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EVALUATION OF A TRAINING MANUAL FOR THE ACQUISITION OF BEHAVIORAL ASSESSMENT INTERVIEWING SKILLS

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Two procedures were used to teach behavioral assessment interviewing skills: a training manual and one-to-one instruction that included modeling, rehearsal, and feedback. Two graduate students and two advanced undergraduates were trained with each procedure. Interviewing skills were recorded in simulated assessment interviews conducted by each student across baseline and treatment conditions. Each training procedure was evaluated in a multiple baseline across students design. The results showed that both procedures were effective for training behavioral interviewing skills, with all students reaching a level of 90%–100% correct responding. Finally, a group of experts in behavior analysis rated each interviewing skill as relevant to the conduct of an assessment interview and a group of behavioral clinicians socially validated the outcomes of the two procedures.

DESCRIPTORS: assessment interview, training manual, behavioral assessment questions

Previous research in the training of clinical interviewing has examined a variety of interviewing skills and training methods. The particular skills trained have included more traditional responses such as reflection of feeling (Richardson & Stone, 1981), communication of empathy (Carlson, 1974; Stone & Vance, 1976) warmth, positive regard, and therapist genuineness (Carkhuff & Truax, 1965), and more recently, sets of behavioral assessment questions (Iwata, Wong, Riordan, Dorsey, & Lau, 1982; Edelstein & Scott, 1983). Among the training procedures demonstrated effective for teaching interviewing skills are live, written, or videotape modeling, performance feedback, and multicomponent training packages consisting of instructions, modeling, rehearsal, and feedback (See Ford, 1979, for a review). With the exception of McKee, Moore, and Presbury (1982) who trained interviewing skills using videotapes, each of the above training approaches required an experienced trainer to implement the procedure. If procedures requiring little or no trainer time proved to be effective in training interviewing skills they might be preferred on the basis of efficiency.

The purpose of this experiment was to evaluate the effectiveness of an instructional manual that required no trainer involvement for the acquisition of behavioral assessment interviewing skills similar to those reported by Iwata et al. (1982). The effectiveness of training manuals has been demonstrated in other areas such as conducting interdisciplinary meetings (Parrish, Iwata, & Johnston, 1985) and training respite care workers (Parrish, Neef, Egel, & Sloane, 1984).

METHOD

Students

Four first-year graduate students in clinical psychology and four undergraduate psychology majors at Western Michigan University volunteered to participate. Each student had at least a rudimentary behavior analysis knowledge but lacked experience or knowledge in clinical interviewing.

Setting and Equipment

The study was conducted in the meeting rooms at an outpatient clinic affiliated with the university.

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Each room was furnished with two or more padded chairs and one or two end tables. An audio tape recorder was placed on a table next to the student's chair.

Simulated Interviews

Data were collected on students' responding during simulated assessment interviews conducted with confederates who were trained to portray outpatient clients with clinical problems. Students conducted 10–12 interviews across baseline and treatment conditions. A different problem was presented by the confederate in each interview. The problems consisted of adult and child behavior problems including phobias, unassertiveness, compulsion, sexual deviance, childhood noncompliance, school problems, aggression, and others.

Four graduate students served as confederates. They were given scripts of each of the 12 problems they were to portray that contained the specific information to be provided in response to specific types of interview questions from the students. Each confederate was trained for approximately 2 hours using instructions, rehearsal, modeling, and feedback.

Data Collection & Reliability

All interviews were recorded on audiotape. Using a checklist of all the target behaviors, three assistants scored the audiotapes for the occurrence of each of the interviewer responses. The assistants practiced scoring a series of sample interviews until they reached a criterion of 90%–100% accuracy for two consecutive interviews.

A second observer independently scored 24.5% of the assessment audiotapes for each student. Agreements were scored if both observers agreed that a target behavior did or did not occur during the interview. Interobserver agreement was computed by dividing the number of agreements by the number of agreements plus disagreements and multiplying by 100%.

Agreement on the occurrence of the assessment questions in the interviews ranged from 83% to 100% with a mean of 96%. Agreement on the occurrence of closed-ended questions in the interviews ranged from 80% to 100% with a mean of 96%.

Dependent Variables

The 10 interviewer responses trained in this experiment were as follows:

1. Asks for a general description of the problem: The therapist, using an open-ended question, asks the client to describe the problem/reason for seeking help.
2. Asks for other problems: The therapist asks if other problems exist and asks the client to describe further problems.
3. Sets priority: Summarizes the problems listed by the client and uses an open-ended question to ask which is most important and should be addressed first.
4. Asks for specification of problem behaviors: Uses open-ended questions to ask the client to describe specific behaviors involved in the problem.
5. Asks about onset: Uses open-ended questions to ask the client when the problem started. Asks if any events were associated with the onset.
6. Asks about dimensions: Uses open-ended questions to ask about relevant dimensions of the problem, i.e., frequency, duration, magnitude, latency.
7. Asks about antecedents: Uses open-ended questions asking the client to describe events happening just before the problem behavior. Also asks under what conditions the problem does not occur.
8. Asks about consequences: Uses open-ended questions to ask the client what happens after the problem behavior occurs.
9. Asks about correlated verbal behavior: Uses open-ended questions to ask what the client is thinking (thoughts, self-talk, internal dialogue) as the problem occurs, prior to the problem behavior, and after the problem occurs.
10. Asks about goals: Uses open-ended questions to ask what the client wants to accomplish in therapy. Asks for description of desired changes in behavior.

Procedure

Prior to each interview, the student was given an intake information sheet containing minimal

information about the client and problem that was similar to that a therapist might receive before an actual clinical evaluation. At the time of their first interview, students received written instructions directing them to conduct an assessment interview for the purpose of collecting sufficient information for a behavior analysis of the client's problem. Students were left alone in the room with the confederate and tape recorder to conduct the interview. The student was responsible for terminating each interview. Confederates responded in specific ways to the students' questions so that consistency was maintained across students and across experimental phases.

Baseline. Students conducted three to five assessment interviews, one per day. No feedback or other consequences were provided for their performance in the interviews.

Manual training. After the baseline assessment, two undergraduate students and two graduate students read an instructional manual designed to teach the clinical interviewing skills chosen as dependent variables in this study. After studying the manual, each student's performance was again assessed in simulated assessment interviews. Students receiving the manual were given no feedback on their interview performance and received no supplemental training, although they were prompted to review the manual prior to each subsequent interview.

The training manual outlined and described the essential components of a behavioral assessment interview. Ten component skills were presented and put into the context of an interview. For each skill, the manual described the responses involved, provided a positive example, provided a number of negative examples, prompted the reader to critique these examples, provided the opportunity for the reader to respond in writing, and provided feedback to the reader critiquing the negative examples. In this way, all the component skills were described and exemplified, and the reader had to actively respond in writing while working through the manual.

Besides critiquing the examples within the manual, the student was required to respond in writing to written vignettes of therapy situations with appropriate assessment questions. In this way, the students had to generate examples of each of the assessment questions. The manual then provided feedback in the form of a range of appropriate examples of assessment questions for each vignette. Prior to posttraining assessment interviews, each student's training manual was checked to ensure that all spaces in the manual requiring responses were completed.

One-to-one training program. The remaining four students, two undergraduates and two graduate students, received a training package consisting of instructions, rehearsal, feedback, and modeling. Students were provided with written response definitions and examples of the component skills of a behavioral assessment interview (the same skills presented in the training manual and used as dependent variables). After studying these materials and completing brief written exercises requiring the identification of each assessment question from an interview script, students rehearsed the skills in role played assessment interviews. A graduate assistant (the first author) who taught a clinical practicum course provided feedback, modeled responses, and answered questions. Following this training, students engaged in posttreatment assessments and received feedback on their performance after each assessment. Posttreatment assessments were conducted until students' responding reached a steady state of 90%–100% correct.

Staff Time

The staff time required by each training procedure was recorded, as well as the time each student spent in training activities. Staff time was recorded when an assistant provided instruction, modeled, or roleplayed with a student or provided feedback after an assessment interview. The time involved in preparing written materials, including the training manual, was not included.

Social Validation

To judge the validity of the dependent variables used in the study, twenty-three PhD-level professionals who were involved in research or teaching activities in behavioral assessment or behavior ther-

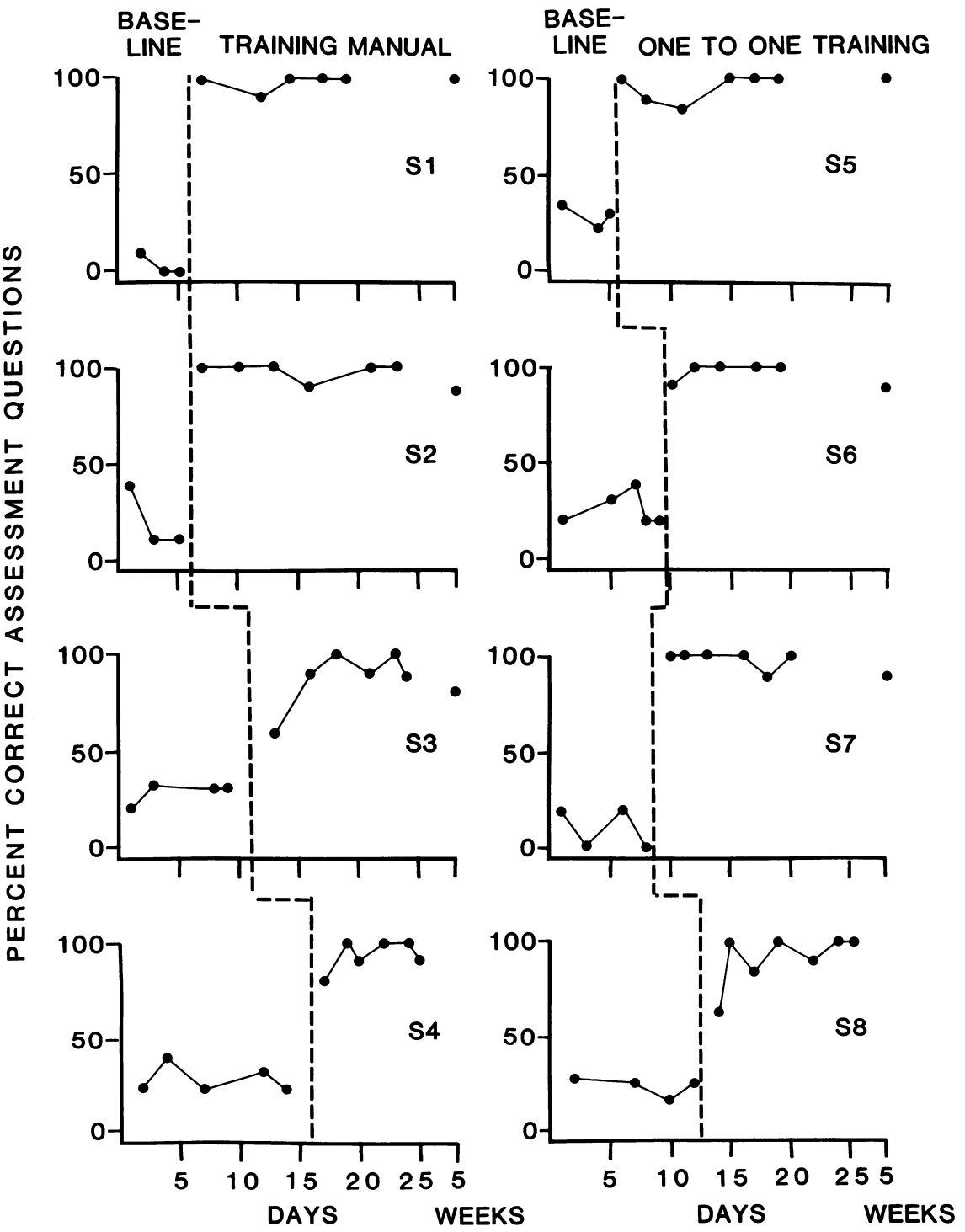

Figure 1. Percentage of behavioral assessment questions correctly asked in baseline and treatment interviews by students receiving one-to-one and manual training.

apy were asked to rate the relevance of each behavioral assessment question on a 5-point Likert scale.

To socially validate the outcomes of the two training procedures, audiotapes of one baseline and one training interview for each student were presented in random order to four experienced behavioral clinicians. These clinicians rated the interpersonal effectiveness of the interviewer, the use of open-ended questions, the use and timing of behavioral assessment questions, and the completeness and overall quality of the interviews on a 5-point Likert scale from poor (1) to excellent (5).

RESULTS

Figure 1 shows that the interviewing performance of each student was characterized by generally low, stable levels during baseline; improvement occurred only after the implementation of the respective training procedure. With the exception of students 8 and 3, all students immediately attained high levels of performance and, for those students for whom such data are available, maintained high performance levels at follow-up.

Each student was involved in 4–6 hours of training activities regardless of the training procedure. In the one-to-one procedure, however, a trainer was actively involved in 3–5 hours of training activities with each student.

Based on responses from the 16 PhD-level professionals who responded to the social validation questionnaire, all the assessment questions trained in the study were judged to be relevant for the conduct of a behavioral assessment interview. The mean ratings for each dependent variable ranged from 3.9 (for dependent variable #9) to 4.8 on a scale in which 1 is irrelevant and 5 is essential.

Table I shows the results of the social validation of the outcomes of the two training procedures. There were increases in the subjective ratings from baseline to treatment across all five dimensions for both training procedures.

Table 1
Mean Social Validation Ratings

	Training manual		One-to-one training	
	Baseline	Treatment	Baseline	Treatment
Completeness of the behavioral assessment	2.2	4.0	2.7	4.2
Interpersonal effectiveness of the interview	2.2	3.3	2.9	3.9
Appropriate use of open-ended questions	2.2	4.2	3.4	4.3
Appropriate use and timing of assessment questions	2.2	4.2	2.8	4.0
Overall rating of the interview	2.1	3.9	2.9	4.1

DISCUSSION

The results from this study replicate the effectiveness of the one-to-one training method for teaching a set of behavioral assessment questions (Iwata et al., 1982) and extend prior research by documenting the effectiveness of a training manual for teaching the same set of interviewer skills. With both training methods, students reached a performance criterion of 90%–100% correct responding. Although the time involved in training was roughly equivalent for both methods, the training manual required no trainer time beyond that required for the preparation of the manual. In addition, a group of professionals in behavior analysis rated the set of dependent variables as relevant to the conduct of a behavioral assessment, and experienced behavioral interviewers socially validated the outcomes of the two training procedures.

These findings should be interpreted cautiously for at least two reasons. First, the number of students exposed to each treatment condition was relatively small, and thus additional research is necessary to establish the generality of the reported effects. Second, these results were obtained with a specific training manual and one-to-one training format. Whether procedures that differ from those used in this study would produce similar results remains open for study.

Further research on the training of interviewing skills might address a number of important issues. First, this research used assistants to play the role of cooperative clients who gave appropriate answers to interviewer questions. Whether interviewing skills trained with a manual or other analogue training techniques would generalize to clinical interviews and prove adequate for difficult clients (e.g., clients giving vague answers or those showing various forms of "resistance") requires further research. The generality of skills trained through analogue procedures is probably related to a number of factors including the quality of the analogue (i.e., realistic portrayals of clients) and the range of client responses depicted.

A second line of research might involve a component analysis of the training manual or an evaluation of other types of written materials to determine which components are essential. Further written training programs could then use only those necessary components and therefore increase their cost efficiency.

A third issue for research concerns the definition and assessment of the target behaviors. The interviewer responses trained in this study, although socially validated by experienced behavioral clinicians, were topographically defined without regard to their antecedants and consequences within the interview (Fuqua & Schwade, in press). Further research on interviewer skills training might attempt to evaluate the appropriateness of assessment questions for the point in the interview where each question is posed. Additionally, some consideration of the client's response to the assessment question would do much to validate the clinical utility of the interviewing skills being trained. More specifically, does the assessment question yield an appropriate client response, and if not, does the interviewer repeat or rephrase the question until the relevant information is attained?

Finally, the use of instructional manuals could be tested with other skills necessary in a behavioral assessment interview. Such skills as professional conduct statements and rapport-building responses (e.g., empathy, restatement) are also important components of an assessment interview and might be amenable to training via an instructional manual. There is no substitute for experience (practice), but the use of training manuals holds promise as a cost-effective teaching technology for the acquisition of clinical interviewing skills.

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