September 1992

Preparation of School Psychologists in Behavioral Consultation Service Delivery

Thomas R. Kratochwill
University of Wisconsin, Madison, WI

Pamela Carrington Rotto
University of Wisconsin, Madison, WI

Susan M. Sheridan
University of Nebraska-Lincoln, ssheridan2@unl.edu

Diane Salmon
National Louis University - Evanston

4 Preparation of School Psychologists in Behavioral Consultation Service Delivery

Thomas R. Kratochwill
*University of Wisconsin–
Madison*

Pamela Carrington Rotto
*University of Wisconsin–
Madison*

Susan M. Sheridan
University of Utah

Diane Salmon
*National Louis University–
Evanston*

Practicing school psychologists have reported that consultation generally has been a high priority in service delivery approaches in schools and other applied settings (e.g., Gutkin, Singer, & Brown, 1980; Lesiak & Lounsbury, 1977; Meacham & Peckam, 1978). Although many practitioners now receive didactic training, few school psychology programs may actually provide a field practicum or other supervised experience in consultation.[1] Formal applied training in consultation is important for several professional and ethical reasons. In the last decade, there has been growing concern over the limitations of traditional psychoeducational services provided to children in school settings. For example, studies have demonstrated that psychologists using traditional assessment practices have major difficulties reliably identifying children for the provision of special educational services (e.g., Ysseldyke, Thurlow, Graden, Wesson, Algozzine, & Deno, 1983). Once referred, there is a high probability that students tested will be placed in special education, and there continues to be low relationship between the actual assessment protocol and the design, implementation, and monitoring of intervention programs. Thus, there has been growing interest in consultation practice as part of the "regular education initiative" (REI) which calls for radical reform in services to mildly handicapped children, some of

---

[1]Meyers, Wurtz, and Flanagan (1981) surveyed national school psychology training programs and reported that among those responding, 55% of the doctoral and 32% of the subdoctoral programs offered a didactic course in consultation. However, 17% of the doctoral and 42% of the subdoctoral programs had no courses with significant focus on consultation. Furthermore, of those programs that offered consultation training, only 27% were reported to incorporate a field practicum component. Although this study was conducted over a decade ago, the picture has likely not changed dramatically.

whom receive services in regular education settings. Recommendations for the inclusion of consultation as a part of the intervention process in the regular education setting supports the growing interest of training in this area (Cancelli & Lange, 1990). Although it is beyond the scope of our chapter to provide an overview of concerns pertaining to the REI, the interested reader is referred to Kauffman (1991), and a mini-series edited by Rosenfield (1990) that reviews issues in this area.

Training in consultation often is seen as a viable option for provision of services and as a strategy for linking assessment directly to prevention and intervention. Specifically, numerous intervention strategies have been presented for implementation within a consultation service delivery role (see Graden, Zins, & Curtis, 1988; Price, Cowen, Lorion, & Ramos-McKay, 1988). The important issue here is that consultation as a process and intervention might be held to the same scrutiny as traditional service delivery approaches. For example, standardization of the protocols, developing the psychometric features of the interview process (i.e., reliability, validity), and establishing the treatment validity of the approach represent a spectrum of standards that behavioral consultation researchers should have to address (Bergan & Kratochwill, 1990). Competency-based training represents the foundation for conducting consultation with integrity and hopefully, addressing standards for practice.

Specific training in consultation and intervention strategies has also taken on ethical importance within the context of children's right to effective treatment. Thus, adequate preparation in consultation services is considered important in preserving children's right to effective services. Individuals with specific competencies are potentially more capable of delivering high quality psychological services.

These are but a few of the major concerns that have prompted more careful consideration of consultation training research, and which have facilitated growing interest in methods to train preservice and inservice school psychology consultants effectively. The purpose of our chapter is to provide an overview of the training literature in consultation, with a specific focus on training behavioral consultants. Broad coverage of training consultants, clinicians, or counselors is presented in other sources and the interested reader is referred to these writings (e.g., Ford, 1979; Friend & Cook, 1988; Gallessich, McDermott-Long, & Jennings, 1986; Idol, 1988; Kurpius & Lewis, 1988; Rosenfield & Gravois, in preparation). The chapter includes an overview of research in various areas of consultant training, and advantages and limitations of this work within a theoretical and practical context. Finally, future directions are presented for research in the field of behavioral consultation training.

CURRENT RESEARCH IN TRAINING CONSULTANTS

Although we do not focus extensively on issues pertaining to terminology, consultation is defined as an indirect form of service delivery in which the consultant

works through a consultee or mediator to effect some change in the client, usually a child or adolescent. A variety of individuals may serve in the consultant, consultee, and client roles (see Bergan & Kratochwill, 1990 and Milne, 1986, for examples). Like other forms of consultation, behavioral consultation has as its single most definitive characteristic, indirect service delivery (see Gutkin & Curtis, 1990 for a review of the core characteristics of consultation). We view behavioral consultation as an indirect service delivery model in three categories (Vernberg & Reppucci, 1986). The first and most familiar, is *behavioral case consultation,* in which the consultant interacts with mediators or consultees who treat the client(s). The most procedurally developed model of case consultation is that presented by Bergan and Kratochwill (1990).

Behavioral system consultation involves an analysis of the process and structure of a social system (e.g., school) using behavioral technology with the goal of improvement of the system. Although perhaps less familiar to readers, the systems approach presented by Maher (1981) represents an analogous sequence for system consultation. "The key distinction between behavioral system consultation and behavioral case consultation lies in the focus of the process and structure of a system per se in the former versus a focus on a particular individual's (or group of individuals') relation to a system in the latter" (Vernberg & Reppucci, 1986, p. 59).

The third form of behavioral consultation involves *behavioral technology training,* and is used to increase skill levels in mediators or consultees who interact with clients. In school psychology the most common form of this format is parent and/or teacher workshops, parent training, etc. The technology training may or may not involve a specific case consultation follow-up, although the integration of service would typically be preferred.

In research and usually in practice, these three formats may overlap, or one form of consultation may evolve from the other. For example, in the conduct of individual case consultation, the consultant may find that system issues must be addressed prior to effective services at the case level. Technology training consultation may further be necessary for the overall successful impact of services.

The purpose for elaborating briefly these behavioral consultation formats is to illustrate the range and scope, and potential complexity involved in training consultants. As noted before, growing interest in developing effective ways to train students and school-based practitioners in consultation has prompted research focused on effective ways to teach specific consultation skills. These skills have been variously labeled "problem-solving skills," "interview skills," and "behavioral consultation skills." A number of training formats have emerged that can be used for establishing competencies in consultation and related areas of functioning. Four major domains are discussed which include conventional graduate preservice program training, workshop inservice training, competency-based preservice and inservice training (including micro-consultation, behavioral consultation training, and self-instructional training), and mentor training.

Conventional Preservice Program Training

Students in graduate preparation programs obviously represent an important focus in consultation training research. Typically, graduate students in school psychology programs are exposed to formal didactic training in consultation at some time during their schooling. This practice is supported by the National Association of School Psychologists (NASP) which recommends training and establishing competencies in consultation (Fagan, 1990). However, as already noted, few programs may actually incorporate opportunities for supervised applied practice of consultation skills through a field practicum or clinical training component (Meyers, Wurtz, & Flanagan, 1981). Thus, it is likely that few preservice school psychologists actually receive *applied training* to supplement classroom instruction even though this type of training is important to practice. Some initial research efforts have been directed at evaluating conventional student training programs which have integrated traditional classroom instruction with opportunities for direct applications.

Carlson and Tombari (1986) developed and evaluated components of a multilevel consultation training sequence with field practicum matched to goals and previous skill development across levels. Table 4.1 presents the four levels of training, corresponding field experiences, and learning goals associated with each level. Their model is based on the assumptions that (a) the three major models of consultation in school psychology (i.e., behavioral, mental health, and organizational) must be included in training, (b) an experiential component of

TABLE 4.1
Multilevel Consultation Training Model

Level	Course(s)	Field Experiences	Learning Goals
Entry	Individual Mental Testing BehavioralAssessment Affective Assessment	Individual case studies	Competence in child psychological assessment
1	School Consultation: Theory and Practice	Student teacher consultation	Cognitive differentiation and practice in diverse consultation models
2	School Consultation Practicum	Consultation in school setting	Application of models to practice setting: skills development
3	Advanced School Consultation	Arranged to meet individual program of study	Expansion of skills to additional settings or depth within school setting

From Carlson and Tombari (1986). Multilevel school consultation training: Preliminary program evaluation. *Professional School Psychology*, *1*, 89-104. Reproduced by permission.

training is necessary, and (c) a field practicum component incorporating the three models is necessary to promote differentiation and flexible practice. Specifically, this model includes four levels of training and field experience:

Entry: Prior to consultation coursework, students complete coursework in client-centered, behavioral, psychoeducational, and affective assessments.

Level 1:   During the consultation course, students practice diverse consultation roles by consulting with student teachers and a student teacher supervisor.

Level 2:   Following the consultation course, students can complete and 8–12 hour per week field placement in a public or private school setting.

Level 3:   For students specializing in consultation, an advanced field experience is individually arranged to develop skills across settings or to expand skills within the public schools to include broader organizational concerns such as program development and evaluation. (p. 90)

Carlson and Tombari (1986) evaluated Level 1 training in terms of feasibility, utility, and optimal conditions of training. The subjects involved in the evaluation were two classes of consultation students with six students in each class and their corresponding consultees. The consultants were school psychology students in their second through fourth years of doctoral training in the University of Texas at Austin. The authors evaluated the outcome of the project on several dimensions. Specifically, three questionnaires were developed to evaluate the consultation training program: Consultant Self-Assessment Form, Consultation Evaluation Form, and Supervisory Problem Evaluation Form.[2] The Consultant Self-Assessment Form is a 30-item Likert scale assessing consultants self-perceptions regarding their skill and knowledge development as a function of the consultation training. For example, students are asked how much they improved in their ability to develop and maintain a collaborative relationship with the consultee; clarify issues; formulate intervention plans; and deliver in-service workshops. Regarding knowledge development, students are asked how much they increased their understanding of ethical issues in consultation, and of various models and stages of consultation. The Consultant Evaluation Form is a 28-item Likert scale assessing student-teachers perceptions of the consultant and the consultation experience. Examples of items include "The consultant is able to summarize and facilitate problem-solving" and "As a result of consultation, I find myself trying some of my new ideas." The Supervisor Evaluation Form was designed to provide information on program redesign and included questions such as, Were you given adequate information about the program?, With what aspect of the

---

[2]The Consultant Self-Assessment Form, Consultation Evaluation Form, and Supervisory Problem Evaluation Form are available from Cindy Carlson, Department of Educational Psychology, University of Texas-Austin.

program have you been most satisfied?, Least satisfied?, If available again, would you want to participate?, What suggestions do you have for increasing the effectiveness of the program?

The results of the training program evaluation yielded favorable ratings from school psychology students, student-teachers, and student-teacher supervisors. The overall training effectiveness as measured by the Consultant Self-Assessment Scale suggested that the students perceived gains in knowledge and skills across the models of consultation in Level 1. Furthermore, a matched field experience reportedly enhanced student mastery of consultation skills at a satisfactory level. Consultees also evaluated the consultant skills favorably, but individual responses were more conservative regarding gains due to consultation. However, consultees did report a high degree of program satisfaction. Student-teacher supervisors also indicated general program satisfaction and rated the consultants as most helpful in reducing student-teacher stress in the classroom environment.

Self-report data collected from student consultants, student teachers, and student teaching supervisors indicated that the consultation training sequence and field experiences were beneficial for providing consultants with an opportunity to apply knowledge and practice skills learned through the training program. However, limitations of this program included the lack of individual child outcome data for each case consultation, and the absence of data to document changes in child behavior as a result of teacher implementation of intervention programs in the applied settings. Moreover, the research design involving posttest only and no comparison group militates against firm conclusions.

In a more recent investigation, Curtis and Zins (1988) evaluated the effectiveness of a consultation training program that emphasized didactic methods, simulation exercises, and videotape analyses, as well as instructor feedback on consultant acquisition of consultation skills. The subjects in this investigation were 14 graduate students in counseling and school psychology who were enrolled in a consultation course. The outcome measures of the investigation involved an analysis of a videotape simulated consultation using the Consultation Verbal Analysis System (CVAS). The CVAS is based on the Consultation Analysis Record (CAR) and analyzes "thought units" (a statement or phrase that expresses a complete thought) in terms of message control, message process, and message content. Subjects in this study were assigned to either an experimental or control group. The training for both groups was held constant, but members of the experimental group received individualized feedback from an instructor based on an analysis of videotaped consultation simulations.

Curtis and Zins (1988) reported that the training approach increased acquisition of consultation skills across both conditions, but the addition of individualized instructor feedback did not result in enhanced performance across all of the variables in the experimental group. Instructor feedback had a significant effect on Behavioral Specificity, but not on Questioning or Problem Solution.

Workshop Inservice Training

Another method for training consultants in consultation skills involves workshops of varying lengths and formats in which consultation strategies are presented. This training approach is typically used at many professional conferences wherein workshop participants receive brief training in consultation techniques. Although this type of training is used often, there is very little empirical research to verify its efficacy.

In one of the earlier reports of workshop training, Goodwin, Garvey, and Barclay (1971) evaluated a training procedure referred to as micro-consultation,[3] for teaching behavioral interview skills to school psychologists. Specifically, an 8-week summer workshop was conducted with 30 experienced school psychologists. The training procedure used a micro-consultation format that included discrimination learning, feedback, shaping, and imitation modeling. The psychologists were trained in interview techniques that involved selecting a target behavior for change, identifying environmental events sustaining target behaviors, planning a strategy for change, and evaluating the program. Thirty experimental trainees were compared to a control group that received videotape exposure and a no contact comparison group.

The authors used an interview rating form that included 20 items (see Table 4.2). Trained graduate student coders reviewed and rated the interviews at baseline, at termination of the 8-week training program, and 2 months later in the subjects' home school districts.

The actual micro-consultation procedure used in the project involved the following 5 steps:

1. After reviewing child-specific referral information on the child to be discussed, the trainee conducted a 10-minute interview with a teacher volunteer in which the trainee attempted to make use of the particular skill being learned. For example, if assessment skills were presented, the trainee attempted to identify the environmental contingencies controlling the behavior and ask questions about events which the child found rewarding.

2. Along with five other group members, the trainee watched a videotape replay of his or her performance. Each member completed a rating of this performance against a list of criterion behaviors, and then discussed with the group aspects of the interview where they had attained criterion levels, and those where they fell short of the skill being learned.

3. Alternative responses for a particular interaction were discussed and role-played by faculty or a group member when a trainee faced difficulty in acquiring a particular skill.

---

[3]Micro-consultation or micro-counseling (MC) as it is often called, is reviewed in detail by Ford (1979). He concluded that MC has proved to be an effective training package generally.

TABLE 4.2

Interview Structure

1. Explains the procedures for using the behavioral analysis with respect to responsibilities, roles, assessment, etc.

2. Assists teacher in deciding on a target problem behavior.

3. Establishes and maintains rapport by clarifying, restating, expressing interest, etc.

Environmental Assessment

4. Behavioral definition: asks for definitions of target behaior in terms of frequency and duration.

5. Antecedents: asks about conditions under which behavior occurs; when, where, what, etc.

6. Consequents: asks about conditions following the target behavior; when where, who, etc.

7. Reinforcers: asks about events serving as positive and negative reinforcers for *this* pupil.

8. Intervening variables: asks about inner states, such as attitudes, personality structure, feelings, concerns.

9. Demographic data: asks for information regarding test results, family background, education history, etc.

10. Dynamic interpretation: sugests a psychodynamic interpretation of pupil's behavior.

11. Behavioral interpretation: suggests interpretation based on principles of learning.

12. Actions taken: asks about steps taken to correct the problem with respect to conferences, other referrals, etc.

13. Summary: summarizes information provided or decisions made for clarification, decision making, etc.

14. Behavioral data: suggests obtaining more information about the behavioral contingencies, for example, observing in the class, playground, or home, asking for teacher observations.

15. Dynamic data: suggests obtaining more information relative to the child's attitude, personality via testing, depth interview, etc.

16. Nonspecific data: suggests obtaining more information without specific purpose, for example, "I'll arrange to see the parent about that."

17. Behavioral change: suggests a specific course of action in coping with behavioral responses.

18. Dynamic change: suggests changes directed toward increasing self-understanding and improving attitudes or other mediating processes.

19. Nonspecific changes: suggests nonspecific changes, for example, "We'll see what can be done to help the child improve."

20. Behavioral rehearsal: models a desired response and uses role playing to promote acquisition, for example, explaining a strategy to a child.

From Goodwin, Garvey, and Barclay (1971). Microconsultation and behavior analysis: A method of training psychologists as behavioral consultants. *Journal of Consulting and Clinical Psychology, 37,* 355-363. Reproduced by permission.

4. The trainee next conducted a shorter, 5-minute taped interaction and attempted to bring his or her performance to criterion levels.

5. The second videotape was replaced and further evaluative comments were offered by faculty and group members. Because of the intent and nature of the micro-consultation process, the trainee participated in no more than two 1 ½ hour sessions per day. (p. 359)

The authors reported that posttest measures of interview techniques at 8-week and 2-month follow-up assessment showed positive skill acquisition overall in comparison to the other groups. Although the authors reported successful outcomes for interview techniques, they did not report changes in individual client behavior on actual consultation cases (see discussion below).

In a recent report, McDougall, Reschly, and Corkery (1988) evaluated the effectiveness of a 1-day inservice workshop designed to teach behavioral consultation skills. In the project, 16 school psychologists submitted audiotapes depicting prereferral interviews with teachers before and after the workshops. The audiotapes were analyzed using the CAR on the problem identification interview (see later discussion of this system). The authors found four problem identification interview (PII) subcategories increased significantly following the workshop training. Fewer Background Environment statements were made in the PII than in the baseline interview; Observation statements increased from baseline to PII; and the percentage of consultant statements increased and that of consultee statements decreased from baseline to PII. However, only six PII objectives were significantly changed, indicating a need for a more broad-based training which focuses on objectives rather than discrete verbal segments of interviewing. Although this study is one of the few to evaluate empirically workshop-type training, a major shortcoming, like the earlier Goodwin et al. (1971) study, is the absence of individual client outcome data. Moreover, in this investigation only the PII was evaluated, and the additional components of problem analysis and treatment evaluation interviews were not examined.

Competency-based Preservice and Inservice Training

Another major domain of training methodology in special education and school psychology involves competency-based approaches (Idol, 1988; Reilly, Barclay, & Culbertson, 1977). In a typical competency-based training format, the trainer identifies specific objectives and trains these within the consultation context.

Micro-Consultation Training.   In an early consultation training project Goodwin and Coates (1972) evaluated a micro-consultation format with 70 preservice school psychology graduate students at San Jose State University. The micro-consultation format (Goodwin et al., 1971) included the following components: (a) an introduction to behavioral analysis (film and videotape models); (b)

specification of consultant behaviors conducive to teacher change (e.g., establishing rapport; target behavior identification, data collection, and assessment strategy; treatment design and implementation, and a videotape and live models of appropriate consultation skills); (c) practice in the steps of behavioral consultation in laboratory settings through role playing and videotape feedback; (d) supervised casework; and (e) the completion of a final report on the outcome of the project. (Detailed discussion of the training format was presented in the previous section on workshop training.)

Outcome measures on the project were selected to assess dependent variables across consultant, teacher, and pupils. Consultants were given the *Learning Inventory* (Goodwin & Coates, 1972), a 25-item, author-constructed questionnaire to assess knowledge of social learning theory. They also used the *School Psychologist Practice Inventory*, a 16-item four-choice questionnaire to assess behavioral solutions to academic problems. The *Behavior Analysis Rating Scale* (Goodwin & Coates, 1972) is a criterion-referenced instrument for evaluating the extent to which the trainees completed the behavior modification procedures according to preestablished criteria. The *Behavior Interview Rating Scale* was used to determine the frequency with which specified behavior responses were emitted during the actual consultation interviews. Teacher behavior change was assessed by the *Teacher-Pupil Interaction Scale* (Goodwin & Coates, 1972). This instrument is a classroom observation strategy yielding four categories of teacher behavior including instructing, rewarding, ignoring, and reprimanding and four categories of pupil behavior including attending, scanning, social interaction, and disruptive behavior. This procedure involves time sampling of both teacher and pupil behavior. Finally, client change was assessed by the *Teacher-Pupil Interaction Scale* and the *Behavior Rate Tabulation Chart* (i.e., assessing specific target behavior change) (Goodwin & Coates, 1973). The latter instrument is an observational format that a teacher uses to record daily frequencies of specific target behaviors for students. The authors found significant gains across all measures for the consultants, teachers, and pupils and concluded that the micro-consultation training format produced changes in psychologists' behavior with accompanying change in student performance. Specifically, consultants increased their knowledge of social learning theory and preference for behavioral solutions to problems. Likewise, 74% of consultants met the criteria for target selection on the *Behavior Analysis Rating Scale*, 82% for strategy planning, 100% for environmental assessment, and 100% for data collection. Gains also occurred on the *Behavioral Interview Rating Scale*. Teacher behavior (instructing, reinforcing, ignoring, reprimanding) did not change from pre to post, but following consultation, increases in teacher instructing and reinforcing occurred more when students were attending, and generalized to other students. Student behavior changed, with noted increased percentages of attending behavior and decreased "scanning," "socializing," and "disruptive behavior." Moreover, there was at least 50% improvement in behavior of referred students.

Behavioral Consultation Training. Some competency-based training approaches have been used by Kratochwill and his associates to train behavioral consultation interview skills. The process of behavioral consultation is presented in four general stages including problem identification, problem analysis, treatment implementation, and treatment evaluation (Bergan, 1977; Bergan & Kratochwill, 1990). With the exception of the treatment implementation phase, the stages of behavioral consultation are procedurally operationalized through interviews. The problem identification interview involves a specification of problems to be targeted during consultation. Problem analysis focuses on exploration of the problem through the evaluation of baseline data, identification of variables that might facilitate a solution to the problem, and development of a specific plan to implement during the treatment phase. Treatment implementation involves the introduction of a plan designed during problem analysis. Finally, treatment evaluation is undertaken in a formal interview to determine the extent to which the intervention plan is successful.

Competency-based training in behavioral consultation has involved identification of specific interview objectives to maximize a consultant's success at identifying, analyzing, and evaluating a problem and its associated intervention. The training of consultants typically involves standardized formats to facilitate the learning of discrete verbalization skills. The model for competency-based training in behavioral consultation was outlined by Kratochwill and Bergan (1978) and is based on earlier research on consultant skill and efficiency in the implementation and outcomes of consultation (Bergan & Tombari, 1975). In their early research, Bergan and Tombari (1975) examined the predictive power of consultant efficiency, skill in applying psychological principles, and interviewing skills as related to the phases of consultation. The results of the study suggested that the prediction variables exerted a maximum impact on the problem identification phase. The multiple correlation for the regression of problem identification on consultant variables was .639, for plan implementation on problem identification and consultant variables it was .775, and for problem solution on plan implementation, problem identification and consultant variables was .977. Consultants lacking in interviewing skills failed to identify target problems and consequently did not reach the stage of plan development and implementation. The consultants who were successful in identifying problems typically were able to solve these problems. Thus, one important implication from the study was that consultants must be trained in the verbal processes used during consultation. Some of this training has been conceptualized within a competency-based framework.

Objectives for the various interviews in behavioral consultation have been identified within the context of two major assessment technologies. First, a strategy that allows classification of the messages occurring during consultation classifies verbal interchanges in terms of (a) source, (b) content, (c) process, and (d) control. The vehicle for analyzing these specific consultant and consultee behaviors is called the Consultation Analysis Record (CAR). Basically, coding

TABLE 4.3
Message Classification Categories and Subcategories

Categories	Message Source	Message Content	Message Process	Message Control
Subcategories	Consultant	Background environment	Specification	Elicitor
	Consultee	Behavior setting	Evaluation	Emitter
		Behavior	Inference	
		Individual characteristics	Summarization	
		Observation	Validation	
		Plan		
		Other		

From Bergan and Kratochwill (1990). *Behavioral consultation and therapy*. New York: Plenum Press. Reproduced by permission.

with the CAR requires that units of observation be determined and numbered on typed transcripts. The four categories of the CAR and their associated subcategories are presented in Table 4.3. Figure 4.1 depicts the CAR and shows how all four message classification categories can be coded. It is beyond the scope of this chapter to provide a detailed overview of each of these categories (see Bergan & Kratochwill, 1990). However, verbal behaviors occurring during the interview can be categorized in terms of the messages in the table. Moreover, there is a growing body of psychometric evidence that attests to reliability and validity of the CAR (see Gresham, 1984; Gresham & Davis, 1988).

A second format for determining consultant competencies involves a list of criterion objectives for each of the consultation interviews. Training objectives for the problem identification, problem analysis, and treatment evaluation interviews have been developed and accompany a manual presented by Kratochwill and Bergan (1990). The objectives consist of required verbal behaviors to be elicited by the consultant for successful completion of each interview (see Table 4.4).

A series of studies have been directed toward competency-based training in behavioral consultation. In an early study in this series, Brown, Kratochwill, and

FIG. 4.1.   Consultation-analysis record form. From Bergan and Tombari (1975). The analysis of verbal interactions occurring during consultation. *Journal of School Psychology, 13,* 212. Reprinted by permission of Human Sciences Press, 72 Fifth Avenue, New York, New York 10011. Copyright (1975).

CONSULTANT _____ CASE NUMBER _____

CONSULTEE _____ INTERVIEW TYPE _____

PAGE _____

CONSULTATION-ANALYSIS RECORD

	Message Source		Message Content							Message Process							Message Control	
	Consultee	Consultant	Background Environment	Behavior Setting	Behavior	Individual Characteristics	Observation	Plan	Other	Negative Evaluation	Positive Evaluation	Inference	Specification	Summarization	Negative Validation	Positive Validation	Elicitor	Emitter
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		
25																		

127

TABLE 4.4
Training Objectives for Each Phase of Consultation

Problem Identification Interview	Problem Analysis Interview	Treatment Evaluation Interview
1. Opening salutation	1. Opening salutation	1. Opening salutation
2. General statements	2. General statements	2. Outcome questions

3. Behavior specification
  a. Specify examples
  b. Specify priorities
	3. Behavior strength	3. Goal attainment questions

4. Behavior setting
  a. Specify examples
  b. Specify priorities
	4. Behavior conditions
	  a. Antecedent
	  b. Sequential
	  c. Consequent
		4. Internal validity

5. Identify antecedents	5. Summarize and validate	5. External validity
6. Identify sequential conditions	6. Interpretation	6. Plan continuation
7. Identify consequents	7. Plan statement	7. Plan modification validation
8. Summarize and validate	8. Summarize and validate	8. Generalization and maintenance
9. Behavior strength	9. Continuing data collection	9. Follow-up assessment
10. Summarize and validate	10. Establish data of next appointment	10. Future interviews
11. Tentative definition of goal	11. Closing salutation	11. Termination of consultation
12. Assets question		12. Closing salutation
13. Questions re: existing procedures		
14. Summarize and validate		
15. Directional statement re: data recording		
16. Data collection procedures		
17. Summarize and validate		
18. Date to begin data collection		
19. Establish data of next appointment		
20. Closing salutation		

From Kratochwill, VanSomeren, and Sheridan (1989). Training behavioral consultants: A competency-based model of teach interview skills. *Professional School Psychology, 4,* 41-59. Reproduced by permission.

Bergan (1982) evaluated a program designed to teach consultation interview skills. In the project, four graduate students were trained in problem identification skills, and their performance was analyzed before and after training in analogue situations using hypothetical client problems. The components of the CAR for the problem identification interview were used to evaluate the outcomes of training. The training components included written outlines, a videotape model with prompts and explanations, and feedback sessions. Generally, the training program was found to be effective for all students and generalized across time with a 2-month follow-up assessment.

In a follow-up study, Kratochwill, VanSomeren, and Sheridan (1989) developed a training package to teach consultation interview skills for each of the

stages of behavioral consultation. Specifically, skills were taught for the problem identification, problem analysis, and treatment evaluation interviews. The interview objectives for assessing outcome in this investigation were identical to those depicted in Table 4.4. In the first study, four students were exposed to a training manual and viewed videotaped models. In Experiment 2, the videotapes were not used, but all other components of the training remained intact. Experiment 3 used the training manual to teach the interview skills to two practicing school psychologists, who then used the interview guidelines and format with an actual case in their schools.

Results indicated that the consultants demonstrated successful acquisition of interview skills. Specifically, the students in the project showed improvements from baseline to treatment; however, there was a decrease in performance demonstrated at the second post-training interview phase. Although the subjects were given some verbal feedback, they did not see coded results of their training interviews and did not have this information available to improve interviewing techniques. This format may have resulted in the observed effect of a decrease between the first and second post-training interviews. It also was speculated that self-evaluative techniques such as self-coding and reviewing audiotape interviews may be beneficial in facilitating cost-and-time efficient training. The data outcomes also showed some evidence of generalization from the problem identification interview to the problem analysis interview, at least in Experiments 1 and 2. Although it was not clear why this occurred, it is possible that some unique generalizable skills are acquired during problem identification and transferred to problem analysis.

An important finding of this study is that when the outcomes of training were compared to analysis of performance on the CAR, verbalizations generally conformed to the appropriate categories as outlined initially by Bergan and Tombari (1975). Again, a major limitation of this investigation is the lack of extensive case study outcome data. Only one psychologist in the third experiment was able to provide outcome data for a client.

More recently, Kratochwill, Rotto, Sheridan, and Salmon (1991) reported the results of three studies focused on training behavioral consultants to work with teachers of emotionally disturbed children. The study involved an analysis of a training package to teach consultation interview skills in three phases of behavioral consultation: (a) problem identification, (b) problem analysis, and (c) treatment evaluation. In Experiment 1, five consultants were exposed to a training package consisting of a training manual and readings, videotape interview models, skill rehearsal, and supervision feedback. In Experiment 2, the package involved the addition of teaching relationship skills and instruction in system issues to five consultants. In Experiment 3, the package was replicated with four consultants and one received a mentorship training format. In each experiment the consultants were evaluated on the acquisition of interview skills, generalization of the skills to role play analogue consultees, and generalization to actual

child cases referred for psychological services by teacher-consultees of emotionally disturbed children. Results of all three studies indicated that the training package and its variations were an effective means for providing consultation interview training. Results of specific case consultation child-client outcomes were more modest. Results of the three studies indicated that the training package was generally effective. The effects of the training on consultation skills was more clear in Experiment 1 and 3 due to the high level of skills demonstrated on baseline in Experiment 2.

Self-Instructional Training. A third approach in competency-based training of consultation interview skills promotes the active involvement of the consultant in self-administered learning of discrete skills. Based, in part, on concerns over the cost of conventional competency-based models of training, researchers have developed a variety of self-instructional approaches that are used for consultation or, more specifically, interview assessment.

In a series of studies on training clinicians in behavioral assessment, Miltenberger and his associates have evaluated the effectiveness of several different self-instructional formats. In an early study in this line, Miltenberger and Fuqua (1985) evaluated a self-instructional manual that incorporated written instructions, modeling, and feedback. There were 10 assessment questions that were taught in this investigation. Eight students were trained, four with the training manual and four with one-to-one instruction. Specific interviewing skills (e.g., asks for a general description of the problem; sets priority; asks for specification of problem behaviors, onset, dimensions, antecedents, consequences, and goals) were recorded in a simulated format across baseline and treatment, and the training outcomes were similar under the two different training conditions.

In another study Miltenberger and Veltum (1988) evaluated a self-instructional package that incorporated written instructions and written and audio modeling for training 30 assessment interviewing skills. These skills included asking behavioral assessment questions, asking questions relevant to treatment selection, and offering professional courtesy responses prior to and following the interview.

In the first study, four upper-level undergraduate psychology majors at North Dakota State University served as subjects. The subjects received training with instructions in audio and written modeling in a multiple baseline design format. The authors reported that the subjects increased interviewing performance substantially following the training program. The second study evaluated the written instructional material alone and involved six upper level undergraduate psychology majors who again were evaluated on the interview outcome measures. Following the baseline interviews the manual alone was implemented. Results suggested that the interviewing performance of four of the participants did not increase to 90% correct, and therefore, a modeling component was added. Following a subsequent feedback phase, all participants increased their performance to 90% or better. Results of both of the investigations demonstrate the effective-

ness of instructions and modeling for training interviewing skills and were consistent with previous research that examined self-instructional programs (e.g., Hirschenberger, McGuire, & Thomas, 1986; Miltenberger & Fuqua, 1985).

In a third investigation in this area, Veltum and Miltenberger (1989) examined the effectiveness of a self-instructional package for training both process- and outcome-related assessment interviewing skills. Similar to previous work in this area, the treatment package involved instructions in written modeling alone, a combination of instructions plus audiotape modeling, and self-directed feedback. The subjects in this project (10 graduate students in clinical psychology) were assessed on simulated assessment interviews conducted across baseline and training conditions with confederates who were portraying clients with clinical problems.

The outcome data in this investigation involved 30 consultant responses identical to those 1988 study and various process responses. Social validation ratings, client ratings of the therapist, and therapist self-ratings were included as part of the outcome measures. Results of this investigation indicated that moderate levels of performance following baseline resulted in immediate and marked improvements for most of the participants. The authors noted that the training procedures were, therefore, effective on process- and outcome-related responses in the interview.

These self-instructional formats represent a promising approach in consultation training given recognition of some limitations. First, the research contains analogue characteristics in that real clients with clinical problems were not included in the protocols. Second, although the "therapist-client" relationship is assessed on graduate students, in these investigations, inservice consultant-consultee interactions may present fundamentally different relationship characteristics, especially in school settings. Finally, only the initial interview is examined, and an interview linked to the entire process of consultation has not been incorporated in these investigations. Relatedly, an important issue is whether an interviewer is more capable of completing a functional analysis of a problem after training in this interview assessment protocol. The authors speculated that the ability to conduct a good interview may not necessarily be correlated with the ability to conduct an adequate functional analysis for the client. Thus, a question in future research is whether interview training should involve an assessment of functional analysis skills before and after training to determine if the therapist can complete this task effectively. Some of these limitations are not unique to self-instructional training formats, but must be addressed to establish the utility of the format.

Mentorship Training

Mentorship training in consultation is based on the belief that learning to be a consultant is more than the acquisition of particular skills. The training process also involves constructing and organizing a new conception of oneself in relation

to other professionals and the organizational processes of the school. According to a mentorship model, as students develop and practice consulting skills, they need to link them to higher-order conceptions of the possible consultant, consultee, and client roles, as well as an understanding of the school as a system. In this way, learning to be a consultant is also a process of acculturation into the profession.

Mentorship, a long standing form of gaining knowledge and experience within a domain, offers an additional avenue for socializing beginning school psychologists into the consultant role. Initially, a student may simply shadow a mentor, observing his/her performance in various contexts of practice. In time, the student assumes more responsibility and ultimately enacts an independent professional role. Throughout this learning process, the mentor and student engage in dialogue that provides the student with information about the field, and feedback on his/her own performance. The mentor designs the dialogue in a fashion that scaffolds or supports the student's thinking, and promotes student reflection on his/her own problem-solving processes (Collins, Brown, & Newman, 1989; Schon, 1987).

Mentorship currently is receiving a great deal of attention in teacher preparation literature (e.g., Galvez-Hjornevik, 1986; Gray & Gray, 1985; Little, 1990). Researchers recognize mentoring as a holistic form of teacher training that orients beginning teachers to the school culture as well as offering guidance on specific teaching practices. Moreover, mentorship is a means of renewal for experienced teachers. Through the eyes of beginning teachers, veterans have an opportunity to reflect upon and re-evaluate their practices.

The holistic focus and the dual benefit to mentor and student are important advantages in the educational and social sciences, where problems are highly complex and new theories and practices develop rapidly. In this regard, mentorship also seems especially well suited for the preparation of school consultants. Indeed, a recent survey of school psychologists indicated that mentorship was a particularly valued, but often under-utilized aspect of professional training (Swerdlik & Bardon, 1988).

Salmon, Fenning, and Kratochwill (1990) described a model and an exploratory case study of mentorship in school consultation. The authors adopted a cognitive approach to mentorship in which the goal of mentoring is to help students re-organize their knowledge with respect to consultant role and begin to construct a personal theory of practice (Argryis & Schon, 1974; Collins et al., 1989; Salmon & Lehrer, 1989, in press; Schon, 1983, 1987). In this regard, the student was encouraged to integrate content knowledge with clinical skills. Reflection on knowledge and action was the key to this process of conceptual growth and change. The supervisory dialogue facilitated this reflective process over time.

The consultation mentorship process was structured into phases that represent a gradual shift in responsibility for a case from the mentor to the student. This

shift was evident by the individual who takes the lead in the consultation inter-view with the teacher, and the quality of the supervisory dialogue following the interview. Two levels of goals guided the mentor-student supervisory dialogues across the phases: case-level goals and principle-level goals.

The focus of case level goals was to gain a better understanding of a specific consultation case by (a) developing a useful way of representing case variables (e.g., conditions when the problem does and does not occur), (b) planning experiments to address questions and hypotheses, and (c) reflecting upon and evaluating the results of these experiments. These goals paralleled an action research approach to problem solving (Argyris, Putnam, & McClain-Smith, 1985). In achieving these goals, the student constructed a working model of the case variables and a direction for a particular consultation case. At the principle level, the purpose of the dialogue was to help students elaborate their knowledge regarding specific cases by (a) integrating case knowledge with other theory and research, and (b) constructing general principles that help link events across cases. New knowledge and skill were consciously integrated with theoretical frameworks, and these theoretical frameworks were further elaborated through case experiences. In this way, the learning that occurred with regard to specific problems was more likely generalized beyond the case context in which it origi-nally occurred (Collins, Foster, & Berler, 1986).

Training consultants through mentorship offers several benefits. Students have an opportunity to build a conceptual model of the consultant's role prior to enacting it. In this regard, they have a conceptual road map to guide their own thought and action. The process helps to foster the integration of content knowl-edge and its application to clinical situations. The dialogue with the mentor across the different mentoring phases allows students to play different roles within the learning process. In the initial phases, students have an opportunity to reflect upon key issues and variables within a case and act as a critic with respect to the actions taken. As students assume more responsibility as the consultant, the mentor offers support and encourages reflection on action. In effect, the mentor acts as a professional mirror helping students to monitor and integrate their professional knowledge and skill. Hence, students are likely to construct a well-organized flexible system of knowledge for enacting the consultant role.

ISSUES AND FUTURE DIRECTIONS
IN CONSULTATION TRAINING AND RESEARCH

Given the great interest in consultation generally, and behavioral consultation specifically, one would expect a solid research base in the area of training behavioral consultants. Unfortunately, this is far from the case. From our review of this literature we must conclude that the research on training behavioral consultants has not kept pace with the growing research on training counselors

and clinicians in more traditional forms of therapy. For example, just over a decade ago Ford (1979) found over 100 empirical studies on training counselors and clinicians. Research on training behavioral consultants has occurred within four major domains including conventional graduate preservice program training, workshop inservice training, competency-based preservice and inservice training, and mentor training. Most of the research has occurred in the domains of micro-consultation, behavioral consultation training, and self-instructional training. Virtually no research has occurred in the area of workshop and mentor training. Several specific issues must be addressed in this body of research. In the following section we chart some conceptual and methodological issues for future research.

Teaching Interview Skills by an Interactive Computer/Video

Researchers have made little use of current computer technology in their training research efforts. Some interesting work in consultation training has been reported by Idol (in press) and her associates (see Lloyd, 1984; Lloyd & Idol-Maestas, 1983). One promising direction for future work in interview training is use and development of interactive video technologies. The interactive video format has been defined as a program designed in segments in which the viewer responds to structured opportunities that influence sequence size and shape of the actual program. Although work in this area is not well-developed in terms of consultation training, some preliminary efforts have occurred in the actual training of individuals in consultation skills. It should be noted that a variety of interview formats already have been adapted to computers, and there are a number of interactive video technologies available for purposes of interview assessment activities (see Kratochwill, Doll, & Dickson, 1990).

The major benefit of using the computer and video-disk is that these technologies can be adapted to present a wide range of training options. For example, the computer can provide text and graphic instruction as well as the usual branching routines. The video option can provide natural presentations of real interactions with either role-play or actual clients.

One promising development in the use of teaching interviewing skills with interactive video was presented by Cummings, Hansen, and Sillings (1989). The purpose of their project was to develop and use two interactive video programs for teaching interview skills to school psychology students and practicing clinicians. These authors developed two programs based on a theoretical model of skill acquisition presented by Dreyfus and Dreyfus (1980, 1986). The interested reader is referred to their original article or to Cummings et al. (1989) for further information. In their first program ("Intertalk"), the primary goal was to create an interactive video program for teaching interviewing skills. The focus was primarily on the concepts of establishing rapport, giving the respondent a concise

description of the interview purpose, and developing a collaborative relationship between the two parties. The program incorporated a number of features to facilitate learner involvement including dramatization, repetition, explanation, audio and video feedback.

The second program ("SOBEX"; Systematic Observation Exercise) was developed from the Intertalk program. While initially serving as a data collection instrument, it was thought to accomplish a training function when used with more advanced interviewers. The program was designed to incorporate six features including split-screen video, interviewer comments, marking device (i.e., a format to mark a point in the interview with minimal disruption of the viewing experience), video transcript notetaking, and a tracking component designed to keep track of activities of users while they were working on an observation exercise. The efficacy and benefits of such a program include its interactive characteristics, abilities to reflect on skills, opportunities to compare performances, and sophisticated learning strategies for more advanced individuals. However, although the audhors described the program in two separate formats, they did not specify the interview skills that were taught or provide outcome data on consultant performance or client behavior.

Training Consultees in Consultation

The traditional approach to consultation training has focused solely on consultant skill performance, without much attention to the skill level of the consultee in training outcomes. Consideration of this issue can be framed within the context of the behavioral consultation indirect service formats presented by Vernberg and Reppucci (1986). In traditional behavioral case consultation little or no training of the consultee occurs, although this training is potentially advantageous (Bergan & Kratochwill, 1990). In behavioral technology training the primary focus of consultation efforts is on training the consultee in discrete skills to better manage the client. Training the consultee may have some specific advantages in the training of the consultant. The consultee may model effective knowledge and skill and therefore, the consultation relationship is educational and reciprocal. Client outcomes can also be investigated as a distal measure of training effectiveness, and are likely to be improved given good consultee skills. Are these potential benefits supported in the empirical literature? Only a few empirical studies have addressed this issue (Anderson, Kratochwill, & Bergan, 1986; Cleven & Gutkin, 1988; Kratochwill & Elliott, 1990). Anderson et al. (1986) evaluated the relative effectiveness of two teacher training packages on two analogue consultation dependent measures. The subjects in the study included elementary school teachers ($N = 56$) in an urban school district in Arizona. The two conditions included (a) training in classroom behavior modification and consultation verbal processes, and (b) training in consultative service delivery procedures and general multidisciplinary team processes (a control condition).

Analogue consultation dependent measures included specific and general problem identification, problem analysis, and problem evaluation elicitors from the CAR.

Subjects in each condition were evaluated on knowledge of behavior modification principles and concepts, and the frequency of specific categories of consultee verbal behaviors on the CAR. Results suggested that the behavior modification and consultation training package was effective in increasing teacher knowledge of behavioral procedures and in increasing the frequency of teacher verbalizations regarding overt child behaviors, behavior observation techniques, and intervention plans during the problem identification and problem analysis phases of analogue consultation. Anderson et al. also found that even after training consultees, specific consultant questions were important in eliciting consultee statements related to environmental conditions surrounding behavior. In contrast, the use of more general consultant verbal behaviors resulted in significantly more vague, unspecified, and irrelevant types of consultee verbalizations.

In this study, the consultants previously trained in behavioral consultation interacted with the teachers trained in the two conditions. In this regard, there was no analysis of how teachers would perform with consultants who were not trained in behavioral consultation. A study could be designed to manipulate both consultant and consultee training. An obvious limitation of the Anderson et al. study is that it was implemented under analogue conditions and without measurement of child outcomes. To overcome the latter concerns, Kratochwill and Elliott (1990) currently are investigating the efficiency of behavioral consultation services under conditions of consultant and consultee training with measures of teacher and child outcomes.

Cleven and Gutkin (1988) conducted a training study in which they examined "consultees" understanding and use of problem definition skills. In the investigation, they implemented a training procedure to increase consultees' understanding and use of problem definition skills during consultation interactions. The study involved 195 volunteer female undergraduate students who were assigned to one of three conditions. Condition 1 involved consultation with cognitive modeling, where consultees viewed videotaped consultation interactions (i.e., problem definition) in which the consultant's verbalizations frequently included overt references to problem-solving processes used by consultants. The consultees in the consultation without cognitive modeling group viewed similar interactions, but the consultant statements did not include overt references to a problem solving process. These two groups were compared to a control condition in which the consultees viewed irrelevant interactions between consultants and consultees. The outcome measure in the study included consultees' responses to the problem definition description and process questionnaires.

The investigators reported that consultees who were exposed to consultation scenarios/examples that included cognitive modeling wrote better problem definitions and were better able to describe the process for defining children's prob-

Preparation

Parent thanks the professional for taking the time to meet with him or her.

Parent states that he or she is willing to actively participate in the meeting by providing information, feedback, and/or helping in the decision-making process.

Parent states how he or she has prepared for the meeting by bringing relevant materials (e.g., "I have brought my child's report cards") and/or stating that he or she has given thought to his or her child's behavior.

Parent brings to the meeting a list of the evaluators and their disciplines.

Parent brings to the meeting materials necessary to record information.

Complete Communication

Parent states a summary of what the professional has said at least at conclusion of the professional's report (i.e., summary must include same topic area as that of professional's report).

Parent states his or her general observations of the child in the natural environment with regard to the topic at hand.

Parent asks for feedback from his or her partner (if present).

If there is a discrepancy between parent's and professional's observations, then parent requests clarification of the professional's statements of observation(s) just given.

Clarification

Parent asks questions about what has been discussed, or states that he or she has no questions about (understands) information given.

Parent states a summary of the professional's response to his or her question(s), (i.e., a summary must include same topic area) or states that he or she understands.

Consensus

Parent compliments the professional, the evaluation, or the meeting and/or makes a statement to acknowledge appropriateness to some aspect of professional's suggestion or report.

Parent states specific area(s) of agreement with the professional (i. e., uses "I" statements), or states there are no areas of agreement.

Identification of Issues

Parent states area(s) of disagreement with the professional (i.e., using "I" statements) without stating that the professional is incorrect, or states that there are no areas of disagreement.

If disagreement, parent states his or her understanding of the professional's concern for the child.

If the parent was mistaken about the disagreement or the professional's statement(s), he or she admits mistake.

Suggestion of Options

Parent states or requests the possible options based on areas of agreement and/or disagreement.

Parent summarizes all options that have been presented.

Parent asks for or states the advantages and disadvantages of each option listed.

Parent states options in descending order of preference.

if there is a disagreement regarding most preferred option, parent makes a statement allowing the professional to "own" the parent's most preferred option (e.g., using "you," "your").

If there is a disagreement, parent states the more positive spect of his or her chosen option.

Continued

137

TABLE 4.5 (continued)

Decide on Action to Be Taken

Parent states or asks who will deliver services.
Parent states or asks what services are to be delivered.
Parent states or asks where services will be delivered.
Parent states or asks when services will begin.
Parent states or asks the time and day of week that services will be delivered.
Parent states or asks how much the services will cost and/or if insurance will cover cost.
Parent states or asks how long the services will need to be provided.
Parent states chosen option or states why option is not feasible.
If necessary, parent states his or her next preferred option.

Feedback and Acknowledgment

Parent compliments the professional, the evaluation, and/or the meeting.
Parent states or asks who will make the next contact.
Parent states or asks when the next contact is to be made.
Parent asks for or states how the contact person may be reached.

From Kohr, Parrish, Neef, Driessen, and Hallinan (1988). Communication skills training for parents: Experimental and social validation. *Journal of Applied Behavior Analysis, 21,* 21-30. Reproduced by permission.

lems than those in either the consultation without cognitive modeling or control groups. Consultees in the consultation without cognitive modeling group performed better than those who participated in the control condition. The major implication of this study is that it may be important for school-based consultants to help teachers develop skills in problem definition during the process of consultation. Specifically, providing teacher consultees with a "cognitive road map" of the problem definition process may facilitate effective problem definitions. Whether the results of this study can be extended to graduate students in school psychology or practicing school psychologists engaged in consultation with actual teachers remains to be determined. Also, the issue of whether consultant skills would be enhanced as a function of consultee skill development and performance beyond direct consultant training, remains to be explored.

An interesting study by Kohr, Parrish, Neef, Driessen, and Hallinan (1988) provides a template for training communication skills to parents who subsequently interacted with professionals. The study has interesting implications for the performance of the professional exposed to a parent trained in these skills. Eight parents were trained in socially validated skills with an instructional package (see Table 4.5). The authors found that the parents acquired the targeted skills during simulated conferences, and some skills generalized to actual conferences. Again, whether these skills in parents would influence the professional skill level of the consultant is not determined. Nevertheless, it is likely that a training approach that involves both a focus on consultant and consultee skills would facilitate overall training impact at both proximal and distal levels. It is

obvious that many of these skills would facilitate the process of parent and professional consultation.

Conjoint Consultation

The majority of consultation training programs have been conducted with teachers serving as consultees, and therefore have been limited within a narrow training focus (Kratochwill, Sheridan, & VanSomeren, 1988). It is important that consultants in training receive experience in a wider range of settings, with diverse consultees. A focus on parent consultation and parent involvement is especially important in school psychology graduate programs, where home-school partnerships and the relationship between school psychologists and parents have been identified as critical training issues (Bergan & Duley, 1981; Brown & Cardon, 1982; Guidabaldi, 1982).

Indeed, a rather large body of research has focused on training parents in behavior modification (e.g., Forehand & McMahon, 1981; Patterson, Reid, Jones, & Conger, 1975). However, although some have referred to this work as "parent consultation" (Cobb & Medway, 1978; Ollendick & Cerney, 1981), most of these programs involve only a combination of parent training and direct child intervention and are best conceptualized as behavioral technology training. Thus, little is known about the practice of case-centered parent consultation and implications that this approach might have for training. In fact, none of the training studies that we reviewed focused on parent consultation.

"Conjoint consultation" (with parents and teachers serving together as joint consultees) has received some support as an effective method of service-delivery for socially withdrawn children (Sheridan, Kratochwill, & Elliott, 1990). Conjoint consultation is defined as a systematic, indirect form of service delivery, in which parents and teachers are joined to work together to address the academic, social, or behavioral needs of an individual for whom both parties bear some responsibility. It is designed to engage parents and teachers in a collaborative problem-solving process with the assistance of a consultant. In conjoint consultation, there is a focus on the interacting systems operating within a child's life, and the interconnections between home and school. This framework has the potential to promote increased communication, reciprocity within and between systems, identification of cross-setting influences on a child's behavior, consistent and systematic behavioral programming, and generalization of treatment effects within and across settings (Sheridan et al., 1990).

Given the focus on the interacting systems within a child's life, conjoint consultation is conceptually and procedurally different from traditional teacher- and parent-only consultation. Thus, several training questions in relation to this model of service-delivery arise. Are traditional training programs, which typically focus on consultation with one consultee who represents only one system in a child's life, adequate in preparing consultants to work with the two interact-

ing systems (i.e., home and school) simultaneously? What specific competencies are necessary for consultants to interface effectively with parents and teachers in a conjoint fashion? Should this training occur after consultants demonstrate "competence" in working with one consultee individually, or would a conjoint approach in training facilitate skill development that is generalizable to a single consultee? These are important issues that will undoubtedly face trainers as they attempt to address parent-teacher consultation and home-school partnerships more directly in their training programs.

Consultation Supervision

The role that supervision plays in consultation training remains largely unexplored. By "supervisor" we mean the individual conducting the training and/or involved in supervising the consultation activities of the consultant. Knoff (1985) did not uncover one study of supervision in the school psychology literature and although Ford (1979) reviewed considerable research on the role that relationship factors play in supervision, he was cautious in drawing any firm conclusions. Ford (1979) concluded that a facilitative supervisory approach is necessary in training counselors and clinicians, but that is not sufficient for effective training.

The influence that supervisors have on training outcomes will vary along several dimensions of involvement in the consultation process. For example, the impact that supervisors have will be potentially greater if they are involved in case supervision than if they discontinue their influence following training in discrete consultation skills. Few researchers presented information on the role that the supervisor plays in training outcomes. Although Kratochwill et al. (1991) included supervision as part of the training package (see Salmon & Sheridan, 1987 for a discussion), the specific influence of the supervisor cannot be determined. A review of various models and approaches to supervision is presented in Knoff (1985) and a discussion of one approach to supervision in behavioral consultation is presented in Kratochwill, Bergan, and Mace (1981).

Building on the research initiatives presented by Knoff (1985, pp. 538–539), we can offer the following agendas for future research on the role of supervision in behavioral consultation training. First, a model of supervision specific to indirect service delivery should be developed to guide future research efforts in the area. The model presented by Knoff (1985) and reproduced in Fig. 4.2 will serve as an important stepping stone in this process.

Second, specific supervisor behaviors (and characteristics) and their relationship to effective training outcomes should be determined. Although some hints on what behaviors might be useful in supervisors during consultation training are presented (Ford, 1979; Kratochwill et al., 1981), there is no research in this area. Third, and related to point two, measures of supervisor behavior as related to the training process need to be explored. A potentially useful assessment model of consultation supervision involves the requirement of consultant
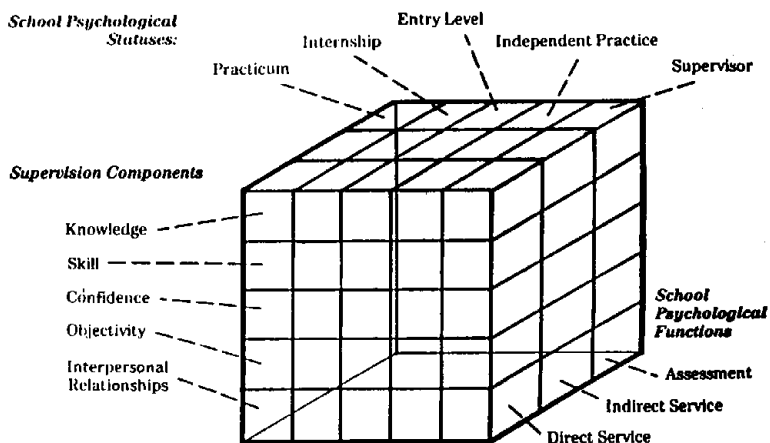
FIG. 4.2. Representational model of the supervision process within the context of the professional roles and developmental statuses of the school psychologist. From Knoff, (1985). Supervision in school psychology: The forgotten or future path to effective services? *School Psychology Review, 15,* 529–545. Reproduced by permission.

trainees to keep consultation logs and to audiotape their interactions. This method of self-evaluation/documentation may help to develop self-reflection and consultant growth, however its value for improving performance has not been evaluated empirically. Important supervision questions to explore include: What is the most effective manner of consultation supervision? What are the most meaningful strategies for documenting consultant performance and skill development? What is the differential effectiveness of university-based vs. field-based consultation supervision? How does the model of effective supervision change across consultation training methods (e.g., competency-based training versus mentorship?)

Content of Training

Perhaps one of the greatest methodological limitations in the consultation training research literature is the lack of empirical data that prescribe the content necessary to prepare "effective consultants." Although certain practices (e.g., training manuals, role-play, behavioral feedback) have been found to be effective in training graduate students to meet predetermined behavioral objectives (e.g., as the PII), it is not known whether these objectives are sufficient for effective consultant performance (i.e., successful case outcomes). Actual "competence" can be determined only in the context within which one practices, and is dependent upon several interacting factors. These factors can be client-related (e.g.,

presenting problems, co-occurring behaviors, history of problems), consultee-related (e.g., knowledge, skills, expectations for consultation), consultant-related (e.g., content expertise, experience with similar cases, expectations for consultation), or system-related (e.g., support for consultation, resources available, role expectations). Thus, determination of "what to train?" is a very complex, yet fundamental issue.

Some consultation training programs focus on the *process* of problem solving, rather than specific *content* issues that may face consultants in practice. Expertise in content areas is assumed in many training paradigms; however, this assumption may not be supported empirically. Content expertise may be dependent on the point in one's graduate education when consultation training occurs (e.g., at the beginning of program study, as a culminating training experience, or integrated throughout the core curriculum) as well as the theoretical approach to content training (e.g., whether the consultant receives training in conventional behavior modification or additional training in effective schooling—Davis & Thomas, 1989). Specifically, in the area of training behavior therapists, Collins et al. (1986) reviewed technique-based, theory-based, and scientific method-based training, and concluded that students should be educated in each domain. They further highlighted the need for research on training general therapist skills and interacting with the nonbehavioral professional. The latter seems especially relevant for consultants who work with teachers who do not share their professional and theoretical views. We believe that at the very least, training in behavioral assessment and analysis, exceptional children, intervention techniques, school policy, systems considerations, interpersonal skills, work relations, and professional issues (e.g., legal and ethical concerns) can be included in a comprehensive training program. Understandably, many of these content areas are integral components of graduate education and receive attention in separate courses and seminars in school psychology programs. Didactic or skill-based consultation training may be most effective following demonstrated competence in these and related skill areas. Without content training, consultants will likely remain ineffective despite good process skills.

West and Cannon (1988) surveyed 100 experts in consultation to identify essential consultation competencies for regular and special educators. Using a Delphi technique, 47 competencies in 8 categories were deemed essential to the consultation process. Skills in interactive communication; equity issues, values, and beliefs; personal characteristics; collaborative problem-solving; and evaluation of consultation effectiveness received the highest ratings from the majority of panel members. This study has obvious implications for training; however, its generalizability to school psychology consultation, and the most effective way to operationalize and train these skill areas, are not known.

A final area of training content issues pertains to assessment. As currently conceived, assessment methods emphasized in consultation training typically include behavioral interviews between a psychologist and teacher, teacher obser-

vation of relevant target behaviors, and occasionally observation of the teacher and child by the consultant. There are several problems inherent in this consultation approach and they do not differ greatly from those raised in the training of behavior therapists in direct forms of therapy. First, it may limit the range and type of target behaviors identified, and lead to an overly narrow scope (Kratochwill, 1985; Kratochwill, Sheridan, & VanSomeren, 1988). Second, it encourages consultant trainees to analyze a given problem molecularly, without addressing the broader contexts within which it occurs (Martens & Witt, 1988; Rogers-Warren & Warren, 1977). Relatedly, this narrow assessment perspective may identify only those stimulus events that immediately precede and follow the target behavior. Such ecological and temporal constriction can limit assessment and functional analyses of behavior (Cataldo, 1984), and thus can be counterproductive in preparing consultants to address complex problems.

Consultation training might include a broader assessment framework, including contextual (e.g., task, environment), ecological, and setting events (Lentz & Shapiro, 1986). Setting events refer to temporally or contextually removed stimuli (or a chain of stimulus-response contingencies) that bear a functional relation to behavior (Wahler & Dumas, 1984; Wahler & Fox, 1981). Training consultants in the use of multi-source, multi-method assessment paradigm may be desirable. Children, teachers, and classrooms are complex systems, and the integration of various measures is necessary to provide a comprehensive evaluation of the client's present status (Achenbach, McConaughy, & Howell, 1987; Kratochwill, 1985). A three-mode assessment framework (i.e., motor, cognitive, and physiological) to measure different problem domains, broaden the scope of potential target behaviors, and expand the understanding of a particular childhood disorder can be used in consultation. Training in specific direct and indirect assessment strategies (e.g., direct observations, permanent products, behavioral checklists, rating scales, and self-reports) is recommended to obtain important data across behavioral, temporal, and contextual bases (Kratochwill & Sheridan, 1990). Likewise, these measures provide important information in the assessment of the social validity (i.e., clinical meaningfulness) of behavioral outcomes.

Along with attention to the individual assessment methodologies, consultation training should focus on how assessment data can be *used* to explore hypotheses, rule out competing explanations, and develop appropriate interventions. Instruction in behavioral assessment, data analysis, conducting functional analyses, and methods of linking assessment to intervention should be included within the context of consultation training.

Consultation Relationship Issues

As reviewed previously, competency-based training programs have received increasing attention in the consultation training literature. As such, standardized procedures typically are used, and these procedures have proven effective in

establishing the necessary verbalization skills to ensure integrity of behavioral consultation interviews (e.g., Brown et al., 1982; Kratochwill et al., 1989). Although competence in specific verbalizations is necessary in consultation training and practice, it may not be sufficient to ensure optimal consultant-consultee relationships. Furthermore, discrete verbalization skills do not address important considerations regarding the situation or context within which consultation occurs, or the *process* of consultative problem-solving.

Virtually all reviews of the training literature in behavior therapy conclude that interpersonal and relationship factors are important to facilitate effective therapeutic outcomes (e.g., Ford, 1979; Milne, 1986; Sweet, 1984). Consultants in training must be aware that personal characteristics and professional competencies likely will influence the consultation relationship and outcome. A consultant who is highly effective at meeting the procedural objectives of behavioral consultation will minimize his or her effectiveness if positive interpersonal skills and understanding are not integrated with technical expertise.

Several factors may operate concomitantly to impact the consultative relationship. These include congruence among consultation expectancies, role definition, professional and personal reference points, and theoretical orientations. The most effective way of including these factors into consultant training programs is not well understood, but may include the use of consultant logs, self-evaluations, and reflective supervision.

In addition, basic interpersonal and communication skills are essential at every stage of consultation. It is believed that skills such as attending, providing an open invitation to talk, selective listening, reflection, paraphrasing, and empathy are important for developing a positive consultant-consultee relationship, and for movement towards problem management (Cormier & Cormier, 1985; Egan, 1986; Gutkin & Curtis, 1990). Thus, the incorporation of these and possibly other interpersonal skills should be considered in future training and research efforts.

Although relationship-enhancing and other interpersonal skills are considered important in interviews, specific objectives in relation to this area of training have not been developed to date. Kratochwill and VanSomeren (1984) suggested that "adaptive affective responses are typically facilitated by listing specific objectives that relate to problems and skills in this area" (p. 20). Consultation, however, is reciprocal, dynamic, and interactive (i.e., *inter*-personal). Although specific competencies in relation to these skills are important, they must be considered in the context of the consultation relationship in which they are manifested. A consultant's use of discrete interpersonal skills is largely a function of his or her interpretation of others' behaviors and knowledge of the social context of consultation. Therefore, consultee variables, and the consultation *relationship,* are critical areas to address in training and research and existing agendas for what should be done next have been presented in related areas (e.g., Sweet, 1984).

Systems Issues

Focal to many consultation training programs is the identification, analysis, and remediation of child (client) problems. The "problem," however, may be more accurately perceived as "lying in the relationship between the child and the . . . social environment" (Witt & Martens, 1988; p. 213). Indeed, traditional consultation training programs do not fully address the complex interactions and interdependencies among individual, classroom, culture, family, and community on the educational process (Knoff, 1984; Milne, 1986). As such, traditional training researchers may provide a limited, oversimplified picture of schools and schooling. What may be needed is a method to understand the broader system within which consultation is occurring, including the pervasive relationships among one's behavior, the environment, and significant others.

Several training considerations at both the individual and system levels are apparent when extending consultation services to applied settings. First, consultants should have a strong knowledge base of the population with which they are working. Diverse child characteristics (e.g., developmental, normative), common referral issues, and handicapping conditions should be addressed in training. Second, because systems variables often override individual variables, it is important to understand the realities of the organization to understand the individuals within that setting (Conoley & Conoley, 1982). Thus, physical-environmental factors of the building and classroom; curricular issues; administrative style; and the social-emotional climate, power structure, and communication pattern within the school must be understood thoroughly if consultation services are to encompass a broader systems perspective adequately.

Other systems issues that should be addressed in training include entry considerations (i.e., appropriate ways to enter a system and establish positive work relations), effective use of the system (i.e., maintaining positive work relations), and potential constraints that may impact consultation attempts. Efforts should be directed at developing empirically documented methods to address these important issues in consultation training programs. Fawcett, Mathews, and Fletcher (1980) have presented some criteria for successful innovation in applied behavior analysis and these may be helpful in a training curriculum in indirect services (Milne, 1986).

Conclusions and Perspectives

Efforts in training school psychologists traditionally have focused upon the student trainees' achievement of specific consultation process skills. Future directions in consultation training argue for a much broader focus in several respects. First, the efficacy of training other members of the consultative team (i.e., teachers and parents) is an important line of inquiry. Second, the content of consultation training programs needs to be critically examined. What informa-

tion (i.e., theoretical frameworks, assessment techniques, intervention strategies, systems information) should be taught and when? How does the quality of students' content knowledge influence their skill in consulting with teachers? Third, models of consultation supervision need to be elaborated and empirically tested. What are the goals of consultation supervision? How can supervisors best support and extend their students' learning? Future training efforts also need to explore the use of new technologies (i.e., interactive video computer programs) as supplements to traditional training programs. Such technology may prove to be a valuable and cost-effective means of extending the scope of consultation training.

By definition, consultation generally is considered to be an interdisciplinary venture. As such, individuals representing different contexts and perspectives within a system are expected to work together in a cooperative and professional fashion. Paradoxically, the majority of consultation training programs to date are conducted within disciplines, such as school psychology, and special education. Recently, an interdisciplinary perspective on consultation theory, research, training, and practice has been proposed (West, 1988). It would seem that beyond acknowledging the importance of "collaboration," a proactive interdisciplinary training perspective may be instrumental to educate future psychologists, special educators, and administrators in ways that resources can be pooled and expertise can be shared in the best interest of system-wide service delivery.

The most effective and efficient manner of operationalizing an interdisciplinary training approach at the training/practitioner level has not been identified, however, several options are apparent. For example, cross-listing of courses in consultation theory and practice may be possible and serve to interface students from various backgrounds (Friend & Cook, 1988). Likewise, an interdisciplinary course on collaborative educational problem solving, co-taught by individuals from fields such as school psychology, special education, educational administration, and educational studies could provide an excellent forum for educating students on the current status and changing nature of professional roles and relationships within schools. Simultaneous training of consultants (e.g., school psychology graduate students) and consultees (e.g., student teachers) in the goals, objectives, and procedures of a consultation service-delivery model also is possible. Finally, pairing consultants in training with student teachers has been found to be an effective model of field-based training, and has received favorable reviews from both parties (Carlson & Tombari, 1986).

Pugach and Allen-Meares (1985) described various barriers to collaboration among school professionals, and proposed a developmentally sequenced series of training activities designed to prepare professionals for collaborative endeavors such as consultation. They suggest that professionals from different disciplines (e.g., school psychology, general education, special education) may engage in productive efforts after establishing skills such as taking the perspective of others, empathizing with peers, and understanding the roles and respon-

sibilities of other professionals. However, the most effective method of training these "skills," if they can indeed be taught, is unknown. Nevertheless, this line of training research must be pursued to understand better practical and professional issues facing practitioners in the schools, and to prepare individuals in a systematic, comprehensive manner.

ACKNOWLEDGMENTS

REFERENCES

Achenbach, T. M., McConaughy, S. H., & Howell, C. T. (1987). Child/Adolescent behavioral and emotional problems: Implications of cross-informant correlations for situational specificity. *Psychological Bulletin, 101,* 213–232.

Anderson, T. K., Kratochwill, T. R., & Bergan, J. R. (1986). Training teachers in behavioral consultation and therapy: An analysis of verbal behaviors. *Journal of School Psychology, 24,* 229–241.

Argyris, C., & Schou, D. A. (1974). *Theory in practice: Increasing professional effectiveness.* San Francisco, CA: Jossey-Bass.

Argyris, C., Putnam, R., & McLain-Smith, D. (1985). *Action science.* San Francisco: Jossey-Bass.

Bergan, J. R. (1977). *Behavioral consultation.* Columbus, OH: Merrill.

Bergan, J. R., & Duley, S. M. (1981). Behavioral consultation with families. In R. W. Henderson (Ed.), *Parent-child interaction: Theory, research, and prospects* (pp. 265–291). New York: Academic Press.

Bergan, J. R., & Kratochwill, T. R. (1990). *Behavioral consultation and therapy.* New York: Plenum Press.

Bergan, J. R., & Tombari, M. L. (1975). The analysis of verbal interactions occurring during consultation. *Journal of School Psychology, 13,* 209–226.

Brown, D. K., Kratochwill, T. R., & Bergan, J. R. (1982). Teaching interview skills for problem identification: An analogue study. *Behavioral Assessment, 4,* 63–73.

Brown, D. T., & Cardon, B. W. (1982). Synthesis and editorial comment of the Olympia proceedings. *School Psychology Review, 11,* 195–198.

Cancelli, A. A., & Lange, S. M. (1990). Considerations for future research in the institutionalization of school-based consultation. *Journal of Educational and Psychological Consultation, 1,* 87–98.

Carlson, C. I., & Tombari, M. L. (1986). Multilevel school consultation training: Preliminary program evaluation. *Professional School Psychology, 1,* 89–104.

Cataldo, M. F. (1984). Clinical considerations in training parents of children with special problems. In R. E. Dangel & R. A. Polster (Eds.), *Parent training* (pp. 329–357). New York: Guilford Press.

Cleven, C. A., & Gutkin, T. B. (1988). Cognitive modeling of consultation processes: A means for improving consultees problem definition skills. *Journal of School Psychology, 26,* 379–389.

Cobb, D. E., & Medway, F. J. (1978). Determinants of effectiveness in parent consultation. *Journal of Community Psychology, 6,* 229–240.

Collins, A., Brown, J. S., & Newman, S. (1989). Cognitive apprenticeship: Teaching the craft of reading, writing, and mathematics. In L. B. Resnick (Ed.), *Knowing, learning, and instruction: Essays in honor of Rober Glaser* (pp. 453–494). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Collins, F. L., Jr., Foster, S., & Berler, E. S. (1986). Clinical training issues for behavioral psychology. *Professional Psychology: Research and Practice, 4,* 301–307.

Conoley, J. C., & Conoley, C. W. (1982). *School consultation: A guide to practice and training.* New York: Pergamon Press.

Cormier, W. H., & Cormier, L. S. (1985). *Interviewing strategies for helpers: Fundamental skills and cognitive behavioral interventions.* Monterey, CA: Brooks/Cole.

Cummings, J. A., Hansen, E., & Sillings, R. (1989). *Teaching interviewing skills via interactive video: Outertalk, SOBEX and beyond.* Paper presented at the annual meeting of the National Association of School Psychologists, Boston, MA.

Curtis, M. J., & Zins, J. E. (1988). Effects of training in consultation and instructor feedback on acquisition of consultation skills. *Journal of School Psychology, 26,* 185–190.

Davis, G. A., & Thomas, M. A. (1989). *Effective schools and effective teachers.* Boston: Allyn & Bacon.

Dreyfus, S., & Dreyfus, H. (1980). *A five-stage model of the mental activities involved in directed skill acquisition.* Supported by the U.S. Air Force, Office of Scientific Research (AFSC) under contract F 49620-C-0063 with the University of California, Berkeley, February 1980. (Unpublished study).

Dreyfus, S., & Dreyfus, H. (1986). *Mind over machine. The power of human intuition and expertise in the era of the computer.* New York: The Free Press.

Egan, G. (1986). *The skilled helper: A systematic approach to effective helping.* Monterey, CA: Brooks/Cole.

Fagan, T. K. (1990). Best practices in the training of school psychologists: Considerations for trainers, prospective entry-level and advanced students. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology - II* (pp. 723–741). Washington, D.C.: National Association of School Psychologists.

Fawcett, S. B., Mathews, A. M., & Fletcher, L. K. (1980). Some promising dimensions for behavioral community technology. *Journal of Applied Behavior Analysis, 13,* 505–508.

Ford, J. D. (1979). Research on training counselors and clinicians. *Review of Educational Research, 49,* 87–130.

Forehand, R. L., & McMahon, R. J. (1981). *Helping the noncompliant child: A clinician's guide to parent training.* New York: Guilford Press.

Friend, M., & Cook, L. (1988). Pragmatic issues in school consultation training. In J. F. West (Ed.), *School consultation: Interdisciplinary perspectives on theory, research, training, and practice* (pp. 127–142). Austin, TX: the Association of Educational and Psychological Consultants.

Gallessich, J., McDermott-Long, K., & Jennings, S. (1986). Training of mental health consultants. In F. V. Mannino, E. J. Trickett, M. F. Shore, M. G. Kidden, & G. Levin (Eds.), *Handbook of mental health consultation* (pp. 279–317). Rockville, MD: National Institute of Mental Health.

Galvez-Hjornevik, C. (1986). Mentoring among teachers: A review of the literature. *Journal of Teacher Education, 37*, 6–11.

Goodwin, D. L., & Coates, T. J. (1972). Increasing teacher effectiveness through social systems change: Training school psychologists as change agents. *California Journal of Educational Research, 25*, 147–156.

Goodwin, D. L., Garvey, W. P., & Barclay, J. R. (1971). Microconsultation and behavior analysis: A method of training psychologists as behavioral consultants. *Journal of Consulting and Clinical Psychology, 37*, 355–363.

Graden, J. L., Zins, J. E., & Curtis, M. J. (1988). *Alternative educational delivery systems: Enhancing instructional options for all students.* Washington, D.C.: National Association of School Psychologists.

Gray, W. A., & Gray, M. M. (1985). Synthesis of research on mentoring beginning teachers. *Educational Leadership, 43*, 37–43.

Gresham, F. M. (1984). Behavioral interviews in school psychology: Issues in psychometric adequacy and research. *School Psychology Review, 13*, 17–25.

Gresham, F. M., & Davis, C. J. (1988). Behavioral interviews with teachers and parents. In E. S. Shapiro & T. R. Kratochwill (Eds.), *Behavioral assessment in schools: Conceptual foundations and practical applications* (pp. 455–493). New York: Guilford Press.

Guidabaldi, J. (1982). Transcending future shock: Invariant principles for school psychology. *School Psychology Review, 11*, 127–131.

Gutkin, T. B., & Curtis, M. J. (1990). School-based consultation: Theory, techniques, and research. In T. B. Gutkin & C. R. Reynolds (Eds.), *The handbook of school psychology (2nd ed.*, pp. 577–611). New York: Wiley.

Gutkin, T. B., Singer, J. H., & Brown, R. (1980). Teacher reactions to school based consultation services: A multivariate analysis. *Journal of School Psychology, 18*, 126–134.

Hirschenberger, R. H., McGuire, P. S., & Thomas, D. R. (1986). Criterion-referenced, competency-based training in behavior modification. In B. A. Edelstein & E. S. Berler (Eds.), *Evaluation and accountability in clinical training* (pp. 299–329). New York: Plenum Press.

Idol, L. (1988). Training in special education consultation. In J. F. West (Ed.), *School consultation: Interdisciplinary perspectives on theory, research, training, and practice* (pp. 105–126). Austin, TX: The Association of Educational and Psychological Consultants.

Idol, L. (in press). Preservice education and professional staff development for educational consultants. In J. E. Zins, T. R. Kratochwill, & S. N. Elliott (Eds.), *The handbook of consultation services for children: Applications in educational and clinical settings.* San Francisco: Jossey-Bass.

Kauffman, J. M. (1991). Restructuring in sociopolitical context: Reservations about the effects of current reform proposals on students with disabilities. In J. W. Lloyd, N. N. Singh, & S. C. Repp (Eds.), *The regular education initiative: Concepts, issues, and Models.* (pp. 57–66). Sycamore, IL: Sycamore Publishing Co.

Knoff, H. M. (1984). The practice of multimodal consultation: An integrating approach for consultation service delivery. *Psychology in the Schools, 21*, 83–91.

Knoff, H. M. (1985). Supervision in school psychology: The forgotten or future path to effective services. *School Psychology Review, 15*, 529–545.

Kohr, M. A., Parrish, J. M., Neef, N. A., Driessen, J. R., & Hallinan, P. C. (1988). Communication skills training for parents: Experimental and social validation. *Journal of Applied Behavior Analysis, 21*, 21–30.

Kratochwill, T. R. (1985). Selection of target behaviors in behavioral consultation. *Behavioral Assessment, 7*, 49–61.

Kratochwill, T. R., & Bergan, J. R. (1978). Training school psychologists: Some perspectives on a competency-based behavioral consultation model. *Professional Psychology, 9*, 71–82.

Kratochwill, T. R., & Bergan, J. R. (1990). *Behavioral consultation: An individual guide.* New York: Plenum.

Kratochwill, T. R., Bergan, J. R., & Mace, F. C. (1981). Practitioner competencies needed for implementation of behavioral psychology in the schools: Issues in supervision. *School Psychology Review, 10*, 434–44.

Kratochwill, T. R., Doll, E. J., & Dickson, P. (1990). Use of computer technology in behavioral assessments. In T. B. Gutkin & S. Wise (Eds.), *Buros-Nebraska series on measurement and testing* (pp. 125–154). Hillsdale, NJ: Lawrence Erlbaum Associates.

Kratochwill, T. R., & Elliott, S.N. (1990). *Preparation of school psychologists to serve as consultants to teachers trained in consultation and classroom intervention.* United States Department of Education, Office of Special Education and Rehabilitative Services. (1988–92 funding period.)

Kratochwill, T. R., Rotto, P. C., Sheridan, S. M., & Salmon, D. (1991). *Preparation of psychologists to serve as consultants for teachers of emotionally-disturbed children.* Manuscript submitted for publication.

Kratochwill, T. R., & Sheridan, S. M. (1990). Advances in behavioral assessment. In T. B. Gutkin & C. R. Reynolds (Eds.), *The handbook of school psychology* (2nd ed., pp. 328–364). New York: Wiley.

Kratochwill, T. R., Sheridan, S. M., & VanSomeren, K. R. (1988). Research in behavioral consultation: Current status and future directions. In J. F. West (Ed.), *School consultation: Interdisciplinary perspectives on theory, research, training, and practice* (pp. 77–104). Austin, TX: The Association of Educational and Psychological Consultants.

Kratochwill, T. R., & VanSomeren, K. R. (1984). Training behavioral consultants: Issues and directions. *The Behavior Therapist, 7*, 19–22.

Kratochwill, T. R., VanSomeren, K. R., & Sheridan, S. M. (1989). Training behavioral consultants: A competency-based model to teach interview skills. *Professional School Psychology, 4*, 41–58.

Kurpius, D. J., & Lewis, J. E. (1988). Assumptions and operating principles for preparing professionals to function as consultants. In J. F. West (Ed.), *School consultation: Interdisciplinary perspectives on theory, research, training, and practice* (pp. 143–154). Austin, TX: The Association of Educational and Psychological Consultants.

Lentz, F. E., & Shapiro, E. S. (1986). Functional assessment of the academic environment. *School Psychology Review, 15*, 346–357.

Lesiak, W. J., & Lounsbury, E. (1977). Views of school psychology services: A comparative study. *Psychology in the Schools, 14*, 185–188.

Little, J. W. (1990). The mentor phenomenon. In C. B. Cazden (Ed.), *Review of research in education* (pp. 297–351). Washington, D.C.: American Educational Research Association.

Lloyd, S. R. (1984). *The development of a computer simulation for consulting teachers.* Unpublished doctoral dissertation, University of Illinois at Urbana-Champaign.

Lloyd, S. R., & Idol-Maestas, L. (1983). Consulting teacher simulation programs. *Teacher Education and Special Education, 6*, 179–185.

Maher, C. A. (1981). Interventions with school social systems: A behavioral-systems approach. *School Psychology Review, 10*, 449–508.

Martens, B. K., & Witt, J. C. (1988). Expanding the scope of behavioral consultation: A systems approach to classroom behavior change. *Professional School Psychology, 3*, 271–181.

McDougall, L. M., Reschly, D. J., & Corkery, J. M. (1988). Changes in referral interviews with teachers after behavioral consultation training. *Journal of School Psychology, 26*, 225–232.

Meacham, M. L., & Peckham, P. D. (1978). School psychologists at three-quarters century: Congruence between training, practice, preferred role and competence. *Journal of School Psychology, 16*, 195–206.

Meyers, J., Wurtz, R., & Flanagan, D. (1981). A national survey investigating consultation training occurring in school psychology programs. *Psychology in the Schools, 18*, 297–302.

Milne, D. (1986). *Training behaviour therapists: Methods, evaluation and implementation with parents, nurses, and teachers.* Cambridge, MA: Brookline Books.

Miltenberger, R. G., & Fuqua, R. W. (1985). Evaluation of a training model for the acquisition of behavioral assessment interviewing skills. *Journal of Applied Behavior Analysis, 18,* 323–328.

Miltenberger, R. G., & Veltum, L. G. (1988). Evaluation of an instructions and modeling procedure for training behavioral assessment interviewers. *Journal of Behavior Therapy and Experimental Psychiatry, 19,* 31–41.

Ollendick, T. H., & Cerny, J. A. (1981). *Clinical behavior therapy with children.* New York: Plenum Press.

Patterson, G. R., Reid, J. B., Jones, R. R., & Conger, R. E. (1975). *A social learning approach to family intervention.* Eugene, OR: Castalia.

Price, R. H., Cowen, E. L., Lorion, R. P., & Ramos-McKay, J. (1988). *Fourteen ounces of prevention.* Washington, D.C.: American Psychological Association.

Pugach, M. C., & Allen-Meares, P. (1985). Collaboration at the preservice level: Instructional and evaluation activities. *Teacher Education and Special Education, 8,* 3–11.

Reilly, D. H., Barclay, J., & Culbertson, F. (1977). The current status of competency-based training. Part I: Validity, reliability, logistical, and ethical issues. *Journal of School Psychology, 15,* 68–74.

Rogers-Warren, A., & Warren, S. F. (Eds.). (1977). *Ecological perspectives in behavior analysis.* Baltimore: University Park Press.

Rosenfield, S. (1990). Taking a position on "appropriate educational services". *School Psychology Quarterly, 5,* 46.

Rosenfield, S., & Gravois, T. (in press). Consultation training. In J. E. Zins, T. R. Kratochwill, & S. N. Elliott (Eds.), *The handbook of consultation services for children: Applications in educational and clinical settings.* San Francisco, CA: Jossey-Bass.

Salmon, D., Fenning, P., & Kratochwill, T. (1990, April). *Preparing school consultants through mentorship.* Paper presented at the Annual Meeting of the National Association of School Psychologists. San Francisco.

Salmon, D., & Lehrer, R. (1989). School consultant's implicit theories of action. *Professional School Psychology, 4,* 173–187.

Salmon, D., & Lehrer, R. (in press). Experience and problem representation in school consultation: Exploring the implicit theories of school psychology trainers and students. *School Psychology Quarterly,*

Salmon, D., & Sheridan, S. M. (1987). *Consultation supervision: Goals, reflection, and action.* Unpublished manual, Wisconsin Center for Education Research, Madison, Wisconsin.

Schon, D. A. (1983). *Reflecting practitioner.* New York: Basic Books.

Schon, D. A. (1987). *Educating the reflective practitioner.* San Francisco: Jossey-Bass.

Sheridan, S. M., Kratochwill, T. R., & Elliott, S. N. (1990). Behavioral consultation with parents and teachers: Delivering treatment for socially withdrawn children at home and school. *School Psychology Review, 19,* 33–52.

Sweet, A. A. (1984). The therapeutic relationship in behavior therapy. *Clinical Psychology Review, 4,* 253–272.

Swerdlik, M., & Bardon, J. I. (1988). A survey of mentoring experiences in school psychology. *Journal of School Psychology, 26,* 213–224.

Veltum, L. G., & Miltenberger, R. G. (1989). Evaluation of a self-instructional package for training initial assessment interviewing skills. *Behavioral Assessment, 11,* 165–177.

Vernberg, E. M., & Reppucci, N. D. (1986). Behavioral consultation. In F. U. Mannino, E. J., Trickett, M. F. Shore, M. G. Kidder, & G. Levin (Eds.), *Handbook of mental health consultation* (pp. 49–80). Rockville, MD: National Institute of Mental Health.

Wahler, R. G., & Dumas, J. E. (1984). Changing the observational coding styles of insular and noninsular mothers: A step toward maintenance of parent training effects. In R. F. Dangel & R. A. Polster (Eds.), *Parent training* (pp. 379–416). New York: Guilford.

Wahler, R. G., & Fox, J. J. (1981). Setting events in applied behavior analysis: Toward a conceptual and methodological expansion. *Journal of Applied Behavior Analysis, 14,* 327–338.

West, J. F. (Ed.). (1988). *School consultation: Interdisciplinary perspectives on theory, research, training, and practice.* Austin, TX: The Association of Educational and Psychological Consultants.

West, J. R., & Cannon, G. S. (1988). Essential collaborative consultation competencies for regular and special educators. *Journal of Learning Disabilities, 21,* 56–63.

Witt, J. C., & Martens, B. K. (1988). Problems with problem-solving consultation: A re-analysis of assumptions, methods, and goals. *School Psychology Review, 17,* 211–226.

Ysseldyke, J. E., Thurlow, M., Graden, J., Wesson, C., Algozzine, B., & Deno, S. (1983). Generalizations from five years of research on assessment and decision making: The University of Minnesota Institute. *Exceptional Education Quarterly, 4,* 75–93.