



SPOTLIGHT ON PRACTICE

INVESTIGATIVE INTERVIEWING WITH CHILDREN: EVALUATION OF THE EFFECTIVENESS OF A TRAINING PROGRAM FOR CHILD PROTECTIVE SERVICE WORKERS

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ABSTRACT

Objective: Previous research suggests that training workshops on investigative interviewing conducted with front-line workers, such as police officers or child protective service (CPS) workers, may result in improved knowledge about appropriate strategies to use. Limited research has addressed whether such training programs result in improvements in actual interviewing skills. The present investigation assessed the impact of a training workshop on CPS workers' knowledge about conducting and behavior during investigative interviews.

Method: Twelve CPS workers participated. To evaluate the impact of the training, a quasi-experimental design was used. Participants completed outcome measures prior to, immediately following, and 3 months following the training. Outcome measures included (a) a questionnaire to assess knowledge about interviewing practices, (b) simulated interviews with a confederate to assess participant behavior during an investigative interview, and (c) questionnaires to gather information related to the simulated interviews (e.g., materials requested for use during interview, abuse status of confederate). All participants completed 6 hours of training during 3 weekly 2-hour sessions.

Results: Participants' knowledge on the topic, as well as several interviewing skills during simulated interviews, improved following the training. However, the training failed to impact several key interviewing skills such as the types of questions asked or the length of the interview.

Conclusions: Knowledge-based workshop training programs may not adequately prepare CPS workers to conduct appropriate investigative interviews with children who were allegedly abused. Further, knowledge about how to conduct such interviews may not be the best indicator of whether someone is prepared for this aspect of the job. © 1999 Elsevier Science Ltd

Key Words—Investigative interviewing, Training, Child protective services, Child sexual abuse.

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fully the level of detail needed to make sound statements about the influence of training on participant behavior.

Second, of the studies using experimental methods, little attention was given to assessing whether the training produced change in the performance of participants, the exception being the Stevenson and colleagues (1992) study. Although indicators of changes in knowledge are important, they may not serve as markers of change in interviewing behavior. Additionally, in the one study to date that has attempted to measure behavior change, methodological concerns exist. Specifically, as Stevenson and colleagues discussed, using the same case scenario during both pre- and post-training assessment may have limited generalization and influenced how participants interacted with the confederate in the latter interview. Further, conducting the post-training assessment immediately following the training may not have allowed participants adequate time and opportunity to learn the new skills.

The purpose of the present study was to assess the impact of a training workshop on CPS workers' abilities to conduct investigative interviews effectively with children. In addition to assessing the impact of training on participants' knowledge, an evaluation of its effect on actual performance was included due to increasing focus on competency- and outcome-based measures of training for CPS workers (e.g., Leung et al., 1994; Mitchell, White, Wright, & Pecora, 1989; Stevenson et al., 1992).

METHOD

Participants

Twelve Caucasian employees (nine caseworkers and three supervisors; eight women and four men) of a local CPS agency participated. Mean age of participants was 33.5 years (*range* 22 to 65 years). Nine participants held a Bachelor of Arts or Bachelor of Science degree, one a Master of Arts, and one had at least 1 year of education beyond a Master of Arts. Participants' mean length of employment in their current position was 21.2 months (*range* 1.0–84.0), whereas mean length of employment at the agency in any position was 52.0 months (*range* 1.0–207.0). Prior to training, participants had completed an average of 1.7 training programs related to investigative interviewing (*range* 0–4), for an average of 17.8 hours of training (*range* 0–68). Informed consent was obtained from each participant.

Confederates

Three Caucasian women (ages 20, 20, and 30) served as confederates during the simulated interviews (see below for discussion). Each confederate learned scripted information about a different hypothetical child. Two confederates learned information about children who experienced intra-familial sexual abuse whereas the third learned information about a child coached by her mother to provide false allegations of intra-familial abuse. Confederates learned the following information about the children they portrayed: (a) personal information (e.g., age, favorite hobbies, family make-up); (b) abuse history (e.g., acts perpetrated against them, relationship with perpetrator, chronological abuse history); (c) to whom they initially disclosed the abuse; and (d) what they were told by the perpetrators about the consequences of abuse disclosure. For the confederate acting as a child providing false allegations, details regarding how she was coached to report being abused was provided in place of abuse history information.

All confederates were educated about and coached to use developmentally appropriate language. Prior to initiating the study, confederates received approximately 20 hours of instruction regarding their role. Prior to the post-training assessment, confederates reviewed one video-taped simulated interview from the pre-training assessment to re-familiarize themselves with their scenario. Finally,

The information and materials requested were provided. Participants were given 30 minutes to establish rapport with the confederate, gather abuse-related information, and conclude the interview. All interviews were videotaped for later scoring. Following the interview, the confederates left the room and participants were asked to complete a brief questionnaire to assess their impressions as to the abuse status of the confederates, as well as any further steps they would complete in the hypothetical investigation.

PROCEDURES

All outcome measures, as well as the workshop, were completed at a local CPS agency. The knowledge and performance measures were completed within 2 weeks prior to the training. Participants were instructed not to collaborate or use other relevant materials when completing the knowledge questionnaires. The simulated interviews were conducted with each participant individually in one of three interviewing rooms at the agency. Each room measured approximately 9' × 9', had no windows, and was supplied with a round table and adult-sized chairs. The workshop was completed with participants in two groups. The training was based on research produced within the past 10 years on issues relevant to conducting investigative interviews, with the focus on findings within the past 5 years. Training topics included the potential influences of social and developmental factors on memory, with an emphasis on the effect of various question formats (e.g., open-ended versus leading); appropriate steps in the interview process (e.g., initiating the interview, using open-ended questions); information on developmental capabilities of children of different ages; and when to refer cases to other professionals (a more detailed outline of training topics is available from the first author). The 6-hour training workshop was completed in three consecutive 2-hour weekly meetings. Instructional modalities used included lecture, role-play, group discussions, and viewing of videotapes depicting information on investigative interviewing. Due to professional emergencies, two participants did not attend 1 day of training. These participants watched the training on video-tape and then met with the first author to discuss any questions or clarifications. Following the training, the performance measure again was completed within a 2-week period. All participants completed the Knowledge Questionnaire within 1 month following the training. Participants also completed a simulated interview and Knowledge Questionnaire 3 months following the training.

Data Analyses

Coding of the knowledge measure. Because the Knowledge Questionnaire contained many open-ended questions, scoring involved a tiered system whereby participants received full credit for capturing the main idea or concept in their answers and received successively lower scores if their answer failed to do so. For example, in response to a question regarding how to initiate an interview, participants received two points if they conveyed the importance of introducing the purpose of the interview *and* establishing rapport with the child. One point was given if they mentioned only one concept, whereas no points were given for other responses. Closed questions that required a prescribed response were scored using a "correct–incorrect" approach.

To determine participants' scores on the questionnaires, a trained research assistant served as the primary coder. Although aware of the general purpose and hypotheses of the study, she was unaware of the time period when any individual questionnaire was completed (e.g., pre-training, follow-up). Knowledge Questionnaire total scores were determined by summing the obtained score for questions 1 through 26. The total score possible was 85.

Intercoder agreement was calculated for 61% of the questionnaires. Data regarding intercoder agreement were collected by the first author only for open-ended questions for which coder bias

percent agreement for types of questions asked were 83%, 96.1%, and 89.6%; for support provided 65.6%, 98.4%, and 89.6%; for information provided 95.4%, 99.6%, and 98%; and for no talking 83.8%, 99.7%, and 96.9%, respectively.

Data collected using the modified CAIICS were summarized several ways. First, the percentage of each specific class of interviewer behavior was calculated by dividing the frequency of intervals scored with that response by the total number of intervals during the interview, multiplied by 100. Second, because open-ended questions may be considered the least leading (e.g., Kuehnle, 1996; United States Department of Justice, 1996), it may be most appropriate for interviewers to rely on their use to a greater extent. Thus, the ratio of open-ended questions in relation to all questions asked was calculated by summing the frequency of intervals scored with open-ended questions and dividing by the total number of intervals in which any type of question was asked, multiplied by 100. This is referred to as the *Open-ended* composite score. Third, based on Wood and colleagues' (1996) recommendation, a composite score of the percentage of inappropriate interviewer behaviors that occurred, referred to as *Inappropriate Behaviors*, was derived. This was calculated by summing the percent of intervals scored with behaviors identified as potentially influencing the child's report (i.e., any leading questions; praise for disclosures; yes-no and multiple choice questions, and providing abuse-related information prior to disclosure of abuse). Fourth, a composite score referred to as *Appropriate Questions* was determined by summing the frequency of intervals scored with the occurrence of free recall/open-ended or direct questions. Fifth, to assess whether participants spent more time explaining the purpose and procedures of the interview at appropriate times during the interview (e.g., introducing self in the beginning, explaining what will happen next toward the end) an *Explain Purpose* composite score was calculated. This was determined by calculating the percent of intervals within the first and last 2 minutes of the interview in which the participant was observed to emit behavior consistent with the explain purpose and procedure code.

In addition to evaluating changes in participants' behavior during the actual simulated interviews, responses on questionnaires completed immediately prior to and following the interviews were evaluated. Specifically, changes in the following areas were assessed: (a) the types of props requested, (b) whether participants would allow the confederate's mother in the room during the interview, and (c) whether participants were able to identify correctly the confederates' abuse status.

RESULTS

Effects of Training on Participants' Knowledge

The first purpose of the current study was to assess whether a training on investigative interviewing would result in significant increases in participants' knowledge about the topic, as well as to determine whether obtained improvements (if any) maintained. As noted earlier, the total score possible on the Knowledge Questionnaire was 85. Eleven participants completed the pre-training questionnaire, 12 the post-training, and 11 the follow-up. Pre- and post-training total scores on the Knowledge Questionnaire, as well as post-training and follow-up scores, were compared using paired-sample *t*-tests procedures. Results showed a significant increase in knowledge scores from pre-training ($M = 42.8$, $SD = 8.7$) to post-training ($M = 50.3$, $SD = 7.5$), $t(10) = 3.8$, $p < .01$. Further, no significant differences were observed between post-training ($M = 50.36$, $SD = 7.80$) and follow-up ($M = 49.82$, $SD = 6.08$) scores, suggesting that improvements noted after the training maintained.

Table 3. Comparison of Percent of Abuse Allegations Correctly Classified by Participants

| Scenario | Time of Data Collection | | |
|----------|-------------------------|---------------|---------------|
| | Pre-training | Post-Training | Follow-up |
| 1 | 50% (2 of 4) | 100% (4 of 4) | 25% (1 of 4) |
| 2 | 75% (3 of 4) | 100% (5 of 5) | 100% (2 of 2) |
| 3 | 33% (1 of 3) | 100% (3 of 3) | 80% (4 of 5) |

allegations of CSA. Further, participants maintained a relatively low rate of asking multiple choice questions at all points of data collection. These findings are important because they are consistent with what would be appropriate during an investigative interview. As such, although no significant changes in the occurrence of these behaviors were noted, it appears that participants were skilled in these areas prior to the training.

Although not statistically significant, several interesting outcomes occurred regarding the effects on participants' responses on questionnaires completed immediately prior to and following the simulated interviews. First, four participants stated prior to training they would allow a parent in the room while they conducted an investigative interview with a child (a decision inconsistent with proper interviewing guidelines). During the post-training simulated interview, three of those four participants reported they would not allow the parent in the room while they gathered abuse-related information.

Second, the types of props requested by participants for use during the simulated interviews changed following the training. Specifically, of the three participants who requested anatomically-correct dolls to use during the pre-training simulated interview, two did not request the dolls during the post-training simulated interview. Further, of the six participants requesting some type of prop during the post-training simulated interview, four requested anatomically-correct drawings instead of the anatomically-correct dolls. This is important given the controversy surrounding the use of anatomically-correct dolls and the recognition that significant training is needed before one should use the dolls (e.g., Koocher et al., 1995).

Finally, participants' ability to identify correctly whether a child was sexually abused (i.e., correctly say "yes" when child was abused, correctly say "no" when child was not abused) was compared across simulated interviews conducted at the three points of data collection. Results suggest that participants' ability to correctly identify whether the child was sexually abused improved following the training (see Table 3). Percent correct increased to 100% for all three scenarios at post-training. Further, participants' abilities to identify correctly whether the child was abused appeared to maintain for scenarios 2 and 3 (scenarios that depicted a child that actually was abused). However, percent correct decreased from 100% to 25% for scenario 1, the scenario that depicted false allegations of CSA.

DISCUSSION

The present study was designed to assess whether a training workshop on investigative interviewing in the context of allegations of CSA would impact significantly CPS workers' knowledge about conducting, and behavior during, investigative interviews. To accomplish this, participants completed Knowledge Questionnaires and simulated interviews prior to, immediately following, and 3 months after a 6-hour training workshop.

Results suggest training impacted participants' knowledge about investigative interviewing. Specifically, significant improvements in Knowledge Questionnaire total scores were obtained

needed. Moreover, the methods used to assess for changes in participants' interviewing behavior following training extended the efforts of Stevenson and colleagues. Specifically, they had participants interview the same confederate prior to and following the training workshop. Conversely, participants in the present investigation interviewed different confederates portraying dissimilar scenarios at all three points of data collection. This may have reduced the likelihood of practice effects, which were speculated to be a major contributor to the lack of findings in the Stevenson and colleagues' study. Further, the present investigation allowed for an assessment of whether changes in behavior would either maintain or emerge given opportunities for participants to use them in their daily work.

Second, and related to the first improvement, using the CAIICS to measure participant behavior during simulated interviews raises the possibility of a standardized measure of interviewer skills becoming available as a means of comparing the effectiveness of different training programs. In particular, classifying different interviewer behaviors into predetermined categories produced data useful in an objective and quantitative assessment of changes in skills. As such, this instrument has the potential of becoming a valuable and useful tool for the field.

Third, as compared to several previous studies, a more comprehensive measure of knowledge was utilized in the current investigation. The Knowledge Questionnaire used in the current study contained 27 items specifically designed to assess participants' knowledge about factors that contribute to children's reporting abilities, as well as the methods of conducting effective investigative interviews. This is in contrast to questionnaires used in previous research that were either more general in nature (see Hibbard et al., 1987) or not detailed enough to capture extensive knowledge (see Sullivan & Clancy, 1990). Further, the current questionnaire probed for factual information as well as for the application of information regarding investigative interviewing. As a result, although the questionnaire was designed specifically for the current study, and thus its psychometric properties are unknown, it potentially allowed for a more thorough assessment of participants' knowledge about investigative interviewing with children who were allegedly sexually abused than did previously utilized measures.

In addition to improving upon existing literature, the present results suggest areas of future research. Specifically, research addressing the issue of the magnitude of change in certain interviewer behaviors required to constitute "clinically relevant" improvements seems important. For example, research suggests that using open-ended questions may be the least leading approach (e.g., Poole & White, 1991; Tucker, Mertin, & Luszcz, 1990). Evaluating the optimal ratio of open-ended to direct questions that produces the most accurate report would help determine the extent to which interviewers should utilize particular forms of questioning. Unfortunately, there are no answers to questions such as this available; however, with the advent of such instruments as the CAIICS, these important questions may be able to be answered.

Researchers also should begin investigating the extent to which various training procedures and lengths of training produce differing results. The current workshop was six hours in length, was completed over three weeks, and involved some role play activities. Other workshops have been both greater and shorter in length, were completed during one day or across many, and involved experiential exercises to a greater or less extent. Currently, little is known about the differential impact of different training designs and modalities on targeted skills and knowledge. One might assume that providing longer training, over a greater time period, with more opportunities to practice the skills taught would result in better outcomes. However, this remains an empirical question, which should be answered.

The current investigation adds to the growing emphasis of providing training to CPS workers on investigative interviewing strategies. As Doris, Mazur, and Thomas (1995) noted, there has been an increased focus on providing relevant training to CPS workers. The authors describe the systems of several states that provide for initial and on-going training in a variety of areas (e.g., human behavior, risk and family assessment, investigation process). Many of these programs grew out of

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RÉSUMÉ

French abstract not available at time of publication.

RESUMEN

Objetivo: Investigaciones previas sugieren que el entrenamiento en talleres sobre la entrevista investigativa conducidos con empleados de primera fila, como son los oficiales de policía o los adscritos al servicio de protección infantil (CPS), pueden resultar en mejoramiento de el conocimiento sobre las estrategias adecuadas que deben utilizar. Se han realizado limitadas investigaciones para enfocar si estos programas de entrenamiento resultan en mejoría en las habilidades reales para la entrevista. La presente investigación evaluó el impacto de un taller de entrenamiento en los conocimientos de los empleados del CPS sobre como conducir y la conducta adecuada durante las entrevistas de investigación.

Método: Doce empleados del CPS participaron. Para evaluar el impacto del entrenamiento se utilizó un diseño cuasi-experimental. Los participantes completaron medidas de aprovechamiento antes e inmediatamente después, y 3 meses después del entrenamiento. Las medidas de los resultados incluían (a) un cuestionario para evaluar el conocimiento sobre las prácticas de entrevista, (b) entrevistas simuladas con un compañero para evaluar la conducta participativa durante la entrevista de investigación, y (c) cuestionarios para recolectar información relacionada con las entrevistas simuladas (e.g., materiales requeridos para el uso durante la entrevista, status del abuso). Todos los participantes completaron seis horas de entrenamiento durante tres sesiones de dos horas semanalmente.

Resultados: Los conocimientos de los participantes sobre el tópico, así como varias habilidades de entrevistas durante las entrevistas simuladas mejoraron después del entrenamiento. Sin embargo, el entrenamiento no influyó en varias habilidades claves de entrevistas como el tipo de preguntas que se harían o la duración de la entrevista.

Conclusiones: Los programas de talleres de entrenamiento basados en conocimientos pueden no preparar adecuadamente a los empleados del CPS para conducir de manera apropiada las entrevistas de investigación con niños que se sospecha han sido abusados. Además, el conocimiento sobre como conducir estas entrevistas pueden no ser el mejor indicador de si una persona está preparado para este aspecto del trabajo.