Purpose

The study was designed to test the effectiveness of a counselor training experience which used pre-recorded client statements as the instructional medium. The principal objective of instruction was to teach counselor trainees to differentiate between the affective and cognitive content of client statements and to respond in ways which would continue to elicit affective responses by the client.

Procedure

Twenty-eight graduate students enrolled in a counseling practicum at Oregon State University were selected for the study. Subjects were randomly assigned to an experimental and control group of equal size. The experimental group received two hours of
individual instruction interacting with the tape-recorded client statements and the control group engaged in two hours of role-playing counseling interviews, alternating between client and counselor roles. The training tape-recordings were developed specifically for the project.

Subjects of both groups participated in a test prior to and following the training sequence. The test consisted of a live structured interview with a role-playing client. All test interviews were recorded and transposed into typescripts. An analysis of each typescript was carried out using a matrix format developed for the study. Counselor-client interactions were classified with respect to degree of lead and their affective-cognitive content. A ratio of acceptable responses made by the subject to all responses made by him was used as a basis for evaluation of performance.

Results

Several statistical techniques were employed in treatment of the data. Statistical analysis revealed that (1) the experimental subjects gained significantly in the performance criterion from pre- to post-training, (2) the control subjects showed no significant gain, (3) the experimental subjects demonstrated a significant gain in the performance criterion over the control subjects, and (4) controlling for pre-training performance, the experimental and control subjects
differed significantly in post-training performance.

These results suggested that the experimental subjects enhanced their use of specific verbal communication skills as a result of training in the simulated interview setting.
The Use of Tape-Recordings to Train Counselors in the Use of Specific Verbal Communication Skills

by

John Thomas Standish

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THE USE OF TAPE-RECORDINGS TO TRAIN COUNSELORS IN THE USE OF SPECIFIC VERBAL COMMUNICATION SKILLS

I. INTRODUCTION

The Problem

Counselor trainees engaged in practicum training situations where clients are first encountered typically receive differential training experiences. This condition is the result of differing client personalities and also the variety of problem areas which they present. With each new contact, therefore, the counselor trainee may experience a new and unique counseling situation, and little control can be maintained over the range and scope of problems presented to groups of trainees in the practicum setting.

The scope of client variables and the limitations of training tend to restrict the trainee to a relatively narrow range of counseling experiences. Practice of specific skills is, therefore, either highly restricted or not feasible, and counselor competencies within the range of counseling skills required for effective performance tend to develop only over extended periods of time in actual practice rather than in the training situation. In addition, the trainee has very little opportunity to be repeatedly confronted with specific interview problems (Loughary, 1961). Therefore, the acquisition of specific
interview skills by the practicum trainee becomes heavily dependent upon a one-trial learning basis.

Often when a client seeks a counselor's help with educational and vocational problems he brings with him deep-seated concerns regarding his personal adequacy in these areas. Tyler (1961) suggests that too often school counselors fail to communicate an awareness, appreciation, or acceptance of such concerns to the client. This failure may result in a premature termination of the counseling relationship with a resultant lessening of the effectiveness of the counselor and counseling program. It is, therefore, desirable that counselor trainees receive specific training in recognizing and responding appropriately to statements of affect or feeling by the client.

Professionals in the field of counseling generally agree that attitudes of acceptance and understanding communicated to counselees are mandatory in the establishment of the counseling relationship (Brammer and Shostrom, 1968; Loughary, 1961; Patterson, 1959; Tyler, 1961). Therefore, the identification of specific verbal behaviors and perceptual skills directly related to acceptance, understanding, and the communication of these feelings to the client can become specific objectives of training. The construction of a training device and an evaluation instrument to measure its effectiveness in order to achieve such objectives could prove to be a valuable asset to counselor-training programs. It is to this end that this research
is directed. It is not suggested that the training strategy is designed as a possible substitute for the total practicum training experience, but only as a supplement to it.

Objectives of the Research

The primary objectives of the study are:

1. To develop a training device which utilizes a series of pre-recorded tapes designed to teach counselor trainees:
   (a) to differentiate between affective and cognitive content of client statements;
   (b) to respond in ways which continue to elicit affective responses by the client or lead toward such statements;
   (c) to provide controlled practice in specific verbal communication skills.

2. To determine whether the training device brings about a quantitative change in the target behavior of the experimental subjects.

3. To determine whether practicum trainees that utilize the experimental device show greater amounts of the target behavior than practicum trainees who have not received training with the device.
Need for the Research

The primary purpose of the research is to construct a training device and an instrument to measure its effectiveness for the benefit of counselor training.

This purpose points up several needs for the research:

1. Systematic evaluation of counselor behavior in pre- and post-training interviews.
3. Provision for controlled practice for trainees with existent center facilities.
4. Systematic analysis of trainees interviews from the point of view of understanding and acceptance.

Hypotheses

The principal objectives of the research are stated in the null form below:

1. Subjects engaging in controlled practice with the training device will exhibit no differences in use of target behavior in pre- and post-training test interviews.
2. Subjects engaging in controlled practice with the training device will show no more gain in the use of target behavior from
pre- and post-training test interviews than will similar subjects not receiving such training.

**Theoretical Model**

The specific verbal counselor behaviors related to acceptance, understanding, and the skills required to communicate them to the client can be identified from counselor responses to client verbalizations. A counselor response may be analyzed with respect to two principal factors:

1. The degree of lead explicitly verbalized by the counselor (Robinson, 1955; Loughary, 1961).

2. The counselor's discrimination between the affective and cognitive content of client statements insofar as the counselor, through his responses to the client's statement, appears to select either cognitive or affective material upon which to respond (Bordin, 1955).

The degree of lead inherent in a given counselor response can be represented on a continuum from acceptance to rejection suggested by Loughary (1961). This continuum is represented in Figure 1:

```
acceptance
restatement
clarification
summary
general lead
reassurance
interpretation
advice
rejection
```

Figure 1. Continuum of lead.
The counselor's discrimination between affective and cognitive content of client statements can be represented on a continuum from highly cognitive to highly affective, as represented in Figure 2:

\[
\begin{array}{ccc}
\text{highly cognitive} & \text{cognitive-affective} & \text{highly affective} \\
\end{array}
\]

Figure 2. Cognitive-affective continuum.

By combining the two continua it is possible to represent a two-dimensional matrix upon which the counselor's verbal responses can be placed with respect to counselor lead and discrimination between cognitive-affective content of client statements. This matrix is discussed in Chapter III and shown in Figure 4.

Definition of Terms

Following are Tables 1 and 2 which define interview analysis categories.

Table 1. Definitions of affective-cognitive categories.

Affective - all verbalizations that contain only elements of feeling and/or expression of emotion.

Affective-Cognitive - all verbalizations that contain elements of feeling and/or expression of emotion in addition to informational statements which cannot be classified as totally affective.

Cognitive - all verbalizations that contain information but which do not embody any responses classifiable as affective.
Table 2 sets forth definitions of counselor lead categories in descending order of acceptance.

Table 2. Definitions of counselor lead categories.

<table>
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<th>Category</th>
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<tr>
<td>Acceptance</td>
<td>any counselor verbalization or gesture that communicates to the client that a statement or action is accepted without judgment.</td>
</tr>
<tr>
<td>Restatement</td>
<td>repeating a client remark in a more or less exact manner with no new content added.</td>
</tr>
<tr>
<td>Clarification</td>
<td>re-wording a client statement in a manner that removes ambiguity and more clearly reflects the ideas and feelings expressed by the client.</td>
</tr>
<tr>
<td>Summary</td>
<td>selection from client remarks and feelings which appear important and then recounting these to the client in capsule form.</td>
</tr>
<tr>
<td>General lead</td>
<td>any expressed or implied question directed to the client.</td>
</tr>
<tr>
<td>Reassurance</td>
<td>the counselor's explicit agreement with or overt support of a client statement.</td>
</tr>
<tr>
<td>Interpretation</td>
<td>explanation to the client of the psychological implications and meanings of his statements or behavior.</td>
</tr>
<tr>
<td>Advice</td>
<td>a counselor statement which suggests or demands a course of action by the client.</td>
</tr>
<tr>
<td>Rejection</td>
<td>a counselor verbalization or action which communicates disapproval to the client.</td>
</tr>
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</table>

Limitations

The experimental subjects for this research were limited to candidates for the Master's Degree in Guidance and Counseling in the School of Education at Oregon State University who were engaged in practicum training. No attempt is made to generalize findings.
beyond this group except insofar as these students may be representa-
tive of other graduate students engaged in the terminal phases of
counselor training at the Master's level. This research takes no
account of the personal interaction of the experimenter with the ex-
perimental subjects or the experimenter's bias.
II. REVIEW OF RELATED LITERATURE

The purpose of this review is the citing of pertinent research in the area of analytical procedures applied to the counseling interview. Counseling interview dynamics have been extensively studied and reported in the literature. This writer's review is therefore delimited to a relatively narrow area within the broad spectrum of interview analysis. Only those analytical procedures directly related to emotional content of and degree of lead in counselor-client interaction are reported here.

Interview Content Analysis

The use of tape-recordings and typescripts of the counseling interview greatly enhances the analytical study of counselor-client interaction. Rogers (1942), while making direct use of interview recordings finds typescripts necessary for a more intensive study of responses and as a raw material for use in research. By applying theoretical constructs to categorical response scales, Rogers tentatively concludes that the typescript is a reliable tool for the evaluation of interview content, that it provides empirical data for research, and that it has use in training counselors to be more adequate therapists.

An early study by Covner (1942) points out advantages and
disadvantages of recording as a technique in counseling and research. He reiterates Roger's (1942) tentative conclusions regarding the value of the typescript for studying and researching the counseling interview. The study also focuses attention on the ethics involved and procedures employed in informing the client and counselor that their interview is to be recorded. A disturbed reaction on the part of both client and counselor is produced in cases when neither is advised of the recording process.

In another pioneer work with the recorded interview, Porter (1943) attempts to develop and evaluate a means whereby procedures within the counseling interview may be identified and treated in a quantitative manner. By means of an empirical analysis of typescripts he groups similar counselor responses and characterizes them with descriptive statements. From this data a scale of counselor directiveness in an interview may be determined. Porter finds that one fundamental aspect of the interpersonal relationship in counseling is the extent to which the counselor determines or imposes the direction the interview takes.

Porter reports (1943, p. 118):

Directiveness is an aspect upon which all interviews may be compared regardless of differences in counseling viewpoint, techniques used, or position of an interview within a series of interviews.

Variations in the classification of counselor and client
verbalizations are reported for differing investigative purposes and the establishment of anlaytical reliability. Snyder (1947) focuses attention upon counselor ideas expressed in the interview. Using arbitrary categories he segments counselor verbalizations into idea units, each idea unit to be associated with a particular categorical construct. A parallel process is employed to categorize the emotional tone of client statements, with individual client statements being treated as an analytical unit. The frequency of classification in each category in seven sample interviews is tallied by two judges. An inter-judge reliability of 78 percent agreement is reported.

Raimy (1948), in a similar study infers that the classification of interview verbalizations provides analytical objectivity and avoids fractionation which tends to obscure meaning. With respect to client verbalization the unit employed by Raimy is any complete response. The unit then is comprised of all words spoken by the client between two responses of the counselor. All verbal units are then classified in six arbitrary categories. Two separate classifications by Raimy of 874 responses with a time interval of six months between results in an inter-judge agreement of 80.8 percent. Reliability of this classification system is further evidenced with an inter-judge agreement of 81.8 percent by three out of four judges when all client responses in four separate interviews are categorized.

An extensive study by Robinson (1949) deals with the unit
analysis of the counseling interview. The separation of interview
verbalizations into major topics of discussion or particular broad
problem areas constitutes the classification unit here. For example,
Robinson finds that structuring, questioning, and friendly discussion
stand out as distinct entities within the interview. Also, findings of
consistency in client and counselor roles and attitudes are manifested
when a particular problem is under discussion. Of the various units
used in interview analysis, Robinson asserts that each one has its
advantages for particular research purposes but that shortcomings
are encountered if an attempt is made to use the different units inter-
changeably regardless of the research objective.

Muthard (1953) reinforces Robinson's findings of the usefulness
of larger units in the study of counselor-client interactions with re-
spect to contrasting roles. In an investigation of two counselor
dimensions, lead and counselor assumption of responsibility for
the interview's direction, Muthard finds that the larger problem
area units or discussion topic units can be rated reliably with no
demonstrable difference between the two. Using three raters for
an analysis of multiple counseling interviews with respect to coun-
selor lead, an inter-rater reliability coefficient of .93 is demon-
strated.

A complex method of reliably unitizing interview material by
division into sentence groupings is reported by Auld and White (1956).
This system takes cognizance of false starts, completive sentences, and affirmations or negations standing alone. Many problems are reported to be connected with sentence unitizing. Because of the system's complexity, long and intricate instructions to raters are required.

Counselor Lead Dimensions

Studies of counselor directiveness in the interview situation (Porter, 1943; Snyder, 1945; Seeman, 1949) indicate that it is possible to discern a process of directiveness in counseling and to describe it in quantitative terms. Dimensions of the degree of counselor directiveness identified from the analytical study of interviews vary slightly with each writer.

Robinson (1950), in an expansion of the aforementioned studies, defines degree of lead as a sensitive measure of counseling behavior on a directive-nondirective continuum. He postulates on counselor techniques combined into four groups and arranges them in order of ascending degree of lead. Each group embraces categories which exhibit certain similarities. Within the first group counselor verbalizations categorized as silence, acceptance, restatement, clarification, and summary clarification show that the counselor accepts and understands what the client is saying without directing the course of the interview. License is offered to the client to verbalize next
whatever he wishes. Robinson's second group of lead categories contains approval and general lead (questioning) techniques representing an increase in the degree of leading over categories in the first grouping. Minor amounts of leading which find acceptance in the client are characterized in this group.

Robinson (1950) characterizes the third group of techniques as tentative analyses, interpretation, and urging. In these techniques are varying degrees of leading in that the counselor takes firm initiative for the course of the interview. Maximum lead by the counselor is exhibited by the categories of depth interpretation, rejection, assurance, and the introduction of new aspects of a problem. The pronounced extent to which the content of the counselor's verbalization appears to be ahead of the content of the client's last remark is characterized by this group.

In a study by Danskin and Robinson (1954) to relate the theoretical orientation of a counselor to counselor leading in the interview, 18 transcripts from interviews by six different counselors are analyzed. The first stage of analysis involves division of each interview into discussion topics patterned after Muthard (1953) and Dipboye (1954). Ninety percent agreement is reported for three raters. Each counselor remark within a discussion topic is then classified into one of 14 degree of lead categories. An inter-rater reliability coefficient of .79 is reported for two raters. Findings
show that the counselor's degree of lead is associated with the type of problem under discussion. Although significant differences are found between counselors with respect to degree of lead, the differences are not associated with the individual counselor's theoretical orientation.

Similar findings confirming the reliability with which counselor degree of lead can be inferred from verbatim interview typescripts are reported by Danskin (1955).

While viewing counselor interview behavior from the perspective of degree of lead, Loughary (1961) proposes a theoretical continuum of lead divided into ten categories from the least amount of counselor leading to the greatest amount of counselor leading. Acceptance, restatement, clarification, summary, and summary-clarification comprise the counselor sub-roles or techniques which are ordered from no leading to small amounts of leading. Increasing amounts of counselor lead are characterized by the classifications of general lead, reassurance, interpretation, advice, and rejection, wherein the counselor assumes increasing responsibility for the content and conduct of the interview.

There is agreement (Bordin, 1955; Danskin, 1955; Loughary, 1961; Robinson, 1950) that the degree to which the counselor's remarks tend to transgress what the client verbally presents represents
a sensitive guideline for adjusting to changes in client characteristics from moment to moment in the interview. A counselor's awareness of the sub-roles he plays should help him to respond with greater sensitivity to client characteristics.

**Affective and Cognitive Dimensions**

Assuming the desirability of the counselor's sensitivity to client concerns and the importance of communicating this understanding to the client (Brammer and Shostrum, 1968; Buchhemimer and Balogh, 1961; Carkhuff and Berenson, 1967; Robinson, 1950; Tyler, 1961) studies are cited dealing with affective and cognitive interview content and its analysis. Good and Robinson (1951) rate individual client statements within single discussion topics using two judges. In tallying the percentage of client feeling remarks in each discussion topic, an inter-judge reliability coefficient of .79 is reported.

The feeling or affective content of client verbalizations and the counselor's reaction to this element is the subject of a study by Snyder (1954). The analyses of 48 counseling interviews yield measurable data based on modified categorical constructs from studies by Covner (1942) and Porter (1943). After initial separation of interview materials into discussion topics, each client statement separated by a counselor response is classified with respect to either its affective or cognitive elements. Classification of client
statements by the writer on two occasions separated by one month's elapsed time yields an inter-rater reliability coefficient of .71.

Snyder (1954) concludes that there is a two-dimensional significance in client statements which is defined in terms of content and feeling.

Adopting the discussion topic as a unit model, Dipboye (1954) studies the interview in terms of the kinds of responses counselors make with reference to client verbalizations. Nine response categories are employed, five of these being related to content or cognitive elements, and the remaining four being related to feeling or affective elements. However, Dipboye finds in this study a clustering of data into two distinct affective and cognitive groups.

In an investigation by Weeks (1957) client responses within discussion units are classified as to intensity of affect. Raters are instructed in practice sessions to classify each client response on a five-point scale ranging from low affect level to high affect level. Typescripts are read simultaneously while listening to the tape-recorded interviews. Three trained counselors acting as raters report 91 percent agreement in the classification of client responses from 20 discussion units.

In an analysis of verbal interactions in five counseling groups, (Ohlsen and Oelke, 1962) trained judges classify sentence statements into four categories of feeling tone or affect. The classification procedure involves listening to tape-recordings of interaction while
following typescripts at the same time. Supplementary data from kinescopes gives visible identity to the various speakers. Seventy-six percent agreement between five raters is reported.

Similar studies (Ohlsen and Lerner, 1962; Schwartz and Ohlsen, 1968; Waskow, 1962) confirm that affect can be classified with reliability directly from tape-recordings without the use of typescripts. In the Ohlsen and Lerner study (1962), two trained judges classify responses into the five scales of positive affect, negative affect, no affect, ambivalent affect, and ambiguous affect. In an analysis of responses for 16 group counseling sessions, inter-judge agreement ranged from 72 percent to 86 percent.

Summary

The review of related literature suggests that tape-recordings and typescripts of counseling interviews can be reliably classified into dimensions of lead and affect. Since primary communication in the interview situation is speech, the ordered analysis of counseling dimensions becomes a valuable research tool. Since counselor dimensions are also many and varied, the few discussed in this chapter do not begin to encompass all aspects of counselor behavior, nor are they independent of one another.
III. THE PROCEDURES

The study was conducted in two principal phases, those of materials development and those of experimentation. The materials development phase involved the construction and refinement of a dual track tape-recording consisting of simulated client statements. An analytical device for use in the evaluation of interview materials was also developed.

The experimental phase of the project encompassed the pre-testing of the research subjects, a brief training period, re-testing of the subjects, and the analysis and evaluation of all test interviews. This phase of the project was conducted at Oregon State University using research subjects who were enrolled in a Master's degree program in Guidance.

The Training Device

The first stage in the development of the training device was to review numerous typescripts of counseling interviews involving students at the junior and senior high school levels. Source materials were gleaned from records at the Oregon State University Counseling Center, junior high school counselors, and counseling tests (Buchheimer and Balogh, 1961; Arbuckle, 1961; Loughary, 1961).
This review was conducted in order to determine appropriate content for the tape-recorded simulated client statements. Three criteria were adopted for the selection of content: (1) realistic presentation of content using the tape-recorded voice of a junior high school age student, (2) interest and appeal of the content to the listener, and (3) reflection in the recorded client statements of an adolescent's disposition to cover up pressing personal concerns with verbalizations of concerns in far less sensitive or less significant areas.

Agreement in consultations with junior high school counselors finalized the typically school-related adolescent problems to be embodied in the tape-recorded client statements.

The tape-recorded statements embodied in the training tape (see Appendix A) are representative of a seventh grade female student, hereinafter referred to as "Jane." An attempt was made to develop a logical sequence of statements in which counselor trainees could respond in varying ways without completely destroying the thread of logic connecting each succeeding statement by Jane. In keeping with the criteria established for the content of Jane's verbalizations two sets of sequential statements were developed for a dual track recording. Four introductory statements, each requiring a hypothetical counselor trainee response led into the dual track recording. At this juncture each of the two parallel tracks were
designed to present a different logical sequence of statements. The experimenter could, at will, switch back and forth from one tape track to the other, depending upon the character of the trainee's responses. In this way, alternative statements by Jane could be fed back to the trainee.

The first track was designed to feed back to the trainee predominately cognitive statements. Similarly, the second track was arranged to feed back predominately affective material representative of Jane's more pressing personal concerns. The cognitive verbalizations served as a hypothetical masking or holding back of deeper concerns.

During the assembly of the tape-recorded sequences, logical counselor responses to each trial statement by Jane were anticipated in order that meaningful feedback could for the most part be maintained during the training presentation. Jane's verbalizations were ordered so that feedback would be appropriate to the assumed counselor trainee role. When cognitive elements of Jane's statements would be pursued, the experimenter would then be able to feed back cognitive elements. When affective elements of Jane's statements would be reacted to, affective feedback would ensue.

Although only possible counselor trainee reactions to Jane's verbalizations could be anticipated, the experimenter assumed that a trainee would not react illogically to any of the tape-recorded
After trial and revision of the script, four successive tape-recordings were made and then modified after being tried out with experienced counselors and advanced doctoral-level students. The final tape-recorded client statements later used in the training sequence are presented in Appendix A.

A short orientation sequence, presented in Appendix B, was also tape-recorded for presentation to experimental subjects immediately preceding their first training session. The tape-recorded client voice used was that of an adolescent male.

The Research Subjects

Twenty-eight subjects participated in the experiment. All subjects were graduate students at the master's level majoring in Guidance at Oregon State University, and enrolled in the counseling practicum during the Spring and Summer terms of 1964. Eleven subjects were enrolled during the Spring term and 17 were enrolled during the Summer term. There was an equal number of males and females. Twenty-three subjects had a minimum of two years public school teaching experience. The remaining four subjects had past experience in social service oriented occupations. Ages of the subjects ranged from 23 to 49 years.
The Experiment

Subjects were randomly assigned to experimental and control groups. Each of the experimental and control group subjects participated in one pre-training and one post-training test interview in which each research subject in turn counseled a professional counselor who role-played the client. In the intervening period between pre- and post-training tests the experimental group engaged in a training procedure interacting with the tape-recorded client statements. The control group subjects received no training but were required to spend a similar amount of time role-playing counseling interviews in pairs. All the pre- and post-training tests were analyzed and quantified in order to provide test scores for the research subjects. Test scores were then evaluated to provide information on the effectiveness of the training procedure.

A role-playing client was interviewed by each research subject in a pre-training test interview. In each test interview the role-playing client was portrayed by a professional counselor who was a member of the Counseling Center staff. The professional counselor received detailed instructions on the client role and how he should best react to the counselor trainee depending upon the particular role assumed by the counselor trainee. The role-playing client was instructed to follow the lead of the trainee. If the trainee tended to be
accepting with respect to degree of lead, then the role-playing client would openly discuss areas of deep concern, feeding back highly affective material. Conversely, if the trainee tended to be low in acceptance, the role-playing client would only discuss cognitive material and would mask or avoid matters of deep emotional concern.

The role-playing client was structured for the research subjects with information provided by two separate documents. A completed Counseling Center Questionnaire, shown in Appendix C, provided background information on the hypothetical client. A Counseling Intake Interview report, shown in Appendix D, indicated minimal information with respect to the client's problem. A file containing the two documents was made available to the research subjects for a short period of time immediately preceding the test interviews which were tape-recorded and exactly 20 minutes in duration.

Fourteen experimental subjects received training with the tape-recorded client statements. Total training time for each subject was approximately two hours in two separate training sessions. Only the experimenter and one subject were present during the training periods. The experimenter occupied a desk with a tape-recorder for use in controlling the tape-recorded client responses. The subject, seated at a separate desk also equipped with a tape-recorder, interacted with the tape-recorded statements while the total process
was recorded. Figure 3 depicts the experimental setting:

![Diagram of experimental setting]

Figure 3. The experimenter and the subject in the experimental setting.

At the outset of the first training session subjects were exposed to a short orientation session in order to provide practice in spontaneous response to and interaction with tape-recorded statements. Following this procedure, subjects were oriented to Jane, the tape-recorded client, and instructed to conduct an interview with her, acting as a counselor. The client, Jane, was represented as having been referred to the counselor by one of her junior high school classroom teachers.

The interview was then begun. If the subject's counseling led toward the cognitive portion of the recorded statements, he was allowed to continue no further than sequence Number 19, as indicated
in Appendix A under the tape-recorded client statements. The tape was then stopped and the experimenter suggested that another approach might be pursued in order to have Jane express some emotional concerns. A second trial was then initiated from the beginning. If the subject showed no improvement in leading Jane toward the affective track, the interview was again stopped and the experimenter pointed out that Jane did have pressing concerns to discuss. The interview was then continued and terminated after the subject had some experience with the problem sequences beginning with sequence Number 10, as noted in Appendix A, and also had an opportunity to listen to and discuss portions of the interaction.

The second training session was scheduled two days later. Subjects repeated the same activity from the beginning to a point where they developed a facility for exploration of the affective track. Direct suggestions were offered by the experimenter to any subject having difficulty in leading Jane into affective material. The second training period concluded after the subject had satisfactorily completed interaction with the affective track.

Subjects were scheduled for post-training test interviews approximately one week after their second training session.

The control group subjects were randomly paired. Each pair of subjects was scheduled for two 50-minute sessions in which they were instructed to role-play a counseling interview. Alternatively
in each of the two sessions, one subject was to act as counselor while
the other subject role-played a junior high school age student. Tape-
recordings were made of both role-playing sessions. Control sub-
jects were then scheduled for post-training test interviews.

All subjects engaged in a 20-minute post-test interview with
the role-playing client. The procedures for this interview were
identical in every respect to the pre-training test interview with one
exception. The role-playing client, who was portrayed by the same
professional member of the Counseling Center staff, represented a
different hypothetical client. These differences were exemplified by
superficial modifications of the hypothetical client portrayed in the
pre-training test interviews. Immediately preceding the interview,
subjects as before examined a client file containing a completed
Counseling Center Questionnaire shown in Appendix E, and an Intake
Interview report shown in Appendix F. Each interview was tape-
recorded.

Collection of the Data

The primary source of the data for the study was the tape-
recordings of pre- and post-training test interviews. Fifty-six tape-
recordings were converted into typescripts. Each typescript was
subjected to analysis, the description of which follows.
Interview Analysis

Typescripts of interview behavior were analyzed with reference to elements of affective content and degree of lead. Both elements of interview behavior were viewed as continuums. Affective interview content was categorized along an affective-cognitive continuum. Three categories were used: (1) affective, (2) combined affective and cognitive, and (3) cognitive. Definitions of the affective-cognitive categories were presented above in Table 1.

The degree of lead was categorized along a continuum from acceptance to rejection. The following nine categories of lead were employed: (1) acceptance, (2) restatement, (3) clarification, (4) summary, (5) general lead, (6) reassurance, (7) interpretation, (8) advice, and (9) rejection. Definitions of lead categories were presented above in Table 2.

A matrix format integrating the two continuums was developed for use in the classification of responses. Responses could therefore receive two-dimensional classification, being simultaneously categorized with respect to affective content and degree of lead. The interview analysis matrix is presented in Figure 4.

The heavily outlined portion of Figure 4 represents the target behavior with which this study is concerned. Counselor responses categorized within the outlined area represent accepting and
understanding responses to client statements of feeling. The training device was designed in such a manner that the target behavior was reinforced consistently and all other behaviors consistently received no reinforcement.

<table>
<thead>
<tr>
<th>Lead</th>
<th>Affective</th>
<th>Affect-Cognitive</th>
<th>Cognitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restatement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clarification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Lead</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reassurance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpretation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advice</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rejection</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 4. Interview analysis matrix.

Counselor statements in each interview typescript were numbered and classified along a continuum of lead. Concurrently, each intervening client statement was analyzed for affective content and classified in relation to the counselor's reaction to this statement. Since the behavior of both client and counselor were in effect analyzed jointly, a client statement followed by a counselor response was considered an interaction. One interaction was therefore used
as the classification unit. Placement of an interaction unit on the matrix provided a dual analysis of counselor behavior. The counselor's reaction to the content of a client statement and the degree of lead exercised by the counselor was recorded for each client-counselor interaction.

Each of the 56 test interview typescripts was analyzed by the experimenter. A counselor ratio score was then calculated for each test interview. This ratio score represented the frequency of responses falling within the shaded outlined target behavior area, shown in Figure 4, compared with the total number of responses recorded on the matrix.

In order to avoid experimenter bias, typescripts of pre- and post-training interviews for both experimental and control groups were assigned random code numbers. During the analysis it was impossible for the experimenter to identify research subjects as to their group, as to pre- or post-training test, or as to their individual identity.

From the 56 test interviews, 12 were randomly selected and analyzed by a second investigator. These analyses were conducted to provide evidence of (1) reliability of the analytical procedure, and (2) experimenter bias. A ratio score of target behavior frequency within the outlined matrix area to the total number of responses was assigned to each of the 12 interviews.
The ratio scores are presented in Table 3.

Table 3. Ratio scores assigned to 12 interviews by two investigators.

<table>
<thead>
<tr>
<th>Investigator</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>.425</td>
<td>.348</td>
<td>.167</td>
<td>.186</td>
<td>.097</td>
<td>.349</td>
<td>.446</td>
<td>.180</td>
<td>.109</td>
<td>.390</td>
<td>.528</td>
<td>.150</td>
</tr>
<tr>
<td>B</td>
<td>.319</td>
<td>.413</td>
<td>.130</td>
<td>.143</td>
<td>.065</td>
<td>.302</td>
<td>.396</td>
<td>.333</td>
<td>.124</td>
<td>.365</td>
<td>.564</td>
<td>.279</td>
</tr>
</tbody>
</table>

A t-test for correlated samples showed no differences in mean ratio scores tabulated by the experimenter from those assigned by the independent investigator. The Spearman rank correlation coefficient between the experimenter and independent investigator scores for the 12 interview analyses was .79.
IV. THE RESULTS

The Statistical Tests

Since no assumptions could be made regarding the nature of the population of graduate students at the master's level enrolled in a counseling practicum, the sample used in this study is representative only of the aforementioned class of graduate students at Oregon State University. Therefore it cannot be assumed that the observations of this study are drawn from a normally distributed population. Nonparametric tests typically do not require assumptions regarding the population from which samples are drawn. Thus, the scores under analysis need not be drawn from a normally distributed population (Siegel, 1956).

Both parametric and nonparametric statistical tests were deemed necessary for the treatment of data in this study. Table 4 represents the particular data tested and the statistical tests applied, with the asterisk indicating nonparametric tests.
Table 4. Statistical tests applied to the data.

<table>
<thead>
<tr>
<th>Data tested</th>
<th>Statistical test applied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability of interview analysis procedure</td>
<td>t-test for correlated samples</td>
</tr>
<tr>
<td></td>
<td>*Spearman rank correlation coefficient</td>
</tr>
<tr>
<td>Pre- and post-training test comparisons of target behavior frequency in experimental and control group</td>
<td>t-test for correlated samples</td>
</tr>
<tr>
<td></td>
<td>*Kruskal-Wallis one-way analysis of variance (H)</td>
</tr>
<tr>
<td>Comparison of gain scores (post-training test scores minus pre-training test scores in experimental group and control group</td>
<td>t-test for separate group variance</td>
</tr>
<tr>
<td></td>
<td>*Kruskal-Wallis one-way analysis of variance (H)</td>
</tr>
<tr>
<td>Analysis of post-training scores controlling for initial level of performance (pre-training scores)</td>
<td>Analysis of covariance</td>
</tr>
</tbody>
</table>

Summary of Objectives

The objectives of the experiment were (1) to determine whether or not training in specific verbal communication skills would result in their increased use, and (2) to determine if subjects exposed to the training would exhibit greater use of the specific verbal skills than a similar group of subjects who were not exposed to the training.

The Data

Raw data gleaned from the typescript analyses were converted to ratio scores representing the ratio of a subject's target responses to his total interview responses. Ratio scores for all experimental
The mean ratio scores for the subjects of both groups on the pre- and post-training tests are shown in Figure 5.

<table>
<thead>
<tr>
<th>Mean ratio score</th>
<th>Pre-training test</th>
<th>Post-training test</th>
</tr>
</thead>
<tbody>
<tr>
<td>.400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>.300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>.200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>.100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 5. Mean ratio scores of experimental and control groups for pre- and post-training tests.

The t-test for correlated samples (Wert, Niedt, Ahmann, 1954) was used for making comparisons in pre- and post-training test results for both experimental and control groups. The statistical model

\[ t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{\sum d^2}{n(n-1)}}} \]

was used to evaluate for a significant difference between two means.

The resultant value of t for the experimental group (t = 2.18) showed
that the difference in pre- and post-training scores was significant at the .05 level (p < .05). Therefore the null hypothesis (see hypothesis No. 1, p. 4) that the subjects engaging in controlled practice with the training device will exhibit no difference in the use of target behaviors in pre- and post training tests can be rejected. In applying the same statistical model to the control group with the resultant value $t = .81$, the pre- and post-training differences were not sufficiently great to reject the null hypothesis.

Parallel results were obtained with nonparametric techniques. The Kruskal-Wallis one-way analysis of variance by ranks yielded an $H$ value of 3.90 (p < .05) for experimental group pre- and post-training differences, sufficient to reject the null hypothesis, ($H = -.22$). The reader is referred to Siegel (1956, pp. 184-186) for the statistical model of the test. A summary of the above test results is presented in Table 5.

Table 5. Results of comparison of pre- and post-training scores for experimental and control groups.

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean pre-training scores</th>
<th>Mean post-training scores</th>
<th>$t$</th>
<th>df</th>
<th>$H$</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>.238</td>
<td>.331</td>
<td>2.18</td>
<td>13</td>
<td>3.90</td>
<td>$p &lt; .05$</td>
</tr>
<tr>
<td>Control</td>
<td>.314</td>
<td>.285</td>
<td>.81</td>
<td>13</td>
<td>-.22</td>
<td>non-significant</td>
</tr>
</tbody>
</table>
Gain scores (post-training score minus pre-training score) for the two groups were compared using two statistical tests, one parametric and the other nonparametric. Table 6 reports mean gain scores for the two groups.

Table 6. Mean gain scores for experimental and control group.

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean gain score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>.093</td>
</tr>
<tr>
<td>Control</td>
<td>-.029</td>
</tr>
</tbody>
</table>

The t-test for separate group variance (Wert, Niedt, Ahmann, 1956) design was one of the tests used to compare the difference between the mean gain scores of the two samples. The statistical model is

\[
t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{\Sigma x_1}{k_1(k_1-1)} + \frac{\Sigma x_2}{k_2(k_2-1)}}}
\]

Two assumptions are inherent in this design, (1) that each group represents a sample from a homogenous population with respect to the performance criterion, and (2) that there was no existent correlation in drawing the samples. A value \( t = 2.19 \) resulted in a difference large enough to reject the null hypothesis at the .05 level of significance (see hypothesis No. 2, p. 4).
The Kruskal-Wallis one-way analysis of variance by ranks, a nonparametric statistical design, was also applied to compare the difference between the gain scores of the two groups. A comparison of gain scores yielded a value $H = 4.242$, large enough to reject the null hypothesis at the .05 level of significance and support the results of the t-test.

Summarized results from the two tests are shown in Table 7.

Table 7. Experimental-control comparison of gain scores.

<table>
<thead>
<tr>
<th>Type of test</th>
<th>Values obtained</th>
<th>df</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parametric t-test</td>
<td>$t = 2.19$</td>
<td>25</td>
<td>$p &lt; .05$</td>
</tr>
<tr>
<td>Nonparametric H test</td>
<td>$H = 4.242$</td>
<td>25</td>
<td>$p &lt; .05$</td>
</tr>
</tbody>
</table>

One further parametric test was made for the purpose of controlling for the initial level of performance. In controlling for previous performance of the groups the technique of arbitrarily starting both groups at the same level enabled a significant comparison to be made between the experimental and control performances on the post-training test.

An analysis of covariance (Wert, Niedt, Ahmann, 1956) of post-training test scores was made controlling for differences in pre-training test scores. A summary of the findings is presented in Table 8. An $F$ value of 4.32 was sufficiently large to reject the
null hypothesis at the .05 level of significance (see hypothesis No. 2, p. 4).

Table 8. Analysis of covariance test of significance of post-training test score differences for experimental and control groups.

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Degrees of freedom</th>
<th>Sum of squares</th>
<th>Mean square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>26</td>
<td>.517320</td>
<td></td>
</tr>
<tr>
<td>Within groups</td>
<td>25</td>
<td>.441011</td>
<td>.017640</td>
</tr>
<tr>
<td>Difference</td>
<td>1</td>
<td>.076309</td>
<td>.076309</td>
</tr>
</tbody>
</table>

\[ F_{1, 25} = \frac{.076309}{.017640} = 4.326 \]

Results of the statistical analyses indicate (1) that the experimental subjects benefited from the tape-recorded training procedure and (2) that their criterion performance differed significantly from a similar group of subjects who were not exposed to this training procedure.
V. SUMMARY AND IMPLICATIONS

Summary of the Study

The primary objective of the study was to train counselor trainees to differentiate between the affective and cognitive content of client statements and to respond in ways which would continue to elicit affective responses by the client. Effectiveness of the instructional procedure was tested (1) to determine whether changes in experimental subjects' criterion behavior occurred after instruction and (2) to determine whether these subjects exhibited greater amounts of this behavior than control subjects not receiving the experimental instruction.

Twenty-eight graduate students enrolled in a counseling practicum at Oregon State University were selected as subjects for the study. Subjects were randomly assigned in equal numbers to an experimental and control group.

A training device consisting of a dual track tape-recording of client verbalizations was developed. The training sequence involved each experimental subject's interaction with the tape-recorded client for two sessions each of one hour's duration. Selective recorded client statements were fed in sequence by the experimenter to the experimental subjects who responded to the simulated client as though
in an actual interview setting. Control subjects spent an equal amount of time role-playing counseling interviews.

Subjects of both the experimental and control groups participated in a test prior to and following the training sequence. Each subject, in the test situation, counseled a role-playing client in a structured live interview. The test interviews were tape-recorded and interview typescripts were prepared. Each interview typescript was subjected to analysis using a matrix format developed by the experimenter for the project. Counselor-client interactions for each test interview were classified with respect to counselor degree of lead and response to affect. These classifications furnished the data for the study.

Both parametric and nonparametric statistical models were employed in treatment of the data. Statistical analysis revealed that (1) the experimental subjects gained significantly in the performance criterion from pre- to post-training, (2) the control subjects evinced no significant gain in the performance criterion from pre- to post-training, (3) the experimental subjects demonstrated a significant gain in performance over the control subjects, and (4) the experimental and control subjects differed significantly in post-training performance when pre-training performance for both groups was controlled. These results suggested that the experimental subjects increased their use of specific verbal communication skills as a
result of training in the simulated interview setting.

Implications of the Study

The findings of this study suggest that the training technique herein described may be of value as an adjunct activity in a counselor training program. With minimal modification of presentation methods counselor trainees could be instructed to employ similar tape-recordings in individual practice sessions. Operation of the recording equipment could be performed by the individual trainee while systematically practicing a particular skill.

Supervised practice is an integral part of the counselor training curriculum. It is conceivable that a trainee activity which to any degree relieves the usual taxing supervisor-enrollee ratio would be of value.

The interview analysis matrix technique constitutes another potential contribution to counselor training. A reliable instrument requiring relatively simple instruction for implementation and use, the matrix technique could be adapted for usage by counselor trainees in self-evaluation as well as evaluation of live or recorded counseling interviews. For example, a counselor trainee, after tape-recording one of his live practicum interviews with a client, could then playback the recording and categorize the responses on the interview analysis matrix. Depending upon the particular counselor role
receiving the focus of attention, the trainee would have a graphic
illustration of his own interview behavior.

Similarly, its use by supervising counselors could provide an
accurate and objective view of specific aspects of counseling behav-
ior. Supervisors could use the interview analysis matrix as a trainee
evaluation device or as a facilitator for supervisor-trainee discus-
sions.

The interview analysis matrix, as well as having considerable
utility for research purposes, exhibits definite potential as a device
for facilitating insights into counselor behavior.


APPENDICES
APPENDIX A
Tape-recorded Client Statements

1. Miss Smith wanted me to come and see you...I don't know--I guess about my grades...I'm not doing very good.

2. I guess most of my trouble is in math...I'm doing good in the rest of my subjects...you know, I'm taking the same things other kids take.

3. My grades are pretty bad in math...we've...Miss Smith gives a lot of tests and I've flunked a couple of them already.

4. I just can't seem to get math...we're working with square root and I'm confused...I get it all mixed up with division.

----------

If counselor accepts, reflects, or gives general lead to math...continue with square route.
If general lead to conflict with Miss Smith or feelings, etc....go on to problem.

----------

<table>
<thead>
<tr>
<th>SQUARE ROUTE</th>
<th>PROBLEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. In square root there's those funny signs they make...I just don't know where to do division and where to do square root.</td>
<td>10. O.K.,...but..., well..., Miss Smith gets pretty mad at me sometimes.</td>
</tr>
<tr>
<td>6. I've never done good in math uh...English is my best subject,...that's where I really do good...history too.</td>
<td>11. She seems like she's picking on me..., she should know I'm not very good in math. (If general lead, skip one)</td>
</tr>
<tr>
<td>7. I like history,...that's a real interesting subject because you learn all sorts of things.</td>
<td>12. Just a lot of little things. (If accepts, continue problem) (If lead to math, square root)</td>
</tr>
<tr>
<td>8. I wish I could do better...I just...just don't understand it. Maybe I don't take notes very well.</td>
<td>13. Nobody likes to have somebody pick on ya...I don't mind it when I'm wrong...gosh, when she jumps on me for nothing at all, I get upset.</td>
</tr>
<tr>
<td>9. Well, Miss Smith says that I don't pay attention in class...and,...she told me I should learn how to take notes so I'd remember these things better.</td>
<td>14. Miss Smith is just like my mom..., always picking on me about things.</td>
</tr>
</tbody>
</table>
15. Sometimes...I guess I don't know what's important...I...just...well, the important things don't get in my notes.

16. Why don't I show you some of my notes?

17. Miss Smith said you could help me... and...maybe if I showed you some of my notes you could...uh...tell me what I'm doing wrong.

18. It would sure help if you could tell me what to do... What do you think I should do?

19. I've got some notes and homework problems here. If you could look them over a bit I'll go back to study hall.

20. Sometimes...ah...well, I get so I feel real guilty about things I do.


22. Mother nags at me about little things, 'til I feel like crying all the time.

23. I don't know...she got mad at me a couple of days ago about borrowing things. Boy! I thought she was going to kill me!

24. She just doesn't understand how kids are...you know....

25. Well,...kids always borrow things from each other...I don't see anything wrong with that, do you?

26. I just wish they'd leave me alone... what I do is my own business.

27. They always jump on me...makes me feel like a criminal or something...just because I borrow a few things.

28. Well, pencils,...erasers and stuff like all the kids do. Miss Smith never said we couldn't borrow anything.

29. And Bill took Nancy's socials book off her desk last week and she nearly failed the test we had 'cause she couldn't study.

30. Nancy told me he's done it before lots of times, and that if he does it again she's going to tell Miss Smith.

31. I told Nancy I didn't think she should... you know how some of the teachers are.

32. Well, the other day Fred told Miss Smith that Nancy was copying his spelling paper...he sure is a tattle-tale.

33. Oh...I don't know...and they get all excited just because...well, just 'cause I forget. They think it's a big crime.
34. Gosh, I mean to give 'em back their old stuff... it's usually not worth anything anyway.

35. Well,... no, not really.

36. I don't know.

37. Oh... the stuff I borrow... what are your friends for anyway... you shouldn't even have to ask 'em.

38. It's not like I'm stealing the things... it's just that I want to use it for a little while.

39. Haven't you ever borrowed anything and forgot to give it back... everybody does it.

40. Well... I know lots of them that do.

41. The stuff's not worth anything... and they make such a big deal about it.

42. I don't know.

43. Well,... I don't know... but... well, I figure it's finders keepers and if the kids leave their stuff around, it's too bad.

45. I'd give it back to them if they asked me...

46. Well,... most of the things I guess I really don't need... it's maybe kind of dumb of me.

47. Sometimes I lose some things that way... and it does kinda get me.

48. I don't know... but... I guess I'd be a little upset if someone took some of my stuff.

49. I suppose it's maybe better to ask, than to have everyone on your back all the time.

50. Sometimes I wonder why I borrow stuff when I really don't need it.

51. If I got up enough nerve to ask... maybe mom would give me the money to buy all that stuff. Boy, I'd sure be happy about that!
APPENDIX B
Orientation Sequence for Simulation Training

ORIENTATION TAPE

Is this the Counseling Office?

They told me I should come and talk to someone here. Are you the counselor?

Do you want me to sit in this chair?

Is it o.k. if I talk to you now...'cause if you're too busy I could maybe come back later sometime.

Well, I've got a lot of pretty private stuff to tell you about...ah...and I was wondering if you ever tell anyone...tell anyone what the kids say in here.

It's just that I wouldn't want my homeroom teacher to hear anything I said, and besides, my mom would kill me if she found out I got myself into kind of a mess at school.

You're sure about that? I mean, that you don't tell anyone?

Are you going to turn that tape-recorder on?

Well, I get kind of nervous with one of those things going while I'm talking.

Do you take notes and stuff on all this, or.... ah....?

I don't know... ah.... ah... Where do you want me to start?

Well, should I start from scratch... or... do you...uh..

Uh....well, I guess I'll have to think now.
APPENDIX C

Counseling Center Questionnaire - - Pretraining Interview

Date June 1964

COUNSELING CENTER
OREGON STATE UNIVERSITY

The purpose of this questionnaire is to gather essential information about you. Answer all questions as frankly and as completely as possible, however, you may leave any questions unanswered if you choose to do so. The information that you give will be helpful to you and your counselor in terms of making most efficient use of your interviews. ALL INFORMATION WILL BE KEPT CONFIDENTIAL.

PLEASE PRINT

Name_ ___________  ___________ Davis  ___________ Frank  ___________
(last)  (first)  (middle)
Birthdate_ ___________  ___________  Oct. 23/38  ___________  Age_ ___________
Birthday_ ___________  ___________  (middle)
Date_ ___________  ___________ Phone_ ___________  ___________ Ext.  ___________
Local Address_ ___________  ___________ Waldo Hall  ___________
Home Address_ ___________  ___________  2417 S. W. 49th  ___________
(number)  (street)  (city)  (state)
Sex_ M  Marital Status: Single_ ___________ Married  ___________  Divorced  ___________  Separated  ___________
Religious Preference:_  ___________  P  C  J  Other (specify)_ ___________ None  ___________
Military Service:_  ___________  Yes  ___________  No_ ___________  Date of Service_ ___________
Entered OSU: Term_ ___________ Fall  ___________ Year_ ___________ 1962  ___________
OSU Class_ ___________ School Engin.  ___________ Major_ ___________ Indst.  ___________
OSU Accumulative gpa_ ___________  ___________ 2. 8_ ___________  Last Term gpa_ ___________  ___________ 2. 1
If transfer from another University, give accumulative gpa_ ___________
Name and address_ ___________
High School_ ___________  ___________ David Douglas  ___________ Portland  ___________ Oregon  ___________ 1955
(name)  (city)  (state)  (year graduated)
High School GPA_ ___________  ___________ 3. 6_ ___________ List the population of the town or city where you lived while
attending high school_ ___________  ___________ 400, 000_ ___________ number of students in high school from which you
graduated_ ___________  ___________ 1, 220_ ___________
Previous Counseling:_  ___________  Yes_ ___________  No_ ___________ (If yes, check where and give year:_)
High School_ ___________  ___________ 1955  ___________ OSU Counseling Center  ___________ Other University_ ___________
Private_ ___________ Employment Bureau_ ___________ Other (specify)_ ___________
OSU Residence:_  ___________ Residence Hall  ___________  x  Fraternity or Sorority_ ___________ Co-op  ___________ With
Friends:_  ___________ In apartment_ ___________  ___________ In house_ ___________ With parents_ ___________ With spouse in
University housing_ ___________  ___________  With spouse in town_ ___________ Other (specify)_ ___________
Please check below your FREE times for convenience in making appointments:

<table>
<thead>
<tr>
<th>M</th>
<th>T</th>
<th>W</th>
<th>T</th>
<th>F</th>
</tr>
</thead>
<tbody>
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Source of Present Financial support (give percentage): Self 50  Parents 50  Scholarship Loan Spouse Other (specify)

Who suggested you contact the Counseling Center: Friend x Dean Spouse Head Advisor No One Physician Faculty Member Other (specify)

Health Problems? Yes No x Explain

Any Disabilities? Yes No x Explain

Indicate All members of your family. Include parents or step-parents, brothers, sisters, husband or wife, and children. If you have a deceased or divorced parent, also include with date of leaving family.

<table>
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Reasons for coming to the Counseling Center (check as many as apply):

- Interests and abilities
- Information
- Effective study habits x
- Ed-vocational decision
- Marital - pre-marital problem
- Family problem
- Finances
- Religious problem
- Social relationships
- Difficulty in understanding myself x
- Other (specify)

Explain more fully the things you want to talk about with the counselor:
APPENDIX D
Summary of Intake Interviews - - Pretraining Interview

RECORD OF INTERVIEW

Interview No.: Intake Date: May 2, 1964

Client: Frank Davis Counselor

1. Client's statement of problems: or estimate of progress:

   Is concerned with his poor performance on exams last term. Feels that he studied hard and knew his work - suggests that he received a raw deal on his grades. Client cannot decide whether to continue with engineering studies or drop out and go to work.

2. Counselor's statement of problem or evaluation of progress:

   Although client thinks he should have done better in his studies, he doesn't appear to have any understanding of why his performance dropped so sharply. He did not suggest that other factors may have been operative - i.e., other than his professors discriminating against him.

3. Description of Interview:

   Mild rapport established. Client appeared somewhat ill at ease. Although he terminated the interview after 15 min. (had to go to a physics lab.), client seemed highly motivated to return to the center for further interviews.

4. Counselor's evaluation of his procedures and techniques:

   (intake interview)

5. Counselor's plan of action for future contacts (case strategy):

   Would recommend further exploration.
APPENDIX E
Counseling Center Questionnaire -- Post-training Interviews

Date _____ May 15, 1964 _____

COUNSELING CENTER
OREGON STATE UNIVERSITY

The purpose of this questionnaire is to gather essential information about you. Answer all questions as frankly and as completely as possible, however, you may leave any questions unanswered if you choose to do so. The information that you give will be helpful to you and your counselor in terms of making most efficient use of your interviews. ALL INFORMATION WILL BE KEPT CONFIDENTIAL.

PLEASE PRINT

Name ___________ Miles ___________ John ___________ Birthdate 3/29/39 ___________ Age 25 ___________
(last) (first) (middle)

Local Address _______ 721 South St. _______ Phone 3-2220 _______ Ext _______

Home Address _______ 2417 S. W. 49th _______ Oakland _______ Calif. _______
(number) (street) (city) (state)

Sex ___________ M _______ Marital Status: Single _______ Married ___________ Married x _______ Divorced _______ Separated _______

Religious Preference: P ___________ x C _______ J _______ Other (specify) _______ None _______

Military Service: Yes ___________ x No _______ Date of Service _______ 1956-60 _______

Entered OSU: Term Fall _______ Year 1962 _______ OSU Class Soph. _______ School Ed. Major Sec. _______

OSU Accumulative gpa 2.9 _______ Last Term gpa 3.2 _______

If transfer from another university, give accumulative gpa _______
Name and address _______

High School _______ Bayview _______ Oakland _______ Calif. _______ 1955 _______
(name) (city) (state) (year graduated)

High School GPA 3.4 _______ List the population of the town or city where you lived while attending high school 250,000: number of students in high school from which you graduated 1,600 _______

Previous Counseling: Yes ___________ x No _______ (If yes, check where and give year):
High School 1955 _______ OSU Counseling Center _______ Other University _______
Private _______ Employment Bureau _______ Other (specify) _______

OSU Residence: Residence Hall _______ Fraternity or Sorority _______ Co-op _______ Other _______
Friends: In apartment _______ In house _______ With parents _______ With spouse in university housing _______ With spouse in town ___________ Married x _______ Separated _______ Other (specify) _______
Please check below your FREE times for convenience in making appointments:

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</table>

Source of Present Financial support (give percentage): Self 20 Parents 80 Scholarship Loan Spouse Other (specify)

Who suggested you contact the Counseling Center: Friend Dean Spouse Head Advisor No One Physician Faculty Member Other (specify)

Health Problems? Yes No x Explain

Any Disabilities? Yes No x Explain

Indicate all members of your family. Include parents or step-parents, brothers, sisters, husband or wife, and children. If you have a deceased or divorced parent, also include with date of leaving family.

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<th>Yrs. of Ed.</th>
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<td>Father</td>
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<td>Foreman</td>
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<tr>
<td>Wife</td>
<td>24</td>
<td>secretary-typist</td>
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</table>

Reasons for coming to the Counseling Center (check as many as apply):

Interests and abilities Information Effective study habits Ed-vocational decision x Marital - pre-marital problems Family problem Finances Religious problem Social relationships Difficulty in understanding myself Other (specify)

Explain more fully the things you want to talk about with the counselor:

Want to know advisability of changing majors at this time.
APPENDIX F
Summary of Intake Interview -- Post-training Interview

RECORD OF INTERVIEW

Interview No.: Intake Date May 18, 1964

Client: John Miles Counselor

1. Client's statement of problem: or estimate of progress:
   Client is undecided as to whether or not he should change from Education to Business Admin. States that his wife feels he could do much better in Business than Education. However, client expresses high interest in his present major but thinks he should carefully consider his wife's wishes.

2. Counselor's statement of problem or evaluation of progress:
   Conflict in contemplated change of major field of study.

3. Description of Interview:
   Client was late for interview- duration 15 min. Was willing to discuss general school climate and general educational goals. Client spent several minutes talking about his work in scouting (Boy Scouts). Rapport good. Client expressed desire to pursue his problem in further interviews.

4. Counselor's evaluation of his procedures and techniques:
   (Intake interview only)

5. Counselor's plan of action for future contacts (case strategy):
   Would recommend further counseling.
APPENDIX G

Scores for all Subjects on Pretraining and Post-training Test Interviews

| Subjects | Experimental | | | Control | | |
|----------|--------------|----------------|----------------|----------------|----------------|
|          | Pretraining  | Post-training  | Subject | Pretraining  | Post-training  |
| 1        | .182         | .205           | 1       | .231         | .426           |
| 2        | .386         | .510           | 2       | .338         | .407           |
| 3        | .294         | .390           | 3       | .384         | .446           |
| 4        | .139         | .275           | 4       | .183         | .349           |
| 5        | .102         | .364           | 5       | .411         | .250           |
| 6        | .186         | .582           | 6       | .352         | .318           |
| 7        | .132         | .225           | 7       | .425         | .358           |
| 8        | .185         | .128           | 8       | .258         | .180           |
| 9        | .207         | .246           | 9       | .536         | .246           |
| 10       | .097         | .150           | 10      | .358         | .420           |
| 11       | .220         | .526           | 11      | .348         | .161           |
| 12       | .349         | .360           | 12      | .167         | .078           |
| 13       | .357         | .442           | 13      | .069         | .109           |
| 14       | .495         | .232           | 14      | .342         | .240           |