

Does enhanced rapport-building alter the dynamics of investigative interviews with suspected victims of intra-familial abuse?

Irit Hershkowitz · Michael E. Lamb · Carmit Katz ·
Lindsay C. Malloy

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Abstract Professional guidelines for forensic interviews of children emphasize cognitive factors associated with memory retrieval and pay less attention to emotional factors that may inhibit cooperativeness. Can an additional focus on rapport-building alter the dynamics of interviews with alleged victims of intra-familial abuse, who are often uncooperative? Transcripts of interviews with 199 suspected victims who made allegations when interviewed were coded to identify expressions of interviewer support and children's reluctance and uncooperativeness in the pre-substantive portions of the interviews. Half of the children were interviewed using a Protocol that emphasized enhanced rapport-building and non-suggestive support, the others using the standard NICHD Protocol. Although there were no group differences in the use of recall-based questions, interviews conducted using the rapport-focused Protocol contained more supportive comments and fewer unsupportive comments. Children interviewed in this way showed less reluctance and the level of reluctance was in turn associated with the number of forensically relevant details provided by the children. A focus on enhanced rapport-building thus altered interview dynamics without changing the appropriateness or forensic riskiness of the questions asked.

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I. Hershkowitz
University of Haifa, Haifa, Israel

M. E. Lamb · C. Katz · L. C. Malloy
University of Cambridge, Cambridge, UK

M. E. Lamb (✉)
Department of Psychology, University of Cambridge,
Free School Lane, Cambridge CB2 3RQ, UK
e-mail: mel37@cam.ac.uk

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Suspected victims of child abuse are likely to face stress attributable not only to the abuse itself but also to its disclosure and the ensuing investigation. In particular, when children have experienced abuse perpetrated by parents or guardians, they may experience conflicting emotions which make them reluctant to disclose (London, Bruck, Ceci, & Shuman, 2005). In such circumstances, the interviewers' support may be especially crucial in helping children to overcome their anxiety and discomfort (Hershkowitz, Orbach, Lamb, Sternberg, & Horowitz, 2006). Although research-based best practice guidelines such as the NICHD Protocol have suggested a structured rapport-building phase, they have predominantly emphasized cognitive factors associated with children's memory retrieval and reporting in interview contexts and have paid much less attention to the motivational factors that may inhibit the cooperativeness and informativeness of some interviewees. The current study assessed a revision of the NICHD Protocol designed to increase the effectiveness of rapport-building employed by interviewers striving to motivate children to be cooperative.

Reviews of the extant literature suggest that many alleged victims do not disclose abuse when formally interviewed and that disclosure is affected by a variety of factors, among which the relationship between suspects and children appears to be especially important (Hershkowitz et al., 2005; London et al., 2005, 2007; London, Bruck, Wright & Ceci, 2008). Children are particularly hesitant to report abuse by parents and guardians (e.g., Di-Pietro et al., 1997; Goodman-Brown et al., 2003; Hershkowitz et al., 2005; Pipe et al., 2007; Sas et al., 1993; Sjoberg & Lindblad, 2002, Ussher & Dewberry, 1995; Wyatt & Newcomb, 1990). Such reluctance is even greater for boys than for girls, for preschoolers rather than

for older children, and when sexual rather than physical abuse is suspected. For example, Pipe et al. (2007) reported that only 38% of the preschoolers interviewed disclosed sexual abuse by a parent even when the allegations were independently substantiated by corroborative evidence. Indeed, only 12% of the preschool-aged boys included in Hershkowitz et al.'s analysis of Israeli national statistics disclosed suspected (not necessarily substantiated) sexual abuse by parents.

In addition to characteristics of children or of child-suspect relationships, the quality of the interaction between children and forensic interviewers may profoundly affect the likelihood of disclosure and how much information children provide. In a study exploring the dynamics of interviews with children whose victimization had been independently verified, Hershkowitz et al. (2006) identified a pattern of escalating uncooperativeness and coercion among both interviewers and children which served only to harden the children's reluctance. In a rapport-building pre-substantive phase, the children's initial uncooperativeness was clearly challenging for the interviewers, whose response, by way of intrusive questioning, unsupportiveness and the premature mention of sensitive topics, was counterproductive. Specifically, the children who later failed to disclose abuse seemed to avoid establishing rapport with the interviewers early in the interviews; they were less responsive to interviewers' questions than their disclosing peers and provided fewer personally meaningful details about neutral experiences when invited to do so. In response, interviewers were unsupportive and then attempted to explore the possibility that abuse had taken place by transitioning prematurely into the substantive phase. Interviewers also addressed fewer open-ended questions and fewer supportive comments to uncooperative than to cooperative children, increasing the resistance of uncooperative children. Hershkowitz et al. concluded that the interviewers' strategies were counter-productive because they did not address the children's emotional needs; the researchers recommended that, in such circumstances, interviewers should make increased efforts to establish meaningful rapport and should avoid shifting the focus to substantive issues until children appear comfortable and cooperative. Interviewers, they advised, should be more, rather than less, supportive of resistant children. Because the non-disclosing children had started showing their reluctance early in the rapport building phase, Hershkowitz et al. stressed the importance of identifying and addressing reluctance at the very beginning of the interview, before negative dynamics had emerged. Subsequent research showed that non-disclosers expressed their initial reluctance nonverbally as well (Katz et al., 2012), thereby providing interviewers with additional cues for identifying uncooperative interviewees.

Other researchers have also underscored the importance of rapport-building and emotional support when interviewing suspected victims who may be unwilling to cooperate and may thus falsely deny being abused. Good rapport facilitates

communication with children and encourages them to affirm and describe traumatic experiences in clinical (Bogg & Eyberg, 1990; Morgan & Friedemann, 1988; Wood, McClure & Birch, 1996), evaluative (Kanfer, Eyberg & Krahn, 1992; Powell & Lancaster, 2003) and investigative interview (Aldridge & Wood, 1998; Goodman & Bottoms, 1993; Hynan, 1999; McBride, 1996; Powell & Thomson, 1994; Ruddock, 2006) settings. Effective rapport-building seems to decrease anxiety and distress, empowering children and increasing their level of engagement, thereby motivating children who have indeed been abused to talk about their experiences (e.g., Siegman & Reynolds, 1983).

Field research shows that rapport is best established when 1) children are invited early in the interview to share personally meaningful information in detail and are prompted using open-ended questions to elaborate on it (Hershkowitz, 2009; Roberts, Lamb & Sternberg, 2004; Sternberg et al., 1997), 2) interviewers say less and instead encourage children to talk (Teoh & Lamb, 2010), and 3) rapport-building is neither too lengthy nor too cognitively burdensome (Davies, Westcott & Horan, 2000; Hershkowitz, 2009). More generally, Hershkowitz (2009) reported a positive association between interviewer support and the number of forensically relevant details children provided. In her study, support was defined as a) non-suggestive encouragement of the children's efforts but not the contents (topics) of their statements, and b) addressing the children by name. Importantly, Hershkowitz showed that supportiveness need not be accompanied by suggestiveness.

Laboratory analogue studies show that supportiveness both improves the accuracy of information provided by children (Greenstock & Pipe, 1997, exp. 2; Moston, 1992) and reduces their suggestibility (Cornah & Memon, 1996; Greenstock & Pipe, 1997, exp.1, but see also Greenstock & Pipe, 1996). Compared to non-supportive interviewers, supportive interviewers elicit more accurate free-recall information from preschoolers (Goodman & Clarke-Stewart, 1991), even after delays as long as one year (Bottoms, Quas & Davis, 2007). Children in supportive conditions are more resistant to misleading questions when their memory is tested immediately after an event (Carter, Bottoms & Levine, 1996; Davis and Bottoms, 2002) or after a 4-week delay (Goodman & Clarke-Stewart, 1991, but see also Imhoff & Baker-Ward, 1999). Although the effects of support may vary depending on individual differences in children's ages and talkativeness (Hershkowitz, 2009), social support networks, attachment styles, or working memory capacity (Bottoms et al., 2007; Davis & Bottoms, 2002), there is no evidence that interviewer supportiveness can be harmful to accuracy, unless it is associated with suggestiveness (Bottoms et al., 2007).

There is thus clear evidence that rapport-building is important, and that interviewers often fail to behave supportively when interviewing children who appear uncooperative. Can these dynamics be changed? There is considerable evidence that

interviewers' behavior is quite resistant to change (Aldridge & Cameron, 1999; Freeman & Morris, 1999; Lamb, Sternberg, Orbach, Hershkowitz, Horowitz, & Esplin, 2002; Stevenson, Leung, & Cheung, 1992; Warren, Woodall, Thomas, Nunno, Keeney, Larson, & Stadfeld, 1999) unless they are trained to use structured interview protocols and have regular follow up meetings to ensure continued compliance with recommended practices (Cyr & Lamb, 2009; Lamb et al., 2009; Lamb, Sternberg, Orbach, Esplin, & Mitchell, 2002; Orbach et al., 2000; Sternberg et al., 2001). To date, unfortunately, researchers have only shown that interviewers can be trained to use more developmentally appropriate questions at more appropriate times and have not sought to show that interviewer supportiveness can be similarly altered. In the present study, accordingly, we sought to create alternative, more supportive, dynamics when forensically interviewing children who were likely to be uncooperative. Building on the research described above, we revised the well-studied NICHD Investigative Interview Protocol by providing interviewers with more guidance about how to behave supportively yet not suggestively and build rapport more effectively with interviewees. We hoped that adherence to the rapport-enhanced Revised NICHD Protocol would help interviewers build better rapport with children, and that this would in turn help children overcome any initial reluctance to cooperate, thus enhancing willingness to discuss experiences of abuse, if they had indeed been abused, although such differences in allegation rates were not explored in the present study.

The current report describes the first empirical test of the 'Revised NICHD Protocol.' We sought to determine whether more cooperative dynamics could be established during the initial phases of investigative interviews by training interviewers to focus additional attention on their own supportiveness and by then comparing the dynamics of interviewer-child rapport-building interactions in interviews conducted using either the Standard (SP) or Revised (RP) Protocols. All children were suspected of having been abused by family members, and were thus expected to be somewhat uncooperative. We predicted that, in the RP condition as opposed to the SP condition:

- a) Interviewers would be more supportive of the children in all phases of the interview
- b) Children would display fewer signs of reluctance to engage; and in turn
- c) Lower reluctance would be associated with the production of more forensic details.

Method

Seven experienced child interviewers from all regions of Israel conducted a total of 613 interviews using the SP and 811 interviews using the RP with suspected victims of child abuse

by family members over a 16-month period. The SP has been mandatory since 1996 and all interviewers had been trained to use it before the study started. The interviewers continued conducting interviews using the SP for 8 months before they were introduced to the RP in a 2 day-long session during which the RP was explained and the new strategies were described and practiced via role-playing exercises. The interviewers then conducted interviews using the RP for 8 months. Throughout the study, group and individual supervision was provided to participating interviewers by two of the authors in monthly scheduled sessions. While supervision on SP interviews focused on the cognitive factors emphasized by this Protocol (e.g., the construction of open-ended questions and the use of retrieval cues), supervision of RP interviews focused exclusively on socio-emotional factors (e.g., rapport-building and emotional support).

Out of 1424 interviews, 200 interviews (100 SP, 100 RP) in which the children made allegations were selected for the purpose of the current study by matching across groups with respect to the children's ages and gender, the type of suspected abuse, and the specific relationships between suspects and victims (see Table 1). One RP interview was excluded from the sample because the child simply confirmed but did not describe the abuse. The children ($N=199$; 89 boys and 110 girls) were 4 to 13 years of age ($M=8.33$, $SD=2.66$) and all alleged physical ($n=154$) or sexual ($n=45$) abuse by family members: parents ($n=173$), siblings ($n=10$) or other family members ($n=16$). No group differences were evident with respect to age, gender, abuse type or suspect identity.

All allegations made in the interviews were deemed highly credible by the investigators but not all were substantiated. However, 131 of the 199 cases (65.8%) were substantiated, and there were similar rates of substantiation in the RP and SP groups. Substantiation of the allegations included: external evidence (suspect admissions, eyewitness testimony, medical evidence and/or material evidence) ($n=45$, 34.4%); CPS substantiation of child abuse (42, 32.1%); siblings' reports in formal interview contexts indicating that the child in our study had been abused (11, 8.4%), and victims' disclosures to disinterested figures or professionals prior to the investigation (33, 25.2%). In 80 cases (61.1%), there was one type of substantiation, in 48 (36.6%) cases there were 2 types and in 3 (2.3%) cases, there were 3.

The NICHD Investigative Interview Protocol

The NICHD Protocol (Lamb et al., 2008) is fully structured, covering all phases of the investigative interview. In the introductory phase, interviewers introduce themselves, clarify the children's task (i.e., the need to describe actually experienced events truthfully and in detail), and explain the ground rules and expectations (i.e., that children can and should say 'I don't remember', 'I don't know', 'I don't understand', or

Table 1 Sample characteristics

Sample Characteristics	SP	RP
Gender		
Male	48	41
Female	52	58
Abuse		
Physical	77	77
Sexual	23	22
Suspect		
Parent	87	86
Sibling	4	6
Other	9	7
Substantiation		
Yes	67	64
No	33	35
Child's mean age	$M=8.34$ $SD=2.64$	$M=8.31$ $SD=2.69$

correct the interviewers when appropriate). The rapport-building (RB) phase comprises two sections. The first is a structured open-ended section designed to encourage children to provide personally meaningful information (e.g., what they like to do). In the second ('practice narrative') section, children are prompted to describe in detail at least one recently experienced event in order to further develop rapport between children and interviewers. In addition to its rapport building function, this phase of the interview is designed to simulate both the open-ended investigative strategies and the retrieval of episodic memory that will take place in the substantive phase. This phase is also intended to demonstrate to children the specific level of detail expected of them.

In a transitional phase (TR) between the pre-substantive and the substantive parts of the interview, open-ended prompts are used to identify the target event/s to be investigated (e.g., Tell me why you came to talk to me today). If the child does not disclose in response to open-ended prompts, the interviewer proceeds to increasingly focused yet non-suggestive prompts, and makes reference to available information about previous disclosures, physical marks, or other evidence only as a last resort. As soon as an allegation is obtained, the substantive part (S) of the interview takes place and the free recall phase begins with the main invitation ("Tell me everything that happened from the beginning to the end as best you can remember"). Follow up open-ended prompts are then recommended ("Then what happened?"; "Tell me more about that"), as are cued invitations ("Earlier you mentioned a *person/object/action/time/location*, tell me everything about that") aimed at eliciting uncontaminated accounts of the alleged incident/s from free recall memory. As soon as the first narrative is completed, interviewers determine whether the incident occurred "one time or more

than one time" and proceed thereafter to secure incident-specific information.

Only after the open-ended questioning has been exhausted do interviewers proceed to directive questions (focused questions, mostly in wh- format, addressing details previously mentioned by the child such as "what colour was his car?" after the child mentioned a car). If crucial details are still missing at the end of the interview, interviewers may ask limited option-posing questions (mostly yes/no questions referencing new information that the child failed to address previously such as "Did he touch any part of his body when he was talking to you?"). Suggestive prompts which communicate what responses are expected ("At that time he was lying on top of you, wasn't he?") are strongly discouraged in all phases of the interview.

In addition to the book cited earlier, readers can access copies of the Protocol at NICHDPProtocol.com.

The Revised NICHD Investigative Interview Protocol

Several changes and additions were made to the rapport-building part of the Protocol for the purposes of the current study. In order to enhance trust and cooperation, the rapport building preceded (rather than followed) explanation of the ground rules and expectations, and additional guidance was provided to interviewers with respect to building and maintaining rapport. In addition to both inviting free-recall narratives about recent experiences and prompting children to provide more information about personally-meaningful topics using open-ended invitations, interviewers were encouraged to express interest in the children's experiences during the rapport building phase ('I really want to know you better'), to use the children's names, to echo children's feelings ('you say you were [*sad/angry/the feeling mentioned*]'), to acknowledge such feelings ('I see/ I understand what you're saying') or to explore them ('Tell me more about [*the feeling*]'). The revised instructions advised interviewers to encourage the children verbally and nonverbally to describe experienced events throughout the interview. Positive reinforcement of the children's efforts ('Thank you for sharing that with me' or 'You're really helping me understand'), but not of what they said, was recommended. Similarly, expressions of empathy with the children's expressed feelings regarding the interview experience ('I know [*it is a long interview/there are many questions/other difficulties the child expressed*]'), but not regarding past experiences, were also encouraged.

Data Coding

Video recordings of the interviews were transcribed and checked to ensure their completeness and accuracy before the rapport-building phase of each interview was coded. Two raters classified the types of utterances interviewers used as *recall prompts* (including open-ended invitations and

directive prompts) or *recognition prompts* (including option-posing or suggestive prompts as defined earlier). In addition, the raters identified all *supportive* verbal expressions as detailed in the previous paragraph, as well as *Unsupportive comments*, including comments on or criticisms of the children's behavior, ignoring their requests or expressions of emotion, and confrontations with them. In the presentation of results below, supportive and unsupportive comments are collectively described as interventions.

With respect to the children's behavior, the raters identified *responsive* replies—those in which the children provided relevant information in response to the interviewers. *Reluctant* responses were identified and classified as *Omissions* (including no answer, don't remember, not sure, unfinished, unclear, nothing else to tell you); *Resistance* (including negative responses to the interviewers "You ask too many questions", don't want/ can't tell/"I don't want to/cannot tell you about that" responses, or setting conditions such as 'I'll answer only this last question'); or *Denials* ('Nothing happened' expressed verbally or non-verbally).

To control for variations in the absolute number of prompts addressed to individual children during the interview, all scores measuring the numbers of interviewer comments of each type or of the children's different responses were converted into proportions of the total number of prompts or responses, respectively, for purposes of analysis.

The raters also tabulated the number of *forensically relevant details* conveyed in the children's descriptions of the investigated events during the substantive part of the interview by employing a technique first developed by Yuille and Cutshall (1986, 1989) and elaborated by Lamb et al. (1996). Details were defined as words or phrases identifying or describing individuals, objects, or events (including actions) related to the neutral event. Details were counted only when they were new and added to understanding of the target events.

Before coding transcripts for the study, the raters were trained on an independent set of transcripts until they agreed on the identification of at least 90% of the interviewers' and children's utterances and behaviors as well as the numbers of details. During the course of coding, 20% of the transcripts were independently coded by both coders to ensure that they agreed on the identification of at least 90% of the interviewers' and children's utterances and behaviors as well as the numbers of details. Coders were not familiar with the conditions or with the researchers' hypotheses.

Results

Protocol Differences in Interviewers' Questioning Style

Approximately 20 prompts were addressed to the children in the average rapport-building (RB) phase ($M= 20.23$,

$SD=6.48$), 10 prompts in the transitional (TR) phase ($M= 10.42$, $SD=10.02$) and 96 prompts in the substantive (S) phase ($M= 96.08$, $SD=66.73$). One-way (procedure: SP, RP) ANOVAs with the number of prompts as the dependent variable revealed no procedure differences in the number of prompts used by the interviewers in all three phases.

The composition of questions in each phase was then explored. In the RB phase, A 2 (prompt type: recall, recognition; within-subject) X 2 (procedure: SP, RP, between-subject) mixed-model ANOVA exploring the types of prompts addressed to the children revealed no effect for procedure and no procedure X prompt type interaction, but an effect for prompt type ($F(1,197)= 1501.98$, $p<.001$, $\eta_p^2 = .88$), indicating that proportionally more recall than recognition prompts were directed to the children, regardless of procedure.

In the TR and S phases, the types of prompts explored also included non-substantive prompts. 3 (prompt type: recall, recognition, non-substantive; within-subject) X 2 (procedure: SP, RP, between-subject) mixed model ANOVA exploring the types of prompts addressed to the children again revealed no effect for procedure but an effect for prompt type ($F(2,171)= 203.64$, $p=.000$, $\eta_p^2 = .70$ *tr*) ($F(2,171)= 203.64$, $p=.000$, $\eta_p^2 = .70$ *s*), indicating that proportionally more recall than recognition prompts, and more recognition than non-substantive prompts were directed to the children. In addition, during the TR phase, a significant prompt type by procedure interaction ($F(2,171)= 5.04$, $p=.007$, $\eta_p^2 = .06$) indicated that children interviewed with the RP received proportionally more recall and non-substantive prompts and proportionally fewer recognition prompts than children interviewed with the SP, suggesting that allegations obtained in RP interviews were prompted with more appropriate means than those obtained in SP interviews.

Protocol Differences in Interviewers' Support

In the average prompt, interviewers used .29 ($SD= .15$) supportive interventions in the RB phase, .11 ($SD= .16$) in the TR phase and .05 ($SD= .08$) in the S phase. Corresponding rates for unsupportive interventions were: .01 ($SD=.03$) in the RB phase, .03 ($SD=.07$) in the TR phase and .02 ($SD=.03$) in the S phase. In all three phases, 2 (intervention type: supportive, unsupportive, within-subject) X 2 (procedure: SP, RP: between-subject) mixed-model ANOVA revealed main effects for intervention type ($F_{rb}(1,197)= 628.68$, $p<.001$, $\eta_p^2 = .76$; $F_{tr}(1,172)= 50.93$, $p=.000$, $\eta_p^2 = .228$; $F_s(1,172)= 24.73$, $p=.000$, $\eta_p^2 = .11$) indicating that interviewers made more supportive than unsupportive interventions overall. In addition, during the RB and TR phases, a procedure effect ($F_{rb}(1,197)= 20.29$, $p<.001$, $\eta_p^2 = .09$; $F_{tr}(1,172) = 38.21$, $p=.000$, $\eta_p^2 = .18$) as well as an interaction between intervention and procedure

($F_{rb}(1,197)=29.66, p<.001, \eta_p^2=.13$; $F_{tr}(1,172)=50.04, p=.000, \eta_p^2=.23$) were evident. Although the procedure effect showed that the average prompt in RP interviews contained more interventions than in SP interviews, the interaction made clear that RP interviews contained more positive but fewer negative interventions than SP interviews.

Protocol Differences in Children's Behavior

Children's reluctance In the average response, children in the RB phase showed reluctance in the following ways: .18 ($SD=.14$) instances of omission, .03 ($SD=.06$) instances of resistance, and .02 ($SD=.04$) instances of denials (see Table 2). Corresponding figures for the TR phase were: .09 ($SD=.16$) instances of omission, .15 ($SD=.20$) instances of resistance and .37 ($SD=.28$) denials and for the S phase: .12 ($SD=.11$) instances of omission, .08 ($SD=.11$) instances of resistance and .03 ($SD=.06$) denials. A 3 (reluctant responses: omission, resistance, denial; within-subject) X 2 (procedure: SP, RP; between-subject) mixed-model ANOVA revealed a main effect for procedure in the RB and S phases ($F_{rb}(1,197)=11.42, p=.001, \eta_p^2=.06$; $F_s(1,197)=8.94, p=.003, \eta_p^2=.04$), indicating that children interviewed using the RP showed less reluctance than children interviewed using the SP. In addition, a significant interaction in the RB phase ($F(1,197)=6.08, p=.014, \eta_p^2=.03$) and near significant interaction in the S phase ($F(2,196)=2.44, p=.090, \eta_p^2=.02$) revealed that although children interviewed with the RP showed reduced reluctance on all measures, this reduction was more marked for omission responses.

Children's production of forensic details

By definition, forensic details are obtained in the substantive phase. On average, children provided 1.96 ($SD=.12$) details in response to prompts in this phase. There was no effect for procedure but an effect for prompt type ($F(2,171)=203.64, p=.000, \eta_p^2=.70$) indicated that proportionally more details were provided in response to recall as opposed to recognition or non-substantive prompts.

Table 2 Children's reluctance (means per prompt) by Protocol type

Children's reluctance	Protocol	<i>M</i>	<i>SD</i>	<i>N</i>
Omission	SP	.21	.15	100
	RP	.15	.12	99
Resistance	SP	.03	.06	100
	RP	.03	.07	99
Denial	SP	.03	.05	100
	RP	.02	.04	99

Pearson correlations were then computed in order to observe variations in the number of details as a function of reluctance in the substantive phase. All measures of reluctance (omission, resistance and denial) were negatively correlated with the number of details elicited using recall prompts.

A linear regression including age, proportions of questions of each type (recall, recognition, non-substantive) in the substantive phase, support (total number of supportive comments), and reluctance (total number of reluctant responses) in the substantive phase, was significant ($F(3,194)=24.15, p=.000$) explaining 26.4% of the variance in the average number of details per prompt. Age, proportion of recall prompts and reluctance were significant predictors of the numbers of details provided: Older children reported more details than younger children, recall prompts elicited more details than recognition prompts, and more reluctant children provided fewer details than less reluctant children.

In sum, use of the RP was associated with increased support in the rapport-building and transitional phases, alongside decreased reluctance in the rapport-building and substantive phases but not in the transitional phase. Nevertheless, during the transitional phase, allegations were proportionally more likely to be obtained in RP interviews using recall prompts and proportionally less likely to be obtained using recognition prompts than in SP interviews. Although there were no group differences in the numbers of details produced, decreased reluctance in the substantive phases was associated with the production of more forensic details. The production of details was predicted by reluctance, age, and prompt type.

Discussion

The current study was designed to test whether use of enhanced rapport-building and supportive yet non-suggestive techniques would help alleged victims of intra-familial abuse become less reluctant and more cooperative with forensic interviewers. Based on empirical research, a revised version of the NICHD Protocol was formulated for the purpose of this study. The 'Revised NICHD Protocol' emphasized rapport-building and non-suggestive support. In the current study, we focused on investigative interviews with children suspected of having been abused by family members because previous research shows that such children are most reluctant to disclose abuse (Hershkowitz et al., 2005, 2007; London, Bruck, Ceci, & Shuman, 2005, 2007; London, Bruck, Wright & Ceci, 2008; Pipe et al., 2007). We closely examined the dynamics of interviews with matched groups of children who subsequently made allegations when interviewed using either version of the Protocol.

As expected, interviewers using the RP made more frequent and more effective efforts to establish rapport than they did when using the Standard version of the Protocol (which focuses on cognitive factors and maximizing free-recall). Whereas interviewers made more (though still relatively few) negative comments and were initially less supportive of reluctant children during rapport building when using the SP (replicating results reported in earlier studies; Hershkowitz et al., 2006), the opposite was true when the RP was employed. Interviewers using the RP thus complied with expert advice concerning the importance of providing more non-suggestive support to reluctant children (Bottoms et al., 2007). Other research on reluctant interviewees indicates that support should be provided as early as possible in the interview to avoid the emergence of negative dynamics (Hershkowitz et al., 2006; Katz et al., 2012; Lamb et al., 2008). Accordingly, the RP guidelines listed supportive comments that might be used at the very beginning of the interview, before and during the RB phase, such as welcoming the child ("I am glad to meet you today, Daniel"), using his/her name, and expressing care ("How are you doing this morning?") or appreciation ("Thank you for coming to see me, Sara"). Such examples of non-suggestive support were designed to help prevent the cycle of reluctance and coercion in which reluctant children and interviewers are often entwined (Hershkowitz et al., 2006). In addition, the structure of the RP protocol was changed, instructing interviewers to engage in rapport-building activities before discussing the ground rules for the interview.

Overall, we found that use of the RP indeed helped interviewers to provide more non-suggestive support for the children while building rapport with them. Exploration of the later phases of the interview revealed that interviewers using the RP continued to provide higher levels of non-suggestive support when they started to explore the possibility that abuse had occurred. Enhanced support in this transitional phase may explain why children in the RP condition more often made allegations in response to open-ended prompts rather than more focused ones. Disclosure following open-ended prompts reflects higher levels of cooperativeness from the children and most importantly increases the likelihood that the allegations were valid and accurate.

However, while interviewers using the RP were clearly more supportive in the pre-substantive and transitional phases than those using the SP, this pattern did not continue into the substantive phase, after allegations had been made. RP interviewers apparently emphasized the importance of obtaining an allegation and attempted to motivate children to disclose abuse, but failed to continue providing higher levels of support while discussing the allegations once they had been made.

The changes in interviewer behavior brought about by use of the Revised Protocol were achieved following intensive

training supplemented by regular monitoring and supervision throughout the course of the study. Although the use of structured Protocols is clearly associated with improved interview practices (Poole & Dickinson, 2005), these changes are only assured by ongoing monitoring and supervision (Lamb et al., 2002).

Because the revisions to the NICHD Protocol studied here focused only on non-suggestive rapport-building and supportiveness, without altering the recommended questioning style, it is not surprising that interviewers utilizing the RP did not use fewer recall prompts than when utilizing the SP, and even used more such prompts in the transitional phase when exploring the possibility that abuse had occurred. Researchers have repeatedly underscored the importance of using open-ended prompts and avoiding focused questions when attempting to establish rapport with children (Roberts, Brubacher, Powell & Price, 2011; Sternberg et al., 1997), including reluctant children (Hershkowitz et al., 2006; Hershkowitz, 2011), but this was the first study to show that they could continue doing this while also altering the supportiveness and empathic components of their behavior.

The data showed that children interviewed using the RP displayed less reluctance in the RB phase than children interviewed using the SP. The more friendly structure of the RP, with rapport-building begun prior to presentation of the ground rules and higher levels of non-suggestive support at the onset of the interview, appeared to help children in the RP condition become less reluctant, allowing for better rapport between interviewers and children. As other researchers have suggested (Bottoms et al., 2007), the creation of a supportive environment is likely to have reduced the children's anxiety, while increasing their confidence and sense of self efficacy, thereby enhancing their cooperativeness.

Interestingly, children in the RP condition showed less reluctance in the substantive phase as well, even though the interviewers were not more supportive during this phase. Thus, reduced reluctance in the substantive part was attributable to the better rapport established early in RP interviews, further emphasizing the role of rapport-building in investigative interviews.

Most importantly, reduced reluctance in the substantive phase was in turn associated with the production of more forensic details, emphasizing that the dynamics of interviewer support and child cooperation may also affect the richness of the testimony the children provide. Unfortunately, because interviewers using the RP failed to maintain higher levels of support in the substantive phase of the interview, possible effects on the richness of forensic statements could not be tested in this study although it seems that the absence of group differences in the numbers of details provided reflects the interviewers' failures to remain supportive after the children made

allegations. Previous research has shown that good rapport and supportiveness enhance the quality of children's reports made by children (Ruddock, 2006). Future field research using the RP will thus need to emphasize the importance of support throughout the interview.

A methodological limitation of this study should be noted. In this field study, it was impossible to conduct a fully controlled experiment, so we used a quasi-experimental design that does not allow us to draw conclusions about causality with the same level of confidence. Because we employed a pre-post design with the same interviewers using the RP procedures after conducting SP interviews, it is unclear whether order effects interacted with protocol effects. In other words, it appears possible that accumulating experience by the interviewers or the more extended periods of training and supervision they received before completing their RP interviews may explain their superior interviewing. However, the precautions taken to reduce such confounds limit this risk. First, only experienced interviewers participated in the study so the additional experience gained while doing the SP interviews was relatively minor. Second, the additional training or supervision provided in the RP phase of the study focused not on best-practices but only on building and maintaining rapport. The analyses conducted for this study confirm that similarly appropriate questions types were employed in the pre (SP) and post (RP) intervention interviews and that only the rapport-building practices differed. This suggests that the decreased reluctance displayed by children in RP interviews could be attributable to improved rapport. Of course, in such pre-post intervention designs, group comparability must be determined before data analysis, as it was in the current study, eliminating potential group differences with respect to age, gender, abuse type or suspect identity.

In sum, the expected benefits of supportive rapport building with children were apparent in reduced levels of reluctance throughout the interview. Because (1) the supportive strategies included in the RP were carefully designed to be non-suggestive, and (2) interviewer support is known to increase rather than decrease the accuracy of children's statements (Bottoms et al., 2007), it is reasonable to assume that disclosures made under supportive conditions would be at least as likely to be valid as those made in standard interviews. Nevertheless, a replication of this study with a sample of substantiated cases, including those who disclosed as well as those who failed to do so, would be valuable. Further, it remains to be seen whether the increased cooperativeness and reduced reluctance on the part of children interviewed using the RP indeed changes the willingness of children to make valid allegations of abuse; this study only included children who made allegations, so that measure of 'effectiveness' could not be examined.

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