The interpersonal functioning of college students :: an evaluation of an integrated didactic and experiential approach to training.

Pamela Nelson Myrus

University of Massachusetts Amherst

Follow this and additional works at: https://scholarworks.umass.edu/theses


This thesis is brought to you for free and open access by ScholarWorks@UMass Amherst. It has been accepted for inclusion in Masters Theses 1911 - February 2014 by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.
THE INTERPERSONAL FUNCTIONING OF COLLEGE STUDENTS: AN EVALUATION OF AN INTEGRATED DIDACTIC AND EXPERIENTIAL APPROACH TO TRAINING

A Dissertation Presented

by

Pamela M. Myrus

Submitted to the Graduate School of the University of Massachusetts in partial fulfillment of the requirements for the MASTER'S DEGREE

October 1965

Major Subject: Psychology
THE INTERPERSONAL FUNCTIONING OF COLLEGE STUDENTS:
AN EVALUATION OF AN INTEGRATED DIDACTIC
AND EXPERIENTIAL APPROACH TO TRAINING

A Dissertation Presented

by

Pamela N. Myrus

Approved as to style and content by:

Robert L. Calhoun
(Chairman of Committee)

(Head of Department)

(Member)

(Member)

(Member)

October 1965
The author is greatly indebted to her major professor and thesis advisor, Dr. Robert R. Carkhuff, for his guidance, assistance and encouragement during the preparation of this dissertation.

Additional acknowledgment is made to Dr. Bernard G. Berenson for organization of the training programs carried out with assistance from the following: Dr. Robert R. Carkhuff, Dr. Alfred J. Southworth, Mr. Richard Pierce and Mr. William Barnard.

The author also wishes to express her sincere appreciation to Mr. James Martin, Mr. Gerald Piaget and Mr. Richard Pierce for the many hours devoted to rating tapes.

Lastly must be mentioned the university students, who faithfully attended the training programs and co-operated fully in other aspects of the project to make this research possible.
# Table of Contents

**LIST OF TABLES** ........................................................................................................ v

**INTRODUCTION** ........................................................................................................ 1

Theoretical Background and Rationale ................................................................. 1
Summary of Hypotheses Studied ................................................................. 7

**METHOD** .................................................................................................................. 8

Subjects ....................................................................................................................... 8
Materials ...................................................................................................................... 8
Procedure ................................................................................................................... 10

**RESULTS** .................................................................................................................. 13

Reliability .................................................................................................................... 13
Statistical Analyses of the Data .................................................................... 16

**DISCUSSION** ............................................................................................................... 23

**SUMMARY** ................................................................................................................ 28

**REFERENCES** ............................................................................................................. 30

**APPENDIX A** ..............................................................................................................

**APPENDIX B** ..............................................................................................................

**APPENDIX C** ..............................................................................................................
LIST OF TABLES

I. Intra-rater Reliability for Counseling Process Variables..... 14

II. Inter-rater Reliability for Counseling Process Variables..... 15

III. Tests for Significant Differences Overall on Pre and Post Training Indices of Interpersonal Functioning..... 17

IV. Tests for Significant Differences on the Pre and Post Tape Ratings Among Experimental and Control Groups for Counseling Process Variables............... 19

V. Tests for Significant Differences on the Pre and Post Interviewee Inventory Among Experimental and Control Groups for Counseling Process Variables............... 21

VI. Tests for Significant Differences on the Pre and Post Self Inventory Among Experimental and Control Groups for Counseling Process Variables............... 22

VII. Tests for Significant Differences on the Pre and Post Roommate Inventory Among Experimental and Control Groups for Counseling Process Variables............... 24

Appendix A

1. Research Scale for Measuring Empathic Understanding
2. Research Scale for Measuring Positive Regard
3. Research Scale for Measuring Genuineness
4. Research Scale for Measuring Concreteness
5. Research Scale for Measuring Self-Exploration

Appendix B

1. Inventory for Assessing Self Interpersonal Functioning
2. Inventory for Assessing the Interpersonal Functioning of Others

Appendix C

1. Means and SDs of the Difference Scores on Pre and Post Tape Ratings for Counseling Process Variables
2. Means and SDs of the Difference Scores on the Pre and Post Interviewee Inventory for Counseling Process Variables
3. Means and SDs of the Difference Scores on the Pre and Post Self Inventory for Counseling Process Variables
4. Means and SDs of the Difference Scores on the Pre and Post Roommate Inventory for Counseling Process Variables
5. Means and SDs of the Pre and Post Tape Ratings for All Experimental Groups for Counseling Process Variables
The Interpersonal Functioning of College Students:
An Evaluation of an Integrated Didactic and Experiential Approach to Training

Introduction

There is an extensive body of research to indicate that certain counselor or therapist-offered dimensions of empathy, positive regard, genuineness and specificity of expression, often referred to as concreteness, in conjunction with the client process variable of client depth of self-exploration, in conjunction with outcome in counseling and therapy (Barrett-Lennard, 1962; Bergin and Solomon, 1963; Carkhuff and Truax, 1965, 1965a; Braaten, 1961; Halkides, 1953; Rogers, 1962; Tomlinson and Hart, 1962; Truax, 1961; Truax and Carkhuff, 1963; Wagstaff, Rice and Butler, 1960). That is, clients receiving high levels of these facilitative conditions demonstrate significantly greater improvement on a wide variety of change indices than do those receiving relatively low levels of these conditions.

Unfortunately, the great majority of our traditional training programs in counseling and psychotherapy have not given any systematic attention to this central core of primary facilitative conditions which accounts for much of the variability in the outcome criteria which we employ to assess our efforts (Carkhuff, 1965). Instead, most have focused upon psychodynamic training and other traditional approaches.

In addition, the professional training programs have not been concerned with studies of their own process and outcome. Past research with the process and outcome of counseling training has been largely trivial or nonexistent. The traditional programs generally have not bothered to ask what leads to what in either psychotherapy or psychotherapy training. It is unfortunate that the
major body of traditional training literature has not pushed itself to the logical conclusion of establishing its own translation to client benefits. Rather, the effectiveness of training programs has been blindly assumed, only to receive a rough awakening out of complacency from Bergin and Solomon’s (1963) negative findings concerning traditional training. Bergin and Solomon found that the ratings of post-interns of a traditional psychodynamic training program on empathy, which again correlated positively with client outcome, correlated slightly negatively with practicum and academic grades. In addition, the ratings ranged so low as to question the efficacy of the four years of clinical training. The trainees were functioning at a level of empathic communication which suggests that they were essentially oblivious to the client with whom they were counseling. In summary, then, the traditional training programs do not tend to assess their effectiveness, but in the few cases which were researched, the results were highly questionable as to the program’s contributions to trainee growth or client benefits.

Yet, the situation is not entirely as hopeless as the previous discussion might imply. While it is true that the majority of the traditional professional training efforts have not established their efficacy, other programs have. Beginning with the inceptions of the shorter-term six to eight week NDEA guidance institutes, a few training programs have included a number of meaningful quasi-outcome studies which have assessed variables previously related to outcome indices (Demos and Zuwaylid, 1963; Hansen and Barker, 1964; Jones, 1963; Hunger and Johnson, 1960; Webb and Harris, 1963). The change indices primarily assessed have been attitudinal in nature, with the most consistent finding being an increased tendency for trainees to make more understanding and less evaluative responses. Generally, however, there has been little direct indication of how these attitudinal changes are translated into client benefits.
The NDEA training programs of Demos (1964) and Hansen and Barker (1964) are noteworthy, because of their effort to assess therapeutic or facilitative dimensions which have been related to the client's improved functioning in previous and extensive research. Demos found that excerpts from short-term vocational-educational counseling tapes of 10 NDEA Institute counselors, judged successful by a variety of criteria, were rated significantly higher on empathy, positive regard and respect than 10 counselors rated least successful. When the facilitative conditions of empathy, warmth and congruence were assessed by still different measures of similar constructs, Hansen and Barker (1964) found "that when conditions are perceived as 'therapeutic' by the trainee, he will allow himself to participate more deeply in interpersonal exploration, i.e. higher experiencing, less defensive."

In addition to the NDEA training programs, there are some lay training programs both concerned with developing lay people who can provide facilitative conditions and interested in the effect of these facilitating conditions upon their clients. From judgments based upon interviews, Harvey (1964) employed lay people who were judged to have had full life experiences, especially those involving successful marital and other relationships, who were sincere in their regard and acceptance of others and themselves and intelligent and warm. After training for two evenings per week over a fifteen month period, marital case outcomes of these lay counselors were outstanding when compared to their professional counterparts. In addition, Appleby (1963), while not measuring characteristics of lay therapists, found significant improvement in experimental groups of chronic schizophrenic patients treated by hospital aides acting as models in providing the "psychological conditions for stable structure, identification and intense involvement." Even more striking is Mendel and Rapport's data (1963) indicating that 70 per cent of a group of 166 chronically disturbed women patients
were maintained outside the hospital at a minimally adequate level of functioning during a 51-month period, with only monthly contacts with non-professionals concerned with specifics of the patients' activities and perceptions.

So far the only systematic attempt to build around a central core of facilitating conditions has been two lay training programs undertaken by Carkhuff and Truax (1965, 1965a) and the professional and lay training programs currently in operation at the University of Massachusetts (Berenson and Carkhuff, 1964).

Both training programs were based on a view of training in counseling and psychotherapy which integrates the didactio-intellectual approach, emphasizing the shaping of therapist behavior, with the experiential approach which focuses upon therapist development and growth.

Briefly, this "approach involves the supervisor didactically teaching the trainee the former's accumulated research and clinical learnings concerning effective therapeutic dimensions in the context of a relationship which provides the trainee with experiences which the research and clinical learnings suggest are essential for constructive or positive therapeutic change." For instance, the teacher-supervisor, while teaching about high levels of necessary therapeutic conditions and employing previously validated research scales in doing so, also provides high levels of these conditions for his students. "Supervision is viewed as a therapeutic process: a learning or relearning process which takes place in the context of a particular kind of interpersonal relationship which is free of threat and facilitative of trainee self-exploration." The effective therapeutic dimensions taught grew out of the body of literature noted earlier, which appears to have identified at least four critical process variables in effective therapeutic personality and behavioral change: therapist accurate empathic understanding, therapist warmth or positive regard, genuineness or self-congruence and patient depth of self-exploration.
A central part of the training program involved the use of research scales of the various effective therapeutic dimensions predictive of positive patient outcome. With the scales, which had measured the levels of therapeutic conditions in previous research, trainees are didactically taught the therapeutic conditions. Beginning counselors then hear tape-recorded samples of counseling rated at various levels of therapist-offered conditions and client-process involvement by the research scales. The trainees practice discriminating the various levels of therapist and client conditions of these tapes, and practice offering the therapeutic conditions themselves. First, by listening to patient statements, then formulating responses and having these responses rated according to the research scales, the trainees didactically learn to offer the therapeutic conditions. Later trainees work-up to role playing and finally initial clinical interviews in their attempts to operationalize these therapeutic conditions.

Using this integrated approach, advanced graduate students and volunteer lay hospital personnel were trained in two separate, yet identical, programs (Carkhuff and Truax, 1965, 1965a). The training lasted 16 weeks, meeting two hours, twice a week, with subjects listening to recorded therapy two hours extra a week. Each trainee at the end of the program had one clinical interview with each of three hospital patients. Ratings of these tapes by experienced raters, trained in the use of the research scales, when compared with ratings of tapes of experienced therapists, showed no significant difference in process levels for experienced therapists, graduate students, or lay trainees, except for a significant difference in self-congruence between experienced and lay groups. In about 100 hours, graduate students and lay hospital personnel were brought to functioning at levels almost equal to the experienced therapists.

Following the training, the lay therapists saw 8 groups of 10 hospitalized mental patients each over a three-month period. At the end of this time, there
was highly significant improvement in ward behavior when compared to control groups receiving no therapy. While more treatment patients than controls were released, this number was not significant.

Unfortunately however, there are problems in attempting to assess even systematic research training programs, such as those previously described, for several methodological reasons. First, lacking pre-post testing, the researcher cannot safely conclude all training groups were similar in ability before the program began and that change over the period of the training program did, in fact, occur. Secondly, no control groups were used to test the efficacy of training when compared to no training. In the first research lay training program (Carkhuff and Truax, 1965), lay personnel were compared only with the performance of experienced therapists, and it was just assumed by the researchers that experienced therapists would bring about more constructive personality change in treated patients than in those receiving no therapy at all. This could easily have been an inaccurate assumption, in which case the lay training program would have been compared with an inconclusive criterion.

In the later research of Carkhuff and Truax (1965a) on the outcome of the lay training program, a control group of patients receiving no treatment was compared to a group of patients who had met with the lay counselors. Even here, when a control group was employed in testing the translation of training to client benefits, the researchers were not able to conclude that the results of their program were more significant than those of patients meeting with untrained lay personnel. A treatment control group was needed to conclusively establish that the efficacy of the lay personnel's training enabled them to bring about constructive personality change. Lastly, the problem of not being able to conclude from our research what therapeutic and/or training dimensions lead to what indices of constructive change remains unresolved.
An attempt to solve the problems previously encountered in the assessment of lay training programs has been attempted in this research. It was first hypothesized that the integrative training approach would be superior to no training at all. Pre-post testing of both (a) a control group of lay personnel receiving no training and (b) the training group proper, allows the researcher to conclude whether or not changes are significant, and if the training was superior to no training in enabling the lay personnel to provide therapeutic conditions. Our other two hypotheses, (1) that a more traditional training control group would be superior to no training and (2) that the integrative training approach be superior to the traditional training approach, resulted from employment of a training control group used to discern whether a group doing everything which the training group proper does with the exception of (a) the systematic employment of research scales and (b) the quasi-therapeutic encounter, can effect the same changes as the integrative training proper. Finally, a variety of assessment indices involving objective ratings, interviewee reports, self-reports and the reports of significant others were employed to discover what changes were effected by different training approaches on different indices; that is, to discover if therapeutic dimensions change differently from approach to approach, depending on the assessment index. A variety of assessment indices, therefore, give the researcher a clearer picture of changes brought about as a result of the different training approaches.

**Summary of Hypotheses Studied**

The three general theses then are:

I. The systematic and integrated didactic and experiential training program in interpersonal functioning (Experimental Group I) will demonstrate greater improvement in interpersonal functioning than the control group proper (Control Group III) which does not meet and does not have any training.
II. The training control program (Experimental Group II) meeting the same number of sessions and employing all aspects of training of the training group proper with the exception of the systematic employment of research scales and the quasi-group therapy experience will demonstrate greater improvement in interpersonal functioning than the control group proper (Control Group III).

III. The training group proper (Experimental Group I) will demonstrate greater improvement in interpersonal functioning than the training control group (Experimental Group II).

From these theses, a number of consistent hypotheses specific to each of the indices of each of the conditions as well as the total conditions were derived.

Method

Subjects. The subjects were 18 male and 18 female undergraduate students at the University of Massachusetts drawn randomly from a group of prospective dormitory counselors who indicated an interest in "learning how to improve their interpersonal relations."

Materials. A tape recorder and two forms of the University of Massachusetts Relationship Inventory (Berenson, Cardhuff and Myrus, 1964) were used to measure the degree to which the qualities of positive regard, accurate empathy, concreteness and genuineness were possessed by the subject, and the degree to which self-exploration by others was elicited by the subject.
The research scales were derived in part from scales (Truax, 1961, 1961a, 1962, 1962a, 1962b, 1963; Truax and Carkhuff, 1963, 1964) supported by extensive process and outcome research on counseling and psychotherapy and other instances of interpersonal learning processes (Aspy, 1965; Bergin and Soloman, 1963; Carkhuff and Truax, 1965, 1965a, 1965b; Rogers, 1962; Truax and Carkhuff, 1963, 1964, 1964a, 1965). In addition, similar measures of similar constructs have received extensive support in the research literature of counseling, therapy and education (Barret-Lennard, 1962; Blau, 1953; Breaten, 1961; Christianson, 1961; Demos, 1964; Halkides, 1953; Peres, 1947; Seean, 1949; Steele, 1948; Wolfson, 1949). The present scales were written primarily to apply to all interpersonal processes while reducing the ambiguity and increasing the reliability of the scale.

The scale "Empathic understanding in interpersonal processes (Berenson, Carkhuff and Southworth, 1964)" is a five-point scale, ranging from the lowest stage where the interviewer gives the appearance of being completely unaware or ignorant of even the most conspicuous surface feelings of the other person to the highest level where the interviewer comprehensively and accurately communicates his understanding of the other person's deepest feelings (See Table I, Appendix A). Similarly the scale, "Respect or positive regard in interpersonal processes (Carkhuff, Southworth and Berenson, 1964)" is a five-point scale ranging from a low where clear negative regard is given by the interviewer who sees himself as responsible for the second person to the highest level where he communicates a deep caring for the second person (See Table II, Appendix A). The scale, "Genuineness in interpersonal processes (Carkhuff, 1964)" ranges from the lowest level where there is a wide discrepancy between the interviewer's experiencing and verbalization to the highest level where the interviewer is freely and deeply himself in a non-exploitative relationship (See Table III,
Appendix A). The scale, "Concreteness or specificity of expression in interpersonal processes (Carkhuff, 1964a)" extends from the lowest level where the interviewer allows discussion to center around vague and abstract concepts to the highest level where the interviewer is always helpful in guiding the discussion so that the client discusses directly and completely his specific feelings and experiences (Table IV, Appendix A). The scale, "Self-exploration in interpersonal processes (Carkhuff, 1964b)" is a five-point scale ranging from the lowest level where the interviewee does not explore himself at all to the highest level where he is searching to discover new feelings concerning himself and his world (Table V, Appendix A).

The relationship inventory had a 6-point scale ranging from "(1) Yes, I feel that it is true" to "(6) No, I feel strongly that it is not true." Each dimension of interpersonal functioning was tapped by 10 statements, half negatively phrased, to which agreement or disagreement was made by the subject. The two different forms of the inventory tapped the same qualities. A Self-form (Table I, Appendix B), written in the first person, was filled out by the subject, while a second form (Table II, Appendix B), having the same statements in the third person, was filled out by two significant others, the standard interviewee who conducted the pre-post interviews which were tape-recorded and a roommate or close friend of the subject. Many of the statements followed the model of the previous Barrett-Lennard Relationship Inventories Scale (Barrett-Lennard, 1962), with an important modification being the systematization of ten items per dimension and the incorporation of a 6-point rating scale for each item.

Procedure. The subjects were randomly assigned to one of three experimental groups: (1) Experimental Group I, the training group proper, (2) a training control group designated Experimental Group II, and (3) the control group proper,
Group III, all of which were determined to be statistically similar on their level of interpersonal functioning as determined by ratings of the pre-training interview. All subjects were notified by telephone with a statement similar to the following: "You have been randomly selected to be in Dr. [name]'s training program on improving interpersonal relations. Are you still interested? Before beginning the training program we would like a sample of your behavior in a situation with another student. You are to interview the other person and be as helpful to him as possible. There is nothing additional you must do."

In a 30-minute taped session, one of two standard interviewees, a male and a female, both graduate students in counseling psychology, talked with each subject. Each interviewee saw half the male and female subjects in each of the three experimental groups. On reporting for the half hour pre-testing, the subjects did not receive any more information than from the initial telephone contact. The situation was left entirely open, except for the subject being told to take the initiative and be as helpful as possible to the other person. The subject was told only the interviewee's name. The standard interviewee's mental set was that of a client talking to a counselor. However, the interviewee was at all times himself, presenting real problems only if the subject made him feel comfortable in doing so. While one standard interviewee met with a subject, the other ran the tape recorder and acted as the experimenter.

After the taped session, the subjects completed the Self-Form of the University of Massachusetts Relationship Inventory. In addition, they were asked to give the other form to their roommate or a close school friend, who mailed the confidential results back to the experimenter. The standard interviewer, on the basis of the 30-minute session, filled out the same form as the roommate.
The subjects in Experimental Groups I and II then met with experienced counselors for 20 hours over an 8-week period. The counselors had previously been equated on the levels of facilitative conditions which they offered in the therapeutic interviews and were randomly assigned groups. For 16 of these hours the trainees in Experimental Group I learned to recognize and discriminate various levels of empathy, congruence, positive regard, concreteness and self-exploration from studying descriptions of research scales which had been derived from scales validated in previous and extensive research (Berenson, Carkhuff and Southworth, 1964; Carkhuff, 1964, 1964a, 1964b; Carkhuff, Southworth and Berenson, 1964; See Appendix A). They listened to tapes of counseling sessions to get first hand examples of these therapy process variables in use in real situations. Role playing with each other allowed the subjects practice in learning to make responses having these qualities and feedback as to the effect of this response upon others. Self-exploration was seen as one of the consequences of presentation of the various conditions both on tapes and in the role playing situations. The subjects were given the opportunity of coming to a fuller understanding of themselves through four hours of formal quasi-group therapy offered by a second party and involving any difficulties which the trainees might have in learning to implement the dimensions of interpersonal functioning. In addition, the group therapy afforded the trainees the opportunity to integrate and incorporate what had proved meaningful in the training program. Lastly, but importantly, the experienced counselor provided a living role model for the subjects in offering the therapeutic conditions he taught.

The subjects in the training control group met for the same length of time with another experienced counselor, equated on level of functioning to the counselor for Experimental Group I. The group received lectures, listened to
tapes and role played. However, this group did not work with the research scales to learn systematically to discriminate and communicate the conditions involved. In addition, the trainees of Group II did not receive a formal group therapy experience but received instead 4 hours of presentation by a second individual of typical problems occurring in a campus setting. The trainees of Group III were tested before and after the training of Groups I and II but received no intervening training experience.

From the written inventory filled out by the client, roommate and self, change was tabulated for the previously mentioned individual concepts as well as overall change. Difference scores were calculated by getting the absolute difference between pre- and post-ratings for each of the 50 questions and marking a + beside the difference if change was in the direction of improvement and - if change was in the opposite direction. These numbers were then added with regard to sign.

The taped excerpts were coded and test-retest reliability or intra-rater reliability was obtained by having the raters, graduate students in counseling psychology who were trained on a variety of tapes over a semester of classes, rate the same 9 training tape excerpts twice, a week apart.

Two sets of raters of two persons each rated the three randomly selected excerpts from each of the interviews, with each set of raters rating half of the excerpts of the total project. Inter-rater reliabilities between raters for each rating scale on the present experiment were also obtained.

**Results**

This section presents a summary of the findings pertaining to each of the three groups on each of the indices involved.

**Reliability**

In the portion of the research involving ratings of three four-minute taped excerpts before and after training assessments were made of the intra-rater and inter-rater reliabilities.
Table 1
Intra-rater Reliability for Counseling Process Variables

<table>
<thead>
<tr>
<th>Process Variables</th>
<th>Raters</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy</td>
<td></td>
<td>.99</td>
<td>.98</td>
<td>.99</td>
<td>.95</td>
</tr>
<tr>
<td>Positive regard</td>
<td></td>
<td>.84</td>
<td>.99</td>
<td>.94</td>
<td>.88</td>
</tr>
<tr>
<td>Genuineness</td>
<td></td>
<td>.91</td>
<td>.95</td>
<td>.96</td>
<td>.93</td>
</tr>
<tr>
<td>Concreteness</td>
<td></td>
<td>.82</td>
<td>.95</td>
<td>.93</td>
<td>.89</td>
</tr>
<tr>
<td>Self-exploration</td>
<td></td>
<td>.92</td>
<td>.94</td>
<td>.79</td>
<td>.90</td>
</tr>
</tbody>
</table>
### Table II

**Inter-rater Reliability for Counseling Process Variables**

<table>
<thead>
<tr>
<th></th>
<th>Team I (Raters I and II)</th>
<th>Team II (Raters III and IV)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$r$ 0.80</td>
<td>$r$ 0.54</td>
</tr>
<tr>
<td>Empathy</td>
<td>$r$ 0.78</td>
<td>$r$ 0.75</td>
</tr>
<tr>
<td>Positive regard</td>
<td>$r$ 0.35</td>
<td>$r$ 0.32</td>
</tr>
<tr>
<td>Genuineness</td>
<td>$r$ 0.91</td>
<td>$r$ 0.73</td>
</tr>
<tr>
<td>Concreteness</td>
<td>$r$ 0.78</td>
<td>$r$ 0.77</td>
</tr>
<tr>
<td>Self-exploration</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Intra-rater reliability. The rate-rerate reliabilities on the same nine excerpts of a training tape over a period of a week ranged between Pearson coefficients of .79 and .99 for the four raters on all of the five scales (See Table I).

Inter-rater reliability. The inter-rater reliabilities for the two raters on the first rating team yielded Pearson coefficients ranging between .78 and .91 for all of the five scales involved. The inter-rater reliabilities for the two raters on team II ranged between .32 and .75 for all of the five scales involved (See Table II).

Statistical Analysis of the Data

When all five counseling process variables were combined and an overall difference score was obtained on each of the four indices, the t tests yielded significant differences in eight of twelve instances (See Table III). On testing the overall differences, Hypothesis I, that the training group proper would demonstrate significantly greater differences in performance than the control group proper, was supported in all cases. Both the objective tape ratings and the reports of the interviewee, the trainee and the significant other or dormitory roommate yielded the same significant differences: Group I in all cases demonstrated a significantly higher difference on the level of interpersonal functioning of its members than did the control group, Group III.

Hypothesis II, that the training control group would demonstrate significantly greater differences in performance than the control group proper, was supported on two of four indices. The differences between Group II and Group III on the tape ratings and the reports of significant others, while in the predicted direction, did not attain statistical significance. However, the self reports and the reports of the standard interviewees yielded statistically significant differences in favor of Group II.
Table III

Tests for Significant Differences Overall on Pre and Post Training Indices of Interpersonal Functioning

<table>
<thead>
<tr>
<th>Indices</th>
<th>I vs. III</th>
<th>II vs. III</th>
<th>I vs. II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tape Ratings</td>
<td>1.71 *</td>
<td>.64</td>
<td>.98</td>
</tr>
<tr>
<td>Interviewee Report</td>
<td>6.96 **</td>
<td>3.52 **</td>
<td>3.68 **</td>
</tr>
<tr>
<td>Self Report</td>
<td>1.90 *</td>
<td>1.81 *</td>
<td>1.27</td>
</tr>
<tr>
<td>Significant Other</td>
<td>2.11 **</td>
<td>1.59</td>
<td>4.55 **</td>
</tr>
</tbody>
</table>

* Significant at the .05 level, one-tailed.
** Significant at the .01 level.
Hypothesis III, that the training group proper would demonstrate significantly greater differences in performance than the training control group was supported on two of the four indices. While the differences on the tape ratings and the self reports for Groups I and II were in the predicted direction, they did not attain statistical significance. Only the reports of the standard interviewees and the significant others or roommates yielded statistically significant differences in favor of Group I.

Overall, then, Group I, the training group proper, on all indices demonstrated improvement significantly greater than Group III, the control group proper. Group II demonstrated improvement significantly greater than Group III on the interviews and self reports and Group I demonstrated improvement significantly greater than Group II on the reports of the interviewees and significant others.

It is important to note that, with the exception of the index involving the reports of significant others or roommates, the trends were consistent throughout: Group I consistently demonstrated the greatest amount of constructive change; Group II demonstrated change greater than Group III but not as great as Group I; and Group III demonstrated the least change. The rankings of Groups II and III were reversed on the reports of the significant others, with Group I still demonstrating the greatest improvement (See Table I, II, III, IV and V, Appendix C).

On the tape ratings, no significant differences overall were found between the overall ratings of any of the groups before training: Groups I vs. III, $t = .09$ N.S.; Groups II vs. III, $t = .28$ N.S.; Groups I vs. II, $t = .37$ N.S. (See Table V, Appendix C). In addition, while all the differences between groups on the individual dimensions were in the predicted direction on the tape ratings, none attained statistical significance (See Table IV).
<table>
<thead>
<tr>
<th>Dimensions</th>
<th>I vs. III</th>
<th>II vs. III</th>
<th>I vs. II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy</td>
<td>1.03</td>
<td>.17</td>
<td>.83</td>
</tr>
<tr>
<td>Positive regard</td>
<td>1.07</td>
<td>.50</td>
<td>.49</td>
</tr>
<tr>
<td>Genuineness</td>
<td>1.30</td>
<td>.53</td>
<td>.51</td>
</tr>
<tr>
<td>Concreteness</td>
<td>1.44</td>
<td>.62</td>
<td>.74</td>
</tr>
<tr>
<td>Self-exploration</td>
<td>.91</td>
<td>.13</td>
<td>.67</td>
</tr>
</tbody>
</table>
The inventory filled out by the standard interviewee before and after training yielded a number of important findings. In all cases, Group I, the training group proper, was ranked first in improvement on the individual dimensions; Group II, the training control group, was second and Group III, the control group, ranked last (See Table II, Appendix C). On four of the five dimensions Group I demonstrated significantly greater improvement than Group III. Only on the dimension of genuineness did the differences not attain statistical significance. Group II demonstrated significantly greater change than Group III on the dimension of concreteness and the interviewee depth of self-exploration. Group I demonstrated significantly greater improvement than Group II on the dimensions of empathy, positive regard and concreteness (See Table V).

On the inventory filled out by the trainee himself, the results again indicated consistent trends on all individual dimensions: Group I demonstrated the greatest change; Group II demonstrated change greater than Group III but not as great as Group I; Group III demonstrated the least constructive change (See Table III, Appendix C). Group I demonstrated significantly greater change than Group III on the individual dimensions of empathy, positive regard and concreteness. Group II demonstrated significantly greater change than Group III on positive regard. Group I demonstrated significantly more improvement than Group II on the dimension of interviewee self-exploration (See Table VI).

On the inventories filled out by the significant others or roommates, Group I again consistently demonstrated the greatest amount of constructive gain on all individual indices. However, with the exception of the concreteness dimension, Group III, the control group proper, demonstrated more improvement on the individual dimensions than Group II, the training control group (See Table IV, Appendix C). With the exception of the statistically significant
Table V

Tests for Significant Differences on the Pre and Post Interviewee Inventory Among Experimental and Control Groups for Counseling Process Variables

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>I vs. III</th>
<th>II vs. III</th>
<th>I vs. II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy</td>
<td>4.18 **</td>
<td>0.76</td>
<td>3.38 **</td>
</tr>
<tr>
<td>Positive regard</td>
<td>5.14 **</td>
<td>1.45</td>
<td>3.84 **</td>
</tr>
<tr>
<td>Genuineness</td>
<td>1.64</td>
<td>0.95</td>
<td>0.94</td>
</tr>
<tr>
<td>Concreteness</td>
<td>6.24 **</td>
<td>3.89 **</td>
<td>1.93 *</td>
</tr>
<tr>
<td>Self-exploration</td>
<td>7.98 **</td>
<td>3.37 **</td>
<td>1.28</td>
</tr>
</tbody>
</table>

* Significant at the .05 level, one-tailed.
** Significant at the .01 level.
Table VI

Tests for Significant Differences on the Pre and Post Self Inventory Among Experimental and Control Groups for Counseling Process Variables

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>I vs. III</th>
<th>II vs. III</th>
<th>I vs. II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy</td>
<td>2.09 **</td>
<td>.52</td>
<td>1.24</td>
</tr>
<tr>
<td>Positive regard</td>
<td>2.38 **</td>
<td>1.97 *</td>
<td>.01</td>
</tr>
<tr>
<td>Genuineness</td>
<td>1.34</td>
<td>1.05</td>
<td>.48</td>
</tr>
<tr>
<td>Concreteness</td>
<td>2.73 **</td>
<td>1.31</td>
<td>1.03</td>
</tr>
<tr>
<td>Self-exploration</td>
<td>1.22</td>
<td>1.25</td>
<td>1.90 *</td>
</tr>
</tbody>
</table>

* Significant at the .05 level, one-tailed.
** Significant at the .01 level.
differences between Groups I and III on the concreteness dimension, the only other statistically significant differences were between Groups I and II, where Group I demonstrated significantly greater change on all dimensions except positive regard (See Table VII).

Discussion

Hypothesis I was supported overall on all four criteria and Hypothesis II and III were each supported on two of the four criteria. In general, the results favor Group I, the training group proper over Group II, the training control group and Group II over Group III, the control group proper. The facts that all trainees were randomly assigned to one of the three groups and that there were no significant overall differences on the initial levels of interpersonal functioning between groups underscores the importance of the pronounced and consistent trends following only the very briefest of training. The direct suggestion is that a systematically implemented program integrating both the didactic and experiential aspects of training and making heavy use of previously validated research scales and group therapy is superior to the usually, more loosely conceived and implemented programs, which is, in turn, superior to the control group which received no training at all and which appeared to demonstrate minimal practice and/or temporal effects. The implications for the training programs which we traditionally see in operation are profound. While it is apparent that they effect some results, as for example in this research on the self reports of the trainees and the reports of their clients, their efforts are not parsimonious in achieving the maximum amount of effectiveness with the minimum investment. In addition, there is the issue of whether or not Group II would have effected results significantly different from a group meeting the same number of sessions with an untrained leader (Carkhuff, 1965a).

In obtaining overall difference scores, some assumptions were made concerning the five dimensions involved. In the first place, while specific
Table VII
Tests for Significant Differences on the Pre and Post Roomate Inventory Among Experimental and Control Groups for Counseling Process Variables

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>I vs. III</th>
<th>II vs. III</th>
<th>I vs. II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy</td>
<td>1.49</td>
<td>0.68</td>
<td>1.90 *</td>
</tr>
<tr>
<td>Positive regard</td>
<td>1.26</td>
<td>1.41</td>
<td>1.43</td>
</tr>
<tr>
<td>Genuineness</td>
<td>1.17</td>
<td>0.60</td>
<td>1.69 *</td>
</tr>
<tr>
<td>Concreteness</td>
<td>3.00 **</td>
<td>0.98</td>
<td>2.54 **</td>
</tr>
<tr>
<td>Self-exploration</td>
<td>0.87</td>
<td>1.47</td>
<td>1.84 *</td>
</tr>
</tbody>
</table>

* Significant at the .05 level, one-tailed.
** Significant at the .01 level.
training centered around each of the five dimensions, there is controversy as to the independence of these dimensions (Truax and Carkhuff, 1963, 1964). In addition, one of the dimensions, interviewee self-exploration, can be considered a dependent variable. In general, however, there is reason to believe that the independence or correlation of dimensions is in large part dependent upon the counselors and clients involved. For example, some counselors appear to be high on all dimensions while some are consistently low. Other counselors are high on some dimensions and low on others, thus demonstrating no necessary relationship between the dimensions other than in the very facilitative and very retarding counselors. In summary, considering the short-term nature of the training, it was felt that an overall difference score obtained by summing all differences on all dimensions was appropriate for the purposes of this research demonstration.

Concerning the indices in general some important observations can be made. The tape rating appeared to be least powerful in differentiating the groups and the interviewee inventories most powerful. The interviewee inventories established significant overall differences on all hypotheses and on nine of 15 individual dimensions, perhaps suggesting an important experiential difference in the clients seen by trained or untrained counselors. With the exception of the inventories filled out by the significant others or roommates, it is important to note that all trends on all dimensions of all indices were consistent: Group I ranked first; Group II ranked second; and Group III ranked third. On the roommate inventory Group I again ranked first. However, Group III ranked second and Group II, third, indicating the lack of generalization of effects of the training control group to the experiences of significant others. One possible explanation is the lack of substantive direction emanating from the training control experience, i.e. a lack of sufficient degree of closure which left the trainees unable to make application in another context.
Further, concerning the tape ratings specifically, while all trends on all dimensions were consistent in the predicted direction, the only significant difference obtained on them was the overall difference between Groups I and III. No differences were obtained on any of the individual dimensions or between Groups II and III, and between Groups I and II. In large part this can be attributed to the limited training time involved. In the earlier studies (Caridduff and Truax, 1965, 1965a), 100 hours of total training time were involved and the final levels of functioning exceeded those resultant from the present 20-hour training program. The limited range of ratings, ranging approximately from level 1 to level 3, apparently required a training program of greater duration in order to achieve statistically significant differences.

The base rate data on the tape ratings is important in and of itself. On all of the dimensions, the subjects of all three groups were functioning at approximately level 2, thus suggesting that the population of college students, when cast in a helping role is functioning at less than minimally facilitative interpersonal levels prior to training. The implications for traditional dormitory counselor programs as well as many other counseling programs in general are critical.

The present research, then, was successful in establishing the differential effects of two different kinds of training programs when compared to a control group. It successfully incorporated three innovating dimensions in the area of research in counseling training and counseling in general: (a) a variety of change indices which allow us to determine that programs have what effects upon what dimensions of what indices; (b) pre and post measures of both individual and overall dimensions which allow us to discriminate our final level of functioning from our initial level and to attribute the differences to the intervening
experience; (c) a training control group which allow us to differentiate the
effects of a training experience from those of a group meeting the same number
of sessions and doing the same kinds of things with the exception of those
critical to the training. While the present research assessed the level of
dimensions related in previous and extensive research to client outcomes, there
is a further need in future research to break free of possibly circular efforts
in extending the studies to outcome research in completing the following cycle:
(a) making some kind of naturalistic assessment of the dimension involved and
the outcome currently achieved in a particular counseling setting; (b) assessing
the level of the dimension offered by both the trainees and their controls, both
prior to and subsequent to the training; (c) introducing training control groups
including those which meet together for a similar amount of time with instruc-
tors for other than the specific training purposes; (d) specifying the more
didactic methods by which the trainee will be taught the dimensions involved;
(e) assessing in some way the level of the dimensions provided the trainees in
the context of training; and (f) assessing client process and outcome variables
in order to determine whether or not the training program has indeed led to
better results than those established in the initial naturalistic studies.

In summary, the results suggest that in a brief period of time a systema-
tically implemented program incorporating both counseling process research scales
and a quasi-therapeutic experience can contribute significantly to constructive
gains in interpersonal functioning. In addition, on some dimensions, the
integrated didactic and experiential program develops significantly greater
interpersonal skills than a non-systematically implemented training control group.
The implications for improving the level of functioning on those interpersonal
dimensions related to constructive gain or change for all professional and non-
professional counselors are profound.
An experimental project studying the extensions of an extensive body of literature relating facilitative process variables in counseling to a variety of indices of client gain or change was conducted. The dimensions of counselor empathy, positive regard, genuineness, specificity or concreteness and interviewee self-exploration were the subjects of systematic attention in a training program integrating the didactic and experiential approaches to counseling training. Volunteer college students were randomly assigned to one of three groups: the training group proper which employed previously validated research scales assessing the dimensions involved and which incorporated a quasi-therapeutic experience; the training control group which did everything that the training group did with the exception of the employment of research scales and the group therapy experience; a control group proper which received no training experience. Innovating controls on previous training research included the following: pre-post measures on all groups; the employment of both the training control group and the control group proper; the variety of indices, including objective tape-ratings, interviewee reports, self reports and the reports of significant others which allowed for the study of the differential effects of each approach. Hypothesis I, that the training group proper would demonstrate significantly greater improvement in their level of interpersonal functioning overall than would the control group proper was supported on all indices. Hypothesis II, that the training control group would demonstrate significantly greater improvement in their level of interpersonal functioning overall than would the control group proper was supported on two of four indices with one of the remaining two indices in the predicted direction. Hypothesis III, that the training group proper would demonstrate significantly greater improvement in their level of interpersonal functioning overall than would the training
control group was supported on two of four indices with the remaining two indices in the predicted direction. Qualifications, implications and suggestions for further research were considered.
References


Carkhuff, R. R. Genuineness in interpersonal processes. Mimeographed research scale, University of Massachusetts, 1964.

Carkhuff, R. R. Concreteness or specificity of expression in interpersonal processes. Mimeographed research scale, University of Massachusetts, 1964(a).

Carkhuff, R. R. Concreteness or specificity of expression in interpersonal processes. Mimeographed research scale, University of Massachusetts, 1964(b).

Carkhuff, R. R. Self-exploration in interpersonal processes. Mimeographed research scale, University of Massachusetts, 1964(b).


Carkhuff, R. R., Southworth, A. J. and Berenson, B. G. Respect or positive regard in interpersonal processes. Mimeographed research scale, University of Massachusetts, 1964.


Harvey, L. V. The use of non-professional auxilliary counselors in staffing a counseling service. *J. counsel. Psychol.*, 1964, 11, 348-357.


Appendix A

Research Scales for Measuring Process Variables of Interpersonal Functioning
Table I
Research Scale for Measuring Empathic Understanding

Empathic Understanding in Interpersonal Processes
A Scale for Measurement

Bernard G. Berenson, Robert R. Carkhuff, Alfred J. Southworth

Level 1
The first person appears completely unaware or ignorant of even the most conspicuous surface feelings of the other person(s).
Example: The first person may be bored or disinterested or simply operating from a preconceived frame of reference which totally excludes that of the other person(s).
In summary, the first person does everything but listen, understand or be sensitive to even the surface feelings of the other person(s).

Level 2
The first person responds to the surface feelings of the other person(s) only infrequently. The first person continues to ignore the deeper feelings of the other person(s).
Example: The first person may respond to some surface feelings but tends to assume feelings which are not there. He may have his own ideas of what may be going on in the other person(s) but these do not appear to correspond with those of the other person(s).
In summary, the first person tends to respond to things other than what the other person(s) appear to be expressing or indicating.

Level 3
The first person almost always responds with minimal understanding to the surface feelings of the other person(s) but, although making an effort to understand the other person's deeper feelings almost always misses their import.
Example: The first person has some understanding of the surface aspects of the messages of the other person(s) but often misinterprets the deeper feelings.
In summary, the first person is responding but not aware of who that other person really is or of what that other person is really like underneath. Level 3 constitutes the minimal level of facilitative interpersonal functioning.

Level 4
The facilitator almost always responds with understanding to the surface feelings of the other person(s) and sometimes but not often responds with empathic understanding to the deeper feelings.
Example: The facilitator makes some tentative efforts to understand the deeper feelings of the other person(s).
In summary, the facilitator is responding, however infrequently, with some degree of empathic understanding of the deeper feelings of the other person(s).

Level 5
The facilitator almost always responds with accurate empathic understanding to all of the other person's deeper feelings as well as surface feelings.
Example: The facilitator is "together" with the other person(s) or "tuned in" on the other person's wavelength. The facilitator and the other person(s) might proceed together to explore previously unexplored areas of human living and human relationships.
The facilitator is responding with full awareness of the other person(s) and a comprehensive and accurate empathic understanding of his most deep feelings.
Table II
Research Scale for Measuring Positive Regard

Respect or Positive Regard in Interpersonal Processes
A Scale for Measurement

Robert R. Carkhuff, Alfred J. Southworth and Bernard G. Berenson

Level 1
The first person is communicating clear negative regard for the second person.
Example: The first person may be actively offering advice or telling the second person what would be "best" for him.
In summary, in many ways the first person acts in such a way as to make himself the focus of evaluation and sees himself as responsible for the second person.

Level 2
The first person responds to the second person in such a way as to communicate little positive regard.
Example: The first person responds mechanically or passively or ignores the feelings of the second person.
In summary, in many ways the first person displays a lack of concern or interest for the second person.

Level 3
The first person communicates a positive caring for the second person but there is a conditionality to the caring.
Example: The first person communicates that certain kinds of actions on the part of the second person will reward or hurt the first person.
In summary, the first person communicates that what the second person does or does not do, matters to the first person. Level 3 constitutes the minimal level of facilitative interpersonal functioning.

Level 4
The facilitator clearly communicates a very deep interest and concern for the welfare of the second person.
Example: The facilitator enables the second person to feel free to be himself and to be valued as an individual except on occasion in areas of deep personal concern to the facilitator.
In summary, the facilitator sees himself as responsible to the second person.

Level 5
The facilitator communicates a very deep respect for the second person's worth as a person and his rights as a free individual.
Example: The facilitator cares very deeply for the human potentials of the second person.
In summary, the facilitator is committed to the value of the other person as a human being.
Table III
Research Scale for Measuring Genuineness

Facilitative Genuineness in Interpersonal Processes
A Scale for Measurement

Robert R. Carkhuff

Level 1
The first person's verbalizations are clearly unrelated to what he is feeling at the moment, or his only genuine responses are negative in regard to the second person(s) and appear to have a totally destructive effect upon the second person.

Example: The first person may be defensive in his interaction with the second person(s) and this defensiveness may be demonstrated in the content of his words or his voice quality and where he is defensive he does not employ his reaction as a basis for potentially valuable inquiry into the relationship.

In summary, there is evidence of a considerable discrepancy between the first person's inner experiencing and his current verbalizations or where there is no discrepancy the first person's reactions are employed solely in a destructive fashion.

Level 2
The first person's verbalizations are slightly unrelated to what he is feeling at the moment or when his responses are genuine they are negative in regard to the second person and the first person does not appear to know how to employ his negative reactions constructively as a basis for inquiry into the relationship.

Example: The first person may respond to the second person(s) in a "professional" manner that has a rehearsed quality or a quality concerning the way a helper "should" respond in that situation.

In summary, the first person is usually responding according to his prescribed "role" rather than to express what he personally feels or means and when he is genuine his responses are negative and he is unable to employ them as a basis for further inquiry.

Level 3
The first person provides no "negative" cues between what he says and what he feels, but he provides no positive cues to indicate a really genuine response to the second person(s).

Example: The first person may listen and follow the second person(s), but commits nothing more of himself.

In summary, the first person appears to make appropriate responses which do not seem insincere but which do not reflect any real involvement either. Level 3 constitutes the minimal level of facilitative interpersonal functioning.

Level 4
The facilitator presents some positive cues indicating a genuine response (whether positive or negative) in a non-destructive manner to the second person(s).

Example: The facilitator's expressions are congruent with his feelings although he may be somewhat hesitant about expressing them fully.

In summary, the facilitator responds with many of his own feelings and there is no doubt as to whether he really means what he says and he is able to employ his responses whatever their emotional content, as a basis for further inquiry into the relationship.

Level 5
The facilitator is freely and deeply himself in a non-exploitative relationship with the second person(s).
Example: The facilitator is completely spontaneous in his interaction and open to experiences of all types, both pleasant and hurtful, and in the event of hurtful responses the facilitator's comments are employed constructively to open a further area of inquiry for both the facilitator and the second person.

In summary, the facilitator is clearly being himself and yet employing his own genuine responses constructively.
<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>The first person leads or allows all discussion with the second person(s) to deal only with vague and anonymous generalities. Example: The first person and the second person discuss everything on strictly an abstract and highly intellectual level. In summary, the first person makes no attempt to lead the discussion into the realm of personally relevant specific situations and feelings.</td>
</tr>
<tr>
<td>Level 2</td>
<td>The first person frequently leads or allows even discussions of material personally relevant to the second person(s) to be dealt with on a vague and abstract level. Example: The first person and the second person may discuss &quot;real&quot; feelings but they do so at an abstract, intellectualized level. In summary, the first person does not elicit discussion of most personally relevant feelings and experiences in specific and concrete terms.</td>
</tr>
<tr>
<td>Level 3</td>
<td>The first person at times enables the second person(s) to discuss personally relevant material in specific and concrete terminology. Example: The first person will help to make it possible for the discussion with the second person(s) to center directly around most things which are personally important to the second person(s) although there will continue to be areas not dealt with concretely and areas which the second person does not develop fully in specificity. In summary, the first person sometimes guides discussions into consideration of personally relevant specific and concrete instances but these are not always fully developed. Level 3 constitutes the minimal level of facilitative functioning.</td>
</tr>
<tr>
<td>Level 4</td>
<td>The facilitator is frequently helpful in enabling the second person(s) to fully develop in concrete and specific terms almost all instances of concern. Example: The facilitator is able on many occasions to guide the discussion to specific feelings and experiences of personally meaningful material. In summary, the facilitator is very helpful in enabling the discussion to center around specific and concrete instances of most important and personally relevant feelings and experiences.</td>
</tr>
<tr>
<td>Level 5</td>
<td>The facilitator is always helpful in guiding the discussion so that the second person(s) may discuss fluently, directly and completely specific feelings and experiences. Example: The first person involves the second person in discussion of specific feelings, situations and events, regardless of their emotional content. In summary, the facilitator facilitates a direct expression of all personally relevant feelings and experiences in concrete and specific terms.</td>
</tr>
</tbody>
</table>
Level 1.
The second person does not discuss personally relevant material, either because he has had no opportunity to do such or because he is actively evading the discussion even when it is introduced by the first person.
Example: The second person avoids any self-descriptions or self-exploration or direct expression of feelings that would lead him to reveal himself to the first person.
In summary, for a variety of possible reasons, the second person does not give any evidence of self-exploration.

Level 2.
The second person responds with discussion to the introduction of personally relevant material by the first person but does so in a mechanical manner and without the demonstration of emotional feeling.
Example: The second person simply discusses the material without exploring the significance or the meaning of the material or attempting further exploration of that feeling in our effort to uncover related feelings or material.
In summary, the second person responds mechanically and remotely to the introduction of personally relevant material by the first person.

Level 3.
The second person voluntarily introduces discussions of personally relevant material but does so in a mechanical manner and without the demonstration of emotional feeling.
Example: The emotional remoteness and mechanical manner of the discussion give the discussion a quality of being rehearsed.
In summary, the second person introduces personally relevant material but does so without spontaneity or emotional proximity and without an inward probing to newly discover feelings and experiences.

Level 4.
The second person voluntarily introduces discussions of personally relevant material with both spontaneity and emotional proximity.
Example: The voice quality and other characteristics of the second person are very much "with" the feelings and other personal materials which are being verbalized.
In summary, the second person, the second person introduces personally relevant discussions with spontaneity and emotional proximity but without a distinct tendency toward inward probing to newly discover feelings and experiences.

Level 5.
The second person actively and spontaneously engages in an inward probing to newly discover feelings or experiences about himself and his world.
Example: The second person is searching to discover new feelings concerning himself and his world even though at the moment he may be doing so perhaps fearfully and tentatively.
In summary, the second person is fully and actively focusing upon himself and exploring himself and his world,
Appendix B

Inventories for Assessing Process Variables of Interpersonal Functioning
Table I

Inventory for Assessing Self Interpersonal Functioning

UNIVERSITY OF MASSACHUSETTS RELATIONSHIP INVENTORY
COUNSELING PSYCHOLOGY

Bernard G. Berenson  Robert R. Carkhuff  Pamela Myrus

Department of Psychology and Counseling Center
University of Massachusetts

Be completely honest. These responses are for research purposes and strictly confidential.

SELF-FORM

Below are listed a variety of ways that persons may feel or behave in relation to other persons.

Mark each statement in the left margin, according to how strongly you feel that it is true, or not true. Please mark every one. Write in the numbers to stand for the following answers:

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

1. I tell many people things that I do not mean.
2. Many people are able to tell me what feelings, if any, they have trouble controlling.
3. I am able to help many people find the proper words to express their emotions.
4. Many people are never able to tell me what they respect most or least about themselves.
5. I am able to understand many people.
6. I am able to make my points precisely and clearly.
7. People are able to tell me what it takes to hurt their feelings deeply.
8. When people do not say what they mean at all clearly, I am still able to understand them.
9. I don't think that I am being honest with myself about the I feel about people.
10. I allow people to talk abstractly about things in general.

11. People are never able to tell me things about themselves that they would like to improve (such as their appearance, lack of knowledge, loneliness, temper, etc.).

12. At times I jump to the conclusion that people feel more strongly or more concerned about something than they actually do.

13. I care about people.

14. I encourage people to be specific.

15. People are able to be secure and comfortable in a relationship with me.

16. I act a part with people.

17. People are able to tell me some of their innermost secrets.

18. People have not told me what it takes to get them really worried, anxious, or afraid.

19. What I say to people never conflicts with what I think or feel.

20. People have never been able to tell me their feelings about their own social adequacy.

21. My interest in people depends on what they are talking about.

22. People are never able to tell their personal views on sexual morality -- how they feel that they and others ought to behave in sexual matters.

23. I like people better when they behave in some ways than I do when they behave in other ways.

24. I do not realize how strongly people feel about some of the things they discuss.

25. My vagueness makes it hard for me to be understood.

26. People feel that I am being genuine with them.

27. People have never been able to tell me things that they will barely admit to themselves.

28. My vague replies to people's statements often lose or confuse them.

29. I generally sense or realize how people are feeling.
30. I am friendly and warm towards people.
31. People have never been able to tell me the kinds of things they have succeeded or failed at in their life.
32. At times I am not aware of something that people can sense in their response to me.
33. I enable people to put their emotions into concrete terms in talking with me.
34. I pretend that I like people or understand them more than I really do.
35. I behave just the way that I am, in my relationships.
36. I ignore some of people's feelings.
37. I disapprove of many people.
38. I can help people clarify half-formed thinking or vague generalities.
39. I seem to "beat around the bush" in talking.
40. I do not really care what happens to many people.
41. I nearly always know exactly what people mean, regardless of how clear they are.
42. I understand people's words but do not realize how they feel.
43. My own attitudes toward some of the things that people say, or do, stop me from really understanding them.
44. I dislike many people.
45. I do not try to mislead people about my own thoughts or feelings.
46. I appreciate exactly what people's experiences feel like to them.
47. I like talking with many people.
48. I respect many people.
49. I feel that I really value many people.
50. I discuss "feeling" at an abstract level.
Table II
Inventory for Assessing the Interpersonal Functioning of Others

UNIVERSITY OF MASSACHUSETTS RELATIONSHIP INVENTORY
COUNSELING PSYCHOLOGY
Bernard G. Berenson  Robert R. Carkhuff  Pamela Myrus
Department of Psychology and Counseling Center
University of Massachusetts

Be completely honest. These responses are for research purposes and strictly confidential.

(Interviewee - Form)

Below are listed a variety of ways that one person may feel or behave in relation to another person.

Please consider each statement carefully with reference to your present relationship with ________.

Mark each statement in the left margin, according to how strongly you feel that it is true, or not true, in this relationship. Please mark every one. Write in the numbers to stand for the following answers:

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

____ 1. He (she) tells me things that he (she) does not mean.
____ 2. I have told him (her) what feelings, if any, I have trouble controlling.
____ 3. He (she) helped me find the proper words to express my emotions.
____ 4. I have never told him (her) what I respect most or least about myself.
____ 5. He (she) understands me.
____ 6. He makes his (her) points precisely and clearly.
____ 7. I have told him (her) what it takes to hurt my feelings deeply.
8. When I do not say what I mean at all clearly, he (she) still understands me.

9. I don't think that he (she) is being honest with himself about the way he feels about me.

10. He (she) allows me to talk abstractly about things in general.

11. I have never told him (her) things about myself that I would like to improve (such as my appearance, lack of knowledge, loneliness, temper, etc.).

12. At times he jumps to the conclusion that I feel more strongly or more concerned about something than I actually do.

13. He (she) cares about me.

14. He (she) encourages me to be specific.

15. He (she) is secure and comfortable in our relationship.

16. He (she) is acting a part with me.

17. I have told him (her) some of my innermost secrets.

18. I have told him (her) what it takes to get me real worried, anxious, or afraid.

19. What he (she) says to me never conflicts with what he (she) thinks or feels.

20. I have never told him (her) my feelings about my own social adequacy.

21. His (her) interest in me depends on what I am talking about.

22. I have told him (her) my personal views on sexual morality -- how I feel that I and others ought to behave in sexual matters.

23. He (she) likes me better when I behave in some ways than he (she) does when I behave in other ways.

24. He (she) does not realize how strongly I feel about some of the things we discuss.

25. His vagueness makes it hard for him (her) to be understood.

26. I feel that he (she) is being genuine with me.

27. I have never told him (her) things that I barely will admit to myself.

28. His (her) vague replies to my statements often lose or confuse me.
29. He generally senses or realizes how I am feeling.
30. He (she) is friendly and warm towards me.
31. I have never told him (her) the kinds of things I have succeeded or failed at in my life.
32. At times he (she) is not aware of something that I can sense in his (her) response to me.
33. He (she) enables me to put my emotions into concrete terms in talking with him.
34. He (she) pretends that he (she) likes me or understands me more than he (she) really does.
35. He behaves just the way that he (she) is, in our relationship.
36. He (she) ignores some of my feelings.
37. He (she) disapproves of me.
38. He (she) can help me clarify half-formed thinking or vague generalities.
39. He (she) seems to "beat around the bush" in talking.
40. He (she) does not really care what happens to me.
41. He (she) nearly always knows exactly what I mean, regardless of how clear I am.
42. He (she) understands my words but does not realize how I feel.
43. His (her) own attitudes toward some of the things I say, or do stop him from really understanding me.
44. He dislikes me.
45. He (she) does not try to mislead me about his own thoughts or feelings.
46. He (she) appreciates exactly how I feel.
47. He (she) likes talking with me.
48. He (she) respects me.
49. I feel that he (she) really values me.
50. He (she) discusses "feelings" at an abstract level.
Appendix C

Raw Data of Difference Scores
### Table I

Means and SDs of the Difference Scores on Pre and Post Tape Ratings for Counseling Process Variables

<table>
<thead>
<tr>
<th>Dimensions:</th>
<th>Group I</th>
<th>Group II</th>
<th>Group III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>.82</td>
<td>.43</td>
<td>.18</td>
</tr>
<tr>
<td>SD</td>
<td>.57</td>
<td>.69</td>
<td>.53</td>
</tr>
<tr>
<td>Empathy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>.85</td>
<td>.41</td>
<td>.32</td>
</tr>
<tr>
<td>SD</td>
<td>.87</td>
<td>.87</td>
<td>.84</td>
</tr>
<tr>
<td>Positive regard</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>.62</td>
<td>.32</td>
<td>.01</td>
</tr>
<tr>
<td>SD</td>
<td>.55</td>
<td>.76</td>
<td>.57</td>
</tr>
<tr>
<td>Genuineness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>.58</td>
<td>.27</td>
<td>-.06</td>
</tr>
<tr>
<td>SD</td>
<td>.33</td>
<td>.91</td>
<td>.46</td>
</tr>
<tr>
<td>Concreteness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>1.11</td>
<td>.64</td>
<td>.25</td>
</tr>
<tr>
<td>SD</td>
<td>.64</td>
<td>.74</td>
<td>.60</td>
</tr>
<tr>
<td>Self-exploration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>.93</td>
<td>.52</td>
<td>.45</td>
</tr>
<tr>
<td>SD</td>
<td>.63</td>
<td>.66</td>
<td>.33</td>
</tr>
</tbody>
</table>
Table II
Means and SDs of the Difference Scores on the Pre and Post Interviewee Inventory for Counseling Process Variables

<table>
<thead>
<tr>
<th>Dimensions:</th>
<th>Groups</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>II</td>
<td>III</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>7.03</td>
<td>1.73</td>
<td>-2.85</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>9.30</td>
<td>6.81</td>
<td>6.35</td>
<td></td>
</tr>
<tr>
<td>Empathy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>6.25</td>
<td>-1.42</td>
<td>3.08</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>9.79</td>
<td>8.47</td>
<td>7.95</td>
<td></td>
</tr>
<tr>
<td>Positive regard</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>8.42</td>
<td>0.08</td>
<td>2.92</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>9.19</td>
<td>7.13</td>
<td>7.66</td>
<td></td>
</tr>
<tr>
<td>Genuineness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>4.67</td>
<td>2.42</td>
<td>0.75</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>13.63</td>
<td>4.65</td>
<td>6.35</td>
<td></td>
</tr>
<tr>
<td>Concreteness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>4.67</td>
<td>1.33</td>
<td>-4.92</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>6.32</td>
<td>3.82</td>
<td>5.12</td>
<td></td>
</tr>
<tr>
<td>Self-exploration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>11.17</td>
<td>2.75</td>
<td>-3.92</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>6.93</td>
<td>8.24</td>
<td>5.31</td>
<td></td>
</tr>
<tr>
<td>Dimensions:</td>
<td>I</td>
<td>II</td>
<td>III</td>
<td></td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>2.87</td>
<td>1.71</td>
<td>1.10</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>5.23</td>
<td>4.49</td>
<td>4.46</td>
<td></td>
</tr>
<tr>
<td>Empathy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>3.52</td>
<td>1.91</td>
<td>1.25</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>5.59</td>
<td>4.63</td>
<td>6.05</td>
<td></td>
</tr>
<tr>
<td>Positive regard</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>2.17</td>
<td>2.18</td>
<td>1.03</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>5.24</td>
<td>4.04</td>
<td>3.87</td>
<td></td>
</tr>
<tr>
<td>Genuineness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>2.17</td>
<td>2.36</td>
<td>1.08</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>3.39</td>
<td>5.39</td>
<td>5.04</td>
<td></td>
</tr>
<tr>
<td>Concreteness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>4.33</td>
<td>2.27</td>
<td>1.42</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>4.41</td>
<td>4.13</td>
<td>5.37</td>
<td></td>
</tr>
<tr>
<td>Self-exploration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>1.83</td>
<td>1.82</td>
<td>1.17</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>3.27</td>
<td>4.71</td>
<td>3.16</td>
<td></td>
</tr>
</tbody>
</table>
### Table IV
Means and SDs of the Difference Scores on the Pre and Post Roommate Inventory for Counseling Process Variables

<table>
<thead>
<tr>
<th>Dimensions:</th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>1.75</td>
<td>-3.00</td>
<td>-1.18</td>
</tr>
<tr>
<td>SD</td>
<td>5.89</td>
<td>5.31</td>
<td>7.40</td>
</tr>
<tr>
<td>Empathy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>1.55</td>
<td>-2.52</td>
<td>-1.18</td>
</tr>
<tr>
<td>SD</td>
<td>5.88</td>
<td>4.54</td>
<td>5.35</td>
</tr>
<tr>
<td>Positive regard</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>-2.27</td>
<td>-4.32</td>
<td>-1.28</td>
</tr>
<tr>
<td>SD</td>
<td>6.04</td>
<td>5.03</td>
<td>9.92</td>
</tr>
<tr>
<td>Genuineness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>-4.45</td>
<td>-3.42</td>
<td>-1.91</td>
</tr>
<tr>
<td>SD</td>
<td>3.14</td>
<td>5.01</td>
<td>7.06</td>
</tr>
<tr>
<td>Concreteness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>3.45</td>
<td>-1.08</td>
<td>-2.82</td>
</tr>
<tr>
<td>SD</td>
<td>5.11</td>
<td>4.70</td>
<td>5.10</td>
</tr>
<tr>
<td>Self-exploration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>3.00</td>
<td>-3.58</td>
<td>1.00</td>
</tr>
<tr>
<td>SD</td>
<td>8.41</td>
<td>9.12</td>
<td>5.53</td>
</tr>
</tbody>
</table>
Table V
Means and SDs of the Pre and Post Tape Ratings for All Experimental Groups for Counseling Process Variables

<table>
<thead>
<tr>
<th>Dimensions:</th>
<th>Groups</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>I</td>
<td></td>
<td>II</td>
<td></td>
<td>III</td>
</tr>
<tr>
<td></td>
<td>Pre</td>
<td></td>
<td>Post</td>
<td>Pre</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>Mean</td>
<td>1.68</td>
<td>2.70</td>
<td>1.76</td>
<td>2.20</td>
<td>1.85</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>.45</td>
<td>.47</td>
<td>.44</td>
<td>.64</td>
<td>.35</td>
</tr>
<tr>
<td>Empathy</td>
<td>Mean</td>
<td>1.62</td>
<td>2.47</td>
<td>1.42</td>
<td>1.83</td>
<td>1.59</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>.28</td>
<td>.49</td>
<td>.28</td>
<td>.54</td>
<td>.12</td>
</tr>
<tr>
<td>Positive regard</td>
<td>Mean</td>
<td>2.09</td>
<td>2.71</td>
<td>1.96</td>
<td>2.29</td>
<td>2.03</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>.29</td>
<td>.47</td>
<td>.38</td>
<td>.47</td>
<td>.21</td>
</tr>
<tr>
<td>Genuineness</td>
<td>Mean</td>
<td>2.23</td>
<td>2.31</td>
<td>2.14</td>
<td>2.41</td>
<td>2.21</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>.28</td>
<td>.33</td>
<td>.48</td>
<td>.65</td>
<td>.22</td>
</tr>
<tr>
<td>Concreteness</td>
<td>Mean</td>
<td>1.75</td>
<td>2.86</td>
<td>1.78</td>
<td>2.42</td>
<td>1.84</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>.27</td>
<td>.47</td>
<td>.31</td>
<td>.61</td>
<td>.17</td>
</tr>
<tr>
<td>Self-exploration</td>
<td>Mean</td>
<td>1.74</td>
<td>2.67</td>
<td>1.48</td>
<td>2.03</td>
<td>1.57</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>.33</td>
<td>.60</td>
<td>.26</td>
<td>.65</td>
<td>.11</td>
</tr>
</tbody>
</table>