Wilfrid Laurier University

Scholars Commons @ Laurier

Psychology Faculty Publications

Psychology

2004

The Effects Of Rapport-Building Style on Children's Reports of a **Staged Event**

Kim P. Roberts Wilfrid Laurier University, kroberts@wlu.ca

Michael E. Lamb University of Cambridge, mel37@cam.ac.uk

Kathleen J. Sternberg

Follow this and additional works at: https://scholars.wlu.ca/psyc_faculty



Part of the Psychiatry and Psychology Commons

Recommended Citation

Roberts, K.P., Lamb, M.E., & Sternberg, K.J. (2004). The effects of rapport-building style on children's reports of a staged event. Applied Cognitive Psychology, 18, 189-202. DOI: 10.1002/acp.957

This Article is brought to you for free and open access by the Psychology at Scholars Commons @ Laurier. It has been accepted for inclusion in Psychology Faculty Publications by an authorized administrator of Scholars Commons @ Laurier. For more information, please contact scholarscommons@wlu.ca.

Running Head: THE EFFECTS OF RAPPORT-BUILDING STYLE

The Effects Of Rapport-Building Style On Children's Reports Of A Staged Event

Kim P. Roberts, Michael E. Lamb, and Kathleen J. Sternberg
National Institute of Child Health and Human Development

Author Notes

Kim P. Roberts, Michael E. Lamb, and Kathleen J. Sternberg, Section on Social and Emotional Development, National Institute of Child Health and Human Development, National Institutes of Health, Department of Health and Human Services.

Kim P. Roberts is now at Department of Psychology, Wilfrid Laurier University, Canada.

Some of the results were presented at the biennial meeting of the American Psychology-Law Society (APA, Div. 41) meeting in New Orleans, LA, in March 2000.

The authors are grateful to Anne Schmitz, Kim Pinns, Lyn Ermer, and the staff and students of the Executive Child Daycare Center, the Bethesda YMCA Daycare Center, and Bethesda Elementary School; and to Jennifer Zale, Jessica Dunne, Elizabeth Eldred, Adam Weitzman, Cady Berkel, and Nicole Sirrine for assistance gathering, coding, and analyzing the data. Correspondence concerning this article should be addressed to Michael E. Lamb, Section on Social and Emotional Development, National Institute of Child Health and Human Development, Rockledge One Center – Suite 8048, 6705 Rockledge Drive, Bethesda, Maryland 20892. E-mail: Michael Lamb@nih.gov

Abstract

Three- to 9-year-old children (N = 144) interacted with a photographer and were interviewed about the event either a week or a month later. The informativeness and accuracy of information provided following either open-ended or direct rapport building were compared. Children in the open-ended rapport-building condition provided more accurate reports than children in the direct rapport-building condition after both short and long delays. Open-ended rapport-building led the 3- to 4-year-olds to report more errors in response to the first recall question about the event, but they went on to provide more accurate reports in the rest of the interview than counterparts in the direct rapport-building condition. These results suggest that forensic interviewers should attempt to establish rapport with children using an open-ended style.

The effects of rapport-building style on children's reports of staged events

Forensic interviewers are widely advised to establish rapport with children before questioning them about substantive issues (e.g., Fisher & Geiselman, 1992; Home Office, 2002; Lamb, Sternberg, & Esplin, 1998; Poole & Lamb, 1998; Yuille, Hunter, Joffe, & Zaparniuk, 1993). Few attempts have been made to explore the effects of rapport building systematically, however, and many forensic interviewers make only perfunctory efforts to establish rapport (e.g., Stockdale, 1996; Warren, Woodall, Hunt, & Perry, 1996). The present study was designed to compare the effects of two styles of rapport building on the length, informativeness, and accuracy of children's accounts of experienced events.

Rapport building serves several functions. First, some children may be reluctant to describe personally-experienced events that are embarrassing or intimate (e.g., Saywitz, Goodman, Nicholas, & Moan, 1991). Rapport may alleviate anxiety or discomfort and thus permit more complete reports (Siegman & Reynolds, 1984). Second, because children report more inaccurate details and are more suggestible when questioned by a perceived authority figure (e.g., Tobey & Goodman, 1992), rapport can reduce children's apprehension and improve their accuracy. Children should also better resist suggestions by individuals who appear warmer and more approachable (e.g., Goodman, Bottoms, Schwartz-Kenney, & Rudy, 1991). Third, rapport building allows interviewers to assess children's verbal skills, cognitive functioning, and emotional state before investigating substantive issues in developmentally appropriate ways (Poole & Lamb, 1998). Fourth, the rapport-building phase can be used to explain the purpose and ground rules of the forensic interview, thereby making the interview more informative (Orbach et al., 2000).

Despite consensus that rapport building is beneficial, there is little agreement about how best to establish rapport with children. Sternberg et al. (1997) compared procedures designed to establish rapport with alleged victims using either open-ended questions (e.g., "Tell me about yourself") or direct, focused questions (e.g., "How old are you?"). When subsequently asked about the alleged incidents, children in the open-ended condition reported 2.5 times more relevant details in their first response than did children in the direct condition. Sternberg et al. argued that, in the rapport-building phase, children in the open-ended condition had learned how to answer open-ended questions informatively. The alleged incidents of abuse were not recorded, however, so the effects of rapport-building styles on the children's accuracy could not be assessed. Accuracy was thus explored in the present study, in which we staged events and interviewed children using the procedures described by Sternberg et al.

There are several reasons why open-ended rapport building should foster longer, more complete, and more accurate reporting than direct rapport building. As noted by Fisher and Geiselman (1992), rapport building helps to transfer control from the interviewer to the witness. Cognitive Interviewers are thus trained not to interrupt, to pause so that witnesses have time to think and respond, and to conduct the rest of their interviews in this witness-directed fashion. Open-ended questions allow children to choose what information to report and, when used in the style advocated by Sternberg et al. (1997), build directly on information already provided by children (e.g., requesting children to "tell me more about your brothers" in response to a child's disclosure that she has two older brothers). As a result, the transfer of control may perhaps best be achieved using open-ended questions that signal to children that they, rather than the interviewers, are the experts. In contrast, direct questions probe specific topics chosen by the interviewer that are often unrelated to children's previous utterances and thus may be ineffective

in transferring control to the witness. Hence, open-ended questions in the rapport-building phase may better communicate to children that they have expertise and thus foster lengthier, more complete, and more accurate accounts than would be achieved using direct rapport-building questions. Additionally, children who perceive themselves as experts may be assertive enough to resist inaccurate suggestions offered by interviewers.

An open-ended style of rapport building also provides practice in using desirable retrieval strategies. Information recalled in response to open-ended questions is consistently more accurate than the information provided in response to direct questions (e.g., Dent, 1982; Goodman & Reed, 1986; Lamb & Fauchier, 2001; Roberts & Blades, 1999) and thus practice in the rapport-building phase may encourage the continued use of recall strategies when children are subsequently interviewed about the target events. As a result, children who have practiced recalling information in the rapport-building phase should provide more accurate accounts than children who have relied on recognition strategies.

In this study, we attempted to replicate Sternberg et al.'s (1997) findings under controlled conditions. Children aged 3- to 9-years participated in a staged event comprising forensicallyrelevant details such as dressing, undressing, and taking photographs. The children were interviewed a week or a month later to assess the effects of rapport building after brief as opposed to extended delays. The interviews began with rapport-building phases that were either open-ended or direct in style, and the rest of the interviews were fully scripted to allow an examination of rapport-building effects on responses to a variety of questions. We expected children to provide longer and more informative accounts about a staged event after rapport was established using an open-ended rather than direct style. The design also allowed us to test the

hypothesis that an open-ended style of rapport building empowers children to resist false suggestions.

Method

Participants

Two-hundred and twenty-six children aged 3- to 9-years were recruited from three preschools and schools serving middle- to upper-income communities in the Mid-Atlantic region of the United States. In return for their participation, the children were given photographs, a copy of the videotaped event, and tickets to a local children's museum. Eighty-two of the children recruited were not included in the study because the script was not followed closely or the children were absent when the interviews were scheduled. This resulted in a final sample of 144 children (72 boys, 72 girls) who were divided into three age groups: 3- to 4-year-olds (n = 48, mean age 4 years 1 month; range, 36-59 months); 5- to 6-year-olds (n = 50, mean age 5 years 8 months; range, 60-83 months); and 7- to 9-year-olds (n = 46, mean age 8 years 3 months; range, 84-116 months). The numbers of boys and girls in each group were roughly equivalent.

Materials

The activities included in the event were chosen to resemble activities (such as touching, dressing and undressing) that might occur in incidents of sexual abuse. During the event, the child dressed up in a pirate costume comprising a cloak, sling, eye-patch, badge, hat, and shoes. The adult wore a cowboy costume comprising a denim shirt, waistcoat, cowboy boots and spurs, sheriff's badge, handcuffs, scarf, and cowboy hat. The photographs were taken using a camera that was mounted on a tripod and the whole event was video-recorded. The interview sessions were audiotape-recorded and later transcribed.

Procedure

Children were individually escorted to the "photography studio" by their teacher or by a confederate, and the photographer then followed a pre-determined script that lasted about 15 minutes. The photographer and child each placed different parts of the pirate costume on the child, a photograph was taken of the child, the photographer then dressed himself in a cowboy costume, and the photographer and the child were then photographed together. After the photographs, the photographer and child removed different parts of the child's pirate costume and the adult's cowboy costume following the predetermined script. As a reward for participating, the child was then allowed to take a photograph her/himself with the camera. The child was then escorted back to the classroom. The children were interviewed either a week (short delay) or a month (long delay) after the staged event by one of two female research assistants (RAs) who had each been trained to use two different interview protocols. The interviewer approached each child individually and said "I heard that you had your picture taken last week (a few weeks ago). Can you come and check to see that I have the right photos for you?". The interviewer then took the child to a quiet room that was different from the one in which the event took place. Although Interviewer A conducted 94 and Interviewer B 50 interviews, each interviewer questioned similar proportions of children in each Condition x Delay x Age cell.

There were six parts to the interview. First, the "ground rules" were explained: The interviewer introduced herself, checked that the child understood the difference between the truth and lies, told the child that s/he should correct the interviewer if the interviewer made a mistake, and instructed the child to say "I don't know" if s/he did not know the answer to a question. The rapport-building phases that followed differed across condition (see Appendix) although the same number (22) of prompts were employed in the two conditions as the children were asked

about themselves, their families, schools, and recent special occasions, such as the first day of camp. These prompts differed only with respect to the style in which they were asked: rapport was attempted with half of the children using open-ended prompts (e.g., "Tell me about yourself"; open-ended condition), whereas the other children were asked direct questions (e.g., "How old are you?"; direct condition).

In the remainder of the interview the children in both conditions were questioned about the staged event using the interview script developed by Roberts, Lamb, and Sternberg (1999). To orient the children to the photography event, the recall phase began with the prompt "I heard that last week/a few weeks ago you had your picture taken. I wasn't there that day but I'd really like to know what happened. Tell me everything that happened from the very beginning to the very end and try not to miss anything out." The child was then asked eight additional openended questions (e.g., "Tell me more about what happened when you had your picture taken so that I will know everything") and was encouraged to report everything that s/he remembered about the photography event (see Appendix for the complete script).

In the fourth phase, the child was asked 25 focused questions such as "What color was the eye-patch?" There were five categories of questions -- appearance, actions, actor, context, body location – with four questions within each category about features present in the event (focused-present questions), and one misleading question about a feature that was not present in the event (e.g., "When did he give you that big hug?" when there was no hug; focused-absent questions).

In the fifth phase of the interview, the *photo prompts* phase, the child was shown the two photographs that had been taken, asked to look at each of the photographs, think about what happened, and report any other information that they remembered. The child was then thanked

for her/his participation and promised that the photographs would be given to the teacher so that the child could take them home. Only 12 of the 144 children provided further details in response to the photo prompts (M = 7.33 details) and so these data were not analyzed further. A short *closure* statement ended the interview.

Coding

The rapport, recall, and focused questions phases of the interview were coded for the richness (number of details) of responses to the interviewer's prompts. The recall and focused questions were also coded for the accuracy of responses about the staged event. Two assistants who did not participate in the staged event and were unfamiliar with the goals of the study conducted the coding. The assistants were trained to code reliably using interviews of children who had participated in a previous study using the same event and began coding the present interviews after they had reached 85% reliability (number of agreements divided by number of agreements plus disagreements) with one another and with another experienced coder. To ensure that the coding was consistent over time, 10% of the transcripts were randomly selected and recoded by another trained rater; reliability was 89%.

Richness of reports.

Narratives were coded for the number of details reported. Each utterance was broken down into subject, verb, object, and other meaningful details, regardless of the accuracy of the information, provided that the children were responsive to the interviewers' prompts. Irrelevant or off-topic details (e.g., talking about the tape recorder) were thus not included. For example, the utterance "I like to watch movies" (given in the rapport phase) would be coded as four details for *I, like, to watch*, and *movies*, and the utterance "I wore a pirate costume" (given in the recall phase) would also be coded as four details for *I, wore, pirate, a costume*.

Accuracy of the reports.

Because the event was videotaped, the coders could check the accuracy of the details reported in response to the recall and focused questions. Details were coded if they referred to the photography event, it was the first time the details were mentioned, and the accuracy of the utterance could be verified. Each detail was coded as "accurate" (when a detail was reported as it had happened in the event), "inaccurate" (when a detail was distorted), or as an "intrusion" (when a detail that was not present in the event was reported). For example, the utterance "He put the white eye-patch on me" would be coded as four accurate details for *he*, *put_on* (verb), *the eye-patch*, and *me*, and one inaccurate detail for *white*. The utterance "He gave me a sword" would be coded as four intrusions for *he*, *gave*, *me*, *a sword* because no such action occurred.

Results

Preliminary Analyses

Separate 2 (Child gender: female, male) x 2 (Interviewer: Interviewer 1, Interviewer 2) x 2 (Condition: direct, open) analyses of variance (ANOVAs) were carried out to see whether child gender or interviewer affected the total number of details reported in the target phase (i.e., the sum of responses to the recall and focused questions). There were no effects, ps > .05.

The total length of the rapport-building phase was timed to the nearest second and entered into a 2 (Rapport-building condition: direct, open) x 2 (Delay: 1-week, 1-month) x 3 (Age: 3-4 years, 5-6 years, 7-9 years) ANOVA. The open-ended rapport building was longer (M = 16.07 minutes, SD = 11.77) than the direct rapport building (M = 5.78 minutes, SD = 3.45; F[1, 131] = 50.53, p < .001). Because the interviewers followed a script, these differences document that open-ended rapport building, as expected, provided children with more practice delivering longer narrative responses.

Separate 2 (Rapport-building condition: direct, open) x 2 (Delay: 1-week, 1-month) x 3 (Age: 3-4 years, 5-6 years, 7-9 years) ANOVAs on the total number of details provided in this phase revealed that responses to open-ended rapport-building questions were richer (F[1, 131] = 30.61, p < .001; M = 677.58 details, SD = 760.17) than responses to direct rapport-building questions (M = 166.86, SD = 190.84). There was a Condition x Age interaction on the number of details, F(2, 142) = 4.67, p < .05. The 7- to 9-year-olds gave richer responses than the 3- to 4-year-olds when rapport was established using an open-ended style, but there were no age differences in the responses of children in the direct rapport-building condition.

Reports About the Staged Event

We then analyzed the richness (number of details), and accuracy (number of accurate, inaccurate, and intruded details) of the children's responses. To directly compare responses to the three different types of questions (recall, focused-present, focused-absent), mean scores per question were calculated by dividing the dependent variable (e.g., number of details) by the total number of questions of that type (i.e., nine for the recall phase, 20 for the focused-present questions, and five for the focused-absent questions).

Richness of reports.

The mean number of details in response to each question were entered into a 2 (Rapport-building condition: direct, open) x 2 (Delay: 1-week, 1-month) x 3 (Age: 3-4 years, 5-6 years, 7-9 years) x 3 (Question type: recall, focused-present, focused-absent) ANOVA with the last factor within-subjects. There were effects for age, F(2, 132) = 29.31, p < .001, and question type, F(2, 264) = 136.86, p < .001. The 7- to 9-year-olds gave richer responses (M = 7.74 details per question, SD = 5.02) than did the 5- to 6-year-olds (M = 4.49, SD = 2.34), who were in turn more informative than the 3- to 4-year-olds (M = 2.41, SD = 1.64; Scheffé, ps < .05). At all ages,

responses to the recall questions (M = 10.44, SD = 10.65) were more detailed than responses to the focused-present questions (M = 2.28, SD = 1.13) which were more detailed than responses to the absent-feature questions (M = 1.78, SD = 1.33). There was an interaction between age and question type, F(4, 264) = 30.18, p < .001. All three age groups differed in their responses to the recall questions, with older children providing richer responses than younger children. The 7- to 9-year-olds and 5- to 6-year-olds also gave significantly more detailed responses to the focused-present questions than did the 3- to 4-year-olds, but there were no age differences in the richness of responses to the focused-absent questions (see Table 1). There was no effect of condition, F < 1.

Accuracy of reports.

The numbers of accurate, inaccurate, and intruded details per response were each entered into 2 (Rapport-building condition: direct, open) x 2 (Delay: 1-week, 1-month) x 3 (Age: 3-4 years, 5-6 years, 7-9 years) x 3 (Question type: recall, focused-present, focused-absent)

ANOVAs with the last factor within-subjects. Analyses of *accurate* details revealed effects for age, F(2, 132) = 35.55, p < .001, and question type, F(2, 264) = 155.68, p < .001. The 7- to 9-year-olds provided more accurate details per question (M = 6.21, SD = 3.78) than did the 5- to 6-year-olds (M = 3.52, SD = 2.20), who reported more accurate details than the 3- to 4-year-olds (M = 1.59, SD = 1.25; Scheffé ps < .05). Also, more accurate details were provided in response to the recall questions (M = 8.53, SD = 8.63) than the focused-present questions (M = 1.54, SD = 0.88), which elicited more accurate details than the focused-absent questions (M = 1.13, SD = 1.01). There was an Age x Question type interaction, F(4, 264) = 31.42, P < .001, because age differences were particularly pronounced in responses to the recall questions (see means in top-third of Table 2).

Analyses of *inaccurate* details revealed that the 7- to 9-year-olds (M=0.73, SD=0.74) reported more than did the younger children (Ms=0.43, 0.22, and SDs=0.35, 0.20, for the 5- to 6- and 3- to 4-year-olds, respectively; F(2,132)=12.17, p<.001; Scheffé ps<.05). Fewer inaccurate details were provided in response to the focused-absent questions (M=0.17, SD=0.38) than to the recall and focused-present questions (Ms=0.64, 0.56, SDs=1.31, 0.42, for the recall and focused-present questions, respectively; F(2,264)=15.34, p<.001). As before, age interacted with question type, F(4,264)=7.13, p<.001. Follow-up analyses showed that the effects of age varied depending on the type of question (see middle-third of Table 2). Specifically, the 7- to 9-year-olds reported more inaccurate details in response to the focused-absent questions than did the 3- to 4-year-olds; the 5- to 6-year-olds reported more inaccurate details in response to the focused-absent questions to the focused-present questions than did the 3- to 4-year-olds.

There were fewer *intrusions* per question in response to the focused-present questions (M = 0.20, SD = 0.29) than to the focused-absent questions (M= 0.47, SD = 0.81), which in turn elicited fewer intrusions than did the recall questions (M = 1.28, SD = 2.13; F[2, 264] = 29.68, p < .001). As before, question type and age interacted, F(4, 264) = 6.33, p < .001: The 7- to 9-year-olds reported more intrusions in response to the recall questions but fewer in response to the focused-absent questions than did the 3- to 4-year-olds (see means in Table 2). There was a main effect of delay, F(1, 132) = 8.51, p < .01, because there were more intrusions per question in interviews conducted after the long rather than the short delay (Long: M = 0.85, SD = 0.97; Short: M = 0.44, SD = 0.59). Delay also interacted with question type, F(2, 264) = 3.36, p < .05, however, because there were more intrusions after long rather than short delays in response to

the recall and focused-present questions, but delay did not affect the number of intrusions in response to focused-absent questions (see means in Table 3).

Because there were age differences in the numbers of accurate details and errors reported, we calculated accuracy rates by dividing the number of accurate details by the total number of details reported² and entered them into a 2 (Rapport-building condition: direct, open) x 2 (Delay: 1-week, 1-month) x 3 (Age: 3-4 years, 5-6 years, 7-9 years) x 3 (Question type: recall, focusedpresent, focused-absent) ANOVA with the last factor within-subjects. Children in the openended rapport-building condition were more accurate than were those in the direct rapportbuilding condition (F[1, 122] = 3.95, p < .05; Ms = .73, .68; SDs = 0.17, 0.20, respectively), and children interviewed after a short delay were more accurate than those interviewed after a long delay (F[1, 122] = 9.35, p < .01; Ms = .75, .67; SDs = 0.16, 0.21, respectively). In addition, 7- to 9-year-olds (M = .78, SD = 0.10) were more accurate than the 5- to 6-year-olds (M = .72, SD = .72) 0.18), who were in turn more accurate than were the 3- to 4-year-olds (M = .62, SD = 0.23; age, F[2, 122] = 10.03, p < .01; Scheffé ps < .05). Responses to the recall questions (M = .81, SD = .05). (0.23) were also more accurate than responses to the focused-present (M = .66, SD = 0.17) and focused-absent (M = .65, SD = 0.35) questions, F(2, 244) = 21.62, p < .001. A Condition x Question type interaction, F(2, 244) = 2.35, p < .05, indicated that, although the style of rapport building had no effect on the accuracy of responses to the recall and focused-present questions, children in the open-ended rapport-building condition responded more accurately to focusedabsent questions (M = .71, SD = 0.33) than children in the direct rapport-building condition did (M = .58, SD = 0.36).

In sum, reports from children in the open-ended rapport-building condition were more accurate overall, and more accurate in response to questions about fictitious details than were

reports from children who experienced a direct style of rapport building. Responses to the recall questions were more detailed and accurate than were responses to the focused questions. Finally, although the older children reported more inaccurate details, their accuracy rates were higher than those of younger children.

Other Results

Because Sternberg et al. (1997) found that open-ended rapport building primarily enhanced responses to the first substantive question, we repeated the above analyses using responses to the first open-ended recall question as dependent variables. The pattern of results regarding the richness of reports to the first recall question was identical to the results reported above on responses to all of the scripted interview questions.

With a few exceptions, analyses of the accuracy of responses to the first question also yielded results similar to those found in analyses of the complete interview. Children in the openended rapport-building condition surprisingly intruded more details than did children in the direct rapport-building condition, (F[1, 132] = 6.41, p < .05, Ms = 1.33, 0.58; SDs = 4.41, 1.44, respectively). A Condition x Delay x Age interaction, F(2, 132) = 3.53, p < .05, showed that this result was restricted to reports from the 3- to 4-year-olds and that the longer delay increased the number of intrusions reported by these children compared to same-age counterparts in the short delay condition (see Table 4 for means). Also, the accuracy rates of children in the direct rapport-building condition were higher (M = .94, SD = .15; N = 58) than those of children in the open-ended condition (M = .87, SD = .22, N = 62; F[1, 108] = 3.53, p < .05). A Condition x Age interaction, F(2, 108) = 2.78, p < .05, showed that the 3- to 4-year-olds' responses in the two conditions differed (Ms = .97, .75 and SDs = .06, .38, for the direct and open-ended conditions, respectively), whereas there were no differences in the accuracy of older children as a function of

rapport-building condition (5- to 6-year-olds: Ms = .90, .90 and SDs = .23, .14; 7-9-year-olds: Ms = .96, .92 and SDs = .07, .12, in the direct and open-ended conditions, respectively).

To see whether the 3- to 4-year-olds consistently provided more accurate reports after direct rather than open-ended rapport building, independent groups t-tests were carried out on the rates of accurate responses to each of the recall questions. Degrees of freedom differed because varying numbers of children reported event details in response to each question, and it was not possible to analyze responses to the last recall question because only three children provided any details. The style of rapport building affected responses to question 4, t(13) = -2.88, p < .01, and question 8, t(32) = -2.13, p < .05. Specifically, children in the open-ended rapport-building condition gave more accurate reports than those in the direct rapport-building condition (Question 4: t=0.93, .43, and t=0.93, .42; Question 8: t=0.93, .67, and t=0.93, .41, respectively).

Discussion

The results of this study confirm our predictions that open-ended rapport-building procedures foster more accurate accounts by children regarding experienced events. Findings such as these complement the results of research in real world contexts, and illustrate the importance of both types of research (Lamb & Thierry, in press).

Children who practiced answering open-ended questions in the rapport-building phase subsequently gave more accurate reports about a staged event than did children with whom rapport was established using a direct style. The former children were also better able to resist misleading suggestions about the event than were children in the direct rapport-building condition, suggesting that open-ended rapport building had a protective effect. For the most part, furthermore, the open-ended style of rapport building had similar benefits for children of all

ages. Because children under 6 years of age tend to provide the least detailed accounts of experienced events (Lamb, Sternberg, & Esplin, 2000; Sternberg et al., 2001), the results reported here and by Sternberg et al. (1997) underscore that open-ended rapport-building procedures may be especially useful when interviewing young children.

Why does open-ended rapport-building enhance the accuracy of reports about experienced events? Perhaps the open-ended style helped construct a socially-supportive context in which children were empowered to resist false descriptions by the interviewer and to rely instead on their own memories of the event. In addition, the open-ended style was highly dependent on information that children had already provided (e.g., "Tell me more about [something the child mentioned]") and so may have shifted the balance of power so that the children felt that they were in control and knew what had happened better than the interviewer did.

The open-ended style of rapport building may also have encouraged children to rely on diverse retrieval strategies because they practiced answering open-ended, recall questions. Such recall strategies are associated with more accurate retrieval than recognition-based processes (e.g., Dent, 1982; Goodman & Reed, 1986; Lamb & Fauchier, 2001), and practice retrieving information using recall in the rapport-building phase may have persisted into the target phase. If so, this has important implications for forensic interviewers seeking to enhance accuracy, especially in the face of delays that might otherwise degrade the quality and quantity of information retrieved (Lamb et al., 2000).

Despite such opportunities for practice during the rapport-building phase, however, the open-ended style did not produce more detailed reports than the direct style did, perhaps because children in the open-ended condition were too tired to provide extensive accounts of the event.

Interviewers spent an average of 16 minutes establishing rapport with children in the open-ended condition as opposed to six minutes in the direct rapport-building condition, so the children in the open-ended condition (especially the very youngest) may have reached the limits of their attention spans before being questioned about the staged event. Interestingly, Sternberg et al. (1997) limited rapport-building to an average of 7 minutes in both conditions and found that the open-ended style was associated with lengthier and more detailed responses to the first substantive question than was the direct style.

Only one negative effect was associated with the use of an open-ended style in the rapport-building phase. Specifically, 3- to 4-year-olds in the open-ended condition reported more intrusions in response to the first recall question about the event than did children in the direct rapport-building condition, and this was also reflected in the accuracy rate. Fortunately, the actual numbers of intrusions were low (approximately two intrusions, on average, in response to the first recall question), and the negative effect was temporary; the 3- to 4-year-olds who had experienced the open-ended style of rapport building responded to subsequent recall questions more accurately than their counterparts in the direct rapport-building condition. Nevertheless, errors that occur early in an interview can have a "snowball effect" because they tend to remain uncorrected (Roberts & Lamb, 1999), so further research on these errors would be useful.

Several practical recommendations flow from our findings. Most importantly, forensic interviewers may find it beneficial to structure a rapport-building phase with open-ended questions (e.g., "tell me about yourself", "tell me about your family", "tell me about [recent special occasion]"). Responses to questions after such rapport building in the current study were more accurate than responses to questions that followed direct rapport building. An open-ended rapport-building style may be especially beneficial when questioning children about

embarrassing events or events that they are uncomfortable disclosing (Sternberg et al., 1997). Very young witnesses often give brief responses (e.g., Goodman et al., 1991; Saywitz et al., 1991), furthermore, yet an open-ended rapport-building phase appeared to help young children as much as older children. Hence, it may help to give young witnesses and victims of crimes adequate opportunity to practice responding to open-ended recall questions. It is not clear from this study how much time needs to be spent in rapport-building activities, but Sternberg et al. observed a benefit after seven minutes. Perhaps the 16-minute long rapport-building phase in the current study was too long, taxing the children's attentional resources. Individual interviewers need to use their discretion in deciding when to terminate the rapport-building phase. Certainly, future research could address this question as well.

In sum, adoption of an open-ended style in the rapport-building phase of an interview enhanced the accuracy, but not the informativeness, of reports about a staged event. Although we did not replicate Sternberg et al.'s (1997) finding that children provided more substantive details after rapport was established in an open-ended rather than a direct manner, the effects on accuracy were noteworthy. Importantly, the beneficial effects of an open-ended rapport-building phase were evident among children aged 3- to 9-years when interviewed after both short and long delays.

References

- Dent, H. R. (1982). The effects of interviewing strategies on the results of interviews with child witnesses. In A. Trankell (Ed.), *Reconstructing the past: The role of psychologists in criminal trials* (pp. 279-297). Stockholm: Norstedt.
- Fisher, R. P., & Geiselman, R. E. (1992). *Memory-enhancing techniques for investigative interviewing: The cognitive interview*. Springfield, IL: Charles C. Thomas.
- Goodman, G. S., & Reed, R. S. (1986). Age differences in eyewitness testimony. *Law and Human Behaviour*, 10, 317-332.
- Goodman, G. S., Bottoms, B. L., Schwartz-Kenney, B. M., & Rudy, L. (1991). Children's testimony about a stressful event: Improving children's reports. *Journal of Narrative and Life History*, 1, 69-99.
- Home Office (2002). Achieving the best evidence in criminal proceedings: Guidance for vulnerable and intimidated witnesses, including children. Home Office: London, UK.
- Lamb, M. E., & Fauchier, A. (2001). The effects of question type on self-contradictions by children in the course of forensic interviews. *Applied Cognitive Psychology*, *15*, 483-491.
- Lamb, M. E., Sternberg, K. J., & Esplin, P. W. (1998). Conducting investigative interviews of alleged sexual abuse victims. *Child Abuse and Neglect*, 22, 813-823.
- Lamb, M. E., Sternberg, K. J., & Esplin, P. W., (2000). Effects of age and delay on the amount of information provided by alleged abuse victims in investigative interviews. *Child Development*, 71, 1586-1596.
- Lamb, M. E., & Thierry, K. L. (in press). Understanding children's testimony regarding their alleged abuse: Contributions of field and laboratory analog research. In D. M. Teti (Ed.),

- Handbook of research methods in developmental psychology. Malden, MA: Blackwell Publishers.
- Orbach, Y., Hershkowitz, I., Lamb, M. E., Sternberg, K. J., Esplin, P. W., & Horowitz, D. (2000). Assessing the value of structured protocols for forensic interviews of alleged child abuse victims. *Child Abuse and Neglect*, 24, 733-752.
- Poole, D. A., & Lamb, M. E. (1998). *Investigative interviews of children: A guide for helping professionals*. Washington, DC: American Psychological Association.
- Roberts, K. P., & Blades, M. (1999). Children's memory and source monitoring for real-life and television events. *Journal of Applied Developmental Psychology*, 20, 575-596.
- Roberts, K. P., & Lamb, M. E. (1999). Children's responses when interviewers distort details during investigative interviews. *Legal and Criminological Psychology*, 4, 23-31.
- Roberts, K. P., Lamb, M. E., & Sternberg, K. J. (1999). Effects of the timing of postevent information on preschoolers' memories of an event. *Applied Cognitive Psychology*, *13*, 541-560.
- Saywitz, K. J., Goodman, G. S., Nicholas, E., & Moan, S. J. (1991). Children's memories of a physical examination involving genital touch: Implications for reports of child sexual abuse. *Journal of Consulting and Clinical Psychology*, 59, 682-691.
- Siegman, A. W., & Reynolds, M. (1984). The facilitating effects of interviewer rapport and the paralinguistics of intimate communications. *Journal of Social and Clinical Psychology*, 71-88.
- Sternberg, K. J., Lamb, M. E., Hershkowitz, I., Yudilevitch, L., Orbach, Y., Esplin, P. W., & Hovav, M. (1997). Effects of introductory style on children's abilities to describe experiences of sexual abuse. *Child Abuse & Neglect*, *21*, 1133-1146.

- Sternberg, K. J., Lamb, M. E., Orbach, Y., Esplin, P. W., Mitchell, S. (2001). Use of a structured investigative protocol enhances young children's responses to free-recall prompts in the course of forensic interviews. *Journal of Applied Psychology*, 86, 997-1005.
- Stockdale, M. (1996). An evaluation of interview techniques used by police officers and social workers with sexually abused children. Unpublished Masters thesis, University of Leicester, Leicester, UK.
- Tobey, A. E., & Goodman, G. S. (1992). Children's eyewitness memory: Effects of participation and forensic context. *Child Abuse and Neglect*, *16*, 779-796.
- Warren, A. R., Woodall, C. E., Hunt, J. S., & Perry, N. W. (1996). "It sounds good in theory, but": Do investigative interviewers follow guidelines based on memory research? *Child Maltreatment*, 1, 231-245.
- Yuille, J. C., Hunter, R., Joffe, R., & Zaparniuk, J. (1993). Interviewing children in sexual abuse cases. In G. S. Goodman & B. L. Bottoms (Eds.), *Child victims, child witnesses: Understanding and improving testimony* (pp. 95-116). New York: The Guildford Press.

Appendix

The Rapport-building Phase of the Interview

Now I want to know you a little better. (Self)						
Direct condition	Open-ended condition					
1. How old are you?	1. Tell me about yourself.					
	[If the child does not answer, gives a short answer, or gets stuck, ask:]					
2. What is your favorite food?	2a. I really want to get to know you better. Tell me more about yourself.					
	[If child answers Question 1, ask:]					
	2b. Tell me more about [something that child has mentioned].					
3. Do you like to watch movies?	3. Tell me what you like to do at home.					
	[If the child does not answer, gives a short answer, or gets stuck, ask:]					
4. What is your favorite game?	4a. I really want to get to know you better. Tell me more about what you like to do at					
	home.					
	[If child answers Question 3, ask:]					
	4b. Tell me more about [something that child has mentioned].					

Direct condition	Open-ended condition						
You've told m	e about yourself. Now, I want to hear about your family. (Family)						
5. Who is in your family?	5. Tell me all about your family.						
6. How old are your brothers and	6a. I'd really like to know all about your family. Tell me more about them.						
sisters?	6b. Tell me more about [something that child has mentioned].						
7. What things do you have in your	7. Tell me all about the house where you live.						
bedroom?							
8. Do you have any pets at home? 8a. I'd like to know all about your house. Tell me more about it.							
	8b. Tell me more about [something that child has mentioned].						
You've told me about yo	our home and family. Now, I want to hear about your school/camp. (School)						
9 What grade/which room are you in?	9. Tell me about your school/camp.						
10. Are you a good student/camper?	10. Tell me more about school/camp.						
11. What do you like best about	11. Tell me what you like to do at school/camp.						
school/camp?							
12. What do like least in school/camp?	12. Tell me more about [something the child has mentioned].						
13. Who is your teacher/counselor?	13. Tell me about your teacher.						

Direct condition	Open-ended condition					
14. Is s/he nice?	14. Tell me more about [something the child has mentioned].					
15. Who are your friends?	15. Tell me about your friends.					
16. What games do you play together?	16. Tell me more about [something the child has mentioned].					
A few	days/weeks ago you started camp. (Recent special occasion)					
17. What games did you play on the	17. Tell me all about your first day at camp.					
first day of camp?						
18. What was the best thing that you	18a. I really want to know all about your first day at camp. Think about it again and tell me					
had to do?	what happened from the time you got up that morning until the time you went to bed.					
	18b. Tell me what happened from the time you got up that morning until the time you went					
	to bed.					
19. What was the worst thing that you	19. Tell me everything that happened every detail from the very beginning					
had to do?	to the very end. [If the child, for example, says: "We sang songs", ask her/him: "Tell me					
	everything that happened when you sang songs, every detail from the very beginning to the					
	very end." If response is brief or repetitive, use "that day"]					
20. What songs did you sing?	20. Tell me a little bit more about [something the child has mentioned] or					

Direct condition	Open-ended condition							
	And [then] what happened?							
21. What did you eat for lunch?	21. Tell me what happened at lunch time from the very beginning to the very end.							
22. Who did you sit with?	22a. I'm really interested in hearing how you spent lunch time. Try hard to help							
	understand everything that you did at lunch time from the minute it started to the minute it							
	ended.							
	22b. Tell me more about [something the child has mentioned] or And [then]							
	what happened?							
	It sounds like you had a [great] time.							

Footnotes

¹ One child's responses to the four questions about family were not recorded for technical reasons and so data from 143 children were used in these analyses.

²Accuracy rates could not be computed for six children who did not provide any details about the event in response to the recall questions, and four children who provided no details in response to the focused-absent questions.

Table 1

The richness of responses (average number of details per question) as a function of age and question type.

			Ques	tion type				
-	Recall Focused-Prese			-Present	Focused	l-Absent	Total	
-	M	SD	M	SD	M	SD	М	SD
3- to 4-year-olds	3.91	3.93	1.78	0.81	1.53	1.36	2.41	1.64
5- to 6-year-olds	9.27	6.18	2.40	1.06	1.81	1.20	4.49	2.34
7- to 9-year-olds	18.54	13.74	2.67	1.31	2.00	1.42	7.74	5.02
Total	10.44	10.65	2.28	1.13	1.78	1.33	4.83	3.93

Table 2

The average number and accuracy of details per question as a function of age and question type.

Accurate Details								
Question type	Rec	call	Focused-Present		Focused-Absent		Total	
Age	M	SD	M	SD	M	SD	M	SD
3- to 4-year-olds	2.96	3.22	1.10	0.61	0.70	0.66	1.59	1.25
5- to 6-year-olds	7.74	5.70	1.56	0.76	1.27	1.18	3.52	2.20
7- to 9-year-olds	15.20	10.56	1.98	1.03	1.43	1.00	6.21	3.78
Total	8.53	8.63	1.54	0.88	1.13	1.01	3.74	3.19
Inaccurate Details								
3- to 4-year-olds	0.16	0.47	0.44	0.31	0.07	0.18	0.22	0.20
5- to 6-year-olds	0.49	0.92	0.66	0.49	0.15	0.33	0.43	0.35
7- to 9-year-olds	1.31	1.89	0.57	0.42	0.31	0.52	0.73	0.74
Total	0.64	1.31	0.56	0.42	0.17	0.38	0.46	0.52
Intrusions								
3- to 4-year-olds	0.78	1.91	0.24	0.34	0.76	1.12	0.60	0.86
5- to 6-year-olds	1.06	1.27	0.19	0.28	0.39	0.58	0.55	0.55
7- to 9-year-olds	2.03	2.83	0.16	0.25	0.26	0.50	0.82	1.01
Total	1.28	2.13	0.20	0.29	0.47	0.81	0.65	0.83

Question type								
•	Recall Focused-Present Focused-Absent Total							
Delay	M	SD	M	SD	M	SD	М	SD
Short	0.84	1.61	0.14	0.19	0.35	0.55	0.44	0.59
Long	1.69	2.47	0.25	0.35	0.59	0.98	0.85	0.97
Total	1.23	2.13	0.20	0.29	0.47	0.81	0.65	0.83

Table 4

The effects of rapport-building condition, delay, and age on the number of intruded details in response to the first substantive question.

Rapport-building Condition	Direct		Open	-ended
Delay	M	SD	M	SD
Short:				
3- to 4-year-olds	0.00	0.00	0.17	0.58
5- to 6-year-olds	0.00	0.00	1.38	2.06
7- to 9-year-olds	0.00	0.00	6.00	11.13
Total	0.00	0.00	2.39	6.57
Long:				
3- to 4-year-olds	0.17	0.58	2.50	3.68
5- to 6-year-olds	1.75	4.52	1.92	3.15
7- to 9-year-olds	2.46	4.24	1.83	5.47
Total	1.49	3.64	2.08	4.09