to identified clients. At practicum training centers such as the PSC, the system would be focused toward providing evaluative feedback on clinical training and service delivery.

Specifically, the present study pointed to the value of developing a system which focuses on clinical data as it applies to training and service issues. A clinical information system at the PSC would serve clinical and administrative purposes through monitoring and providing feedback on the clients served, services delivered, and resulting outcomes. At the PSC clinical records are kept on charts which serve as the vehicle for storing and sharing information about clients. What these charts offer in completeness of detail they lack in suitability for rapid transmission and distribution. Since information retrieval is difficult, the information value of clinical records remains untapped. Also, the PSC has no systematic procedures or requirements for monitoring treatment progress. It is the responsibility of therapists to monitor client change as they deem neces-

sary. Thus, outcome data are not available.

The proposed clinical information system would be computer-based to facilitate information retrieval and allow quick data manipulation. For each client case a clinical record index would be completed which efficiently organizes client information and presenting complaints, and further integrates treatment planning, service delivery, and progress. More specifically, each client case file would include: 1) client demographics, 2) a clear statement of problems and their specific effects, 3) clear goals and objectives within specified time intervals, 4) the treatment approach related to each objective, 5) evaluative measures of progress in relation to treatment objectives, taken during treatment and at discharge, and 6) attendance rate and circumstances of discontinuation.

The proposed system would provide feedback on training and service delivery useful for decision making at both an individual and a program level. Emphasis would be on turning evaluation findings into practical improvements in the program. For example, in an individual case, assessing client progress against objectives at designated intervals during treatment would provide feedback to therapists and supervisors so that treatment procedures can be maintained or modified. At a broader level, aggregate outcome data broken down by type of client case and type of presenting problem might uncover the need to place additional emphasis

on some aspect of the clinical training (e.g. child interventions, desensitization procedures).

As outlined earlier, the data generated on client progress and outcome would serve numerous important purposes. These include providing formative feedback on the effectiveness of student therapists, the effects of clinical training on outcome, and the efficacy of intervention strategies. Consider one example relevant to clinical training. Since students participate in practicum at the PSC for two years, client improvement in the second year could be related to trainee gains in the first year, as well as to concurrent gains.

Further, outcome data would be available to justify the program's functions and demonstrate accountability. And finally, the evaluative procedure would provide training and exposure to students in the ongoing use of evaluation methods in clinical practice decision making. The importance of this final point cannot be overemphasized. Clinical training programs, for whatever reasons, have been negligent in providing training and experience to doctoral students in the use of evaluation methods. Kulig (1984) recently reported serious concerns that clinical students are infrequently introduced to documentation systems or the value of systematic practice recording. According to Mattson (1984), the education of clinicians in the principles and practices of quality assurance and accountability record keeping is

"badly underrepresented" and demands immediate attention from training programs. Kulig (1984) further has stressed that, at the doctoral level, expertise in evaluation and accountability methods and procedures is a practical necessity.

General Summary

The present research project was a descriptive study conducted at a clinical psychology practicum center which investigated the relationship between supervisory ratings of student therapist competency and respective client outcome. Although subjective ratings are commonly used to evaluate student-therapists, the relationship between such ratings and client outcome has not been established. The major finding of this investigation was that competency ratings were unrelated to the outcomes of clients. Possible reasons for the lack of relationship and problems with subjective assessments of competency were discussed and recommendations for improving evaluations were given. These included supplementing subjective ratings with behavioral performance ratings of in-therapy behavior and with client progress and outcome data.

Next, data generated through outcome monitoring were presented and discussed as they apply to clinical training and service issues. First, several of the variables associated with outcome made evident the need to focus on some of

the structural aspects of the delivery system at the PSC. Specifically, the importance of keeping clients in therapy for a sufficient number of sessions and reducing unilateral terminations was evident. Two methods to increase client commitment to therapy were recommended including pre-therapy training to modify expectations, and the routine use of time-limited therapeutic contracting.

Secondly, a major recommendation resulting from the present study was to develop a management information system at the PSC. The management data generated in the study pointed to the need to establish an automated system to collect clinical data which apply to both clinical training and service delivery. As demonstrated in this study, an information system can be useful for clinical, evaluative, and administrative purposes. For example, such a system could provide formative feedback on the clients served, services delivered, and resulting outcomes. Also, feedback on the effectiveness of student therapists at different levels of training and with different types of client cases and clinical problems could be available. Further, such a system could provide data for accountability purposes, and finally the procedure would provide valuable training and exposure to students in the use of evaluation and accountability methods and procedures.

REFERENCES

- American Psychological Association Task Force on Education, Training, and Service in Psychology. (1982). Summary Report. Washington, D.C: Author.
- Aronson, D.E., Akamatsu, T.J. and Page, H.A. An initial evaluation of a clinical psychology practicum training program. Journal of Professional Psychology, 1982, 3, 610-618.
- Barak, A. and Lacrosse, M.B. Multidimensional perception of counselor behavior. Journal of Counseling Psychology, 1975, 22, 471-476.
- Barlow, D.H., Hayes, S.C. and Nelson, R.O. The Scientist Practitioner. New York: Pergaman Press, 1984.
- Battle, C.S., Imber, R., Hoehn-Saric, A., Stone, E., Nash, K. and Frank, J. Target Complaints as a criteria for improvement. American Journal of Psychotherapy, 1966, 20, 184-192.
- Bent, R.J. The quality assurance process as a management method for psychology training programs. Professional Psychology: Practice and Research, 1982, 15, 98-104
- Bergin, A.E. and Lambert, M.J. The evaluation of therapeutic outcomes, In Garfield, S.L. and Bergin, A.E. (Eds.) Handbook of Psychotherapy and Behavior Change. An empirical analysis (2nd ed.). New York: Wiley, 1978.
- Bernstein, G.S. Training behavior change agents: A conceptual review. Behavior Therapy, 1982, 13, 1-23.
- Boehler, J.A. Two experiments in psychiatric interrater reliability. Journal Health Human Behavior, 1966, 7, 192-202.
- Bond, J.A. Behavior therapy, learning theory and scientific method. Psychotherapy, Theory, Research and Practice, 1974, 11, 118-132.
- Chevron, M.S. and Rounsaville, B.J. Evaluating the clinical skills of psychotherapists. Archives of General Psychiatry, 1983, 40, 1129-1132.
- Deets, C., Brown, M. and Saslow, G. Criterion-referenced objectives. Journal of Psychiatric Education, 1979, 3, 162-170.

- Dustin, R.E., Engen, H.B. and Shymansky, J.A. The ICB: A tool for counselor supervision. Counselor Education and Supervision, 1982, 22, 70-74.
- Edelstein, B.A. and Brasted, W.S. Clinical Training. In Hersen, M., Kazdin, A.E. and Bellack, A.S. (Eds.) The Clinical Psychology Handbook, New York: Pergamon Press, 1983.
- Fiester, A.P. Goal attainment and satisfaction scores of CMHC client. American Journal of Community Psychology, 1979, 7, 181-188.
- Ford, J.D. Research on training counselors and clinicians. Review of Educational Research, 1979, 49, 87-130.
- Hargreaves, W. and Attkisson, C. Evaluating program outcomes. In Attkisson, C., Hargreaves, W., Horowitz, M. and Sorenson, J. (Eds.) Evaluation of Human Service Programs. New York: Academic Press, 1978.
- Hill, C.E. Development of a counselor verbal response category system. Journal of Counseling Psychology, 1978, 25, 461-468.
- Ihilevich, D., Gleser, G.C., Critter, G.W., Kroman, L.J. and Watson, A.S. Measuring program outcome. Evaluation Review, 1981, 5, 451-477.
- Johansson, S.L., Silverberg, R. and Lilly, R.S. Therapy improvement in two out-patient mental health clinics. Journal of Community Psychology, 1980, 8, 34-44.
- Kendall, P.C. and Norton-Ford, J.D. Therapy outcome research methods. In Kendal, P.C. and Butcher, J.N. (Eds.) Handbook of Research Methods in Clinical Psychology, New York: Wiley, 1982.
- Keppler-Seid, H., Windle, C. and Woy, J.R. Performance measures for mental health programs: Something better, something worse, or more of the same? Community Mental Health Journal, 1980, 16, 217-234.
- LaCrosse, M.B. Perceived counselor social influence and counseling outcome: Validity of the counselor rating form. Journal of Counseling Psychology 1980, 27, 320-327.
- Lambert, M.J. Introduction to assessment of psychotherapy outcome: Historical perspective and current issues. In Lambert M.J., Christensen, E.R. and DeJulio, S.S. (Eds.) The Assessment of Psychotherapy Outcomes. New York: Wiley, 1983.

- Larsen, D., Attkisson, C., Hargreaves, W. and Nguyen, T. Assessment of client satisfaction: Development of a general scale. Evaluation and Program Planning, 1979, 2, 197-207.
- Lemoine, R.L. and Carney, A. The Louisiana mental health client-outcome evaluation project: An initial progress report. Community Mental Health Journal, 1984, 20, 30-36.
- Linehan, M.M. Supervision of behavior therapy. In Hess, A.K. (Ed.) Wiley Series on Personality Processes, New York: Wiley, 1980.
- Liston, E.H., Yager, J. and Strauss, G.D. Assessment of psychotherapy skills: The problem of interrater agreement. American Journal of Psychiatric, 1981, 138, 1069-1074.
- Manthei, R.J. Evaluating therapy outcome at a community mental health center. Professional Psychology: Research and Practice, 1983, 14, 67-77.
- Manthei, R.J., Vitalo, P.L. and Ivey, A. Therapy outcome at a community mental health center. Community Mental Health Journal, 1982, 18, 224-229.
- Markson, E.W. and Allen D.F. Trends in Mental Health Evaluation. D.C. Health and Company: Lexington Books, 1976.
- Mata azzo, R.G. Research on the teaching and learning of psychotherapeutic skills. In Garfield, S.L. and Bergin, A.E. (Eds.) Handbook of Psychotherapy and Behavior Change: An Empirical Analysis New York: Wiley, 1978.
- Mattson, M.R. Quality assurance: A literature review of a changing field, Hospital and Community Psychiatry, 1984, 35, 605-616.
- Mintz, J. and Kiesler, D.J. Individualized measures of psychotherapy outcome. In Kendal, P.C. and Butcher, J.N. (Eds.) Handbook of Research Methods in Clinical Psychology, New York: Wiley, 1982.
- Mitchell, R. The dimensions of an evaluation system for community mental health centers. In Coursey, R.D., Specter, G.A., Murrell S.A. and Hunt, R. (Eds.) Program Evaluation for Mental Health. New York: Grune and Stratton. 1977.

- Munford, P.R., Alevizos, P., Reardon, D., Miller, W.H., Callahan, E., Liberman, R.P. and Guilani, B. A behavioral approach to therapy training. The Journal of Psychiatric Education, 1980, 4, 47-51.
- Neigher, W.D. and Schulberg, H.C. Evaluating the outcomes of human service programs. Evaluation Review, 1982, 6, 731-751.
- Orlinsky, D.E. and Howard, K.I. The relation of process to outcome in psychotherapy. In Garfield, S.L. and Bergin, A.E. (Eds.) Handbook of Psychotherapy and Behavior Change: An Empirical Analysis. New York: John Wiley and Sons, 1978.
- Pinsof, W.N. Family therapy process research. In Gurman, A.E. and Kniskern, D. (Eds.) Handbook of Family Therapy, New York: Brunner/Mazel, 1981.
- Posavac, E.J. Impacts of Program Evaluation on Mental Health Care. Boulder, Colorado: Westview Press, 1979.
- Schaffer, N.D. Multidimensional measures of therapist behavior as predictors of outcome. Psychological Bulletin, 1982, 92, 670-681.
- Schaffer, N.D. The utility of measuring the skillfulness of therapeutic techniques. Psychotherapy: Theory, Research and Practice, 1983, 20, 330-336.
- Schaffer, J.L. and Atkinson, D.R. Counselor education courses in program evaluation and scientific research: Are counselors being prepared for the accountability press? Counselor Education and Supervision, 1983, 23, 29-34.
- Schulberg, H. Issues in the evaluation of community mental health programs. Professional Psychology: Research and Practice, 1983, 8, 560-572.
- Schulberg, H. Outcome evaluations in the mental health field. Community Mental Health Journal, 17, 132-141.
- Shakow, D. Recommended graduate training program in clinical psychology. American Psychologist, 1947, 2, 539-558.
- Sloane, R.B., Staples, F.R., Cristol, F.R., Yorkston, N.J., & Whipple, K. Psychotherapy Versus Behavior Therapy. Cambridge, Mass.: Harvard University Press, 1975.
- Stein, S.P., Karasu, T.B., and Charles, E.S. Supervision of the initial interview: A study of two methods. Archives of General Psychiatry, 1975, 32, 265-268.

- Stevenson, J.F., Norcross, J.C., King, J.T., and Tobin, K.G. Evaluating clinical training programs. Professional Psychology: Research and Practice, 1984, 15, 219-229.
- VandeBos, G.R., Psychotherapy: Practice, Research, Policy. Sage Publications: Beverly Hills, 1980.
- White, G.D. and Pollard, J. Assessing therapeutic competence from therapy session attendance. Professional Psychology: Practice and Research, 1982, 13, 628-633.
- Zarski, J.J., Bubenzer, D.L., & Walter, D.A. Counseling effectiveness and trainee helping qualities: Another view, Counselor Education and Supervision, 1980, 20, 15-21.

APPENDICES

APPENDIX A

PRACTICUM STUDENT EVALUATION

Psychotherapy

1. This student seems to know what information to gather to effectively assess his/her client (eg. client's needs, problems, present behavior, resources).

1	2	3	4	5	6	7	8	9
very strongly disagree				neutral				very strongly agree

2. In general, this student is able to accurately conceptualize the client's problems.

1	2	3	4	5	6	7	8	9
very strongly disagree				neutral				very strongly agree

3. Not only is this student able to understand the client's frame of reference, but he/she is able to effectively communicate this to his/her client.

1	2	3	4	5	6	7	8	9
very strongly disagree				neutral				very strongly agree

4. One of this student's weaknesses is his/her inability to draw accurate inferences about his/her client based on limited data.

1	2	3	4	5	6	7	8	9
very strongly disagree				neutral				very strongly agree

5. This student demonstrates the ability to formulate treatment plans based on a theoretical or empirical rationale.

1	2	3	4	5	6	7	8	9
very strongly disagree				neutral				very strongly agree

6. This student demonstrates the ability to carry out a treatment plan based on the formulation.

1	2	3	4	5	6	7	8	9
very strongly disagree				neutral				very strongly agree

7. This student demonstrates the ability to assess treatment progress from observation and measures.

1	2	3	4	5	6	7	8	9
very strongly disagree				neutral				very strongly agree

8. Overall, I believe this student is an effective therapist at this point in time.

1	2	3	4	5	6	7	8	9
very strongly disagree				neutral				very strongly agree

9. I believe that whether or not this student is an effective therapist now, he/she has the potential to be an effective therapist.

1	2	3	4	5	6	7	8	9
very strongly disagree				neutral				very strongly agree

APPENDIX B

ASSESSMENT OF CASE DIFFICULTY

Client _____

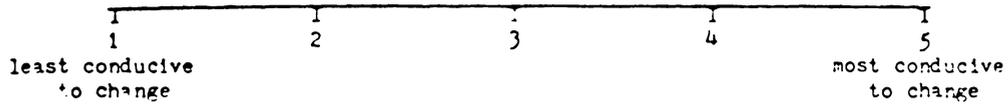
Therapist _____

Supervisor _____

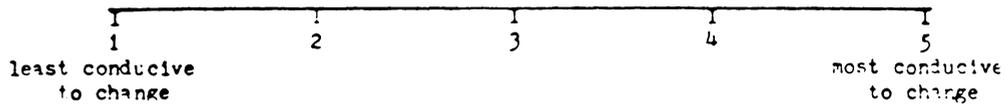
Date _____

Supervisors: To formulate rating of client difficulty please score the following factors from 1 (poor) to 5 (very good).

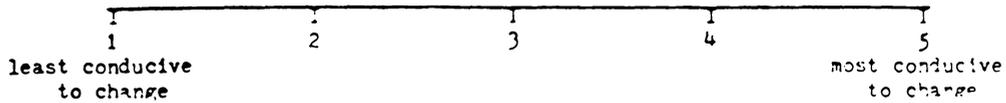
Presenting problem, difficulty of disorder (eg. effectiveness of therapeutic techniques for a particular psychopathology or problem behavior).



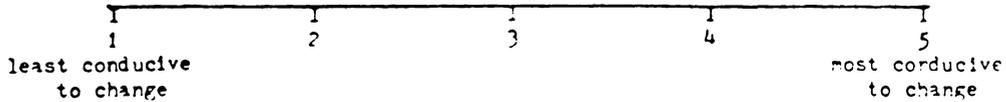
Past adaptive functioning, chronicity of problem.



Environmental circumstances (ie. stressors, economic conditions, social opportunities).



Motivation and resources for change (eg. referral circumstances, psychological insight, support system).



APPENDIX C

TARGET PROBLEMS SEVERITY RATING FORM

NAME _____

DATE _____

Problem: _____

In general, how much does this problem or complaint bother you?

couldn't be worse	very much	pretty much	a little	not at all
----------------------	--------------	----------------	-------------	---------------

Problem: _____

In general, how much does this problem or complaint bother you?

couldn't be worse	very much	pretty much	a little	not at all
----------------------	--------------	----------------	-------------	---------------

Problem: _____

In general, how much does this problem or complaint bother you?

couldn't be worse	very much	pretty much	a little	not at all
----------------------	--------------	----------------	-------------	---------------

APPENDIX D

TARGET PROBLEMS IMPROVEMENT RATING FORM

NAME _____

DATE _____

Please circle how the problems listed below have changed since the beginning of treatment.

Problem: _____

worse no change a little better moderately better much better

Problem: _____

worse no change a little better moderately better much better

Problem: _____

worse no change a little better moderately better much better

APPENDIX E

Adult PES Form I: Present Functioning

Client _____
 M/F/O—Sig. Other _____
 Therapist _____

INSTRUCTIONS—1
 Please circle one statement in each column that describes best how you were in the last two weeks.

Date _____

Name _____

<i>Family Interaction</i>	<i>Occupation (School, Job or Homemaking)</i>	<i>Getting Along with Others</i>	<i>Feelings and Moods</i>	<i>Use of Free Time</i>	<i>Problems</i>	<i>Attitude toward Self</i>
Often must have help with basic needs (for example, feeding, dressing, toilet).	Does not hold job, or care for home, or go to school.	Always fighting or destructive; or always alone.	Almost always feels nervous, or depressed, or angry and bitter, or no emotions at all.	Almost no recreational activities or hobbies.	Severe problems most of the time.	Negative attitude toward self most of the time.
Takes care of own basic needs but must have help with everyday plans and activities.	Seldom holds job, or attends classes, or cares for home.	Seldom able to get along with others without quarrelling or being destructive; or is often alone.	Often feels nervous, or depressed, or angry and bitter, or hardly shows any emotion for weeks at a time.	Only occasional recreational activities, or repeats the same activity over and over again.	Severe problems some of the time or moderate problems continuously.	Negative attitude toward self much of the time.
Makes own plans but without considering the needs of other family members.	Sometimes holds job, or attends some classes, or does limited housework.	Sometimes quarrelling, but seldom destructive difficulties in making friends.	Frequently in a good mood but occasionally feels nervous, or depressed, or angry for days at a time.	Participates in some recreational activities or hobbies.	Moderate problems most of time, or mild problems almost continuously.	Almost equal in positive and negative attitude toward self.
Tries to consider everyone's needs but somehow decisions and actions do not work well for everybody in the family.	Holds regular job, or classes, or does housework (or some combination of these), but with difficulty.	Gets along with others most of the time; has occasional close friends.	Usually in a good mood, but occasionally feels nervous, or unhappy, or angry all day.	Often participates in recreational activities and hobbies.	Occasional moderate problems.	Positive attitude toward self most of the time.
Usually plans and acts so that own needs as well as needs of others in the family are considered.	Holds regular job, or attends classes, or does housework (or some combination of these) with little or no difficulty.	Gets along with others most of the time; has regular close friends.	In a good mood most of the time, and usually able to be as happy, or sad, or angry as the situation calls for.	Participates in, as well as creates, variety of own recreational activities and hobbies for self and others.	Occasional mild problems.	Positive attitude toward self most of the time.

Comments: _____

APPENDIX F

CLIENT SATISFACTION QUESTIONNAIRE

Please answer by circling the number of your choice.

Evaluation of Program

1. How would you rate the quality of service you received?

1	2	3	4	5	6	7	8	9
poor		fair			good		excellent	

2. To what extent has our program met your needs?

1	2	3	4	5	6	7	8	9
none of needs met		few needs met			most needs met		almost all needs met	

3. Have the services you received helped you deal more effectively with your problems?

1	2	3	4	5	6	7	8	9
made things worse		didn't help			helped somewhat		helped greatly	

4. In an overall, general sense, how satisfied are you with the services you received?

1	2	3	4	5	6	7	8	9
quite dissatisfied		mildly dissatisfied			mostly satisfied		very satisfied	

Evaluation of Therapist

5. He/She seemed to understand my problems very well.

1	2	3	4	5	6	7	8	9
very strongly disagree				neutral				very strongly agree

6. He/She selected an approach to work on my problems which seemed likely to be effective.

1	2	3	4	5	6	7	8	9
very strongly disagree				neutral				very strongly agree

7. Overall, I believe he/she is an effective therapist.

1	2	3	4	5	6	7	8	9
very strongly disagree				neutral				very strongly agree

APPENDIX G

OUTLINE OF OUTCOME EVALUATION PROCEDURES

The general procedure used for all clients is as follows:

Pre-Treatment packet administered at end of first session:

Target Problems Form (client and therapist each complete)

Progress Evaluation Scale-Current Functioning (client and therapist each complete)

Progress Evaluation Scale-Goals (client and therapist each complete)

Post-Treatment packet administered at termination:

Target Problem Form (client and therapist each complete)

Target Problem Improvement Rating Form (client and therapist each complete)

Progress Evaluation Scales-Current Functioning (client and therapist each complete)

Client Satisfaction Questionnaire (client completes)

INSTRUCTIONS FOR TARGET PROBLEMS PROCEDURE

The Target Problems (TP) form is to be completed separately by both the client and therapist at the conclusion of the initial assessment session and again at termination. Both the client and therapist collaborate in identifying the three leading problems for which psychological intervention is being sought. (Interpretive problems will be avoided if three problems are listed).

Problems presented by the client need to be translated into specific, operational descriptions so that change can be reliably evaluated. This specificity is very important!

In order to facilitate the process of quantifying the severity of a symptom have the client indicate when it first appeared, when it was last experienced, its average frequency and duration, and also when he/she last felt comfortable in the situation. Try to group redundant symptoms or complaints and also only list problems which are treatable through psychological intervention. At termination ratings should be made without reviewing initial ratings.

In review:

Beginning of Treatment:

1. Identify with client 3 presenting complaints and specify each as clearly as possible in terms acceptable to the client.
2. Client and therapist separately rate the severity of each problem at the end of the initial assessment session.

Conclusion of Treatment:

3. Client and therapist separately re-rate three problems

on Target Problems Form at termination without reviewing prior ratings.

4. At termination both client and therapist also independently complete Target Problems Improvement Rating Form.

INSTRUCTIONS FOR COMPLETING PROGRESS EVALUATION SCALES

Like the Target Problem approach the PES are to be completed independently by both client and therapist at the initial assessment session and at termination. Ratings on the "Current Functioning" form should reflect the Client's typical level of functioning made on the basis of observed behavior and reported experience. After current status ratings have been made goals are to be set for a two month period. Therapist must be familiar with the dimensions tapped by the scales in order to thoroughly assess the client's background, life-style, functioning, and priorities which is necessary for proper completion of the PES. Reassessment of current functioning at termination is to be completed separately by client and therapist without review of initial ratings.

In review:

Beginning of treatment:

1. Client and therapist independently rate current functioning
2. Client and therapist independently set goals for the following two months.

Conclusion of treatment:

1. Client and therapist independently rate level of functioning with reviewing pre-treatment ratings.

Instructions for Client Satisfaction Questionnaire

1. Clients are to independently complete the CSC at termination.

Special Note: To reduce the influence of demand characteristics on clients when completing the outcome measures at termination instruct clients to put rating forms in an envelop and hand them into the PSC secretary.

APPENDIX H



VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061

PSYCHOLOGICAL SERVICES CENTER

June 28, 1984

Client's address

Dear Mr./Ms.

Please help us improve our program by answering some questions about the services you have received at the Psychological Services Center. We are interested in your honest opinions, whether they are positive or negative. This information is confidential and will not be seen by your therapist. Please answer all of the questions that apply. Enclosed is an addressed, stamped envelope. Thank you very much, we appreciate your help.

Sincerely,

Blake D. Warner
PSC Associate

APPENDIX I

DECISION RULE GUIDELINES

The following criteria were used in establishing a determination of outcome on each measure:

Measure One: Type of Termination

The premise with this factor is that favorable outcomes would be associated with termination based on mutual client-therapist decisions. In contrast, if the client dropped out of therapy the evidence shifted toward an unsatisfactory outcome.

Measure Two: Session Attendance

This indicator was determined by dividing total sessions attended by total sessions scheduled. Client cancellations or no-shows were considered missed sessions. Higher rates of session attendance were interpreted as indicative of more favorable outcomes. Attendance rates of .75 and above were considered acceptable. Special consideration of the reasons and circumstances surrounding nonattendance was given. For example, if a client missed 4 out of 10 sessions because of plausible excuses (e.g. illness, death in family) and he/she gave appropriate cancellation notice session attendance was deemed acceptable. In contrast, if the client missed 4 of 10 sessions without giving cancellation notice and indicated that they merely "forgot" session attendance was judged as a negative factor.

Measure Three: Target Problem Severity

The basis for making a decision on this measure was whether client and therapist ratings of severity evidenced improvement

from pre- to post-treatment, and additionally whether any deterioration on any problem or problems was indicated. As a general guideline, clear improvement was indexed as a positive change of 2 scale points while clear deterioration was indexed by a negative change of 2 scale points. Initial severity ratings of problems were used as an index of their relative importance. Thus change on a very distressing problem was considered more significant in terms of outcome than change on a less disturbing problem.

Measure Four: Target Problems Improvement

Similar to Target Problem Severity the basis for decision was whether the client and therapist indicated improvement on the target problems. Once again the initial severity of each problem was considered when evaluating the extent of improvement.

Measure Five: Progress Evaluation Scales

Since the PES were administered at pre- and post-treatment the index of improvement was the change score between the 2 assessments. Clear improvement was roughly indexed as a net positive change of 2-4 scale descriptors, depending on the client's initial level of adjustment. Note that changes on the PES were minimal for fully functioning, well-adjusted clients with specific presenting problems.

Measure Six: Client Satisfaction Questionnaire

The CSQ was completed by the client and administered at post-treatment only. Overall satisfaction was indexed as a mean response of greater than or equal to 6 across items.

Overall client outcomes were determined on the basis of these

six outcome indices. Cases were classified as "poor," "fail," "good," or "excellent." It was decided that the plethora of case-specific idiosyncracies prohibited the establishment of rigid decision rules for scoring and combining measures to obtain an overall index of outcome. Instead, when formulating the overall outcome classification, the assessor after judging separately each indice evaluated the total package of outcome measures guided by clinical judgment and the general guidelines which follow. First note that these broad guidelines were intended to serve as general classification criteria which allowed accomodation of case-specific factors, but which also served to enhance the reliability of the decision-making procedure.

Excellent Outcome

For an outcome to be categorized as excellent it was decided that there should be consistent evidence of positive outcome across factors. For example, an excellent outcome classification was supported if: client and therapist ratings indicated lessening of severity and improvement on target problems, therapy was mutually terminated, client attendance was good, satisfaction with therapy was indicated, and finally if level of functioning was maintained at the same high level as at the beginning of therapy.

Good Outcome

To classify an outcome as good it was decided that there should be evidence of positive outcome on some measures (particularly Target Problems) while others may be unchanged. For example, a good outcome classification was supported if: client and

APPENDIX J

CONFIDENTIAL INTAKE INFORMATION

Please answer the following questions to help clarify your concerns so that treatment can be focused on problems most distressing to you. This information is confidential and will become part of your treatment record.

1. Please describe your most serious problem or difficulty.

How does this affect your life and activities?

How would you be or act differently if this problem were resolved?

2. Please describe any additional problem or difficulty.

How does this affect your life and activities?

How would you be or act differently if this problem were resolved?

**The two page vita has been
removed from the scanned
document. Page 1 of 2**

**The two page vita has been
removed from the scanned
document. Page 2 of 2**

THE RELATIONSHIP BETWEEN THERAPIST
COMPETENCY AND CLIENT OUTCOME

by

Blake Douglas Wagner, Jr.

(ABSTRACT)

This research project was a descriptive study conducted at a clinical psychology practicum center which investigated the relationship between supervisory ratings of student-therapist competency and respective client outcome. Cases were assigned to one of four outcome categories on the basis of six outcome criteria. These included: client and therapist assessment of change in presenting complaints and adaptive functioning, client satisfaction with treatment, type of termination, and session attendance. Clinical faculty supervisors completed subjective competency ratings of student-therapists and also rated the difficulty of client cases. A semi-partial correlation was calculated between competency and outcome scores with the effects of case difficulty partialled out of the outcome scores. It was hypothesized that a significant positive semi-partial correlation would emerge.

Forty-eight client cases that were seen during a six month period were included in the study. Also, 14 student-therapists belonging to four practicum teams participated.

The major finding of this investigation was that overall, therapist competency ratings were not significantly related to the outcomes of clients, ($r = -.12$, $p > .05$). However, when assessing the relationship between therapist competency and outcome for each of practicum teams individually, a significant negative semi-partial correlation was found for one of them, ($r = -1.03$, $p < .01$).

Problems with subjective assessments of competency were discussed and recommendations for improving evaluations were given. Results of a fine grained analysis of outcome data and related variables were presented and discussed as they apply to clinical training and service issues.