

University of Tennessee, Knoxville Trace: Tennessee Research and Creative Exchange

**Doctoral Dissertations** 

Graduate School

8-1977

# An Instructional Model for the Implementation and Use of Videotape Simulation for the Improvement of Employee Counseling Skills of Dietetic Students

Karen Margaret Fiedler University of Tennessee, Knoxville

#### **Recommended** Citation

Fiedler, Karen Margaret, "An Instructional Model for the Implementation and Use of Videotape Simulation for the Improvement of Employee Counseling Skills of Dietetic Students." PhD diss., University of Tennessee, 1977. https://trace.tennessee.edu/utk\_graddiss/3992

This Dissertation is brought to you for free and open access by the Graduate School at Trace: Tennessee Research and Creative Exchange. It has been accepted for inclusion in Doctoral Dissertations by an authorized administrator of Trace: Tennessee Research and Creative Exchange. For more information, please contact trace@utk.edu.

To the Graduate Council:

I am submitting herewith a dissertation written by Karen Margaret Fiedler entitled "An Instructional Model for the Implementation and Use of Videotape Simulation for the Improvement of Employee Counseling Skills of Dietetic Students." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Human Ecology.

Betty L. Beach, Major Professor

We have read this dissertation and recommend its acceptance:

Alfred D. Grant, Mary Jo Hitchcock, Grayce E. Goertz

Accepted for the Council: <u>Dixie L. Thompson</u>

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

To the Graduate Council:

I am submitting herewith a dissertation written by Karen Margaret Fiedler entitled "An Instructional Model for the Implementation and Use of Videotape Simulation for the Improvement of Employee Counseling Skills of Dietetic Students." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Home Economics.

each, Betty Major Professor

We have read this dissertation and recommend its acceptance:

red h rant Hitchark

Accepted for the Council:

Vice Chancellor Graduate Studies and Research

AN INSTRUCTIONAL MODEL FOR THE IMPLEMENTATION AND USE OF VIDEOTAPE SIMULATION FOR THE IMPROVEMENT OF EMPLOYEE COUNSELING SKILLS OF DIETETIC STUDENTS

> A Dissertation Presented for the Doctor of Philosophy Degree The University of Tennessee, Knoxville

> > Karen Margaret Fiedler August 1977

Copyright by Karen Margaret Fiedler 1977 All Rights Reserved

#### ACKNOWLEDGMENTS

Sincere appreciation is extended to Dr. Betty L. Beach for her guidance and support in developing and conducting this research project. Appreciation is also extended to Dr. Mary Jo Hitchcock and Dr. Grayce E. Goertz for their suggestions and advice. The author wishes to thank Dr. Alfred Grant for his guidance in educational technology and to Mr. David Wood for his cooperation in producing the videotapes.

Appreciation is extended to the members of the Coordinated Undergraduate Program in Dietetics, both students and faculty for the hours spent in participating in the workshop and evaluating videotapes.

Appreciation is given to the W. K. Kellogg Foundation for providing funds for the development of innovative teaching techniques.

Special appreciation is extended to the author's parents, Mr. and Mrs. Norman Fiedler, for their constant encouragement and support throughout the many years of the author's education.

# ABSTRACT

An instructional model was developed and implemented for the introductory application of employee counseling techniques by 17 senior students in the Coordinated Undergraduate Program in Dietetics at The University of Tennessee, Knoxville. Lack of experience in employee counseling during the clinical practicum was noted. The model as a substitution for actual experience combined as a microteaching approach, referred to as an intensive workshop, utilizing videotape simulation of employee counseling situations with a coached counselee. Five evaluation instruments were developed.

Students were released from clinical facilities for one week to participate in the intensive counseling workshop to practice counseling situations. A profile questionnaire was completed indicating previous experience both with counseling and videotaping. The Self-Perception of Confidence (SPOC) scale describing feelings of confidence in handling various employee situations was completed by students both before and after participation in the workshop. A hypothetical employee situation that required employee counseling but not dismissal of the employee was role played by each student while being videotaped with a coached counselee playing the part of the employee. Pre- and post-workshop videotapes were produced by each student. The pre-workshop videotape was used by clinical instructors and small groups of students to critique the employee counseling performance using the Checklist for Counseling, Indirect Patient Care which had been tested for content validity and interrater reliability. After the week was completed, participants submitted an evaluation of the workshop.

iv

A team of experts consisting of five clinical instructors each randomly viewed all 34 situations without knowledge of which were taped before instruction and which were taped after instruction. Twelve students improved in verbal communication, 7 in nonverbal communication, 10 in interpersonal relationships, 11 in organization and 11 in application of knowledge. Application of the Wilcoxon matched-pairs signedranks test showed a significant positive change in verbal communication and application of knowledge. Other areas were insignificant. The composite score for each student showed 11 students had improved significantly and a general trend for improvement in all areas was noted.

Within workshop groups using the Checklist for Counseling also indicated general improvement in all areas. All students improved in percentage composite scores ranging from 1 percentage point to 13 percentage points with an average increase of 8 percentage points difference from the first to the second videotaped situation.

SPOC scores indicated the students generally felt more confident in handling various employee situations after having participated in the workshop. A particular gain in confidence was noted for handling negative situations such as reprimanding an employee.

Profile data had little correlation with performance although the cosmetic effect was experienced by students when viewing the first videotape as would be expected when only 5 of the 17 students had previously seen themselves on television before.

Three impartial technical experts each randomly viewed 16 of the

taped situations for audio, video, and overall quality. Tapes were considered average or above average by 94% of the responses.

Workshop evaluations indicated students felt the workshop was beneficial and wanted the techniques expanded to include other aspects of dietetic professional education.

# TABLE OF CONTENTS

СНАРТ	ER PAG	E
Ι.		1
п.	REVIEW OF LITERATURE	6
	Microteaching Using Videotaped Simulations	6
	Measurement of Counseling Skills	3
III.	A MODEL FOR ESTABLISHING RELIABILITY OF EVALUATION TOOLS 1	8
IV.	PROCEDURE	29
	Intensive Counseling Workshop	:9
	Techniques Used in Workshop	31
	Methods of Evaluation	6
	Model for Microteaching of Employee Counseling	
	Techniques	1
V. RESULTS AND DISCUSSION		4
VI.	CONCLUSIONS, RECOMMENDATIONS, AND SUMMARY	9
	Conclusions	9
	Recommendations	60
	Summary	2
LIST	OF REFERENCES	5
APPENDIXES		רי
Α.		2
Β.		8
VITA.		17

# LIST OF TABLES

TABLE	PAGE
3.1.	Measures of Interrater Reliability for Nuclear Group
	Members Evaluating Clinical Performance Using Checklist
	for Counseling, Indirect Patient Care in a Standardized
	Situation
5.1.	Evaluation of a Model for Microteaching of Employee
	Counseling Techniques from Key Profile Questionnaire
	Questions, Self-Perception of Confidence (SPOC) Scale and
	Checklist for Counseling
5.2.	Self-Perception of Confidence (SPOC) by 17 Dietetic
	Students in Conducting Periodic Employee Evaluations 50
5.3.	Spearman Rank Correlation Coefficient $(r_s)$ and t-Test for
	Significance Between Team of Experts' Evaluations and
	Self-Perception of Confidence by Students
5.4.	Spearman Rank Correlation Coefficient $(r_s)$ and t-Test for
	Significance Between Team of Experts' Evaluations and
	Within Workshop Evaluations of Videotaped Clinical
	Performance
A.1.	Summary of Student Profile Data
A.2.	Scores Received on Checklist for Counseling as Judged by
	Team of Experts

viii

# GLOSSARY

Cosmetic effect	an awestruck response by a person seeing herself/ himself on television for the first time.	
Extended group	hospital dietitians, didactic faculty, peers, affiliating personnel, and clinical instructors not affiliated with the student's assigned facility some- times involved in clinical performance evaluation of the student.	
Nuclear group	students, a clinical instructor, and a hospital coordinator all assigned to one facility involved in the major part of clinical performance evaluation of the student.	
SPOC	Self-Perception of Confidence Scalea tool for estimating confidence of the student in handling possible clinical situations.	
Standardized situation	role-played situations available to a group for common viewing for practice in using evaluation instruments.	

#### CHAPTER I

#### INTRODUCTION

The implementation of Coordinated Undergraduate Programs in Dietetics has allowed for the combining of practical experience with didactic information. Experiencing and participating in the real operation of a food facility while continuing academic studies was suggested as the primary educational emphasis from the Study Commission on Dietetics (1972) commissioned in 1970 to study all aspects of dietetic practice, education, and professional organization.

# Methods of Implementing Coordination

Clinical experiences should be carefully coordinated with classroom information and may be accomplished by a number of different methods. Well-planned directed experiences are strengthened with the use of preand post-conferences dealing with the principles gained from the experiences and the relationships to the theories derived from the didactic (Watson, 1976). Conferences may be between instructor and student or group interactions. Mastery learning and group study in a dietetic curriculum in teaching a computer-assisted food management system was accomplished by dividing a class of 17 students into four groups for interaction and consultation with instructors. A significant gain in knowledge was observed on a pre-test and post-test (Miller and Spears, 1974).

Although emphasis is placed on clinical education practicums, time constraints and confidentialities place limitations on the range of actual experiences. Competencies may be met by using a method such as microteaching employing aids including computer-assisted instruction, videotaping, simulation, and gaming (Hart, 1976; Shanklin, 1976).

The Essentials for Coordinated Undergraduate Programs in Dietetics as developed by the American Dietetic Association note that substitutes for real experience may be necessary: "Self-study modules, simulation, or other experiences may be considered clinical learning experiences if there is evidence that practitioner competence is being developed" (1976).

#### Need for Personnel Counseling Skills

The use of educational technologies to provide substitution for unavailable real experience needs to be coordinated with an educational need to allow for evaluation and measurement of possible influence and effect. The second most frequently held position after completion of a dietetic internship was that of administrative dietitian in a hospital (Sanford et al., 1973a). Yet "the management performance of dietitians has not always measured up to the expectations of their superiors" (Day and Blaker, 1974). Particular areas where dietitians may be lacking in confidence and not meeting the expectations of the hospital administrators have been identified.

Professional activities of the administrative dietitian in an entry level position were explored by Matthews et al. (1975) using the Delphi Technique. Responses from dietitians and administrators indicated

that the education of the dietitian both academically and clinically needed to include communication processes, problem-solving, evaluation, decision-making, and sanitation. The need for written and verbal communication skills was the only statement receiving 100% priority from nursing home administrators and consulting dietitians rating importance of educational needs of dietitians. One hundred percent of the dietitians and 95% of the administrators set management science and personnel management as top priority for educational needs. Communications training ranked second in priority as an educational need by consulting dietitians and ranked third by administrators (Smith, 1975).

The need for personnel skills is recognized by the administrators as indicated by the above studies but the importance of the management function of the dietitian apparently is not as clearly recognized by the medical staff (Spangler et al., 1974). One hundred and thirty-five chiefs of staff were polled on their perceptual ideal of assignment of dietary related responsibilities. Fifty-nine percent noted that the dietitian alone should handle dietary employee problems and 35% noted that employee problems should not be handled by a dietitian, a doctor, or a nurse.

In a list of 14 administrative elements studied by Sanford et al. (1973a), graduates of hospital internships ranked personnel management third in importance as a part of the first position. Individual employee counseling received a mean of 1.52 (on a scale of 0 to 3) and appraisal of performance a mean of 1.44. Graduates of dietetic internships were

polled also for adequacy of training in the 14 administrative elements (Sanford et al., 1973b). On a scale of 0 (completely inadequate) to 5 (completely adequate), a mean adequacy rating for personnel management was 2.9, tenth on the list. Individual counseling received a mean score of 1.39 and appraisal of performance received a mean score of 2.63.

The need for adequate counseling skills becomes crucial when discussing legal consequences. Open lines of communication with all groups of employees is important under the 1974 Taft-Hartley amendment (Hallahan, 1974) and the Buckley amendment allows for little error in personnel interviewing, record-keeping, and counseling.

# Lack of Real Employee Counseling Experience

Students in the Coordinated Undergraduate Program in Dietetics at The University of Tennessee, Knoxville, complete experience units to fulfill requirements for the program and attain entry level professional competency. One such unit has been counseling and evaluation of employees. Food service managers and dietitians responsible for the supervision of the students in clinical facilities are somewhat reluctant to allow students to handle employee problems for two reasons: (1) the opportunity does not always occur at the times the student is at the facility and the situation cannot be delayed until a student is available; and (2) employee counseling is a sensitive situation that if handled incorrectly could lead to legal and confidentiality problems.

To afford the students experience in these types of situations and to increase their confidence, a five-day in-depth counseling workshop with a microteaching approach using videotape to record simulated counseling sessions was developed.

#### Combining Educational Technology with Instruction in Counseling

The purpose of this study was to develop and implement an instructional model for the introductory application of employee counseling techniques by students in a Coordinated Undergraduate Program in Dietetics. The model was developed employing the educational techniques of microteaching (referred to as an intensive workshop), simulation, and videotaping. Evaluation techniques were developed to determine the efficacy of the model when used in a Coordinated Undergraduate Program in Dietetics.

#### CHAPTER II

# REVIEW OF LITERATURE

# I. MICROTEACHING USING VIDEOTAPED SIMULATIONS

The educational technique of microteaching and videotaped simulations has been employed separately and conjunctively by several disciplines including education, educational psychology and counseling, clinical psychology, medicine, veterinary science, nursing, and journalism.

#### Microteaching

The first use of microteaching was documented as resulting from doctoral work by Keith Acheson in 1961 at Stanford University. The definition of microteaching is a scaled-down sample of actual teaching generally lasting 10 to 30 minutes. As a simulation of a regular classroom instructional period, the student teacher is allowed to experience the results and feelings of the real situation. The typical microteaching pattern is teach--critique--reteach with many variations possible (Olivero, 1970). Although the original use of microteaching involved the use of videotape, the medium is not absolutely necessary to accomplish the objectives of the technique. Other suggested approaches could be audiotaping and the use of Flanders' Interaction Analysis.

To determine if one medium was more effective than another, 59 student teachers were assigned to three microteaching clinics using either videotape recording, audiotape recording, or Flanders' Interaction

Analysis. Five microlessons were prepared and evaluated by student teachers and supervisors once each week for five weeks. No supervisory guidance was provided on the first lesson but was provided on subsequent lessons. Lesson 5 involved reteaching lesson 1. Six months after preparing the five lessons, the student teachers were asked to evaluate performance on the first and fifth microteaching experience. The greatest growth for all teachers was found with the Flanders' Interaction Analysis group, next was videotape, and third was audiotape. Further analysis showed greatest growth varied by academic discipline. English student teachers showed greatest growth when audiotape was used whereas majors in science showed greatest growth by use of Flanders' Interaction Analysis, and social studies majors greatest growth from videotape (Donlan, 1974).

Changes in teaching behavior were studied using microteaching techniques. Teachers have been trained in constructing and implementing lesson plans, improving questioning techniques, evaluating studentcentered behavior, and improving cognitive discrimination. Although microteaching was found equal to other educational techniques (Pierce and Halinski, 1974; Borg et al., 1969; Wagner, 1973), no significant change was observed between control groups and experimental groups in studying each of these areas.

Confidence of students in encountering the real teaching experience was improved if they had participated in microteaching. Preservice teachers involved in a teach--critique--reteach--critique pattern felt free to offer suggestions for improvement for a situation appearing on a monitor. Students who were asked their opinion on the technique felt

it was one of the best preparatory experiences they could have had (Huber and Ward, 1969). Students who were evaluated after eight weeks of student teaching subsequent to participating in microteaching received higher ratings on five of six factors on the Teacher Performance Evaluation Scale (Jensen and Young, 1972). Students and teachers were enthusiastic about microteaching with videotape (Kromer, 1974).

#### Videotaping

Videotaping has found a place in many curricula. Television was used extensively at the Boston University School of Nursing. Interviewing techniques, taping guest lecturers, patient sessions, roleplaying, microteaching, clinical demonstration, and diagnostic evaluation were the systems most utilized (Zides, 1974).

Improved teaching techniques have resulted from use of videotaping. Teachers in eight schools were divided equally into four experimental and four control groups (Webster and Mendro, 1974). The experimental group utilized knowledge of objectives and immediate videotape feedback to modify behavior. The control groups were videotaped but received no formal training. Those receiving videotaped playback and training improved cognitive behaviors but not affective behaviors.

Speech students have had oral presentation videotaped in order to critique performance. Oral interpretation of Shakespearean sonnets by students was shown to improve through the use of videotaped feedback. An experimental group recorded oral interpretation and reviewed the performance prior to presentation. A second group recorded the performance but did not view a playback. A control group presented the sonnet to the class after a practice period but no videotaping. Results were based on scores derived from a semantic differential completed by five instructors and a group of peers. Reliability and internal consistency of a semantic differential scale was established by a test-retest method and content validity was assured through the manner of selecting item pairs. Five instructors using the scale judged a significant difference between those videotaping with playback, those without feedback, and the control group. Evaluation by peers showed no significant difference between playback and no playback (Porter and King, 1972).

A high level of anxiety was expected when a student was called upon to be videotaped while speaking before a live audience. No significant difference was found between a group presenting a speech to an audience alone or an audience plus a videotape recorder. Probably an anxiety threshold had already been reached by having to speak to an audience so the videotape recorder made little difference (Bush et al., 1972).

<u>Videotaping counseling and interviewing</u>. The improvement of counseling techniques have been explored. For real situations, veterinary interview techniques were evaluated through videotaping. A camera was placed in the examination room to record a diagnostic interview between a student veterinarian and a pet owner. Students and instructors felt the method was valuable (Welser and Judy, 1973).

Many counselor educators have used videotaping as a learning method. Self-evaluation through videotaping tends to change the students' selfperceptions and leads to a gain in confidence. The student also gains

an awareness of personal qualities while increasing a desire for further self-study (Marks et al., 1975).

Videotaping has been used for two purposes in counselor education: presenting a role model and providing feedback for self-evaluation (either simulated or real). Videotape simulations as models for training counselors were used by Eisenberg and Delaney (1970). Instructors presenting a situation on videotape allowed the student to observe and critique a situation. Observation of a model on videotape also reduced avoidance of communication demonstrated by clients required to come to psychological counseling (Eisenberg and Delaney, 1970; Eisenberg, 1971; Smith and Lewis, 1974).

Graduate students in counseling and guidance at Youngstown State University in Ohio were involved in videotaped microcounseling of high school students. When the graduate students were asked their perceptions about the taping session, replies indicated that the camera added some tension but the opportunity to see themselves was helpful (Digiulio and Eshleman, 1972). Counselors became more aware of themselves and gained in self-confidence as a result of viewing an interview on videotape as measured by an interview checklist (Walz and Johnston, 1963).

Medical students have received interviewing training through videotape simulation. Students who were given sample cases to handle were videotaped while conducting an interview based on their own perceptions of the way to handle the situation. The primary advantage to the playback was that a dissociation of the television image from the viewer takes place and class members felt freer to criticize than

if they had viewed a live situation (Ramey, 1968).

Journalism students learned interviewing techniques through videotape simulation. An advantage from using videotape simulation was that students could evaluate privately with the instructor as opposed to the previous method of role-playing before a class for general critiquing (Christensen and Fuller, 1973).

Videotaping is expensive and time-consuming. To determine if videotaping was the most desirable method for allowing self-evaluation of counselors in training, 32 student counselors were divided into four playback groups: (a) audio-video, (b) audio, (c) video, and (d) no playback. Four students had been trained as clients. Evaluation was performed by trained judges using the Counselor Evaluation Inventory, Non-Verbal Behavior Scale, and Audio-Visual Counseling Scale. The results showed no difference among playback groups but the authors felt that the evaluation scales were too global and one-time playback was insufficient (Markey et al., 1970). Yenawine and Arbuckle (1971) divided graduate students in counseling into two groups, one using audiotape and one using videotape for counseling sessions. These students found initial evaluation of audio and videotapes to be helpful and stimulating but upon viewing a number of tapes began to become uninvolved and passive. The videotaped students seemed to gain more from the experience than the audiotaped students.

Baum (1974) tested the equivalence of client problems perceived over different media: audio, video, and transcript. Measurement of differences was achieved through use of the semantic differential by

undergraduate students enrolled in educational psychology. No perceptual difference occurred between video or audio presentation but the transcript method, or reading the problem instead of hearing or seeing the client, caused a devalued impression of client problems.

#### Simulation

The function of simulation is to move the student into a situation that will be encountered in the future. Simulation can be used for skill training or concept application when the real situation is too complex, difficult, or dangerous (Tansey, 1971). Simulation of case problems has been used in studies on counselor education.

The coached client or programmed patient provides a more realistic subject for simulation than simulation among class members. A professional model served as the client for students in clinical neurology (Barrows and Abrahamson, 1964). The model was trained by reviewing a motion picture on neurological examination then the model underwent an examination. Besides playing the part of an actual patient whose file she studied for the simulation, the model also participated in the evaluation of students.

Wives of three medical students were trained as simulators by practicing interviewing sessions and memorizing factual information of an organic and psychosocial nature. These "patients" were interviewed as outpatients by senior medical students. The simulations were significantly effective as measured by interaction analysis and semantic differential (Helfer and Hess, 1970). Walz and Johnston (1963) used two university students as "coached counselees" for training of counselors. The counselees were coached until unanimous agreement was reached by three judges as to consistency of performance.

Kagan et al. (1965) used a drama student to simulate the part of a counselee in experiments with Interpersonal Process Recall in counseling and teacher-learning. Using only one actor as a client was a disadvantage since responses became automatic and there was a temptation to aid an uncomfortable counselor.

# II. MEASUREMENT OF COUNSELING SKILLS

Many observational techniques were reported in the literature for assessing counselor behavior by a supervisor. Simon and Boyer (1974) explored various classroom observation instruments describing several potential factors that could be analyzed such as cognitive behavior or intellectual learning, affective behavior or emotional content, or psychomotor behavior or physical behavior. Counseling skills were defined primarily as cognitive behavior and the use of these skills was classified as being at the level of application (Bloom, 1956).

The assessment of performance is more effectively evaluated based on criteria rather than norms. Hodgkinson et al. (1975) suggested "real world" criteria or the qualities the professional must possess. Evaluation was defined as a collection and use of information to make decisions about future needs (Worthen and Sanders, 1973). The qualities an evaluation instrument must possess were that it be utilitarian, practical and economical to use in both time and money. The instrument should be designed to help the evaluator avoid personal bias, central tendency, halo effect, and logical error but a general opinion of a particular individual performance must not be formed solely on the basis of results of a rating scale but there must be some description of behavior (Cangemi, 1970).

#### Performance Evaluation Tools

Basically five types of evaluation tools were reported in the literature as applicable to counselor evaluation. Anecdotal record, interaction analysis, semantic differential, confidence ratings, and Likert-type scales were explored as methods of evaluating student counseling performance for self-evaluation and determination of grade.

<u>Anecdotal records.</u> Anecdotal records were used by Jenkins (1966) and were found useful to teacher improvement but proved to be too subjective for determination of grades. Ward et al. (1972) used several methods for evaluation including a request for judges to write any adjective or phrase they felt described the student. There appeared to be more of a sense of satisfaction from the students when the reason for a score was explained to them.

<u>Interaction analysis.</u> Classically, Flanders' Interaction Analysis has been used to assess teacher behavior. The format has been adapted to classroom experiences describing interaction between a supervisor and a teacher (Simon and Boyer, 1974). Bales' Interaction Process Analysis allows for an observer to classify and categorize everything observed on a checklist chart. The scale is concerned with interaction content or process content as opposed to topical content (Bales, 1952). The Bales model has been adapted for psychotherapy counseling by revising descriptors (Adler and Enelow, 1966). The development of a systematic and quantifiable method for describing the nature of the interaction between a supervisor and teacher was done by Blumberg and Cusick (1970). Blumberg's system was based on models by Flanders and Bales but was more concerned with the one-to-one relationship.

Andrew (1975) reported a method of assessing interview skills of pharmacists using the Pharmacy Interview Observation Form requiring evaluators to record diads of interaction in the sequence in which they occurred. The proportion of agreement among three raters was very high.

<u>Semantic differential</u>. The semantic differential is a method of evaluation using polar contrasting adjectives with a scalar measure between. Therefore, an observer can choose between terms such as "effective" or "ineffective" and determine the degree of behavior. Porter and King (1972) used the semantic differential to measure effectiveness of oral interpretation of literature. Reliability and validity were established by a test-retest method. The semantic differential is descriptive but quality judgments must be made after the evaluation had occurred in order to make suggestions for improvement or to assign a grade.

<u>Confidence ratings</u>. Researchers often mention the importance of confidence and comfortability of students resulting from the educational

procedures used, but little is written on the methods of assessing feelings of confidence. The use of a comfortability scale is mentioned by Breese et al. (1977) as a method of assessing the students' feelings toward anxieties in the clinical environment after having participated in computer-assisted instruction. Students were asked to respond to a list of 40 statements by marking a 5-point scale ranging from uncomfortable to netural to comfortable dealing with situations likely to be encountered in direct patient care. The instrument was tested for four academic quarters for internal validity but no conclusive statements were made on reliability or validity (Breese, 1977).

<u>Likert-type scales.</u> Scales developed by Likert (1967) offered a descriptive scale placed on a continuum. A clinical observation checklist was developed by Tower and Vosburgh (1976) employing descriptive terms to judge clinical performance. The form was tested in a simulated patient interview on videotape. After revision of the instrument a second test confirmed validity and practicality of the form and there was 70% agreement among raters.

Matell and Jacoby (1971) in their research on optimal numbers of alternatives for Likert scale items found that both reliability and validity are independent of the number of scale points. Lee (1974) developed a rating scale to measure communication skills. Using a 4-point scale employing the terms "never," "occasionally," "frequently," and "always," a criterion-based scale was devised avoiding central tendency yet with a sufficient number of levels of performance.

#### Content Validity and Interrater Reliability of Evaluation Instruments

An evaluation tool, in order to be effective, must measure what the user wants to measure and when a number of raters are involved must display reliability among raters. Literature was reviewed for content validity and interrater reliability of evaluation instruments.

Content validity is established by logical examination of a test and the methods used in its preparation. Content validity is relevant to proficiency testing employing one type of content to assess ability to learn to deal with some other content. Examining content validity requires judging whether each item, and distribution of items as a whole, covers what the tester wants to measure (Cronbach, 1960).

Hayman (1976) advised the use of two statistical techniques for determination of interrater reliability among a number of raters. These were intraclass correlation (r') and the generalized Kuder-Richardson 20 (coefficient alpha). Tinsley and Weiss (1975) confirmed that the intraclass correlation was the best measure of interrater reliability available on ordinal and interval level measurement. Downie and Heath (1965) recognized the value of the Kuder-Richardson 20 as having an item analysis indicating the difficulty of measure for each item on an evaluation form.

Individuals differ in their ability to rate item characteristics as found by Vosburgh et al. (1976). Evaluator training is a necessity to assure interrater reliability in the use of evaluation instruments.

# CHAPTER III

# A MODEL FOR ESTABLISHING RELIABILITY OF EVALUATION TOOLS

Fairness, dependability, and reliance are the keywords to effective performance evaluation. In the Coordinated Undergraduate Program in Dietetics at The University of Tennessee, Knoxville, the emphasis in the clinical phase of the program is on small group team teaching. For clinical performance evaluation purposes, two groups were identified-the nuclear small group and the extended group (Figure 3.1). The nuclear small group includes two to five students all assigned to one facility, a clinical instructor, and a hospital coordinator-Registered Dietitian (R.D.). The extended group includes the hospital dietitians, didactic faculty, peers, affiliating personnel, and other clinical instructors. The major responsibility of judging clinical performance rests on the nuclear group. For affiliating experiences and special situations, evaluation is performed by the extended group. With numerous people involved in clinical evaluation, it was desirable to develop an observational form that could be easily understood and used by all members of the groups. In addition, forms developed to accompany assigned experiences in the clinical component needed to not only have the quality of content validity but also interrater reliability to justify the assignment of academic grades to performance.

Early observational instruments in the Coordinated Undergraduate Program in Dietetics received complaints from students. The students noted

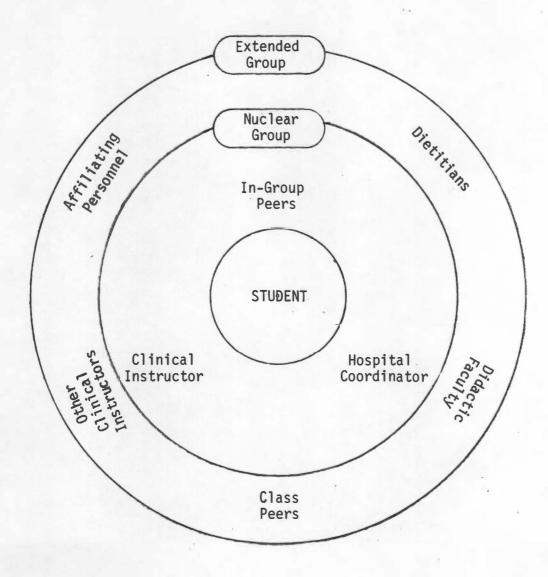


Figure 3.1. Groups Involved in Dietetic Clinical Performance Evaluation.

that the forms were not descriptive enough and evaluators also were finding a lack of discriminatory descriptors. Everyone using the forms seemed to interpret the descriptors differently thus causing the students to believe they were not being evaluated equally for the same level of performance. Two educational consultants were retained to assist the nuclear group in establishing content validity and interrater reliability on the forms being used. As a result of four training sessions over a one and one-half year period, a model was developed for use by the nuclear group to establish content validity and interrater reliability of performance evaluation instruments (Figure 3.2).

# Development of the Evaluation Instrument

In the initial training session, two members of the workshop group were asked to provide a standardized situation while other workshop members used an existing form to evaluate the performance. A comparison of evaluation results indicated the need for revision of forms if not rewriting based on desirable constraints for instrument format.

Several methods of performance evaluation were explored. An anecdotal record method requiring the evaluator to write in narrative style reactions to the session was dismissed as being too subjective. Interaction analysis and semantic differential were considered as efficient methods of recording behavior but required extensive value judgment after the performance had taken place in order to assign a grade or make suggestions for improvement. Confidence ratings, completed by the students, were considered as valuable and an accompaniment to an experienced evaluator's judgment. The Likerttype scale was chosen as the method that could provide efficiency in

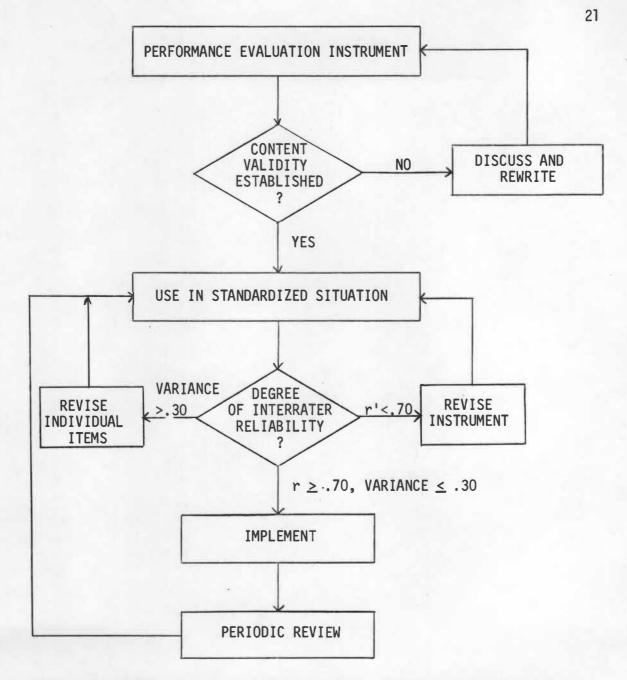


Figure 3.2. Model for Establishing Content Validity and Interrater Reliability of Performance Evaluation Instruments.

noting behavior plus having descriptors that would allow for value judgment as well as quick feedback.

A Likert-type scale with four gradations was developed. The range of the four gradations carried the understanding of "did not meet criteria," "met minimal criteria," "acceptable, needs improvement," and "met all criteria." Instead of using this precise terminology, narrative descriptions based on competencies were written for expected behaviors illustrating the level of performance. Space was allowed to mark a characteristic "not applicable," or "not observable." Space for comments was available for each item and at the end of the form. A place for signatures of the counselor and the evaluator accompanied by the date of review of the form was included to assure student-evaluator interaction. Items were categorized into five major units: verbal communication, nonverbal communication, interpersonal relationships, organization, and application of knowledge (Appendix B). To assist form users; an evaluator's guide was developed to provide instruction in the proper use of the form. Examples of acceptable and unacceptable behavior to watch for when observing a performance were listed under each item (Appendix B).

# Establishing Content Validity

Following determination of instrument format, the evaluation instrument was distributed among dietetic faculty for careful review and estimation of practicality of the form. The faculty read the form to make sure three objectives had been met--the items were realistic, attainable and not insulting, and that all descriptors were positive not negative. The

form was revised until everyone felt comfortable in the interpretation of the descriptors. Students also were involved in reading and revising the form for the establishment of validity.

The final test of content validity occurred simultaneously with the establishment of interrater reliability since no one could predict the true validity of the form until used in a standardized situation.

# Standardized Situations

To determine if interrater reliability was established, standardized situations for common viewing were developed. In the first training session, participants role-played a situation but this situation was not repeatable since it was performed extemporaneously. Therefore, senior students were asked to role-play various interviewing and counseling situations while being videotaped so a common situation would be available and repeatable. The standardized situations were used at three stages of instrument development: (1) establishing content validity, (2) establishing interrater reliability, and (3) periodic review of existing instruments.

# Establishing Interrater Reliability

Two statistical procedures, the Kuder-Richardson 20 (coefficient alpha) and intraclass correlation (r') were used to objectively establish interrater reliability (Hayman, 1976; Guilford and Fruchter, 1973).

The generalized Kuder-Richardson 20, or coefficient alpha, tests internal consistency among raters. A high alpha indicates that some raters are consistently low and some consistently high. An item analysis

inherent in the calculation indicates the difficulty of measure for each item on the test. This analysis was used extensively within the workshops for determining need for item explanation or revision. Coefficient alpha was computed as follows:

$$\alpha = \frac{n}{n-1} \left( \frac{s_t^2 - \sum_{i=1}^n s_i^2}{s_t^2} \right)$$

where:

n = number of items

- st<sup>2</sup> = variance of the total scores (derived by summing individual test scores for each rater)
- $s_i^2$  = variance of item 1 (derived by summing all item variances, i.e.,  $s_1^2 + s_2^2 + s_3^2 + \dots + s_n^2$ ).

A form used for tabulating variances is included in Appendix B.

The total score derived with the Kuder-Richardson 20 is the equivalent to averaging all of the possible reliabilities figured by the split-halves method. A high alpha indicates that some raters are being consistently low and some consistently high.

Intraclass correlation (r') measures the degree of similarity among raters for the use of one instrument. Computation is as follows:

$$r' = \frac{s_b^2 - s_w^2}{s_b^2 + (n-1) s_w^2}$$

where:

- n = number of persons rating
- sb<sup>2</sup> = variance between items (derived from the sum or average score of all the raters on the item)
- $s_w^2$  = variance within items (derived from the variance of the raters for each item)

Intraclass correlation varies indirectly with item variances, i.e., as the raters agree more, the "within" item variance decreases and r' increases. A form used for tabulating intraclass correlation is included in Appendix B.

To establish interrater reliability, participants viewed the standardized situation and completed the appropriate validated evaluation instrument. The two formulas were calculated. If the intraclass correlation score was equal to or greater than 0.70, the instrument was considered reliable. If the intraclass correlation was less than 0.70, discussion and/or revision was required to discover and solve the differences in evaluating the standardized situation. If item variances, calculated as part of the computation of the Kuder-Richardson 20 were equal to or less than 0.30, the item demonstrated desirable agreement among raters. If the variance was greater than 0.30, the item required discussion and usually revision. The acceptance criterion for items therefore was an item variance equal to or less than 0.30, and the acceptance criterion for the instrument as a whole was an intraclass correlation equal to or greater than 0.70. During the final in-service training session, the Checklist for Counseling, Indirect Patient Care was used in a standardized situation by seven clinical instructors who were members of the nuclear group for clinical evaluation. The reliability procedure was repeated three times with results as shown in Table 3.1.

Calculation of r' showed the instrument to be acceptable for interrater reliability with a correlation of 0.72. Although item analysis indicated only 19 of the 29 items were equal to or less than 0.30 variance, the same items were not recurring as troublesome items in each trial. Therefore, it was decided that item variances were acceptable. The reduction in alpha score was an indication that raters were becoming more consistent in rating. Senior dietetic students used the form in the standardized situation as an introduction to the instrument that would be used in clinical performance evaluation.

## Implementation and Periodic Review

When acceptable levels of both intraclass correlation and item variances were reached, the observational instrument was implemented for program use. Because the reliability and validity of an instrument will change with time, periodic recalculation for reliability is mandatory. Content validity can be maintained with close communication among members of the nuclear group and extended group.

#### Applicability of the Model

The first step in applying the interrater reliability model is to either develop an evaluation instrument or use an existing instrument.

# TABLE 3.1

# MEASURES OF INTERRATER RELIABILITY FOR NUCLEAR GROUP MEMBERS EVALUATING CLINICAL PERFORMANCE USING CHECKLIST FOR COUNSELING, INDIRECT PATIENT CARE IN A STANDARDIZED SITUATION

Nuclear Group Member and Trial Number	Intraclass Correlation (r')	Kuder-Richardson 20 (α)	Number of items (N=29) with Variance 4 0.30
Clinical Instructors, N = 7			
Trial 1 Trial 2 Trial 3	0.70 0.71 0.72	0.83 0.72 0.34	14 23 19
Students, N = 17			
Trial 4	0.57	0.82	.13

Content validity for the instrument must be confirmed through agreement among the potential users. Testing the validated instrument in a standardized situation, such as produced through videotaped role-playing provides the information required to determine reliability. The evaluation instrument should be analyzed for variance on individual items. This can be done with the generalized Kuder-Richardson 20 equation. If variance of an item is equal to or less than 0.30, the item demonstrates high agreement among raters and is acceptable. If the variance is greater than 0.30, then the item requires discussion and probably revision so that agreement can be improved. Results are analyzed through intraclass correlation to determine total reliability and similarity among raters. If the correlation score is less than 0.70, revision of the instrument is indicated.

The Kuder-Richardson 20 and intraclass correlation are used in cooperation to improve the reliability of a performance evaluation instrument. As item variance decreases, intraclass correlation increases. If the score is not improved through discussion and explanation, the difficulty may be interpretation of descriptors in relation to the standardized situation.

### CHAPTER IV

### PROCEDURE

In coordinated dietetic programs, students are involved with a number of simultaneous didactic and clinical learning situations. The concentration of time and effort on one subject for a short period of time generally does not occur. In the Coordinated Undergraduate Program in Dietetics at The University of Tennessee, Knoxville, students were released from clinical facilities for one week to participate in a workshop for the purpose of implementing an instructional model developed for the introductory application of employee counseling techniques. Employee counseling was identified as an experience students usually do not have in their practicuum.

Simultaneously with the workshop, students continued attending didactic courses and the workshop was coordinated with the course entitled Food Systems Personnel Development. Lectures in this course during the workshop involved communication skills and procedures used in personnel development.

## I. INTENSIVE COUNSELING WORKSHOP

Seventeen senior dietetic students participated in a one-week workshop designed to improve their employee counseling skills by means of a microteaching approach. The 18 hours substituted for clinical time were distributed throughout the first week of the Winter, 1977 quarter at The University of Tennessee, Knoxville (Appendix A).

Behavioral objectives for the workshop were: (a) upon completion of the workshop, the student will be able to simulate on videotape, with a coached counselee, an effective counseling encounter; and (b) the student will be able to follow the principles of counseling in directing and participating in a simulated counseling session.

### Agenda

<u>Day 1.</u> Orientation to the workshop included explanation of the workshop format, student completion of the Self-Perception of Confidence (SPOC) scale and a profile information sheet. Each student was given a file containing one of five hypothetical employee cases. A job description, completed application, description of the problem, and an employee evaluation form were included.

The students were provided with several hours to read and study the hypothetical situation. Groups of four or five students were scheduled at one-hour intervals to come to the university television studio to be videotaped. Each student in the small group watched the others perform but each student had a different personnel case study to handle.

<u>Day 2.</u> On Day 2 each group of students met with a clinical instructor to evaluate the tapes and discuss the principles of counseling. During this session, the group viewed a videotaped lecture prepared by

the researcher on counseling techniques and received an outline of counseling principles with a short optional reading list (Appendix A). A group discussion followed based on the Checklist for Counseling, Indirect Patient Care (Appendix B).

<u>Day 3.</u> Day 3 was devoted to viewing the pretaped situations from Day 1 while completing the Checklist for Counseling with peers and clinical instructors. Discussions were held on how to improve the observed handling of the situation. The students then planned how they would change their techniques for a videotaped repeat of the situation.

<u>Day 4.</u> On Day 4, the students retaped the same situations as Day 1 except they were to utilize suggestions and information gained from the evaluation sessions. They were scheduled again at one-hour intervals in groups of four or five.

<u>Day 5.</u> For follow-up, small groups met again with the clinical instructors to evaluate the second videotape. The students completed the SPOC scale and a post-workshop evaluation questionnaire (Appendix B).

II. TECHNIQUES USED IN WORKSHOP

## Workshop Approach

The workshop on counseling skills was scheduled the first week of Winter quarter before students assumed their regular clinical duties in the clinical facilities. Videotaping sessions were held in the late afternoon and early evening because the television studio was scheduled for regular class sessions during the day. The 18-hour substitution for clinical time was spread over a week's time to allow for a leisurely pace and also to avoid the students' regularly scheduled didactic class time. All 17 students were required to attend all workshop sessions.

#### Members of Small Groups

The 17 students participating in the intensive counseling workshop were all seniors in the Coordinated Undergraduate Program in Dietetics. They had participated in the validation process of the Checklist for Counseling, Indirect Patient Care as described in Chapter III. They were familiar with the technique of viewing a videotaped situation for evaluation and critiquing.

The students were divided into groups of four or five according to their clinical assignments and their supervising clinical instructor. Therefore, each small group was composed of a clinical instructor and the four or five students regularly assigned to the instructor. These groups were used to working with each other and were comfortable in offering criticism or praise.

The clinical instructors assigned to each group had participated in the establishment of content validity and interrater reliability of the Checklist for Counseling, Indirect Patient Care. They had met with the researcher before the intensive counseling workshop to discuss methods of approaching the sessions and in leading the peer and self-critiquing of the videotaped situations. Small group sessions were similar in presentation of counseling principles and evaluation techniques. The videotaped lecture on counseling principles provided common ground for the four groups and the evaluator's guide for the Checklist for Counseling was used by the clinical instructors for describing acceptable and unacceptable behavior.

#### Case Studies

Five case studies were developed for distribution to the students for the videotaping simulation. Each student was given a job description, completed application, description of the problem, and an employee evaluation form. The five cases were similar in that (a) some disciplinary action was required; (b) at least one complimentary fact was made known to the student; (c) termination of the employee was not necessary; and (d) the employee was due for either a probationary or annual evaluation.

The cases were based on actual situations but some facts were changed to withhold the identity of the employee and the facility involved. The cases were modified to fit the age, sex, and description of the actors.

#### Coached Counselee

Two graduate students (hereafter referred to as actors) were hired to play the parts of the employees. They were volunteers interested in the intensive counseling workshop project. Neither of the actors had had experience in a food service operation but this was not considered essential. Neither had had any encounters with dietetic students nor were they students in the College of Home Economics. One actor was male and one

female both about 30 years of age. They were told to react naturally to the manner and attitude of the counselor. For example, if the manner of the counselor invoked hostility, they were to respond appropriately. If the counselor was not firm, they were to take advantage of this. Acting naturally was emphasized rather than causing excessive problems for the student. The actors were encouraged to ask employee-employer type questions if they desired.

Each actor was given the same background information on the situation to be roleplayed as the student received, i.e., a job description, a completed application form, and a description of the problem but not the employee evaluation form. Additional background information provided included the typical educational level and salary expectations of dietary employees and the usual organizational structure of a dietary department. The actors were not asked formally to evaluate the students.

## Videotaping Technique

Two methods of videotaping were available, semi-portable equipment owned by the program or professional taping through the Department of Television Services, University of Tennessee, Knoxville. The professional taping was chosen to eliminate or minimize effects of video in the interpretation of social distance, nonverbal behavior, and physical surroundings. Two cameras were used for flexibility in close-ups and long shots and for use of cameo shots so close-ups of both the face of the counselor and counselee could be seen at the same time.

The production director was provided with a copy of the Checklist for Counseling, Indirect Patient Care and was asked to direct the cameramen in the best possible way to capture points in the checklist under verbal communication, nonverbal communication, and interpersonal relationships. This included a variety of long shots, moderate shots, and close-ups for showing setting of the room, social distance of the participants, and nonverbal behavior. Sufficient lead time was requested at the beginning to eliminate cutting important dialogue or action. Lapel microphones resulted in adequate voice quality and cameo shots were used to allow viewing of facial expression of both counselor and counselee simultaneously. The same two cameramen were used for each situation and were experienced in working with the production director.

Situations were taped in black and white on three-quarter inch cassette tapes. The equipment used was standard color television equipment including cameras, switchers, and videotape machines that met all standards for broadcast quality as established by the Federal Communications Commission. The studio setting included a desk and two chairs which could be moved as desired. Since no session took longer than 15 minutes, four to five situations were taped on a 60-minute cartridge. These were the same small groups that worked together for critiquing and discussion. Each situation was coded with a randomly selected letter of the alphabet.

To determine if the tapes showed enough detail for fair evaluation, a team of three impartial evaluators were employed to view the situations

and rate each videotaped situation for quality using a form checked for content validity by an educational media expert (Appendix B). The three evaluators were asked to randomly evaluate half the situations, therefore each evaluator viewed four videotapes or 16 situations. They were familiar with videotape techniques since each had served as a graduate teaching assistant in either speech or English courses where videotaping was a method of self-evaluation.

For playback of videotapes, each group participating in the intensive counseling workshop was assigned to a classroom equipped with a videotape recorder and a 17 or 19 inch monitor. The same type of equipment was used by the team of experts and the technical experts for viewing the situation.

#### III. METHODS OF EVALUATION

#### Profile Information

The first item students were asked to complete was a profile information sheet (Appendix B). The form was developed to determine three previous experiences: (1) if the students had any experiences with counseling at any time in their lives, (2) if they ever had been videotaped and seen themselves, and (3) if they were able to recognize some common terms in relation to professional communications. Experience with counseling was expected to correlate with high scores received from evaluation of the videotaped situation. The information received from asking the students if they ever had seen themselves on videotape would determine the strategy for viewing the first videotape. Educational experts agreed that there is a "cosmetic effect" or awestruck response by a person seeing herself/himself on television for the first time (Bellon and Hodge, 1976). An initial viewing without any required critiquing or evaluation was recommended. The recognition of counseling terms was used to determine didactic knowledge retained by the student from possible previous presentations of principles of counseling or from reading. Questions also were asked from which positive responses might be recognized in techniques used by the students in handling the employee situation. One question was whether the student had ever studied transactional analysis followed by a question whether the student had ever used transactional analysis. Students also were asked if they had completed courses in psychology, sociology, speech, and other courses they could list that related to interpersonal relations.

In case the questions had missed any experiences the students may have had in counseling, one general question asked for other experiences that increased proficiency in counseling. The students also were requested to discuss feelings about the prospect of being videotaped in order to analyze and improve counseling skills.

## Self-Perception of Confidence Scale

The prospect of reprimanding an employee is usually not one to which any professional dealing with subordinates looks forward but is a required duty and since experience was not available to the facilities it was determined that simulation could instill some confidence for an inexperienced dietitian. A Self-Perception of Confidence (SPOC) scale based on the comfortability concept used at The Ohio State University (Breese, 1977)

was developed for students to indicate their feelings of comfort in dealing with both positive and negative employee counseling situations (Appendix B). Twelve factors were included representing positive, negative, and neutral situations. The positive situations were: (a) soliciting opinions from an employee; (b) complimenting an employee; (c) promoting an employee; (d) conducting a preemployment interview; and (e) rewarding an employee. The negative situations were: (a) reprimanding an employee; (b) conducting a probationary interview; and (c) terminating an employee. Neutral situations, either positive or negative depending on the situation, were: (a) conducting an exit interview; (b) conducting a periodic employee evaluation; (c) conducting a periodic evaluation with a trayline worker; and (d) conducting a periodic evaluation with a food service supervisor. The students were given the SPOC scale on which they could indicate their degree of comfort in each of the preceding factors as uncomfortable, somewhat uncomfortable, somewhat comfortable, and comfortable. The term "comfortable" was used since students could better relate to the term and would not feel an increased degree of consequence denoted by the term "confident."

Content validity of the SPOC scale was established by agreement among clinical instructors and the director of the program who was also the instructor for the didactic course entitled Food Systems Personnel Development.

The SPOC scales obtained at the beginning of the workshop were compared with those completed at the end. The marking of uncomfortable

was assigned a value of one sequencing to a value of four for comfortable. Average ratings were determined for each item on the SPOC scale. Items were grouped as to positive, negative, and neutral connotations. The scales were also compared as a whole determining significance through the use of Spearman rank correlation coefficient.

## Checklist for Counseling, Indirect Patient Care

Use by team of experts. Following the intensive counseling workshop, a team of evaluators consisting of clinical instructors was asked to randomly evaluate all the videotaped situations using the Checklist for Counseling, Indirect Patient Care unaware of which were pre-workshop counseling and which were post-workshop counseling. The situations were only identified by a random alphabet letter. The evaluation team consisted of five clinical instructors, three of whom had participated in the small group discussions undertaken during the workshop. These three were asked not to evaluate the situations of the students with whom they had worked during the workshop. Each member of this team had been thoroughly familiarized with the procedure and had participated in the instrument development workshops within the last year (Chapter III).

Evaluation was accomplished by using the Checklist for Counseling, Indirect Patient Care (Appendix B). Since this form had had an intraclass correlation of 0.72 within this group of evaluators, it was considered to be a valid and reliable instrument for evaluation of counseling situations. The initial videotape and resulting ratings were treated as a pretest. The second videotape and resulting ratings were treated as a posttest. Ratings were derived from the Checklist for Counseling assigning a numerical value of one to the column on the left and sequencing to a numerical value of four to the column on the right. A mark indicating not applicable or not observable was disregarded as was absence of a mark for an item. Percentages were calculated from these figures.

After obtaining gross percentage scores on counseling checklists, analysis was made for change in the several areas represented on the checklist, i.e., verbal communication, nonverbal communication, interpersonal relationships, organization, and application of knowledge. Significance of effect for the groups as determined through the team of experts' use of the Counseling Checklist, Indirect Patient Care was determined through use of the Wilcoxon matched-pairs signed-ranks test. The Wilcoxon T is the sum of positive ranks or the sum of negative ranks, whichever is smaller, therefore the test not only measures direction of pairs of scores but also magnitude (Siegel, 1956).

<u>Within workshop evaluations.</u> Within the workshop, students and instructors used the Checklist for Counseling to analyze counseling behavior. Data from these evaluations were not considered as valid as were those from the team of experts since pre- and post-workshop videotapes were identified and an improvement in technique was expected. The scores were noted for correlation with the team of experts.

### Correlations

To determine if there was a relationship between the students' self-perception of confidence and the team of experts' evaluation, the Spearman rank correlation coefficient was used with a t-test for significance. Within workshop evaluations were also correlated with the team of experts' evaluations to find if a relationship existed between these two scores. Profile information was studied for possible effect of experience on quality of performance in the situations.

IV. MODEL FOR MICROTEACHING OF EMPLOYEE COUNSELING TECHNIQUES

The instructional model implemented combined three teaching techniques--intensive workshop (microteaching), videotaping, and simulation. Figure 4.1 shows the instructional model used for microteaching of employee counseling techniques beginning with the simulated case situation to be videotaped. After selecting the simulated case situation the next step is to review counseling techniques. Having these two steps in the order indicated initially removes the pressure from the students so they act more naturally. If counseling techniques are presented first, students might feel they are being tested with the videotaping.

After it has been ascertained that the students know the principles of counseling they are ready to view the videotaped situations aware of the qualities to search for. As each student views her/his own videotape, the Checklist for Counseling should be completed. The level of acceptability must be determined by the instructor.

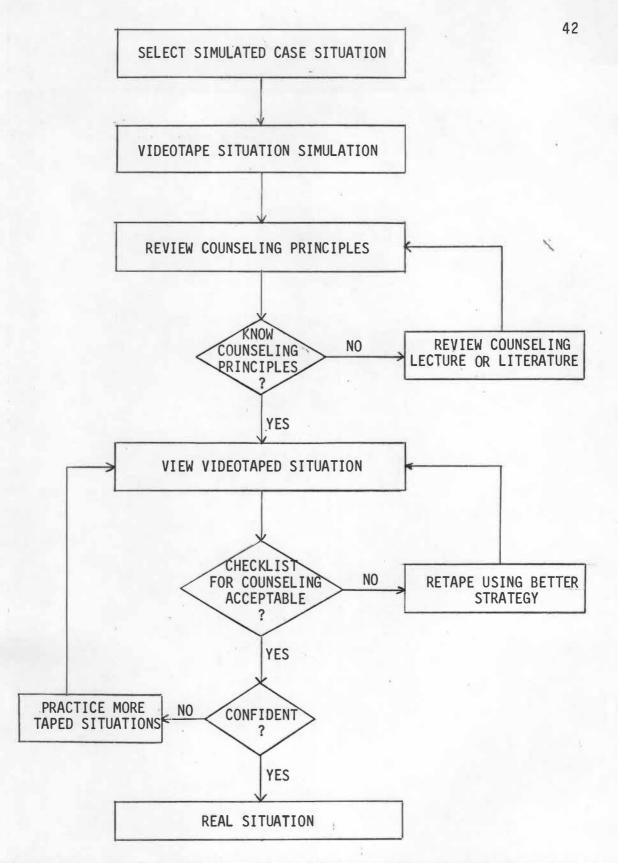


Figure 4.1. Model for Microteaching of Employee Counseling Techniques.

Even if the counseling checklist shows a high score, the importance of feeling confident in dealing with the situation should not be overlooked. If either level of confidence or formal evaluation is low, simulated situations should be repeated until these levels reach an acceptable level.

#### CHAPTER V

### **RESULTS AND DISCUSSION**

Five evaluation techniques were developed to measure student competence in counseling techniques, self-confidence in handling employee problems, and quality of videotapes in order to determine the efficacy of the model for the microteaching of employee counseling techniques by 17 students in the Coordinated Undergraduate Program in Dietetics at The University of Tennessee, Knoxville. A summary of results from evaluation of the model from key profile questionnaire questions, Self-Perception of Confidence (SPOC) scale and Checklist for Counseling is presented in Table 5.1.

### Profile Questionnaire

Three major concerns were considered in analyzing the results of the profile questionnaire. Consideration was given to whether the student (1) had counseling experience in the past; (2) had ever seen herself/ himself on television; and (3) could define some typical counseling terms.

The profile questionnaire (Appendix B) indicated that all but two students remembered being instructed in counseling techniques in the past. Generally, the students were referring to patient counseling which is a major component of the quarter previous to the one in which the intensive counseling workshop was offered. All students had counseled patients. Two had served as dormitory resident advisors and five had had a variety of other types of counseling experiences.

			SPOC Scale** Average Score		Checklist for Counseling Performance Evaluation of Videotaped Situations			
Student ID	Profile	Questions*	Pre- Workshop	Post- Workshop	Within Wo lst Situation	rkshop 2nd Situation	Team of E lst Situation	2nd Situation
					ž	%	X	Z
FO	No	No	3,3	3.3	88	90	78	75
EEA	No	No	2.8	3.2	85	96	80	82
rc	No	No	3.2	3.4	88	96	76	84
Ан	No	Yes	2.8	3.3	83	92	80	74
кнн	No	No	3.1	3.8	70	79	66	78
NU S	No	No	2.5	3.3	72	82	55	78
PN	No	Yes	3.7	3.8	79	87	73	85
KL	No	No	3.0	3.3	86	87	75	83
IIV	No	. No	2.7	3.7	80	91	68	86
ZE	Yes	Yes	2.8	3.5	84	94	88	81

### TABLE 5.1

#### EVALUATION OF A MODEL FOR MICROTEACHING OF EMPLOYEE COUNSELING TECHNIQUES FROM KEY PROFILE QUESTIONNAIRE QUESTIONS, SELF-PERCEPTION OF CONFIDENCE (SPOC) SCALE AND CHECKLIST FOR COUNSELING

			SPOC Scale** Average Score		Checklist for Counseling Performance Evaluation of Videotaped Situations			
Student ID	Profile Questions*		Pre- Post-	Within Workshop		Team of Experts		
	A	B	Workshop	Workshop	1st Situation %	2nd Situation	lst Situation	2nd Situation
GGI	No	No	2.8	3.5	85	88	75	. 80
BBCC	No	No	3.5	3.8	86	93	77	88
JQ	No	No	3.6	3.6	82	89	80	80
SB	No	Yes	1.9	2.9	77	90	62	78
RDD	No	Yes	3.4	3.8	77	89	77	80
WT	No	No	3.2	3.8	83	93	83	73
FFG	No	No	3.1	4.0	79	90	72	69

### TABLE 5.1 (Continued)

\*A = Counseled an employee? B = Seen yourself on television?

\*\*Self-Perception of Confidence Scale
1 = Uncomfortable
2 = Somewhat Uncomfortable
3 = Somewhat Comfortable
4 = Comfortable

Referring specifically to employee counseling, all students stated they had been interviewed for a job at some time but only three had ever interviewed a potential employee. One person had counseled an employee:

Ten students indicated they had been audiotaped for performance evaluation. Twelve of the students had been videotaped at some time, but only five had seen the playback, and three had used playback as a method of analyzing behavior in speech classes (Table 5.1). None of the students had ever practiced transactional analysis although six were familiar with the subject. All students had had a general psychology and a general sociology course either at The University of Tennessee, Knoxville, or at another university. Fourteen students had had speech and organizationalindustrial psychology. Other courses mentioned by students as having an influence in interpersonal relations were first aid, intimate relations, child development, and anthropology. Other experiences mentioned by students as increasing proficiency in counseling were serving as a leader in the Christian student center, helping in father's business, employment as a supervisor at Children's Hospital, advising students during drop/add university registration, and serving as a manager of a basketball team (Table A.1).

All students recognized the six terms they were asked to define relating to counseling. Responses ranged from good to excellent indicating the students had a basic didactic knowledge of counseling. When asked about feelings about the prospect of being videotaped, eight students indicated anxiety but most felt the value of the experience would outweigh anxiety.

### Self-Perception of Confidence

Students were asked to complete the SPOC scale expressing comfort in dealing with employee situations. Uncomfortable was assigned a rating point of 1; somewhat uncomfortable, 2; somewhat comfortable, 3; and comfortable, 4. For purposes of analysis the situations listed were grouped according to (1) those expected to illicit a low degree of discomfort (positive items), (2) those expected to illicit a high degree of discomfort (negative items), and (3) those that could be negative or positive. Group 1 consisted of five positive items numbered here as they appeared on the actual scale (Appendix B):

- 1. Soliciting opinions from an employee
- 2. Complimenting an employee
- 7. Promoting an employee
- 11. Conducting a preemployment interview
- 12. Rewarding an employee

On the initial SPOC scale, the average rating for these items among all 17 students was 3.6. After participating in the workshop, the average rating was 3.8 with an average increase of 0.2 between the two administrations of the scale. Item 11 showed greatest improvement with four students indicating greater comfort after the workshop, two with a one-point improvement and two with a two-point improvement. Three students noted greater comfort on items 2 and 7. Two students were more comfortable by one point on item 12 and one student, more comfortable on item 1. One student was less comfortable on item 1 after the workshop. All other students indicated the same degree of comfort on both the first and second SPOC scale for positive items. The negative group consisted of three items:

- 3. Reprimanding an employee
- 5. Conducting a probationary interview
- 6. Terminating an employee

Some disagreement may exist as to categorizing "conducting a probationary interview" as a negative factor. To students this meant that the employee was to be placed on or was already on probation because of an infraction of rules, therefore classifying "probationary" as a negative term.

On the first SPOC scale, the average rating for negative items was 2.0. This average was increased to 3.0 after the workshop, a net average gain of 1.0. Fifteen students were more comfortable in conducting a probationary interview after the workshop, three by a margin of two points, the others by a margin of one point. Thirteen were more comfortable by one rating point on items 3 and 6. One student indicated a change from uncomfortable to comfortable on item 3, a full range change of three points. All other scores remained the same from the first SPOC scale to the second on negative items.

The neutral group consisted of four items:

- 4. Conducting an exit interview
- 8. Conducting a periodic employee evaluation
- 9. Conducting a periodic evaluation with a trayline worker
- 10. Conducting a periodic evaluation with a food service supervisor.

Item 4 was confusing because the students had never been introduced to the concept of the exit interview. Five indicated greater comfort by one rating point after the workshop, two indicated less comfort by one point. Since the workshop had not been designed to familiarize the student with this particular type of counseling session, average comfort scores remained the same from the first SPOC scale to the second. On the other three neutral items, nine students improved in confidence in conducting a periodic employee evaluation by an average of 3.1 to 3.8 but noted more discomfort in evaluating a food service supervisor than a trayline worker as shown by Table 5.2.

## TABLE 5.2

## SELF-PERCEPTION OF CONFIDENCE (SPOC) BY 17 DIETETIC STUDENTS IN CONDUCTING PERIODIC EMPLOYEE EVALUATIONS

Counselee	Mean Composite Pre-Workshop	SPOC Scores* Post-Workshop	Number of students more comfortable on Post-Workshop SPOC scale
Food Service Supervisor	2.9	3.6	8 (2 by 2 points)
Trayline Worker	3.1	3.8	8 (3 by 2 points)

Based on a scale of 1 to 4.

Correlation of scores between the first and second administration of the SPOC scale was 0.59 using the Spearman rank correlation coefficient. A t-test of 2.38 indicated a significant positive change ( $p\leq.01$ ) from the first test to the second.

### Evaluation by Team of Experts

Four to five clinical instructors viewed each taped situation and each completed the Checklist for Counseling, Indirect Patient Care. Since instructors who had participated in the workshop groups were asked to not evaluate the students with whom they had worked, 13 students were evaluated by four members of the team of experts, and 4 students were evaluated by five members of the team of experts. These 4 students had had the researcher as the clinical instructor in their workshop group. The researcher did not participate as a member of the team of experts. Scores were compared for each of the areas including verbal communication, nonverbal communication, interpersonal relationships, organization, application of knowledge, and composite rating of all areas. Percentage scores can be found in Table A.2.

<u>Verbal communication</u>. Twelve of the 17 students showed improvement in 11 verbal communication items including 3 dichotomous items and 8 items with four gradations each. The percentage range of change for the scores was from minus 11 to plus 23 with one student receiving identical scores. The average range of change was six. Application of the Wilcoxon matched-pairs signed-ranks test resulted in a significant T value of 25.5,  $p^{\leq}0.025$ . An improvement was particularly noted in students being better able to guide the session and close the session (items 2 and 7) (Appendix B).

<u>Nonverbal communication</u>. Nonverbal communication scores were derived from five dochotomous items on the evaluation form. Little difference was observed between first and second tapes and, in fact, all students received 90% or above on all items in both taped situations.

Improvement was noted for seven students, seven students remained the same (five at the 100% level), and three received lower scores on the second videotape. The range of change was minus eight to plus ten with an average of zero. The Wilcoxon T value was 21.5 for nonverbal communication and was not significant. Little change in nonverbal communication could be due to the fact that all items on the scale were dichotomous allowing for little gradation in score.

Interpersonal relationships. Interpersonal relationships were judged on four dichotomous items and three items with four gradations each. The first item (introduced self) was not applicable since students were instructed that in the simulation, they already knew the employee. Ten students improved in interpersonal relationships and three students received identical scores from the first to the second videotaped situation. The range of change for interpersonal relationships was minus 11 to plus 34 with an average of 6. Four students received lower scores for the second performance. The Wilcoxon T value of 23 was insignificant. Greatest improvement occurred on item 2 "verbally attempts to set mood for the session with non-directive conversation."

Organization. Three items were the basis for judging organization of the student for the interview. Eleven students improved in average overall organization and six received a lower score on the second situation. The range of change was from minus 27 to plus 39 with an average of 5. The Wilcoxon T value of 48 was insignificant for organization. Average scores for the three items showed no apparent trend for improvement.

<u>Application of knowledge.</u> Three items composed the application of knowledge score. The first item "information consistent with hospital policies" was difficult for the evaluators not familiar with the policies of the student's assigned clinical facility. The item was usually marked "not applicable" therefore scores were averaged for only two items including "suggestions were realistic and appropriate" and "counselee was informed of consequences of session." Eleven students improved in application of knowledge and six received lowered scores. The range of percentage change was from minus 17 to plus 31 with an average of 7. A significant Wilcoxon T value was 31, p<0.025. Both items showed a positive improvement.

<u>Composite score</u>. Total percentage scores for all five categories were averaged. Eleven students improved according to the team of experts, one student remained the same and four received lower scores. The significant Wilcoxon T value was 29, p<0.025. The range of change was from minus 10 to plus 23 with an average of 5 percentage points.

### Within Workshop Evaluations

Each workshop group, consisting of students and a clinical instructor, completed the Checklist for Counseling, Indirect Patient Care upon viewing pre-videotaped situations on Day 3 and post-videotaped situations on Day 5. Each group had five or six participants including the clinical instructor. Three groups had four students and one group had five students.

Change in individual student composite scores averaging verbal communication, nonverbal communication, interpersonal relationships,

organization, and application of knowledge ranged from a change of 1 percentage point to a change of 13 percentage points (Table 5.1, page 45). The average change was 8 percentage points and all students improved in performance.

Analyzing percentage scores according to the areas included resulted in a change range of minus 2 to plus 20 with an average of 11 for verbal communication. One student decreased from the first to the second videotaped situation. Nonverbal communication ranged from a minus 2 to plus 6 with an average of zero. Two students received lower scores by two percentage points on the second videotaped situation and 11 remained the same. Percentage score changes for interpersonal relationships ranged from no change to plus 13. The average was 6 with one student remaining the same. Organization scores ranged from no change to plus 22 with an average of 10 with one student remaining the same. Application of knowledge ranged from no change to a change of 33 with an average of 13. One student remained the same.

#### Technical Evaluation

Three impartial experts in the use of the videotape technique in their respective disciplines randomly chose 16 of the 34 situations to view and evaluate using the technical evaluation form (Appendix B). They were told to view the tapes as if they were evaluating a live situation. Of 957 responses, 50% were rated above average and 41% were average. Items indicated as being highest in quality were tape leader time at the beginning and end of the sessions and absence of excess noise. Low items were microphone pickup of the counselor and audio quality. Overall videotape quality received 94% of the ratings as average or above.

### Student Evaluation of Workshop

After the workshop, students were asked for their opinions of using the intensive workshop approach utilizing videotape simulation as a learning tool (Appendix B). All the students felt that the technique was valuable allowing them to see gestures they never knew they had such as facial expressions that were not expressing what the student had thought. They also discovered speech habits that needed improvement. They also were interested in the counselee's reaction to the manner in which the session was handled.

When asked how videotaping might be used to teach skills to another person or group, the students thought that the technique could improve their skills in patient counseling and skills required for employee preemployment interviews. Students felt the techniques could be used in foodservice employee in-service training by videotaping employees and allowing them to see their habits. General employee orientation could also be improved by using videotape.

The only complaint about the procedure was that the workshop should not be held around a weekend. This suggestion was made by students assigned to clinical facilities outside of Knoxville. All students were pleased with the intensive workshop format utilizing videotape simulation and wanted it expanded to include direct patient care.

## Correlations

The evaluation data considered the most reliable and valid was from the Checklist for Counseling, Indirect Patient Care as used by the team of experts. The SPOC scale had the quality of content validity but had not been tested for reliability. The SPOC scale was correlated with the Checklist for Counseling to determine if any agreement was found between the team of experts' opinion of the students' performances and the students' self-perception of confidence. No significant correlation was found as measured by the Spearman rank correlation coefficient ( $r_s$ ). Table 5.3 presents results of correlations and t-test for significance.

#### TABLE 5.3

## SPEARMAN RANK CORRELATION COEFFICIENT (r<sub>s</sub>) AND t-TEST FOR SIGNIFICANCE BETWEEN TEAM OF EXPERTS' EVALUATIONS AND SELF-PERCEPTION OF CONFIDENCE BY STUDENTS

Evaluations	rs	t
Experts' Evaluation 1 - SPOC 1	0.34	1.40
Experts' Evaluation 2 - SPOC 2	-0.05	-0.02

Correlations were run between team of experts' evaluations and within workshop evaluations when using the Checklist for Counseling. The within workshop groups tended to rate the performances higher than the team of experts, and particularly high ratings were noted by the within workshop groups for the second videotaped situations. Rank order correlations were done to show if a relationship existed between the team of experts' scores and the within workshop groups. Table 5.4 presents results of correlations and t-test for significance.

### TABLE 5.4

## SPEARMAN RANK CORRELATION COEFFICIENT (rs) AND t-TEST FOR SIGNIFICANCE BETWEEN TEAM OF EXPERTS' EVALUATIONS AND WITHIN WORKSHOP EVALUATIONS OF VIDEOTAPED CLINICAL PERFORMANCE

Evaluations	rs	t
Experts' Evaluation 1 - Within workshop 1	0.55	2.55*
Experts' Evaluation 2 - Within workshop 2	0.16	0.63

\*Significant at p=0.025.

There was no correlation found between individual items on the profile questionnaire and total scores from the team of evaluators. Student ZE indicated having had experience in counseling an employee and received the highest average composite score in the class on the first videotaped situation but dropped 7 percentage points with the second videotaped situation. There was no indication that this student felt any higher degree of confidence either before or after the workshop than other students in the class (Table 5.1, page 45).

Student FFG indicated total comfortability (a rating of 4.0) on the second SPOC scale. Although the within workshop group judged this student as having improved by 11 percentage points on the composite rating, the team of experts judged the performance 3 percentage points lower on the composite rating for the second videotaped situation.

Student VII was ill at the time of the second taping session and had to be rescheduled for a private taping session two days later. In spite of comments about being more nervous and a technical error requiring the student to stop in the middle of the session and start over, neither SPOC scores nor evaluation scores indicated the change in procedure to be detrimental.

When doing the initial playback with the students, it was necessary to watch the videotaped situation once through without any evaluations, since the students were overcome by the cosmetic effect at seeing themselves on videotape. With the second viewing, they began to experience detachment with the image on the screen and could more objectively evaluate and critique their own and peers' performances. Profile data had indicated that only five students had seen themselves on videotape previous to the workshop so cosmetic effect was expected from at least twelve of the students.

#### CHAPTER VI

#### CONCLUSIONS, RECOMMENDATIONS, AND SUMMARY

I. CONCLUSIONS

An instructional model incorporating microteaching with videotape simulation for the introductory application of employee counseling techniques by students in a Coordinated Undergraduate Program in Dietetics was a valuable method for training students. An appropriate, effective evaluation instrument was considered essential to guide students in self-evaluation and peer-evaluation plus setting the guidelines for instructor grading. The Checklist for Counseling, Indirect Patient Care, tested for content validity and interrater reliability, was considered to contain all factors necessary to judge effective performance in employee counseling. After completing the instructional sequence, students achieved a significant increase in performance scores as judged by a team of experts in verbal communication, application of knowledge, and composite score. Data indicated a general trend for improvement in nonverbal communication, interpersonal relationships, and organization. Post-workshop SPOC scores indicated students were significantly more confident in counseling employees.

The microteaching method using videotape simulation was valuable by allowing the students to practice before becoming involved in a real situation or as a substitute when the real situation was not available. An advantage of videotaping over the real situation was allowing the students to see themselves as others see them.

The combination of improved scores as judged by a team of experts on students' conducting an employee counseling situation plus indications of improved confidence by students as measured by the SPOC scale objectively showed the efficacy of the instructional model in training students. Improved skills also were being recognized by peers and clincial instructors within workshop groups. Enthusiasm expressed in workshop evaluations subjectively showed that students enjoyed the approach and could see further application and broadening of the model. Videotape simulation provided the counselor with the opportunity to see herself/himself as others do in a useful and simple way that could not be compared with any other method reported in the literature. This study suggests that the instructional model presented is applicable to training of dietetic students in employee counseling skills. Videotape simulation using a coached counselee has the potential of leading to sufficient competency for students to more effectively handle real employee counseling situations, particularly situations with sensitive or legal implications.

### II. RECOMMENDATIONS

The use of the instructional model was limited to 17 seniors in the Coordinated Undergraduate Program in Dietetics at The University of Tennessee, Knoxville. The Checklist for Counseling, Indirect Patient Care had established content validity and interrater reliability for The University of Tennessee dietetic faculty and coordinators. The model should be tested to determine the generalizibility of the model for use in other programs and situations.

Because of the lack of employee counseling situations it is recommended that the microteaching approach with videotape simulation be included yearly in conjunction with the Food Systems Personnel Development course. The Self-Perception of Confidence (SPOC) scale, developed for measuring student confidence in terms of degree of comfortability in handling various situations, requires repeated use to establish reliability.

The microteaching approach using videotape for self-evaluation is a method that can be extended to other areas of the education of the dietitian. Introduction to patient interviewing and counseling, employee preemployment interviewing, and educational presentations such as group diet instruction and employee inservice education all might be practiced using the microteaching approach.

The use of the instructional model could benefit other aspects of dietetic training. Any part of the dietitians' job that requires interpersonal relationships could be practiced and self-evaluated through the instructional model.

A follow-up study should be conducted to determine the students' actual level of performance and confidence in encountering the real situation either later in dietetic training if the situation becomes available or one year after completion of training when the student is involved in a position requiring employee counseling to determine the long-term effect of the instructional model.

### III. SUMMARY

An instructional model was developed and implemented for the introductory application of employee counseling techniques by 17 senior students in the Coordinated Undergraduate Program in Dietetics at The University of Tennessee, Knoxville. Lack of experience in employee counseling during the clinical practicum was noted. The model combined a microteaching approach, referred to as an intensive workshop, utilizing videotape simulation of employee counseling situations with a coached counselee. Evaluation instruments developed were the Self-Perception of Confidence (SPOC) scale, an audio-video technical evaluation, a profile questionnaire, a workshop evaluation, and the Checklist for Counseling, Indirect Patient Care. The SPOC scale, audio-video technical evaluation and Checklist for Counseling were all tested for content validity through input and evaluation by experts. Interrater reliability was established for the Checklist for Counseling through a series of training sessions including faculty, coordinators, and students from the Coordinated Undergraduate Program in Dietetics. An intraclass correlation of 0.72 was achieved among seven clinical instructors, five of whom were asked to serve as a team of experts for evaluation of videotaped situations.

The intensive counseling workshop was scheduled for 18 hours distributed throughout the first week of Winter quarter, 1977. After completing a profile questionnaire and an initial SPOC scale, students received information on an employee situation. A coached counselee was utilized in videotaping the dietetic student's handling of the situation. Small

workshop groups including four or five students and a clinical instructor reviewed principles of counseling, then viewed the videotaped situations using Checklist for Counseling. Suggestions for improvement were offered by the group. The same situation was videotaped a second time utilizing suggestions and principles of counseling. Small groups reviewed the second situation using the Checklist for Counseling followed by students completing the second SPOC scale and a workshop evaluation.

Three impartial technical experts each randomly viewed 16 of the taped situations for audio, video, and overall quality. Tapes were considered average or above average by 94% of the responses.

A team of experts consisting of five clinical instructors each randomly viewed all 34 situations without knowledge of which were taped before instruction and which were taped after instruction. Twelve students improved in verbal communication, 7 in nonverbal communication, 10 in interpersonal relationships, 11 in organization, and 11 in application of knowledge. Application of the Wilcoxon matched-pairs signed-ranks test showed a significant ( $p^{\leq}0.025$ ) positive change in verbal communication and application of knowledge. Other areas were insignificant. The composite score for each student showed 11 students had improved significantly ( $p^{\leq}0.025$ ) and a general trend for improvement in all areas was noted.

Within workshop groups using the Checklist for Counseling also indicated general improvement in all areas. All students improved in percentage composite scores ranging from 1 percentage point to 13 percentage points with an average increase of 8 percentage points difference

from the first to the second videotaped situation.

SPOC scores indicated the students were confident in handling various employee situations after having participated in the workshop. A particular gain in confidence was noted for handling negative situations such as reprimanding an employee.

Profile data had little correlation with performance although the cosmetic effect was experienced by students when viewing the first videotape as would be expected when only 5 of the 17 students had ever seen themselves on television before.

Workshop evaluations completed by students indicated the workshop was beneficial and the suggestion was made to expand the techniques to include other aspects of their professional education. LIST OF REFERENCES

#### LIST OF REFERENCES

- Adler, L. M. and Enelow, A. J. 1966. An instrument to measure skill in diagnostic interviewing: A teaching and evaluation tool. J. Med. Educ. 41: 281.
- Andrew, B. J. 1975. Interviewing and counseling skills. J. Am. Dietet. Assoc. 66: 576.
- Bales, R. F. 1952. Interaction Process Analysis. Cambridge, Mass.: Addison-Wesley Press, Inc.
- Barrows, H. S. and Abrahamson, S. 1964. The programmed patient: A technique for appraising student performance in clinical neurology. J. Med. Educ. 39: 802.
- Baum, D. D. 1974. Equivalence of client problems perceived over different media. J. of Couns. Psych. 21: 15.
- Bellon, J. J. and Hodge, R. L. 1976. Private communication. The University of Tennessee, Knoxville.
- Bloom, B. S. 1956. Taxonomy of Educational Objectives. New York: David McKay Company, Inc.
- Blumberg, A. and Cusick, P. 1970. An analysis of verbal behavior. Paper prepared for presentation at the 1970 convention of the American Educational Research Association, Minneapolis, Minn.
- Borg, W. R., Kallenbach, W., Morris, M., and Friebel, A. 1969. Videotape feedback and microteaching in a teaching training model. J. of Exp. Educ. 37: 9.
- Breese, M. S. 1977. Private communication. The Ohio State University. Columbus, Ohio.
- Breese, M. S., Welch, A. C., and Schimpfhauser, F. 1977. Computersimulated clinical encounters. J. Am. Dietet. Assoc. 70: 382.
- Bush, J. D., Bittner, J. R., and Brooks, W. D. 1972. The effect of the video-tape recorder on levels of anxiety, exhibitionism and reticence. Speech Teacher. 21: 984.
- Cangemi, J. P. 1970. Personnel evaluation rating scale. Personnel Journal. 49: 665.

- Christensen, M. and Fuller, R. J. 1973. Teaching interview techniques with videotape. Educ. and Ind. Television. 5(5): 20.
  - Cronbach, L. J. 1960. Essentials of Psychological Testing. New York: Harper and Row.
- Day, M. and Blaker, G. 1974. Management attitudes and personality characteristics of dietitians. J. Am. Dietet. Assoc. 65: 403.
- Digiulio, R. A. and Eshleman, W. 1972. Graduate students response to televised micro-counseling experiences. Audio-Visual Instruction. 17(4): 39.
- Donlan, D. 1974. Observed versus unobserved behavior in three types of microteaching. Phi Delta Kappan. 55: 707.
- Downie, N. M. and Heath, R. W. 1965. Basic Statistical Methods. New York: Harper and Row.
- Eisenberg, S. 1971. Implications of video simulation of counseling. Educ. Tech. 11(8): 50.
- Eisenberg, S. and Delaney, D. J. 1970. Using video simulation of counseling for training counselors. J. of Couns. Psych. 17: 15.
- Essentials for Coordinated Undergraduate Programs in Dietetics. 1976. Chicago: The American Dietetic Association.
- Frunzi, G. and Dunn, J. 1974. Counseling subordinates: It's up to you. Supervisory Management. 19(8): 2.
- Grote, R. 1971. Making the most of counseling sessions. Supervisory Management. 16(9): 7.
- Guilford, J. P. and Fruchter, B. 1973. Fundamental Statistics in Psychology and Education, Fifth ed. New York: McGraw-Hill Book Company.
- Hallahan, I. A. 1974. Implication of the 1974 Taft-Hartley amendments. J. Am. Dietet. Assoc. 65: 554.
- Hart, M. 1976. Competency-based education. J. Am. Dietet. Assoc. 69: 617.
- Hayman, J. 1976. Private communication. University of Alabama, Montgomery, Alabama.
- 'Helfer, R. and Hess, J. 1970. An experimental model for making objective measurements of interviewing skills. J. Clin. Psych. 26: 327.

- Hodgkinson, H. L., Hurst, J., and Levine, H. 1975. Improving and Assessing Performance: Evaluation in Higher Education. University of California, Berkeley.
- Huber, J. and Ward, B. E. 1969. Pre-service confidence through microteaching. Education. 90: 65.
- Jenkins, E. C. 1966. The efficacy of videotapes and direct observation for teaching observational skills. University of Hawaii, Honolulu, Hawaii.
- Jensen, L. C. and Young, J. I. 1972. Effect of televised simulated instruction on subsequent teaching. J. of Educ. Psych. 64: 299.
- Kagan, N., Krathwohl, D. R., and Farquhar, W. W. 1965. Interpersonal Process Recall: Simulated Recall by Videotape in Exploratory Studies of Counseling and Teaching-Learning. Michigan State University, East Lansing, Michigan.
- Klos, L. 1973. Take the pain out of performance appraisal. Supervisory Management. 18(5): 22.
- Kromer, T. P. 1974. Watching themselves teach, they learn. Improv. Coll. and Univ. Teach. 22: 172.
- Lee, E. C. 1974. Interpersonal communication skills. Unpublished paper. Emory University, Atlanta, Georgia.
- Leskovec, E. 1967. A guide for discussing the performance appraisal. Personnel Journal. 46: 150.
- Likert, R. 1967. The Human Organization. New York: McGraw-Hill Book Company.
- Markey, M., Fredrickson, R., Johnson, R., and Julius, M. 1970. Influence of playback techniques on counselor performance. Couns. Educ. and Supervis. 9: 178.
- Marks, S. E., Montgomery, J. S., and Davis, W. L. 1975. Videotape recording in counseling: "What we know and where to find it." Canadian Counsellor. 9: 31.
- Matell, M. S. and Jacoby, J. 1971. Is there an optimal number of alternatives for Likert scale items? Study I: Reliability and validity. Educ. and Psych. Meas. 31: 657.
- Matthews, M. E., Mahaffey, M. J., Lerner, R. M., and Bunch, W. L. 1975. Profiles of the future for administrative dietitians via the Delphi technique. J. Am. Dietet. Assoc. 66: 494.

- Miller, J. B. and Spears, M. C. 1974. Mastery learning and group study in a dietetics curriculum. J. Am. Dietet. Assoc. 65: 151.
- Olivero, J. L. 1970. Micro-Teaching: Medium for Improving Instruction. Columbus, Ohio: Charles E. Merrill Publishing Company.
- Pierce, W. and Halinski, R. 1974. An evaluation of microteaching training techniques using pupil outcomes as the evaluative criterion. Contemp. Educ. 46: 45.
- Porter, D. T. and King, G. W. 1972. The use of video-tape equipment in improving oral interpretation performance. Speech Teacher. 21: 99.
- Ramey, J. W. 1968. Teaching medical students by videotape simulation. J. of Med. Educ. 43: 55.
- Sanford, J. P., McKinley, M. M. and Scruggs, M. 1973a. Graduates of hospital dietetic internships. I. Employment and administrative content of first positions in hospital dietetics. J. Am. Dietet. Assoc. 63: 255.
- Sanford, J. P., McKinley, M. M., and Scruggs, M. 1973b. Graduates of hospital internships. II. Perceptions of administrative experiences in internships. J. Am. Dietet. Assoc. 63: 259.
- Shanklin, C. W. 1976. The Assessment of the Feasibility for Using the Evaluation Component of a Model for Implementing and Evaluating a Competency-Based Dietetic Program. Unpublished doctoral dissertation, The University of Tennessee, Knoxville.
- Siegel, S. 1956. Nonparametric Statistics for the Behavioral Sciences. New York: McGraw-Hill Book Company.
- Simon, A. and Boyer, E. G. (eds.). 1974. Mirrors for Behavior: An Anthology of Classroom Observation Instruments. Philadelphia: Research for Better Schools.
- Smith, E. R. 1975. Forecasting Educational and Training Requirements and Responsibilities for Consulting Dietitians to Nursing Homes. Unpublished master's thesis, The University of Tennessee, Knoxville.
- Smith, J. A. and Lewis, W. A. 1974. Effect of videotaped models of the communications of college students in counseling. J. of Couns. Psych. 29:, 78.
- Spangler, A. A., Cederquist, D. C., and Blackman, C. A. 1974. Physicians' attitudes on dietitians' contributions to health team care. J. Amer. Dietet. Assoc. 65: 646.

- Study Commission on Dietetics. 1972. The Profession of Dietetics. Chicago: The American Dietetic Association.
- Tansey, P. J. 1971. Educational Aspects of Simulation. New York: McGraw-Hill.
- Tinsley, H. E. A. and Weiss, D. J. 1975. Interrater reliability and agreement of subjective judgments. J. of Couns. Psych. 22: 358.
- Tower, J. B. and Vosburgh, P. M. 1976. Development of a rating scale to measure learning in clinical dietetics. J. Am. Dietet. Assoc. 68: 440.
- Vosburgh, P. M., Tower, J. B., Peckos, P. S., and Mason, M. 1976. Development of a rating scale to measure learning in clinical dietetics. J. Am. Dietet. Assoc. 68: 446.
- Wagner, A. C. 1973. Changing teaching behavior: A comparison of microteaching and cognitive discrimination training. J. of Educ. Psych. 64: 299.
- Walz, G. R. and Johnson, J. A. 1963. Counselors look at themselves on videotape. J. of Couns. Psych. 10: 232.
- Ward, G. R., Kagan, N. and Krathwohl, D. R. 1972. An attempt to measure and facilitate counselor effectiveness. Couns. Educ. and Supervision. 11: 179.
- Watson, D. R. 1976. Coordination of classroom and clinical experience. J. Am. Dietet. Assoc. 69: 621.
- Webster, W. J. and Mendro, R. L. 1974. The effects of a videotape feedback system on classroom teacher behavior. J. of School Psych. 12: 189.
- Welser, J. R. and Judy, J. W. 1973. Videotape for evaluation in veterinary medicine. Educ. and Indus. Television. 5(7): 14.
- Worthen, B. R. and Sanders, J. R. 1973. Educational Evaluation: Theory and Practice. Worthington, Ohio: Charles A. Jones.
- Yenawine, G., and Arbuckle, D. 1971. Study of the use of videotape and audiotape as techniques in counselor education. J. of Couns. Psych. 18: 1.
- Zides, E. 1974. Videocassettes at the Boston University School of Nursing. Educ. and Indus. Television. 6(7): 25.
- Zima, J. 1971. Counseling concepts for supervisors. Personnel Journal. 50: 482.

APPENDIXES

# APPENDIX A

### AGENDA INTENSIVE COUNSELING WORKSHOP

Day 1

Room 102 Home Economics Building 10:00 - 11:30 Explanation of format for workshop Completion of 1st SPOC scale Completion of profile information Television Studio B, Communication Building 3:00 - 7:00 Videotape first counseling session 3:00 - 4:00 Group 1 (Four students) 4:00 - 5:00 Group 2 (Four students) 5:00 - 6:00 Group 3 (Four students) 6:00 - 7:00 Group 4 (Five students)

#### Day 2

Room 102 Home Economics Building 1:30 - 2:00 General meeting, students and clinical instructors Explanation of activities for Day 2 2:00 - 4:00 Small group sessions with clinical instructors 2:00 - 2:30 View instructional videotape 2:30 - 4:00 Discuss principles of counseling Study Checklist for Counseling, Indirect Patient Care

Before next session read suggested references

### Day 3

Room 102 Home Economics Building 9:00 - 12:00 Small group sessions with clinical instructors View situation videotapes from Day 1 using Checklist for Counseling 1:00 - 3:00 Plan second counseling session

### Day 4

Television Studio B, Communication Building 3:00 - 7:00 Videotape second counseling session 3:00 - 4:00 Group 3 4:00 - 5:00 Group 4 5:00 - 6:00 Group 2 6:00 - 7:00 Group 1

# Day 5

Room 215 Home Economics Building Time to be arranged Critique second videotape in small groups Complete 2nd SPOC scale Complete workshop evaluation

### STUDY GUIDE

#### COUNSELING TECHNIQUES FOR EMPLOYEE COUNSELING

- A. Purpose for counseling
  - 1. Motivation and recognition
  - 2. Periodic performance review
  - 3. Probationary employee evaluation
  - 4. Disciplinary counseling
  - 5. Exit interview
- B. Approaches to counseling
  - 1. Direct counselor leads the discussion
  - 2. Indirect counselee centered
- C. Questions
  - 1. Closed
  - 2. Leading
  - 3. Open-ended
  - 4. Probe
  - 5. Restatement
- D. Attitude
  - 1. Empathy
  - 2. Positive regard
  - 3. Genuineness
  - 4. Concreteness
- E. Sequence
  - 1. Be prepared
  - 2. Make sure counselee at ease
  - 3. Begin positively
  - 4. Talk in specifics
  - 5. Be a good listener
  - 6. Set a target for the future
  - 7. Close positively
- F. References
- Frunzi, G. and Dunn, J.: Counseling subordinates: It's up to you. Supervisory Management 19(8): 2, 1974.
- Grote, R.: Making the most of counseling sessions. Supervisory Management 16(9): 7, 1971.
- Klos, L.: Take the pain out of performance appraisal. Supervisory Management 18(5): 22, 1973.

Leskovec, E.: A guide for discussing the performance\_appraisal. Personnel Journal 46: 150, 1967.

Zima, J.: Counseling concepts for supervisors. Personnel Journal 50: 482, 1971.

# TABLE A.1

# SUMMARY OF STUDENT PROFILE DATA

		Number of	students
Ques	tion	Yes	No
1.	Been instructed on counseling	15	2
2.		17	0
3.		3	14
4.	Been interviewed for a job	17	0
5.	Counseled an employee	1	16
6.	Held a job where you had to counsel	0	17
7.	Been videotaped or appeared on television	12	5
8.	Watched yourself on videotape	5	12
9.	Analyzed your behavior on videotape	3	14
10.	Studied transactional analysis	6	11
11.	Practiced transactional analysis	0	17
12.	Read articles on counseling techniques	17	0
13.	Observed a counseling session	17	0
14.	Been a dorm resident adviser	2	15
15.	Been audiotape recorded for performance		77
	evaluation	10	7
16.	Taken Psychology 2500 (General)	16	1
17.		14	3
18.	Taken Psychology 4460 (Organization-Industrial		
	Psychology)	14	3
19.	Taken Sociology 1510 (General)	16	1
20.	Taken any other course dealing with inter-		
	personal relations	9	8
21.	Had any other experiences that increased		
	your proficiency in counseling	5	12

# TABLE A.2

Student Code	Verbal	Communication	Nonverba]	Communication	Interpersonal	Kelationsnips		Urgari 1 za ti 0ri	Application of	Knowledge	Composite	Score
	lst	2nd	lst	2nd	lst	2nd	lst	2nd	lst	2nd	lst	2nd
FO	75	71	100	100	79	79	77	71	69	63	78	75
EEA	74	79*	100	100	79	79	81	79	81	88*	80	82*
YC	74	80*	100	100	76	85*	69	81*	71	88*	76	84*
ААН	77	73	100	100	74	75*	83	56	75	70	80	74
ХНН	63	74*	97	100*	64	82*	65	81*	50	56*	66	78*
MU	51	71*	90	100*	51	85*	36	75*	44	75*	55	78*
PN	72	82*	100	100	67	89*	71	79*	66	81*	73	85*
KL	72	81*	98	98	74	85*	• 77	83*	63	69*	75	83*
VII	61	84*	100	95	69	86*	65	81*	72	94*	68	86*
ZE	84	76	98	90	92	89	88	81	84	78	88	81
GGI	70	71*	98	100*	85	85	69	77*	59	88*	75	80*
BBCC	72	84*	98	100*	86	90*	71	85*	63	84*	77	88*
JQ	72	74*	100	95	90	79	67	81*	84	88*	80	80
SB	54	75*	92	100*	71	86*	57	70*	53	65*	62	78*
RDD	70	80*	98	100*	86	77	78	82*	65	58	77	80*
WT	78	67	98	100*	79	71	83	67	93	85	83	73
FFG	66	66	98	98	70	71*	73	63	70	53	72	69

# SCORES RECEIVED ON CHECKLIST FOR COUNSELING AS JUDGED BY TEAM OF EXPERTS

\*Improvement noted.

#### APPENDIX B

Coordinated Undergraduate Program in Dietetics College of Home Economics The University of Tennessee, Knoxville COUNSELING CHECKLIST Indirect Patient Care

Student	Name	 	_
Date			

Type of Session

Please indicate with a checkmark above the statement in each category you feel best describes the behavior of the counselor.

I.	Verbal Communi- cation		1					1
1.	Content of questions and com- ments appropriate to the session.	Counselor's conver- sation biased. Talks over the head of counselee.	Counselor made attempt at using correct con- versation at level of counselee.	Good choice of ques- tions and comments. Usually unbiased and at the counselee's level.	Excellent choice of questions and comments. Unbiased at level of counselee.	Not Applicable:	Not Observable:	Comments :
2.	Guides ses- sion by pursuing information offered by counselee.	Minimum evidence of good listening.	Some evidence of good listening through use of probes, restate- ment, and/or cognizant comments.	General evidence of good listening through use of probes, restatement, and/or cognizant comments.	Every evidence of listening through use of probes, re- statement, and/or cognizant comments.			
3.	Questions and infor- mation expressed concisely.	Minimally concise and efficient presentation of information.	Some information pre- sented concisely and efficiently.	Most information pre- sented concisely and efficiently.	Demonstrated con- cise, efficient presentation of information.			
4.	Questions and informa- tion ex- pressed confidently.	Somewhat uncertain about information.	Confident and sure about part of the information.	Confident and sure about most of the information.	Confident and sure about all of the information.			
5.	Attempts open com- munication	Counselee allowed little opportunity to communicate freely and express views and opinions.	Counselee allowed some opportunity to communicate freely and express views and opinions.	Counselee allowed opportunity to communicate freely and express views and opinions for most of the inter- view.	Counselee allowed to communicate freely and express views and opinions.			
6.	Illustrates significant points with documented evidence.	Significant points undocumented.	Made some attempt at documentation.	Made good attempt at documentation.	All significant points were documented.	÷		·
-	and the second se							

7.	Made sure counselee understood meaning of the session.	Made little attempt at assessing coun- selee's under- standing.	Made some attempt at assessing counselee's understanding but inquiry inappro- priate to solicit sufficient response.	Made good attempt at assessing counselee's under- standing offering some further ques- tioning or explana- tion.	Made excellent attempt at assess- ing counselee's understanding offer- ing further ques- tioning or explana- tion as necessary.	*		
8.	Signals close of session in an appro- priate manner.	End of session abrupt or un- necessarily drawn out with lack of ending cues, summary, or direc- tion.	End of session achieved with minimal grace, some cues, inadequate summary or direction.	End of session achieved somewhat gracefully with appropriate cues, summary, or direc- tion.	End of session grace- fully achieved with appropriate cues, excellent summary, and definite plan for the future.			
9.	Rate of speaking.		Fast, slow	Appropriate				
10.	Tone of voice.		Irritating, soft, loud or shrill, monotone.	Appropriate				
11.	Enunciation		Mumbles, mis- pronounces.	Inappropriate	-			
	Nonverbal Communication Eye contact		Avoids, stares	Appropriate				
2.	Facial expression		Scowls, frowns, aloof, distracted, mocking or derisive, unfriendly.	Appropriate				
3.	Posture		Stiff, slouching	Appropriate				
4.	Movements	-	Distracting, absent	Pleasant				
5.	Social distance		Intimate (less than 2 ft) Public (beyond 12 ft).	Personal (2-4 ft) Social (4-12 ft).			*	

	Observes social ameni-						
	Introduces self		No	Yes			
	Ascertains that coun- selee is ready		No	Yes			
	Explains purpose of session		No	Yes			
	Manner is courteous		No	Yes			
2.	Verbally attempts to set mood for the session with non- directive conversa- tion.	Purpose of inter- view immediately begun with little appropriate pre- liminary verbal preparation.	Made little attempt to put counselee at ease. No comments indicating positive regard.	Made some attempt to set appropriate mood. Used counselee's name. Tried somewhat successfully to indicate positive regard.	Made every attempt to set appropriate mood for the session. Used counselee's name. Began session with comments indicating positive regard.		
3.	Displays diplomacy and dis- cretion in hand- ling com- ments, questions, and answers.	Session somewhat out of hand.	Made an attempt with little success.	Made some attempt with moderate success.	Made every attempt with good success.		
4.	Displays honesty and concreteness in dealing with the situation.	Apparent game- playing and avoidance of the issue.	Shows some evidence of gameplaying or evading the issue.	Is moderately honest and concrete in deal- ing with the situa- tion.	Is completely honest and concrete in dealing with the situation.		
	Organization Session proceeds	Sequence appears haphazard. Little	Sequence somewhat logical with adequate	Sequence logical with apparent fore-	Sequence logical with evidence of forethought.		
	in a logi- cal sequence.	evidence of ade- quate forethought. Jumpy.	forethought. Flow is jumpy. Repetiti- ous.	thought. Some repetition. Flow somewhat smooth.	No unnecessary repetition Smooth flow.		

2.	Shows evi- dence of prior prepa- ration.	Apparently unnecessary interruptions occur; confu- sion somewhat evident.	Few unnecessary interruptions; little confusion.	No unnecessary interruptions; good evidence of prior preparation.	No unnecessary interrup- tions; evidence of thorough prior prepara- tion.	*	
3.	Paces the session to achieve desired pur- poses in allotted time.	Session unneces- sarily hurried or sluggish. No pauses. Partici- pants' conversa- tion rushed, held back, or very ill-at-ease.	Session somewhat well- paced. Participants appear at ease most of the time. Conversation mostly noninterruptive. Pauses allowed.	Session paced well. Participants appear at ease most of the time. Conversation mostly non-interrup- tive. Pauses allowed.	Session placed well. Participants appear at ease. Allowance made for pauses. Conversation non- interruptive.		
	Application of Knowledge Information consistent with hos- pital poli- cies.	Many inconsisten- cies observed.	Some information correct.	Most information correct.	All information correct.		
2.	Suggestions were realis- tic and appro- priate.	Suggestions seemed unrealistic or in- appropriate.	Suggestions tended to be unrealistic or inappropriate.	Suggestions were somewhat realistic and appropriate.	Suggestions seemed quite realistic and appropriate.		
3.	Counselee was informed of conse- quence of session.	Counselee was not informed.	Counselee was vaguely informed.	Counselee was in- formed non- specifically.	Counselee was completely informed.		

Signature of Counselor \_\_\_\_\_\_

Signature of Observer

Date reviewed

Copyright@ 1976, Coordinated Undergraduate Program in Dietetics, College of Home Economics, The University of Tennessee, Knoxville 37916.

Evaluator's Guide Checklist for Counseling (Indirect Patient Care)

#### Notes and suggestions for use.

This form is designed for the evaluation of counselor behavior in an employee-supervisor counseling session. It can be used for motivational counseling sessions, periodic performance review, probationary employee evaluation sessions, disciplinary counseling sessions, and exit interviews.

Categories are grouped according to verbal communication, nonverbal communication, interpersonal relationships, organization, and application of knowledge. Subheadings are the result of behavioral objectives considered to be desirable for a successful counseling session. Four gradations are made available to assess most behavior. Only two choices are available in some categories. The observer is asked to check the box in which the most applicable descriptions are located. An area for comments is available on the far right of the form---it is valuable to the counselor to receive comments on the incident of her/his behavior that warranted a particular judgment. An area is designated where the observer can mark not applicable or not observable. Not applicable indicates that the described behavior has absolutely no relationship to the observed situation. This should be unlikely, but if the observer feels this item should be marked, then a comment is required. Not observable indicates that for some reason beyond the observer's control, he cannot observe the behavior. This could be due to her/his late arrival or early departure, the nature of the observation such as poor placement of the observer so she/he cannot see or hear well, or video or audio simulation limiting observation. An explanation under comments once again must be supplied (except for item 1 under Interpersonal Relationships).

The form is judgmental in nature and requires the observer to have an adequate background in counseling techniques. But for some help in making judgments, the following list of possible observable, desirable, and undesirable behaviors is included. This list is by no means all inclusive, but may help to serve as a guide to the evaluator.

_		UNDESIRABLE	DESTRABLE
I.	VERBAL COMMUNICATION		
1.	Content of questions and comments appro- priate to the ses- sions.	Leading questions Biased questions or comments Questions or comments poorly phrased Talking over or be- neath the under-	Open-ended questions Clearly understood questions Speaking on the counselee's level

standing of the

counselee.

		UNDESIRABLE	DESIRABLE
2.	Guides session by pursuing informa- tion offered by counselee.	Asks questions that counselee has already answered in conversa- tion Ignores counselee's verbal or nonverbal cues Appears distracted	Uses restatement to lead conversation Appears to be listening Continues in counselee's train of thought Empathetic Uses probes to pursue information
3.	Questions and infor- mation expressed concisely.	Tends to ramble Overuse of unnecessary phrases such as "you know," "okay," etc. Overuse of unnecessary examples of personal experiences Repetition of a partic- ular thought	Conversation well thought out Thinks before speaking Gets to the point
4.	Questions and infor- mation expressed confidently.	Apparent nervousness Allows counselee to sway confidence	Positive Comfortable in situa- tion
5.	Attempts open communication.	Counselor does all of the talking Counselor is brusque Counselee's comments are brushed aside	Supportive Tries to draw out counselee
6.	Illustrates signif- icant points with documented evi- dence.	Makes statements like "you're doing very well" but not describ- ing why Admonishes counselee without specific instances	Cites specific instances warranting comment
7.	Makes sure counselee under- stood meaning of the session.	Doesn't request counselee viewpoint or understanding	Asks counselee to repeat decisions or meanings
8.	Signals close of interview in an appropriate manner.	Ending abrupt Ending unnecessarily drawn out No summary or review	Ending fitting with situation Ending cues graceful but apparent

- 11		UNDESTRABLE	DESIRABLE
9.	Rate of speaking.	Explanation appears on form but any irritat- ing voice mannerism	A mark for desirable behavior is described on the form
10.	Tone of voice.	is considered undesir- able; therefore this column can be marked	
11.	Enunciation.	with an explanation in comments column	
п.	NONVERBAL COMMUNICA	TION	
1.	Eye contact.	Avoids, stares, atten- tion directed else- where, such as window, papers, wall, etc.	person, varies expres-
2.	Facial expres- sion.	Continuously scowls, frowns, looks un- pleasant, aloof, mock- ing, distracted	Pleasant, appropriate, varied
3.	Posture.	Slouching, stiff, inappropriate to the situation	Relaxed Controlled Appropriate to the situation
4.	Body mannerisms.	Fidgety, flamboyant, distracting, paralyzed	Pleasant, varied, appropriate
5.	Social distance.	Self-explanatory	
III	. INTERPERSONAL RELA	TIONS	
1.	Observes social amenities. Intro- duces self.	No introduction Introduction inappro- priate	Introduces self appro- priately (usually not on first name basis)
	Ascertains that counselee is ready	Begins session before counselee is seated or has directed his attention to the counselor	Allows counselee to become comfortably seated and has directe his attention toward the counselor
	Explains purpose of session.	Offers no immediate explanation of the purpose. Counselee needs to discern this from the conversation	Early in the session, briefly explains the purpose

Manner is courteous	Brusque, insulting, does not use counse- lee's name, aloof, mocking	Uses counselee's name very early in session. Displays positive re- gard
Verbally attempts to set mood for the session with non- directive conversa- tion.	Gives feeling doomsday is at hand Inappropriately jovial or serious Jumps into the core of the session without any preliminaries	Puts counselee at ease Carries on some "small talk" before beginning or begins session with generalities before specifics
Displays diplomacy and discretion in handling comments, questions, and answers.	Inappropriate joking Sarcasm Wryness Finishes sentences for counselee Interrupts	Sympathetic Understanding Impersonal Values equality Democratic
Displays honesty and concreteness in dealing with the situation.	Avoids unpleasantness, even though necessary Evades the issue, makes excuses Reassures when not appropriate	Tells it like it is Down to earth Honest
ORGANIZATION		
The session pro- ceeds in a logi- cal sequence.	Factors come up repeat- edly in random fashion No apparent planning of session Counselee obviously leading the session	Usually 1. Social ameniti 2. Good points 3. Sensitive poin 4. Reiteration 5. Explain follow up 6. Closure (Depends on circumstances Well-planned
Shows evidence of prior preparation.	Fumbles for information Confused Stumbles over explan- ation Unnecessary interrup- tions Setting unnecessarily	All materials at hand Information studied and ready Private area
	Verbally attempts to set mood for the session with non- directive conversa- tion. Displays diplomacy and discretion in handling comments, questions, and answers. Displays honesty and concreteness in dealing with the situation. <u>ORGANIZATION</u> The session pro- ceeds in a logi- cal sequence.	does not use counse- lee's name, aloof, mockingVerbally attempts to set mood for the session with non- directive conversa- tion.Gives feeling doomsday is at hand Inappropriately jovial or serious Jumps into the core of the session without any preliminariesDisplays diplomacy and discretion in handling comments, questions, and answers.Inappropriate joking Sarcasm Wryness Finishes sentences for counselee InterruptsDisplays honesty and concreteness in dealing with the situation.Avoids unpleasantness, even though necessary Evades the issue, makes excuses Reassures when not appropriateORGANIZATIONFactors come up repeat- edly in random fashion No apparent planning of session Counselee obviously leading the sessionShows evidence of prior preparation.Fumbles for information Confused Stumbles over explan- ation Unnecessary interrup- tions

		UNDESTRABLE _	DESIRABLE
3.	Paces the session to achieve desired purpose in allotted time.	Hurried Sluggish Any part of session hurried or extended	Well-paced Smooth Adequate time allotted to each part and to the whole
۷.	APPLICATION OF KNOWL	EDGE	
1.	Information consis- tent with hospital policies.	(Number of inconsis- tencies per degree of error can be used to determine.counselor. place on the scale)	Consistent with hospital policy
2.	Suggestions were realistic and appropriate.	Offers platitudes	Objectives set
3.	Counselee informed of consequences of session.	Not informed at all Told to read policies Threatened unnecessarily	Well-informed Direct

Date \_\_\_\_\_

Session \_\_\_\_\_

Total Item Response Scores sZ X 2 3 4 5 Item 1 6 S Rater 1.\_\_\_\_ 1. 2. 2. 3. \_\_\_\_ 3. 4. 4. 5. 5. 6. 6. 7. 7. 8. 8. 9. 9. 10. 10. X = st<sup>2</sup>\_\_\_\_ Σs<sup>2</sup> n = \_\_\_\_\_ n/n-1 = \_\_\_\_\_ s<sub>t</sub> = \_\_\_\_\_ |s<sup>2</sup><sub>t</sub>-<sup>n</sup> <sup>1</sup>=<sup>3</sup><sup>2</sup> Reliability (generalized KR-20) =  $\frac{n}{n-1}$ st = (())()

Fill in number of participants responding under each rating for each item.

Reliability (estimated by intraclass correlation)

			Trial	
Item	<u>n</u>	Σχ	<u>Σx<sup>2</sup></u>	$(\Sigma x)^2$
1.				
2.				
3.			and the second se	
4.				
5.		-		
6.				
7. 8.				
9.				
10.				
Totals	Σn	ΣΣχ	ΣΣχ2	$\Sigma(\Sigma x)^2$
Within:				
SS <sub>W</sub> =	$\frac{1}{n} [n \Sigma \Sigma x^2 - \Sigma]$	$(\Sigma x)^2$ ]	df <sub>w</sub> =	Υ.
			2 SS	
=	<sup>1</sup> ()().	- ( )]	$s_w^2 = \frac{SS_w}{df_w}$	
=				
Between:				
$SS_{b} = \frac{1}{\Sigma n}$	$[k\Sigma(\Sigma x)^2 - ($	$(\Sigma\Sigma x)^2)$	df <sub>b</sub> =	
_ 1	_E()() - (	17	$s_b^2 = \frac{SS_b}{df_b}$	
- (	יייייייייייייייייייייייייייייייייייייי	17	$b = \overline{df_b}$	
=			=	
	s, <sup>2</sup>	- s.2		
Intraclass r	$(f') = \frac{b}{s_b^2 + b}$	(n-1)s <sub>W</sub> <sup>2</sup>		
		$-\frac{1}{2}$		
1	() (			
	=			

Name	
Date	

# SELF-PERCEPTION OF CONFIDENCE SCALE

Check the appropriate column indicating the degree of comfort you would feel in each of the following situations. Consider each statement at its face value assuming no complications.

		Uncomfortable	Somewhat Uncomfortable	Somewhat Comfortable	Comfortable
1.	Soliciting opinions from an employee				
2.	Complimenting an employee				
3.	Reprimanding an employee				
4.	Conducting an exit interview				
5.	Conducting a probationary interview				
6.	Terminating an employee				
7.	Promoting an employee				
8.	Conducting a periodic employee evaluation				
9.	Conducting a periodic evaluation with a trayline worker				
10.	Conducting a periodic evaluation with a food service supervisor				
11.	Conducting a preemployment interview	1			
12.	Rewarding an employee				

Copyright 1976, Coordinated Undergraduate Program in Dietetics, College of Home Economics, The University of Tennessee, Knoxville, 37916. All rights reserved. Used by permission.

## Technical Evaluation Video-Taped Counseling Simulation

Session

Evaluator

Title

Date

The videotapes you are about to see are designed for evaluation of counseling skills of dietetic students. The areas included in the evaluation are verbal communication, nonverbal communication, interpersonal relationships, organization of content, and application of knowledge. The tape is a simulation but the same evaluation instrument will be used in a real situation. Therefore, your opinion is needed on the quality of the videotape in simulating an actual session. Please mark the following items according to whether the tape is high quality, low quality, or somewhere between.

AUDI	D TECHNICAL ASSESSMENT:	Not Observable	Low:	Below Average	Average	Above Average	High	Comments
1.	Absence of extra noises							
2.	Voice clarity a. Counselor							
	b. Counselee							
3.	Microphone pickup a. Counselor							
	b. Counselee						4	

	*	Not Observable	Low	Below Average	Average	Above Average	High	Comments
VIDE	O PICTURE ASSESSMENT:					S		
1.	Tape leader before ses- sion starts							
2.	Facial expression shown a. Counselor							
	b. Counselee							
3.	Eye-to-eye contact a. Counselor							
	b. Counselee							3-1-
4.	Distance between participants							
5.	Body movements shown a. Counselor					*		
	b. Counselee							
6.	Type of setting shown					-		

		Not Observable	Low	Below Average	Average	Above Average	High	Comments
7.	End leader time after session							
8.	Visual contrast							
AUDI 1.	0 + VIDEO QUALITY: Overall audio quality							
2.	Overall picture quality							
3.	Quality of playback							
4.	Overall video-tape quality							

# Participant Profile Information Counseling Workshop

Date						
Name		Social Security	Number		Clinical facility	
	Have you ever had a	another major other	than dietetics?	Yes No	If so what?	

Please respond to the following questions:

lave	you ever	Yes	No	Approximate Number of Times	Explanation
1.	been instructed on counseling techniques?				
2.	interviewed or counseled a patient?		-	55	
3.	interviewed a potential employee?			4 g +	
4.	been interviewed for a job?	-	-	-	
5.	counseled an employee?	-		6 B	
6.	held a job where you had to counsel?		-		
7.	been video-taped or appeared on television?	-			

Have	you ever	Yes	No	Approximate Number of Times	Explanation
8.	watched yourself on video-tape				
9.	analyzed your behavior on video-tape?		-		
10.	studied transactional analysis?	-			
11.	practiced transactional analysis?				
12.	read articles on counseling techniques?				× 2
13.	observed a counseling session?				
14.	been a dorm resident adviser?				
15.	been audio-tape recorded for performance evaluation?				
16.	taken Psychology 2500 (General)?			4 2 1	
17.	taken Speech 2311 (Public Speaking)?	~			
18.	taken Psychology 4460 (Organization- Industrial Psychology)?				

lave	you ever	Yes	No	Approximate Number of Times	Explanation
19.	taken Sociology 1510 (General)?				
20.	taken any other courses dealing with interpersonal relations (please list).		нî Н		
21.	had any other experiences that increased your proficiency in counseling?				

What do these terms mean in relation to professional communications?

Empathy Honesty

Concreteness

Open-ended questions

Probationary

Positive Regard

Discuss your feelings about the prospect of being video-taped in order to analyze and improve your counseling skills.

### Counseling Workshop Evaluation

Social Security Number Date

Please give your opinion of the intensive counseling workshop by answering the following questions.

- 1. Discuss how you felt about the format of the workshop.
- 2. Do you feel being able to view yourself or others on videotape sharpened your perceptions of behavior? Why or why not?
- 3. What influence do you feel that participating in a simulation experience will have on your ability to do employee counseling?
- 4. What other skills in dietetics would you like to see presented in a format similar to this workshop?
- 5. Describe how you might use each of the following techniques to teach some kind of skills to another person or group.
  - a. Simulation
  - b. Videotaping
  - c. Intensive workshop

Karen Margaret Fiedler was reared in North Ridgeville, Ohio, graduating from Ridgeville High School as salutatorian of her class. She attended Baldwin-Wallace College in Berea, Ohio, receiving the Bachelor of Science in Home Economics in 1967.

After completing a dietetic internship at Miami Valley Hospital in Dayton, Ohio, the author began graduate school at The Ohio State University receiving the Master of Science in Food and Nutrition in December of 1969.

The author was employed from 1970 to 1972 as an Instructor in Home Economics at Otterbein College in Westerville, Ohio. She then accepted a position as Assistant Professor in Home Economics at Miami University in Oxford, Ohio.

The author assumed the position of part-time Clinical Instructor in the Coordinated Undergraduate Program in Dietetics at The University of Tennessee, Knoxville, in 1975 while pursuing the Doctor of Philosophy degree. The degree was conferred in August, 1977.

The author is a member of the American Dietetic Association, American Home Economics Association, International Federation of Home Economics, Nutrition Today Society, Society for Nutrition Education, Foodservice Systems Management Education Council, and Omicron Nu. She is the daughter of Mr. and Mrs. Norman Fiedler of North Ridgeville, Ohio.