# THREE EXPERIMENTAL MODES OF COUNSELING

Garth Sorenson
University of California, Los Angeles

and

Richard K. Hawkins

Pupil Personnel Services Center, Roswell, New Mexico

The research and development reported herein was performed pursuant to a contract with the United States Department of Health, Education, and Welfare, Office of Education under the provisions of the Cooperative Research Program.

(Each paper printed as a Technical Report, Occasional Report, or Working Paper of the Center for the Study of Evaluation of Instructional Programs (UCLA) is reviewed prior to acceptance for publication. Standard journal review procedures are followed, which include submission of comments to the Director by professional reviewers. This insures that the technical competence of the papers will be maintained at the high level set by the Center.)

CSEIP Working Paper No. 5, August 1968 University of California, Los Angeles

### ABSTRACT

An evaluation model was applied to three experimental modes of counseling. They were compared on the basis of 3 interviews with respect to their affects on behavior, moods, and feelings about counseling.

Mode 1 counselors guided counselees in making their own plans for coping with problems. Mode 2 counselors suggested specific actions. Mode 3 counselors explored feelings. Three experimental counselors were trained in all 3 modes.

Thirty-six subjects, student teachers who reported stress, were randomly assigned to counselor and mode.

Their reactions to counseling were collected during and following interviews.

It was found that a) high-stress counselees were more likely to continue in counseling regardless of mode; b) more mode 2 counselees were satisfied with their interviews; c) more mode 1 counselees actually tried the plans they made during interviews.

Other findings and their implications are discussed.

# CONTENTS

ABSTRACT	ii
INTRODUCTION	1
THE STUDY	4
THE HYPOTHESES	15
THE DISCUSSION	21
SUMMARY	25
REFERENCES	27
TABLES	
Table 1. Three Experimental Modes of Counseling Categories of Counselor Verbal Behavior	9a
Table 2. The Number and Proportion of Counselor Responses in Each of the Experimental Counseling Modes	12a
Table 3. Summary of Acceptable and Error Counselor Verbal Responses	12b
Table 4. Summary of Obtained Frequencies and Proportions for Counselor Post-interview Responses on CIS Items for 83 Interviews	13a
Table 5. Chi-square Analyses of Counselor Post-Interview Responses on CIS Items for 83 Interviews	130
Table 6. Analysis of Variance for Counselor x Mode Effects on "Per- ception fo Counselor's Personal Qualities	14a
Table 7. Summary of Scores for Al- ternatives Tried between Inter- views by Counseling Modes	15 <i>a</i>

Table 8a. Summary of ATBI Scores by Mode and GPA Level (Averages of Second & Third Interview Scores)	17a
Table 8b. Comparison of ATBI Scores for High- and Low-GPA Counselees in Mode II	17a
Table 8c. Number of Counselees Reporting 0, 1 and more than 1 ATBI for High- and Low-GPA Level	17a
Table 9a. Mean Stress Scores for Counseled Student Teachers	18a
Table 9b. Comparison of Interviews Attended for High- and Low-stress Counselees	18a
Table 10. Summary of Analyses of Variance on Five Mood Factors (Based on Average Change Scores for 2, 3, or 4 Administrators	19a
Table lla. Means and Standard De- viations of Scores for Modes on "Feelings About Self" Scale	19b
Table llb. Analysis of Variance for Modes on "Feelings About Self" Scale	19b
Table 12a. Means and Standard Devi- ations of Scores for Modes on "At- titudes about External Environment" Scale	19c
Table 12b. Analysis of Variance for Modes on "Attitudes about External Environment" Scale	19c
Table 13a. Means and Standard Deviations Satisfaction Scores between Mode II and Mode III Counselees	20a
Table 13b. Summary of t-test for Mean Satisfaction Scores between Mode II and Mode III Counselees	20a
Table 14a. Means and Standard Deviations of Mode X Preference Subgroups on "Satisfaction with Content and Process of Counseling" Scale	20b

Table 14b. Analysis of Variance for Mode X Preference on "Satisfaction with Content and Process of Interviews"	20h
Table 14c. Summary of t-test for Preference Effect in Mode III	218
Table 15a. Means and Standard Devi- ations of Mode X GPA Subgroups on "Satisfaction with Content and Pro- cess of Counseling"	21
Table 15b. Analysis of Variance for Mode X GPA on "Satisfaction with Content and Process of Interviews"	211

# THREE EXPERIMENTAL MODES OF COUNSELING

Ideally, the best way to find out which of the many different methods of counseling are most useful would be to conduct a series of experiments in which different techniques were employed and their effectiveness compared. However, a number of obstacles make it difficult to conduct such experiments.

- 1. There are no fully adequate measures of counselee progress or improvement. Furthermore, counselors are not in agreement as to what kind of criterion measures are needed--partly because different counselors have different goals, partly because some counselors are satisfied with their own subjective impressions of counselee progress and do not feel that instruments are useful or even feasible, and partly because of measurement difficulties per se. The measurement difficulties are of two types: those having to do with the unreliability of human observers (Bruner and Tagiuri, 1954); and those having to do with development of proper scales, once reliable observations are obtainable, i.e., the problem of change scores, etc.
- 2. The various counseling and therapeutic methods have not been operationally defined. As Ford and Urban (1963) have observed, the proponents of the major systems of psychotherapy have generally avoided describing precisely what the therapist does to produce change in his clients. Problems of technique are usually discussed

and Guerney, 1957; Fiedler, 1950, 1951). However, again the research findings are neither consistent nor conclusive.

6. Even when a hoped-for change occurs in a counselee, it is difficult to determine what events in the interview or in the counselee's life outside of the interview caused the change. Problems relating to research design have been explicated by Campbell and Stanley (1963) and by Goldstein, Heller and Sechrest (1966).

In addition to the above categories, there are a number of problems which are more or less technological in nature. They have to do with developing a workable plan for experimental research in a naturalistic setting. There are the obvious tasks of selecting or creating instruments, of finding subjects, of training personnel to act as counselors and data processors. In addition there is the subtle task of developing a way for the investigator to "manipulate" the behavior of the counselor without distorting the interview and making it unrealistic.

Then there are ethical problems. Not all counselors are willing and able to participate in experimental research, for some believe that to follow an experimenter's directions rather than the counselor's own intuitive judgment is to withhold help from some counselees and is, therefore, immoral. Obviously ethical as well as research conventions must be satisfied.

The enterprise to be described in this paper was concerned in large part with technological problems, particularly with developing a way of controlling an interviewer's behavior and of gathering data while the interviewer is conducting a "natural" counseling interview. It is part of a continuing research project aimed

at developing an instructional mode of counseling (Sorenson, 1967). While some hypotheses were tested and the results reported below, the research findings are not as important at this phase of the project as is the general research strategy which has been developed. Both the number of subjects and the number of interviews were relatively small. The attrition rate was relatively high-high enough to prevent the testing of some of the hypotheses which it was planned to test; the outcome measures have to do with intermediate rather than long-term counseling goals; and there are other limitations which will be evident. In spite of these limitations, some of the findings are provocative and instructive; and it would appear that the general strategy is sufficiently promising to justify description and replication, of course with appropriate steps to remedy the obvious defects.

### The Study

Thirty-six subjects, all women, volunteered to participate in three interviews and an evaluation session. They were informed that they were participating in a study of counseling procedures, but were given no other information about the project. Each subject was randomly assigned to one of three counselors and to one of three experimental counseling modes. Data about the subjects and about the outcomes of counseling were collected by means of standardized questions during the interviews and by self-reports a) before each interview and b) a week after completion of counseling.

or physical action in regard to his problem or concern, and to achieve a more comfortable feeling about himself and his world. However, these goals were not stated explicitly by the counselors in any of the interviews. The criterion measures were the following:

- 1. Alternatives tried between interviews (ATBI). Counselees were asked to report at the beginning of the second and third interviews any actions which they had taken to try out plans made during previous interviews or as a consequence of previous interviews. "Since our last session, have you done anything differently, or had any new feelings or thoughts about what was bothering you last week?" When all of the interviews were completed, the counselees' responses to this question were transcribed from the tape to 8" x 5" cards, one card per interview. A judge, or rater, then read each response card and decided how many activities the subject had reported.
- 2. Mood Check List. Five of the seven mood factors isolated by McNair and Lorr (1963) were used as criterion measures: Tension-Anxiety, Anger-Hostility, Depression-Dejection, Vigor-Activity, and Friendliness. A check list was constructed by selecting the five adjectives with the highest factor loadings to represent each of the five factors. The adjectives were then listed on a single page in such a way that every fifth adjective represented the same factor. The counselee was instructed to rate each adjective on a four-point intensity scale. Intensity modifiers were "not at all," "a little bit," "quite a bit," "extremely." For scoring purposes the modifiers were assigned weights of 1, 2, 3, and 4. The Mood

Check List was administered before each interview and at the beginning of the evaluation session.

- of 47 items. Six items asked the counselee to rate the degree to which his feelings and attitudes about himself had changed during the two- or three-week period of counseling. Six items asked him to report the degree of satisfaction and comfort he had experienced with the interviews. Twenty-nine items asked whether he had learned anything about a variety of topics.
- 4. Attrition rate. One indication of whether a counselee feels he is getting something worthwhile from counseling is whether or not he keeps his appointments and continues in counseling. For this reason the "drop-out" rate has been of interest to a number of counselors and psychotherapists. In the present study some of the differences between those who continued and those who completed fewer than three interviews were examined.

The treatment variables. We did not try to represent any established method of counseling such as psychoanalytical or Rogerian in this study. Instead, the assumption was that any method of counseling can be regarded as consisting of a) a number of describable components, or categories of counselor behavior, some verbal and some non-verbal; and b) a set of rules or directions about when to use each component, when to shift from one to another, and which categories to avoid using. Porter (1950) made a start in this direction, among others. (We do not assume that counselors are always aware of, let alone able to describe in words, the categories or behavior they employ or the heuristics

or physical action in regard to his problem or concern, and to achieve a more comfortable feeling about himself and his world. However, these goals were not stated explicitly by the counselors in any of the interviews. The criterion measures were the following:

- 1. Alternatives tried between interviews (ATBI). Counselees were asked to report at the beginning of the second and third interviews any actions which they had taken to try out plans made during previous interviews or as a consequence of previous interviews. "Since our last session, have you done anything differently, or had any new feelings or thoughts about what was bothering you last week?" When all of the interviews were completed, the counselees' responses to this question were transcribed from the tape to 8" x 5" cards, one card per interview. A judge, or rater, then read each response card and decided how many activities the subject had reported.
- 2. Mood Check List. Five of the seven mood factors isolated by McNair and Lorr (1963) were used as criterion measures: Tension-Anxiety, Anger-Hostility, Depression-Dejection, Vigor-Activity, and Friendliness. A check list was constructed by selecting the five adjectives with the highest factor loadings to represent each of the five factors. The adjectives were then listed on a single page in such a way that every fifth adjective represented the same factor. The counselee was instructed to rate each adjective on a four-point intensity scale. Intensity modifiers were "not at all," "a little bit," "quite a bit," "extremely." For scoring purposes the modifiers were assigned weights of 1, 2, 3, and 4. The Mood

Check List was administered before each interview and at the beginning of the evaluation session.

- 3. Counseling Evaluation Form (CEF). This form consisted of 47 items. Six items asked the counselee to rate the degree to which his feelings and attitudes about himself had changed during the two- or three-week period of counseling. Six items asked him to report the degree of satisfaction and comfort he had experienced with the interviews. Twenty-nine items asked whether he had learned anything about a variety of topics.
- 4. Attrition rate. One indication of whether a counselee feels he is getting something worthwhile from counseling is whether or not he keeps his appointments and continues in counseling. For this reason the "drop-out" rate has been of interest to a number of counselors and psychotherapists. In the present study some of the differences between those who continued and those who completed fewer than three interviews were examined.

The treatment variables. We did not try to represent any established method of counseling such as psychoanalytical or Rogerian in this study. Instead, the assumption was that any method of counseling can be regarded as consisting of a) a number of describable components, or categories of counselor behavior, some verbal and some non-verbal; and b) a set of rules or directions about when to use each component, when to shift from one to another, and which categories to avoid using. Porter (1950) made a start in this direction, among others. (We do not assume that counselors are always aware of, let alone able to describe in words, the categories or behavior they employ or the heuristics

that determine their choice. It seems likely that for most counselors these categories are intuitive and habitual and not entirely deliberate. However, we do assume that the categories or behavior patterns can be observed and the rules inferred by a skillful observer.)

Mode 1. In mode 1, "Inquiry," it is intended that the counselor be a special kind of teacher, one who tries to teach skills that will enable the counselee to solve not only the problems which brought him to the interview, but also similar kinds of problems on future occasions (Sorenson, 1967).

Mode 2. In mode 2, "Advisory," the counselor assumes the role of an experienced and presumably wise person who analyses the counselee's problems, provides the counselee with some perspective, and also suggests some things he might do.

Mode 3. In mode 3, "Affective," the counselor acts mainly as a listener who encourages the counselee to explore his own feelings. The hypothesis here is that the counselee's strong feelings block action by producing confusion and ambivalence about goals, and that when these feeling are adequately verbalized and recognized by the counselee, the confusion and ambivalence will be dispelled. The counselee will then either feel differently, i.e., no longer be troubled, or he will be free to act and to invent solutions to his problems.

The three modes are outlined in Table 1.

Three steps were taken before the interviews were conducted to make certain that each research counselor would practice the appropriate mode in each of his interviews:

Table 1

# Three Experimental Modes of Counseling Categories of Counselor Verbal Behavior

	Problem-oriented discovery		Problem-oriented didactic		Person-oriented affective	
4	Dofining categories:	Defi	Defining categories:	Defi	Defining categories:	
ner.	ming cacegoires.				solution and classification of	
1)	direct questions (phrased so as to elicit analytical thinking).	7	direct questions (phrased so as to elicit recall and explanation).	Î	reflection and claimication of feelings.	
	a) about onals: 'What do		a) data gathering:	2)	questions about feelings.	
			'What happened then?'' 'Why do you want that?''	3)	statements about counselor's	,
	<pre>b) about obstacles: 'What seems to stand in the way?"</pre>	2)			nere-dualion recriiga.	
	<pre>c) about alternatives: "What could you try?"</pre>		tation and explanation or counselor's views.			
	<pre>d) evaluation and prediction:     "How might that turn out?"</pre>					
	e) a plan to try: "What will you do?"	3)	suggestions, advice and persuasion.			
2)	restatement of content					
3)	teaching of principles					
Cat	Categories to be avoided:	Cate	Categories to be avoided:	Cat	Categories to be avoided:	
1.	information giving, interpre-	Ļ.	"discovery" questions.	1:	direct questions except about feelings.	
	tation and explanation or counselor's views.	2.	questions about feelings.	2.	information giving, interpretation	
2.	-	3.	restatement of content.		and explanation of counselor's views.	
	explanation, or discussion of feelings not verbalized.	4.	reflection of feelings.	3.	suggestions, advice and persuasion.	
3	suggestions, advice and persuasion.					Ja

- 1. Each counselor was provided with three interview schedules, one for each mode, to be used as a guide to his behavior during the training sessions and during the actual interviews. (As it turned out, the counselors did not use the interview schedules after the first few interviews, having by that time memorized them.) The interview schedule provided for each mode specified which verbal categories were to be used and when, and which verbal categories were not to be used. Illustrations were included.
- 2. The research counselors, together with the investigators, participated in discussions of the goals of the research, the use of the modes, problems likely to be encountered, ways of keeping the three modes independent.
- 3. The three counselors role-played the different modes.

  They, together with the investigators, observed one another's enactment of each role and provided corrections and suggestions to one another.

Two coders who were unaware of the experimental design were trained to do a content analysis of the counselors' verbal behavior, working from tape recordings. All of the second interviews, except for two which were inaudible, were analyzed by one or the other of the two coders. Five cases were analyzed by both coders working independently of one another. Each of the counselors' statements was assigned a sequential number and one of 14 category numbers. The categories were as follows:

- 1. Preliminary friendly talk, e.g., weather, lateness.
- 2. Structuring comments, e.g., any explanation of the process or purpose of counseling.

The categories which follow are designated "Defining" categories:

Categories 6, 8, and 12 define mode one.

Categories 5, 11, and 13 define mode two.

Categories 7, 8, and 10 define mode three.

Unfortunately we were not able to differentiate between mode 3 "restatements" and mode 3 "reflections"; and so while category 8 differentiates mode 2 from modes 1 and 3, it does not differentiate between modes 1 and 3.

Inter-coder consistency was checked by having the coders code the tape recordings of five interviews independently and then comparing their work. Overall, they agreed on 83 percent of the counselor responses. Category 12, "teaching of principles," was the most difficult to code, showing agreement only about 70 percent of the time. Category 9, "contentless interjections," was easiest to code; there was agreement on about 90 percent of these responses.

The complete set of second interviews for all counselors was categorized on separate coding sheets for each interview. For each of 29 interviews, an estimate of error was obtained by examining the proportion of statements in each mode which were defining for one of the other two modes, i.e., the proportion of verbal statements that should <u>not</u> have been present in each mode. This information is presented in Table 2 and in Table 3, which is a condensation of Table 2.

It will be noted from Table 3 that the least amount of error, 9 percent, occurred in mode 3, while the largest amount of error,

The Number and Proportion of Counselor Responses in Each of the Experimental Counseling Modes

Table 2

			MODE I		MODE	II	MODE	III
					1 L	60	Number	0%
ΰ	Category of Response	Defining Mode	Number	3/0	Number	0,	Manda	>
1, 2,3	Preliminary friendly talk, structuring, searching for topic	a11	22	3.4	17	1.8	30	2.0
4	What happened since last interview?	data gathering all	11	1.7	20	2.1	20	1.5
rv	Information gather- ing questions	MODE II	36	5.1	110	11.5	28	2.0
9	"Discovery"questions	MODE I	104	16.1	26	5.7	25	2.0
7	Feelings questions	MODE III	&	1.2	11	1.1	100	7.5
∞	Summarizations, restatements and reflections	MODES I & III	150	23.2	149	15.4	325	25.0
6	Contentless interjections	a11	254	39.1	344	36.6	710	54.0
10	Counselor's here-and now feelings	MODE III	3	0.5	0	0	13	1.0
11	Suggestions, advice, persuasion	MODE II	15	2.3	80	8.5	S	0.5
12	Teaching principles	MODE I	27	4.3	32	3.3	17	1.0
7 7	Information giving	MODE II	17	2.6	130	14.0	39	3.0
7 7	Other		3	0.5	0	0	7	0.5
								i

 $^{a}$ Based on all counselors' responses in the second interview for all counselors. n=7 in Mode II, n=9 in Mode II, n=13 in Mode III.

Table 3
Summary of Acceptable and Error Counselor Verbal Responses

	MODE I		MODE II		MODE III	
	Cate- gories	%	Cate- gories	%	Cate- gories	%
Acceptable Verbal Responses						
Defining Categories	6,8,12	43.6	5,11,13	34.0	7,8,10	33.5
Common Categories	1-4,9	<u>44.2</u> 87.8	1-4,9	40.5 74.5	1-4,9	57.5 91.0
Error Responses	5,7,10 11,13,14	12.2	6,7,8 10,12,14	25.5	5,6,11 12,13,14	9.0

25.5 percent, occurred in mode 2. An examination of Table 2 will show that most of the error in mode 2 was in the "restatement-reflective" category. In other words, the counselors were more reflective in mode 2 than was intended.

The error in mode 2 was not regarded as so great as to invalidate the other results of the study. [Pallone and Grande (1965) had used a criterion of 70 percent acceptable responses for all interviews] However, because mode 2 was more similar to the other two modes than was intended, some of the results may have been "flattened" because of a reduction in the experimentally produced variance.

The second set of data about manipulation of the independent variable consists of the counselor's responses to five items of the Counselor Information Sheet. These items were:

- 8. I felt that overall this session was helpful to the counselee.
- 9. I was able to stay pretty consistently within the specified mode of counseling.
- 10. I was effective in meeting the objectives of the specified mode.
- 11. This counseling was useful with this counselee.
- 12. Another counseling mode would have been more helpful with this counselee.

Table 4 summarizes the frequency and proportion of the counselors' combined responses to each of the above five items grouped by counseling modes. The 83 interviews contributing to the data are distributed as follows: mode 1, 22; mode 2, 26; mode 3, 35. Table 5 reports chi-square analyses of the obtained frequencies.

Table 4
Summary of Obtained Frequencies and Proportions for Counselor Post-Interview Responses on CIS
Item for 83 Interviews

Item 8: I felt that overall, this session was helpful to the counselee.

<u> </u>	<del>-</del> -	MODE I	MODE	EII	MOD	E III	TOTA	LS
· · · · · · · · · · · · · · · · · · ·	f	%	f	%	f	%	f	%
AGREE	13	68.5	7	37	16	69.5	36	59
DISAGREE	6	31.5	12	63	7	30.5	25	41
TOTALS	19		19		23		61	

Item 9: I was able to stay consistently with the specific mode of counseling.

		MODE I	MOD	E II	MOI	E III	TOT	ALS
	f	%	f	%	f	%	f	%
AGREE	18	94.7	18	85.9	28	93.3	64	91.4
DISAGREE	1	5.3	3	14.1	2	6.7	6	8.6
TOTALS	19		21	<u> </u>	30		70	

Item 10: I was effective in meeting the objectives of this mode.

		MODE I	MODI	II E	MODE	E III	TOI	ALS
	f	%	f	%	$_{ m f}$	%	f	00
AGREE	12	60	17	81	22	84.6	51	76.2
DISAGREE	8	40	4	19	4	15.4	16	23.8
TOTALS	20		21		26		67	

Table 4 (continued)

Item 11: This counseling mode was useful with this counselee

	MC	DDE I	N	ODE II	MOI	E III	TOT	ALS
		%	f	%	f	%	f	%
	12	70.6	10	66.7	15	68.2	37	68.5
AGREE DISAGREE		29.4	5	33.3	7	31.8	17_	31.5
TOTALS	17		15		22		54 	, <u> </u>

Item 12: Another mode would have been more helpful with this counselee

	MC	DE I	N	ODE II	MOL	E III	TOT	ALS
	f	%	f	96	f	%	f	%
AGREE	3	15.8	6	42.8	12	57.2	21	38.8
DISAGREE	16	84.2	8	57.2	9	42.8	33	61.2
TOTALS	19		14		21		54	

 $<sup>^{\</sup>rm a}{\rm There\ were\ 22\ CIS\ forms\ completed\ for\ Mode\ I\ interviews,\ 26\ for\ Mode\ II\ and\ 35\ for\ Mode\ III.$ 

bNeutral responses were omitted for sake of clarity and precision.

Table 5 (continued)

Item 11: This counseling mode was useful with this counselee.

								•
	MOI	DE I	MOI	E II	MOI	E III	TOTALS	_
	0	E	0	E	0	Е		_
AGREE	12	11.6	10	10.3	15	15.1	37	$x^2 = 0.07$
DISAGREE	5	5.4	5	4.7	7	6.9	17	n.s.
TOTALS	17		15		22		54	_

Item 12: Another counseling mode would have been more useful with this counselee.

								• •
	MOI	E I	MOD	E II	MOI	DE III	TOTALS	_
	0	E	0	Е	0	Е		$x^2 = 7.28$
AGREE	3	7.4	6	5.4	12	8.2	21	P 0.05
DISAGREE	16	11.6	8	8.6	9	12.8	33	_
TOTALS	19		14		21		54	_

 $<sup>^{\</sup>rm a}{\rm There}$  were 22 CIS forms completed for Mode I interviews, 26 for Mode II, and 35 for Mode III.

 $<sup>\</sup>ensuremath{^{b}}\xspace\ensuremath{^{Neutral}}\xspace$  responses were omitted here for sake of clarity and precision.

The counselors' responses to the Counselor Information Sheet indicate that they saw themselves as staying within the boundaries of the specified modes 91 percent of the time (item 9). They felt that they had met the objectives of the specified mode over 80 percent of the time in modes 2 and 3, but only 60 percent of the time in mode 1. In this sense, they found mode 1 the most difficult to follow. The counselors saw modes 1 and 3 as helpful about 70 percent of the time, but mode 2 as helpful only 37 percent of the time. Their response to item 12 indicates that they were inclined to regard mode 1 as generally the most helpful and mode 3 as generally the least so.

The third set of data regarding the independent variables is provided by the counselees' responses to those items of the CEF which describe their perception of the counselor's personal qualities. Those who criticize research in which counselors are asked to use alternative modes of counseling or to vary their personal styles for research purposes sometimes argue that important personal characteristics of the counselor will inevitably prove more effective in one mode than in another. If that argument is sound, then in projects such as the present one, there should be significant counselor x mode interaction. The data in Table 6 would suggest that if there was interaction between counselor and mode, it did not influence the way the three counselors were perceived in any of the three modes. In all three modes the counselors were perceived as warm, sincere, likable and friendly.

### The Hypotheses

While the attempt to test hypotheses was not outstandingly successful, it would seem useful to present our results for two reasons: One, some of the findings, both positive and negative, suggest useful hypotheses for testing in future research. Two, the inconclusive results have implications for the kinds of improvements in technology, e.g., in instrumentation, that are needed for future research. There will be additional comment on these two points in the discussion section.

Hypothesis 1. In mode 1, "Inquiry," counselees will try a larger number of alternative courses of action between interviews toward solving their own problems than will counselees in the other two modes. This prediction was based on the assumption that encouragement to practice inventing and trying alternatives will be more effective than either telling counselees what to do or trying to "free them" emotionally. Furthermore, learning to solve problems has important, concomitant motivating and reinforcing effects. A greater amount and wider range of action should result if one decides to work towards his own solutions by generating and testing alternatives than if one is merely told which alternative to try.

It was not possible properly to test this hypothesis in the present study. The plan was to use the "Alternatives Tried Between Interviews" (ATBI) data reported by the counselees at the beginning of the second and third interviews as coded by the two judges. Table 7, which shows ATBI scores according to mode and interview number, indicated a trend in the predicted direction. But in only

Table 7:

Summary of Scores for Alternatives Tried between Interviews by Counseling Modes

·	SEC	OND INTER	VIEW	THI	RD INTER	VIEW MEAN
	n	ATBI <sup>a</sup>	MEAN ATBI	n	ATBI <sup>a</sup>	ATBI
MODE I	7	6.5	.93	5	8	1.60
MODE II	10	4.5	.45	5	3.5	.70
MODE III	13	11.5	.89	9	1.5	.17
MODE III	30	22.5		19	13	

52 percent of the interviews did the counselee report that he had tried any of the plans discussed in previous interviews. Moreover, although the proportion of dropouts was not appreciably different for the three modes, sizable attrition occurred with successive interviews. The data are therefore unfortunately not amenable to conventional statistical tests, the number of cases in some cells being too few to make chi square appropriate and the skewed distribution making the use of parametric tests questionable.

The mean ATBI score reported at the second interview by counselees in mode 1 was slightly higher than the average score for mode 3 counselees, and twice as large as for mode 2 counselees. By the third interview, the discrepancy between mode 1 and the other two modes increased further. Considering the small N, the trend of the data suggest that the hypothesis should be given further attention in the next phase of the project.

Hypotheses 2. In mode 1, high-achieving counselees will try more alternatives between interviews than low-achieving counselees. This prediction is based on the more general hypothesis that self-concept, and particularly the degree of self-confidence, is an important determinant of behavior. It seemed plausible that high achievers, because they have experienced greater academic success and therefore would be more self-confident, would be likely to find the business of generating and evaluating alternatives an easier task than low achievers and would be likely to test ideas more freely. Low achievers would be likely to see fewer alternative courses of action and be less inclined to try them.

Table 8a

Summary of ATBI Scores by Mode and GPA Level
(Averages of Second & Third Interview Scores)

	HIGH	I GPA		LO	W GPA	MEAN
	n	ATBI	MEAN ATBI	n	ATBI	ATBI
		~ F	.58	1	4.5	4.50
MODE I	6	3.5		5	4.5	.90
MODE II	5	1	.20		6.75	.84
MODE III	5	1.5	.30	8		
WDD III	16	6.0	.375	14	15.75	1.12

Table 8b

Comparison of ATBI Scores for High- and Low-GPA
Counselees in Mode II

	N	Mean ATBI Score	S.D.	S.E. <sub>diff</sub> .	t	P
High-GPA Counselees	5	0.20	0.45	0.14	5.0	0.01
Low-GPA Counselees	5	0.90	0.88			

Table 8c

Number of Counselees Reporting O, 1 and more than 1 ATBI for High- and Low-GPA Level

	HÍGH-GPA	LOW-GPA
	8	3
$ATBI = 0$ $ATBI \leq 1$	6	5
	2	6
ATBI > 1	2	

Table 8c shows the ATBI data organized by GPA level and by the number of counselees reporting zero, one, or more than one alternatives tried. Inspection shows that not only did fewer low GPA counselees report trying no alternatives, but also that the low GPA counselees tended more than the high to try more than one course of action.

Hypothesis 4. High-stress counselees will have a lower attrition rate than low-stress counselees. Counselees who report a higher level of personal stress will be more motivated to attend counseling, regardless of the mode or its effectiveness and will be less likely to drop out before the three interviews have been completed.

This hypothesis was supported. Five counselees dropped out after one interview, and ten more after the second, the N for the first interview being 36, for the second 31, and for the third, 21. The mean number of interviews for the total sample was 2.45. Table 9a shows that the mean stress score on the Reaction to Student Teaching scale was somewhat higher for the sample (p less than .06) than for the population of 250 from which it was drawn, even though a third of those who came for counseling had stress scores below the mean for the non-counseled group. When the number of interviews attended by the 18 high and the 18 low-stress counselees is compared (see Table 11b), the difference in number of interviews attended by the two groups is in the predicted direction and is significant at the .005 probability level.

Hypothesis 5. Counselees in modes 1 and 2 will show greater positive changes than will counselees in mode 3 on a) the mood

Table 9a

Mean Stress Scores for Counseled and NonCounseled Student Teachers

	N <sup>Me</sup>	an Stres: Score	s S.D.	S.E. diff.	t	P <b>*</b>
Counseled Student Teachers	36	22.95	4.66	0.87	1.86	0.06
Non-Counseled Student Teachers	191	21.33	4.88			

<sup>\*</sup>P is based on a two-tailed test.

Table 9b

Comparison of Interviews Attended for High- and Low-Stress Counselees

	N	Inter- views At- tended	MEAN	S.D.	S.E. diff.	t	p <b>*</b>
High Stress (> 23) Counselees	18	49	2.72	0.460	0.229	2.62	0.005
Low Stress (< 23) Counselees	18	39	2.17	0.857			
	36	88					

<sup>\*</sup>P is based on a one-tailed test.

Table 8c shows the ATBI data organized by GPA level and by the number of counselees reporting zero, one, or more than one alternatives tried. Inspection shows that not only did fewer low GPA counselees report trying no alternatives, but also that the low GPA counselees tended more than the high to try more than one course of action.

Hypothesis 4. High-stress counselees will have a lower attrition rate than low-stress counselees. Counselees who report a higher level of personal stress will be more motivated to attend counseling, regardless of the mode or its effectiveness and will be less likely to drop out before the three interviews have been completed.

This hypothesis was supported. Five counselees dropped out after one interview, and ten more after the second, the N for the first interview being 36, for the second 31, and for the third, 21. The mean number of interviews for the total sample was 2.45. Table 9a shows that the mean stress score on the Reaction to Student Teaching scale was somewhat higher for the sample (p less than .06) than for the population of 250 from which it was drawn, even though a third of those who came for counseling had stress scores below the mean for the non-counseled group. When the number of interviews attended by the 18 high and the 18 low-stress counselees is compared (see Table 11b), the difference in number of interviews attended by the two groups is in the predicted direction and is significant at the .005 probability level.

Hypothesis 5. Counselees in modes 1 and 2 will show greater positive changes than will counselees in mode 3 on a) the mood

Table 9a

Mean Stress Scores for Counseled and NonCounseled Student Teachers

	N <sup>Mea</sup>	n Stress Score	s s.D.	S.E. diff.	t	p*
Counseled Student Teachers	36	22.95	4.66	0.87	1.86	0.06
Non-Counseled Student Teachers	191	21.33	4.88			

<sup>\*</sup>P is based on a two-tailed test.

Table 9b

Comparison of Interviews Attended for High- and Low-Stress Counselees

	N	Inter-	MEAN	S.D.	S.E. <sub>diff</sub> .	t	p*
		At- tended	l				
High Stress (> 23) Counselees	18	49	2.72	0.460	0.229	2.62	0.005
Low Stress (< 23) Counselees	18	39	2.17	0.857			
	36	88					

<sup>\*</sup>P is based on a one-tailed test.

scales, b) the feelings-about-self measures and c) the attitudetoward-external-environment measure.

Modes 1 and 2 focus primarily on the individual in relation to his external world. White (1962) has described a relationship between psychological well-being and involvement in activities which are designed not to make him more "self-aware," but in activities in which he can learn to manipulate his environment more effectively. If this latter type of activity is engaged in, and if it does lead to a sense of autonomy and self-determination, then one's attitudes about himself and his external world ought to be positively influenced, as should his general moods.

This hypothesis was not supported.

- 1. Mood factors. Table 10 indicates that analysis of average change scores in the five mood factors shows no differences that can be attributed to the experimental variables. Only one Fratio approaches statistical significance and that one, which suggests an interaction of mode with GPA on the friendliness factor, will be difficult to interpret if it reappears on subsequent studies.
- 2. Feelings about self. The rank order of means is in the predicted direction but the differences are not statistically significant (Tables 11a and 11b).
- 3. Attitude about the external environment. The means order in the predicted direction, but the differences are not statistically significant (Tables 12a and 12b).

Hypothesis 6. Counselees will be more satisfied with mode 2 counseling and least satisfied with mode 3.

Table 11a

Means and Standard Deviations of Scores for Modes on 'Feelings About Self' Scale (High Score means high change)

RANK	MODE	MEAN	S.D.	N
1	I	16.63	1.302	8
2	II	16.40	2.011	10
3	III	14.92	4.033	12

Table 11b

Analysis of Variance for Modes on 'Feelings about Self' Scale

Source	Sum of Squares	D.F.	Mean Square	F-Ratio	Р
Between Modes	18.28	2	9.14	1.09	n.s.
Within Modes	227.19	27	8.41		

Table 12a

Means and Standard Deviations of Scores for Modes on 'Attitudes about External Environment' Scale (High Score means greater change)

CANK	MODE	MEAN	S.D.	N
1	I	21.13	2.17	
2	II	21.00	2.00	10
3	III	20.17	2.13	12

Table 12b

Analysis of Variance for Modes on ''Attitudes about External Environment'' Scale

Source	Sum of Squares	D.F.	Mean Square	F-Ratio	P
Between Modes	5.76	2	2.88		<del></del>
Within Modes	118.54	27	4.39	0.66	n.s.

Table 12a

Means and Standard Deviations of Scores for Modes on "Attitudes about External Environment" Scale (High Score means greater change)

RANK	MODE	MEAN	S.D.	N
1	I	21.13	2.17	8
2	II	21.00	2.00	10
3	III	20.17	2.13	12

Table 12b

Analysis of Variance for Modes on "Attitudes about External Environment" Scale

Source	Sum of Squares	D.F.	Mean Square	F-Ratio	P
Between Modes	5.76	2	2.88	0.66	n.s.
Within Modes	118.54	27	4.39		

The sample of subjects comes from a population of college students who, it is postulated, have become relatively comfortable in a learning situation involving authority and dependency relationships, and, as a consequence, they are more likely to feel comfortable in a situation in which the counselor gives them a good deal of direction, tells them what to do. Both modes 1 and 3 try to guide the counselee in one way or another to help himself. Mode 2 does not require the counselee to take very much responsibility for what happens in the interview. Mode 3 might be expected to be least satisfactory because it not only requires the counselee to analyze his own situation while avoiding giving suggestions, but also requires him to focus on his internal world.

The hypothesis was supported. The satisfaction scores, grouped by mode in Table 13a, indicate a trend in the predicted direction, and the  $\underline{t}$  test shown in Table 13b is significant at the .05 probability level.

Hypothesis 7. In mode 3, counselees with a preference for a "general-internal" type of counseling will be more satisfied than counselees with more "specific-external" preferences.

It seems plausible to expect that counselees who come for counseling about a tangible problem in their relations with events outside themselves will be less comfortable in a mode of counseling which focuses on their internal world than those who prefer counseling to be more general and to deal with their feelings.

The hypothesis was not supported. Table 14a lists the means and standard deviations of the six mode x preference sub-groups. The  $\underline{F}$  ratios in Table 14b indicate that there is no interaction

Table 13a

Means and Standard Deviations of Scores for Modes on "Satisfaction with Content and Process of Interviews" (Low score means high-satisfaction)

RANK	MODE	MEAN	S.D.	N
1	II	11.30	3.27	10
2	I	13.10	3.72	10
3	III	14.50	5.11	13

Table 13b

Summary of t-test for Mean Satisfaction Scores between Mode II and Mode III Counselees

X Mode III - X Mode II	3.24
S.E. difference	1.86
t statistic	1.74
one-tailed p	0.05

Means and Standard Deviations of Mode X Preference
Sub-groups on 'Satisfaction with Content and
Process of Counseling' Scale (Low
score means high satisfaction)

MODE X	PREFERENCE	MEAN	S.D.	N
II	Low	10.60	4.56	5
II	High	12.00	1.41	5
ĭ	Low	13.00	4.64	5
I .	High	13.20	3.11	5
III	High	13.75	4.86	8
III	Low	15.80	5.81	5
	II I I I III	II High I Low I High III High	II       Low       10.60         II       High       12.00         I       Low       13.00         I       High       13.20         III       High       13.75	II       Low       10.60       4.56         II       High       12.00       1.41         I       Low       13.00       4.64         I       High       13.20       3.11         III       High       13.75       4.86

Table 14b

Analysis of Variance for Mode X Preference on 
''Satisfaction with Content and Process 
of Interviews''

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F-RATIO	P
MODE	66.72	2	33.36	1.74	0.20
PREFERENCE	0.18	1	0.18	0.01	n.s.
MODE X PREF.	17.27	2	8.64	0.45	n.s.
ERROR	516.30	27	19.12		n.s.

between counseling mode and preference group. A  $\underline{t}$  test specific to the question about preference effects among mode 3 counselees showed no significant differences (Table 14c).

Hypothesis 8. In mode 1, high-achieving counselees will be more satisfied with the content and process of counseling than low-achieving counselees.

It has been observed that the kinds of cognitive tasks expected of counselees in mode 1 can be difficult for persons who do not have either some concepts about how to approach problems in an orderly way in order to solve them, or the motivation to come to grips with their problems and to take self-directed action. Thus, if GPA represents some function of the counselee's ability to analyze practical problems and take action, then high achievers should be more comfortable with mode 1 than those who presumably have less well-developed analytical skills or who are less motivated to take action about their concerns.

This hypothesis was supported. Table 15a displays the means of the six modes x GPA sub-groups. The greatest discrepancy is between mode 1 high GPA counselees and mode 1 low GPA counselees. The most satisfied sub-group was the mode 1 high GPA counselees. The least satisfied was the group of mode 1 low GPA counselees. The F ratio reported in Table 17b for mode x GPA interaction is significant at the .04 level.

## Discussion

The criterion variables. 1. It would appear that some of the measurement problems in counseling research can be partially

 $\begin{array}{c} \text{Table 14c} \\ \text{Summary of t-test for Preference Effect in} \\ \text{Mode III} \end{array}$ 

X <sub>Low Pref.</sub> - X <sub>High Pref.</sub>	2.05
S.E. difference	2.98
t-statistic	0.69
Probability	n.s.

solved by using self-report devices, questionnaires which ask the counselee to report aspects of his own experience, provided care is taken to secure the cooperation of the counselee. For example, the "stress in student teaching" scale shows promise in that a relationship was demonstrated between a subject's responses and his tendency to continue in counseling. On the other hand, another self-report device, the "Counseling Preference Questionnaire" was not predictive. In retrospect, it would appear that this latter instrument failed to perform as hoped, for perhaps two reasons: a) counselees may not know what kind of counseling they would prefer--at least not before they have had considerable experience with counseling, both with a variety of methods and a variety of personalities; b) the language used in the CPQ is probably too abstract. Terms which counselors use, such as "accept me as I am," constitute a kind of professional jargon. This jargon may have some exact meaning to counselors, (although that proposition has not been demonstrated), but it is probably not meaningful to counselees.

2. Counselee progress, or improvement, or gains may be defined in a number of ways, and these may be unrelated to one another, or perhaps inversely related. For example, counselees who as a result of counseling experience a change of feeling--a reduction in the discomfort which brought them to counseling in the first place--may be unlikely to change their overt behavior patterns outside of the interview. Other counselees with perhaps a different kind of problem may not experience a reduction in discomfort from merely talking with the counselor, but may

need to change their behavior patterns--their habitual ways of coping with a recurring pattern of events--in order to change the circumstances which produce their discomfort.

Counselor and counselee may evaluate an interview or a series of interviews quite differently. An interview seen as helpful by the counselee may not be so regarded by the counselor, The counselors and counselees in this study and vice versa. sometimes differed rather sharply about which counseling modes were most helpful to the counselee. However, that is not to say that the customer is always right. Especially in school counseling, the counselor may have ethical and rational goals which are not endorsed, at least in the beginning, by the counselee-goals which are in fact inconsistent with the student's goals. For example, a counselor may feel justified in trying to change the behavior of a bright student whose study habits are poor, or a young teen age girl whose sexual behavior threatens to result in her pregnancy. The questions of the goals and the ethics of counseling need considerably more discussion.

The treatment variables. 1. Our experience indicates that it is possible to control the behavior of the research counselor by means of the kind of interview schedule described above, combined with a moderate amount of training. It seems clear that despite overlaps, the research modes were in fact different in important ways, and that with revision of the schedules and more careful training these differences can be sharpened. What is needed for each research mode is an interview schedule that will explicate a greater variety of alternative verbal responses for

use by the counselor together with clearer rules about when each category is to be used. Our experience in this phase of the project leaves us hopeful that it is feasible to make such improvements.

2. It is probably true that not every counselor can learn to function effectively as a research counselor. Selection as well as training is important. The research counselor must be a person who is able to think of himself as an investigator as well as a counselor. It would appear that a person well trained in a particular mode of counseling is unlikely to be able to exercise cognitive control over his own responses in the interview because the force of established habits—or established beliefs—is so great. The bright inexperienced person who is willing to follow directions is likely to make a much better research counselor than is the old hand.

The mediating variables. 1. The research counselors in the study saw themselves as preferring one particular mode, but they also felt that on a number of occasions some other counseling mode than the one they were scheduled to use, even if that one were their preferred mode, would have been more helpful to the counselee. While the basis for these judgments is not entirely clear, we have some leads. Some counselees, for instance, seemed inclined to reject mode 1 because they felt that nothing could be done about their problems. Or, they felt that it was not their personal responsibility to cope with the troublesome events, that it was really someone elses responsibility to change things. Another example, some of the students in mode 3 did not find discussing

their problems useful or satisfying and were either unwilling or unable to continue in this mode because they wanted to talk about some kind of action rather than about feelings.

It may be that in a further phase of this project it would be useful to try to develop the first interview as a kind of appraisal interview in which the counselor would try to make some estimate of the counselee's degree of self-confidence, his willingness to try to define his own goals and actively to cope with the obstacles to those goals. It may be that some counselees are so lacking in self-confidence and in the sense of potency that the counselor will have to spend time, perhaps somewhat in the manner of mode 3, to explore their world, including their selfconcept, and to try to improve that concept. Other counselees, higher on an imaginary ladder of effectiveness, may be ready to cope with their problems, provided they are given a good deal of direction by the counselor. Still others, with more self-confidence, more experience, may be ready to accept the responsibility for defining goals, for trying to apply new ideas which the counselor would teach.

## Summary

The purpose of the present study was to take a beginning step toward the goals of a) working out a method of conducting naturalistic counseling interviews while controlling counselor behavior, and b) of building the necessary instrumentation to measure the effectiveness of different modes of counseling. While each goal was only partially achieved, the results are encouraging.

They indicate that the counselors were sufficiently able to adhere to the defined modes, that each mode was differentiated from the others, and that within each mode, there was relatively little intrusion of non mode-defined behavior. Also, from their reactions it was evident that the counselees experienced the interviews as serious attempts to help them deal with real problems. Furthermore, this research shows that the different modes of counselor behavior do indeed have different results, and that counselee characteristics will influence how an individual will respond to a particular method of counseling. The "Advisory" mode, for example, seems more likely to make people feel better, and the "Inquiry" mode seems more likely to change their behavior. person with more self-initiative seems to prefer the "Inquiry" mode, while the one who feels helpless and impotent seems to prefer to have solutions provided, as in the "Advisory" mode. These conclusions are still largely intuitive, but they are partially supported and the findings give us no reason to reject them.

## REFERENCES

- Adams, H. E., & Frye, R. L. Psychotherapeutic techniques as conditioned reinforcers in a structured interview. <u>Psychological Reports</u>, 1964, <u>14</u>, 163-166.
- Ashby, J. D., Ford, D. H., Guerney, B. G., & Gunerney, L. F. Effects on clients of a reflective and a leading type of psychotherapy. Psychological Monographs: General and Applied, 1957, 71(24, Whole No. 453). Also in Stollak, G. E., Guerney, B. G., Jr., & Rothberg, M. (Eds.), Psychotherapy research: Selected readings. Chicago: Rand McNally, 1966.
- Auld, F., Jr., & Murray, E. J. Content-analysis studies of psychotherapy. Psychological Bulletin, 1955, 52, 377-395. Also in Stollak, G. E., Guerney, B. G., Jr., & Rothberg, M. (Eds.), Psychotherapy research: Selected readings. Chicago: Rand McNally, 1966.
- Auld, F., Jr. & White, A. M. Rules for dividing interviews into sentences. <u>Journal of Psychology</u>, 1956, <u>42</u>, 273-281.
- Ausubel, D. P. In defense of verbal learning. Educational Theory, 1961, 11, 15-25. (a)
- Ausubel, D. P. Learning by discovery: Rationale and mystique.

  Bulletin of the National Association of Secondary School
  Principals, 1961, 45, 18-59. (b)
- Beck, C. E. Philosophical foundations of guidance. Englewood Cliffs, N. J.: Prentice-Hall, 1963.
- Bordin, E. S. The implications of client expectations for the counseling process. <u>Journal of Counseling Psychology</u>, 1955, <u>2</u>, 17,21.
- Bruner, J. S. Learning and thinking. <u>Harvard Educational</u> Review, 1959, 29, 184-192.
- Bruner, J. S. The act of discovery. Harvard Educational Review, 1961, 31, 21-23.
- Bruner, J. S. On knowing: Essays for the left hand. New York: Atheneum, 1966. (First published, Boston: Harvard University Press, 1962).

- Campbell, R. E. Counselor personality and background and his interview subrole behavior. <u>Journal of Counseling Psychology</u>, 1962, 9, 329-334.
- Cautela, J. R. The application of learning theory "as a last resort," in the treatment of a case of anxiety neurosis. Journal of Clinical Psychology, 1965, 21, 448-452.
- Cole, C. W. Effects of verbal stimuli in a counseling analogue.

  Journal of Counseling Psychology, 1965, 12, 408-413.
- Cooley, W. W., & Lohnes, P. R. Multivariate procedures for the behavioral sciences. New York: Wiley, 1962.
- Cowen, E. L. The experimental analogue: An approach to research in psychotherapy. Psychological Reports, 1961, 8, 9-10.
- Culbert, S. A. Trainer self-disclosure and member growth in a T-group. Unpublished doctoral dissertation, UCLA, 1966.
- Danskin, D. G. Roles played by counselors in their interviews. Journal of Counseling Psychology, 1955, 1, 22-27.
- Danskin, D. G., & Robinson, F. P. Differences in "degree of lead" among experienced counselors. <u>Journal of Counseling Psychology</u>, 1954, 1, 78-83.
- Edwards, A. L., & Cronbach, L. J. Experimental design for research in psychotherapy. <u>Journal of Clinical Psychology</u>, 1952, 8, 51-59. Also in Stolak, G. E., Guerney, B. G., Jr., & Rothberg, M. (Eds.), <u>Psychotherapy research</u>: <u>Selected</u> readings. Chicago: Rand McNally, 1966.
- Ellis, A. Reason and emotion in psychotherapy. New York: Stuart, 1962.
- Ellis, A. Rational psychotherapy. <u>Journal of General Psychology</u>, 1958, <u>59</u>, 35-49.
- Ewing, T. NReaChanges during counseling appropriate to the client's initial problem. <u>Journal of Counseling Psychology</u>, 1964, <u>11</u>, 146-150.
- Ferguson, G. A. Statistical analysis in psychology and education. New York: McGraw-Hill, 1959.
- Fiedler, F. E. A comparison of therapeutic relationships in psychoanalytic, non-directive and Adlerian therapy. <u>Journal of Consulting Psychology</u>, 1950, 14, 436-445.
- Fiedler, F. E. Factor analyses of psychoanalytic, non-directive, and Adlerian therapeutic relationships. Journal of Consulting Psychology, 1951, 15, 32-38.

- Ford, D. H. Systems of psychotherapy. New York: John Wiley & Sons, Inc., 1963.
- Ford, D. H., & Urban, H. G. Psychotherapy. Annual Review of Psychology, 1967, 18, 333-372.
- Frank, J. D. Problems of controls in psychotherapy. In Rubenstein, E. A., and Parloff, N. B. (Eds.), Research in psychotherapy. Washington, D. C.: American Psychological Association, 1959. Also in Stollak, G. E., Guerney, B. G., Jr., & Rothberg, M. (Eds.), Psychotherapy research: Selected readings. Chicago: Rand McNally, 1966.
- Gagné, R. M. The conditions of learning. New York: Holt, Rinehart & Winston, 1965.
- Garret, H. E. The discriminant function and its use in psychology. <u>Psychometrika</u>, 1943, <u>8</u>, 65-79.
- Gibbs, D. N. Reciprocal inhibition therapy of a case of symptomatic erythema. Behavioral Research and Therapy, 1965, 2 261-266.
- Glasser, W. Reality therapy. New York: Harper & Row, 1965.
- Gordon, J. E. Leading and following psychotherapeutic techniques with hypnotically induced repression and hostility. <u>Journal of Abnormal and Social Psychology</u>, 1957, <u>54</u>, 405-410. Also in Stollak, G. E., Guerney, B. G., Jr., & Rothberg, M. (Eds.), <u>Psychotherapy research</u>: <u>Selected readings</u>. Chicago: Rand McNally, 1966.
- Grater, H. A. Client preferences for affective or cognitive counselor characteristics and first interview behavior. <u>Journal of Counseling Psychology</u>, 1964, <u>11</u>, 248-250.
- Halpert, R. L. A study of the sources, manifestations, and magnitude of stress among student teachers at UCLA. Unpublished doctoral dissertation, University of California, Los Angeles, 1966.
- Heilbrun, A. B., Jr. Psychological factors related to counseling readiness and implications for counselor behavior. <u>Journal</u> of Counseling Psychology, 1962, 9, 353-358.
- Heilbrun, A. B., Jr. Further validation of a counseling readiness scale. Journal of Counseling Psychology, 1964, 11, 290-292.
- Heilbrun, A. B., Jr. Counseling readiness: a treatment--specific or general factor (Comment). <u>Journal of Counseling Psychology</u>, 1965, 12, 87-90.

- Hoffman, A. E. An analysis of counselor subroles. <u>Journal of</u> Counseling Psychology, 1959, <u>6</u>, 61-68.
- Kanfer, F. H., Phillips, J. S., Matarazzo, J. D., & Saslow, G. Experimental modification of interviewer content in standardized interviews. <u>Journal of Consulting Psychology</u>, 1960, 24, 528-536.
- Krumboltz, J. D., & Thoreson, C. E. The effect of behavioral counseling in group and individual settings on information-seeking behavior. Journal of Counseling Psychology, 1964, 11, 336-341.
- Levison, P. K., Zax, M., & Cowen, E. L. An experimental analogue of psychotherapy for anxiety reduction. Psychological Reports, 1961, 8, 171-178. Also in Stollak, G. E., Guerney, B. G., Jr., & Rothberg, M. (Eds.), Psychotherapy research: Selected readings. Chicago: Rand McNally, 1966.
- London, P. The modes and morals of psychotherapy. New York Holt, Rinehart & Winston, 1964.
- Marsden, G. Content-analysis studies of therapeutic interviews:
  1954 to 1964. Psychological Bulletin, 1965, 63, 298-321.
  Also in Stollak, G. E., Guerney, B. G., JR., & Rothberg, M.
  (Eds.), Psychotherapy research: Selected readings. Chicago:
  Rand McNally, 1966.
- Matarazzo, J. D. Prescribed behavior therapy: Suggestions from interview research. In Bachrach, A. J. (Ed.), Experimental foundations of clinical psychology. New York: Basic Books, 1962.
- McGowan, J. F., & Porter, T. L. An introduction to employment service counseling. Columbia, Mo.: University of Missouri Press, 1964.
- McNair, D. M., & Lorr, M. An analysis of professed psychotherapeutic techniques. <u>Journal of Consulting Psychology</u>, 1964, <u>28</u>, 265-271.
- McNair, D. M., & Lorr, M. An analysis of mood in neurotics.

  Journal of Abnormal and Social Psychology, 1964, 69, 620-627.
- Metzner, R. Learning theory and the therapy of neurosis. British Journal of Psychology, 1961 (Monogr. Suppl. 33).
- Miller, G. A., Galanter, E., & Pribram, K. H. <u>Plans and the structure of behavior</u>. New York: Holt, Rinehart & Winston, Inc., 1960.
- Murray, E. J. A content-analysis method for studying psychotherapy. Psychological Monographs, 1956, 70(13, Whole No. 420).

- Nowlis, V. Research with the mood adjective check list. In Tomkins, S., & Izard, C. (Eds.), Affect, cognition and personality. New York: Springer, 1965.
- Pallone, N. J., & Grande, P. P. Counselor verbal mode, problem relevant communication and client rapport. <u>Journal of Counseling Psychology</u>, 1965, <u>12</u>, 359-365.
- Patterson, C. H. Counseling and guidance in schools: A first course. New York: Harper, 1962.
- Patterson, C. H. Counseling. <u>Annual Review of Psychology</u>, 1966, 17, 79-110.
- Pohlman, E. Changes in client preferences during counseling. Personnel and Guidance Journal, 1961, 40, 340-343.
- Pohlman, E. Should clients tell counselors what to do? <u>Personnel</u> and Guidance Journal, 1964, 42, 456-458.
- Polya, G. How to solve it. Garden City, N. Y.: Doubleday & Co., Inc., 1957. (First published: Princeton, N. J.: Princeton University Press, 1945).
- Porter, E. H. An introduction to therapeutic counseling. Boston: Houghton-Mifflin, 1950.
- Rogers, C. R. The necessary and sufficient conditions of therapeutic personality change. <u>Journal of Consulting Psychology</u>, 1957, 21, 95-103.
- Rogers, C. R. On becoming a person. Boston: Houghton-Mifflin, 1961.
- Rogers, C. R. Psychotherapy today or where do we go from here?

  American Journal of Psychotherapy. 1963, 17(1), 5-16.

  Also in Stollak, G. E. Guerney, B. G., Jr., & Rothberg, M. (Eds.), Psychotherapy research: Selected readings. Chicago: Rand McNally, 1966.
- Rogers, C. R. & Dymond, R. F. <u>Psychotherapy and personality change</u> Chicago: University of Chicago Press, 1954.
- Rottschafer, R. N., & Renzaglia, G. A. The relationship of dependent-like verbal behaviors to counselor style and induced set. <u>Journal of Consulting Psychology</u>, 1962, 26, 162-177.
- Ryan, T. A., & Krumboltz, J. D. Effect of planned reinforcement counseling in client decision-making behavior. <u>Journal</u> of Counseling Psychology, 1964, 11, 315-323.
- Salinger, K. Experimental manipulation of verbal behavior: A review. Journal of General Psychology, 1959, 61, 65-94.

- Snyder, W. U. Casebook of non-directive counseling. Boston: Houghton Mifflin Co., 1947.
- Sorenson A. G. Laboratory experiences: Counseling classes. Counselor Education and Supervision, 1965, 5, 148-153.
- Sorenson, A. G. Toward an instructional madel of counseling.

  Occasional Report No. 6, Center for the study of Evaluation
  of Instructional Programs, University of California, Los Angeles,
  1967.
- Stollak, G. E., Guerney, B. G., Jr., & Rothberg, M. (Eds.).

  Psychotherapy research: Selected readings. Chicago: Rand
  McNally & Co., 1966.
- Strupp, H. H. A multidimensional comparison of therapist activity in analytic and client-centered therapy. <u>Journal of Consulting Psychology</u>, 1957, <u>21</u> (4), 301-308. Also in Stollak, G. E., Guerney, B. G., Jr., & Rothberg, M. (Eds.), <u>Psychotherapy research</u>: <u>Selected readings</u>. Chicago: Rand McNally & Co., <u>1966</u>.
- Tolor, A., & Kissinger, R. D. The role of the therapists's interventions in a simulated therapy situation. <u>Journal of Clinical Psychology</u>, 1965, <u>21</u>, 442-445.
- Truax, C. B., & Carkhuff, R. R. Experimental manipulation of therapeutic conditions. <u>Journal of Consulting Psychology</u>, 1965, 29, 119-124.
- Van Kaam, A. Counseling from the viewpoint of existential psychology. Harvard Educational Review, 1962, 32, 403-415.
  Also in Mosher, R. L., Carle, R. F., & Kehas, C. D. (Eds.),
  Guidance an examination. New York: Harcourt, Brace & World,
  1965
- Volsky, T., Jr. Comment. <u>Journal of Counseling Psychology</u>, 1961, 8, 3-7.
- Volsky, T., Jr., Magoon, T. M., Norman, W. T., & Hoyt, D. P.

  The outcomes of counseling and psychotherapy. Minnesota:
  University of Minnesota Press, 1965.
- Whyte, L. L. The unconscious before Freud. Garden City, New York: Doubleday & Co., 1962.
- Williamson, E. G., & Bordin, E. S. The evaluation of vocational and educational counseling: A critique of the methodology. Educational and Psychological Measurement, 1941, 1, 5-24.
- Winer, B. J. Statistical principles in experimental design. New York: McGraw Hill, 1962.

- Wittenborn, J. R. Critique of small sample statistical methods in clinical psychology. <u>Journal of Clinical Psychology</u>, 1952, 8, 34-37.
- Zytowski, D. G. The study of therapy outcomes via experimental analogs: A review. <u>Journal of Counseling Psychology</u>, 1966, 13, 235-240.