

Support and Reluctance in the Pre-Substantive Phase of Alleged Child Abuse Victim

Investigative Interviews: Revised versus Standard NICHD Protocols

Elizabeth C. Ahern^a, Irit Hershkowitz^b, Michael E. Lamb^a, Uri Blasbalg^b, &

Alice Winstanley^a

^aUniversity of Cambridge

^bUniversity of Haifa

This research was supported by the Nuffield and Jacobs Foundations. Address correspondence to Dr. Elizabeth C. Ahern at Department of Psychology, University of Cambridge, Free School Lane, Cambridge, CB2 3RQ, United Kingdom; email: eca35@cam.ac.uk

Abstract

Children's unwillingness to report abuse places them at risk for re-victimization, and interviewers who do not respond sensitively to that unwillingness may increase the likelihood that victims will not disclose abuse. Interviewer support and children's reluctance were examined on a turn-by-turn basis using sequential analyses in 199 forensic interviews of 3-to-13-year-olds who alleged maltreatment. Half of the children were interviewed using the Revised Protocol that emphasized rapport-building (RP), the others using the Standard NICHD Protocol (SP). When using the RP, interviewers provided proportionally more support than when using the SP, but even when using the RP they did not specifically provide support when children expressed reluctance. The RP promoted immediate cooperation when reluctant utterances were met with support, however, suggesting that supportive statements were valuable. The findings enhance our understanding of children's willingness to participate in investigative interviews and the means through which interviewers can foster the comfort and well-being of young witnesses.

Keywords: child investigative interviewing, reluctance, support, sequential analyses

Support and Reluctance in the Pre-Substantive Phase of Alleged Child Abuse Victim

Investigative Interviews: Revised versus Standard NICHD Protocols

Children's feelings of embarrassment or fear and their desire to protect people they love may make them reluctant to disclose maltreatment (Berliner & Conte, 1990; Sas & Cunningham, 1995), especially when they were abused by caretakers (London, Bruck, Ceci, & Shuman, 2005; Lyon, 2002; Paine & Hansen, 2002). Interviewers' support may be particularly critical in helping such children to overcome their anxiety and discomfort in forensic settings (Hershkowitz, Orbach, Lamb, Sternberg, & Horowitz, 2006). The National Institute of Child Health and Human Development (NICHD) Protocol is the most widely researched child interviewing guideline (Lamb, Orbach, Hershkowitz, Esplin, & Horowitz, 2007). Although the NICHD Protocol maximizes the amount of reliable information children report in interviews (Lamb et al., 2008), many children exhibit reluctance when interviewed (Hershkowitz et al., 2006). The NICHD Protocol includes a structured rapport-building phase but it emphasizes cognitive factors associated with children's memory retrieval (Hershkowitz, Lamb, Katz, & Malloy, 2013) rather than socio-emotional factors associated with children's reluctance. Researchers have thus begun to test modifications to the NICHD Protocol, including interventions designed to facilitate children's emotional comfort and their motivation to cooperate with interviewers (Hershkowitz et al., 2013; Hershkowitz, Lamb, & Katz, 2014). The current study compared the Standard NICHD Protocol to a socio-emotion-based revision in order to examine the sensitivity of interviewers' responses to children's reluctant utterances and the momentary effects of interviewer support, in response to children's reluctance, on children's responsiveness.

Children's Unwillingness to Report Abuse

Alleged child abuse victims often do not disclose maltreatment when formally interviewed (Hershkowitz, Horowitz, & Lamb, 2005). The likelihood of disclosure is

affected by a variety of factors, among which the relationship between suspects and children is especially important (London et al., 2005). Motivational factors make more than a third of suspected victims, and unknown numbers of unidentified victims, reluctant to disclose abuse (Hershkowitz et al., 2005). Adults participating in retrospective surveys report several reasons for not disclosing abuse when they were children (Anderson, Martin, Mullen, Romans, & Herbison, 1993; Fleming, Mullen, & Bammer, 1997), including embarrassment and shame, as well as expectations of being blamed, disbelieved or failing to elicit help. They also reported not wanting to upset others, protecting abusers, and/or fearing abusers (Anderson et al., 1993). Children involved in child maltreatment investigations reveal similar concerns, including fear of offenders (Sas & Cunningham, 1995), physical harm, negative emotions, and concerns over legal consequences to suspects (Malloy, Brubacher, & Lamb, 2011).

Benefits of Rapport Building

Several researchers have shown the importance of rapport-building and emotional support when interviewing uncooperative suspected child abuse victims (Goodman & Bottoms, 1993; Hynan, 1999; McBride, 1996; Powell & Thomson, 1994; Ruddock, 2006) as a means to increase children's engagement and feelings of empowerment while decreasing anxiety and distress during the investigative interview (e.g., Siegman & Reynolds, 1983).

Laboratory research has shown that non-suggestive support increases children's accuracy (Greenstock & Pipe, 1997 exp. 2; Moston, 1992), enhances their resistance to misleading questions (Carter, Bottoms, & Levine, 1996; Davis & Bottoms, 2002; Imhoff & Baker-Ward, 1999), and reduces their suggestibility (Cornah & Memon, 1996; Greenstock & Pipe, 1997, exp.1; Greenstock & Pipe, 1996; Quas et al., 2005). Field studies to date have shown that children's cooperation can be established when children are invited to share personally meaningful information during the pre-substantive phase of the interview

(Hershkowitz, 2009; Roberts, Lamb, & Sternberg, 2004; Sternberg et al., 1997) and when interviewers encourage children to talk (Teoh & Lamb, 2010).

Interviewers Should (but don't) Respond to Reluctance with Support

Children's emotional discomfort and unwillingness to disclose abuse may result in uncooperative behavior during investigative interviews to which interviewers should respond sensitively. Field research has shown that interviewer support increases the likelihood that abused children will disclose (Hershkowitz et al., 2006) and the amount of information they provide (Hershkowitz, 2009; Ruddock, 2006). However, when speaking to reluctant children, interviewers provided fewer supportive comments and more coercion than to non-reluctant children, which increased children's reluctance rather than cooperativeness (Hershkowitz et al., 2006). The interviewers' insensitive responses neglected children's emotional needs and tended to prompt abbreviated accounts. Thus, researchers recommended that interviewers should be more, rather than less, supportive of uncooperative children (Hershkowitz et al., 2006).

Revised Protocol Study

Given the substantial evidence that support is beneficial and that interviewers struggle to respond supportively to children's reluctance, the Revised Protocol (RP) was designed to increase children's emotional comfort during investigative interviews (Hershkowitz et al., 2013, 2014). Specifically, the RP included a friendlier version of the pre-substantive phase and provided guidance for interviewers to use non-suggestively supportive comments, especially in response to reluctant displays (see Method Section for details).

A comparison of the Revised and Standard Protocols (Hershkowitz et al., 2013) revealed that, during the pre-substantive phase, the Revised Protocol (RP) was associated with increased support and decreased reluctance. However, support and reluctance were only

measured at an aggregate level, as was the case in other studies examining support in forensic interviews (Hershkowitz, 2009; Hershkowitz, Orbach, Lamb, Sternberg, & Horowitz, 2002; Hershkowitz et al., 2006). Because proportionally more support and less reluctance was provided in RP than SP interviews, we sought to examine, at a turn-by-turn level, how sensitively interviewers responded to children's displays of reluctance and the immediate effects of supportive comments on children's cooperation.

Thus, in the present study, we identified conversational turns in which reluctance was exhibited in order to examine 1) the likelihood that they would be followed by immediate support from interviewers and 2) whether that support affected the children's behavior in the next conversational turn.

Importance of Examining the Pre-Substantive Phase

The present study focused on the pre-substantive phase for several reasons. For one, the RP increased aggregate levels of support during the pre-substantive phase of the interview, making it the appropriate section of the interview to examine in this sample (Hershkowitz et al., 2013). In addition, because the goal of the pre-substantive phase is to be supportive (Lamb et al., 2008), interviewers should be especially invested in making efforts to establish rapport during this portion of the interview. Moreover, because the pre-substantive phase focuses on non-allegation topics, interviewers face minimal risk in providing support that could be construed as suggestive of abuse. Thus, interviewers should feel more comfortable providing support during this period. The provision of support during the pre-substantive phase of the interview can prevent uncooperativeness during later stages in the interview when children are asked to speak about alleged abuse (Hershkowitz et al., 2006, 2013; Katz et al., 2012), making it critical that interviewers provide support early in their interactions with child witnesses. The fact that non-disclosing children suspected of being abused appear uncooperative in the pre-substantive phase (Katz et al., 2012; Orbach,

Shiloach & Lamb, 2007) highlights the opportunities that interviewers have to respond to reluctance with support early in the interview.

Current Study

This is the first study to examine patterns of support and reluctance on a turn-by-turn basis using lag sequential analyses, comparing the same RP and Standard NICHD Protocol (SP) interviews that had been studied by Hershkowitz et al. (2013). Lag sequential analyses were used to provide unique insight into how and when supportive comments were helpful in child-interviewer dyadic exchanges. Specifically, we examined whether interviewers immediately responded sensitively to children's reluctant utterances with support, whether that provision of support promoted children's subsequent cooperation, and whether these effects were more apparent in the RP than the SP. 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 respond to reluctant utterances (as opposed to non-reluctant utterances) proportionately more often.
- b) Given a reluctant utterance, the effect of support (versus no support) would increase the proportion of subsequent responses that were non-reluctant.

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 had 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 researchers in monthly scheduled sessions. Whereas 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 on 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) of children who made allegations when interviewed were selected and matched across Protocol with respect to the children's ages and gender, the type of suspected abuse, and the specific relationships between suspects and victims. No other inclusion criteria were employed. 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 3 to 13 years of age ($M = 8.28$, $SD = 2.66$) 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 allegations (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 ($n = 42$, 32.1%); siblings' reports in formal interview contexts indicating that the children in our study had been abused ($n = 11$, 8.4%), and victims' disclosures to disinterested figures or professionals prior to the investigation ($n = 33$, 25.2%). In 80 cases (61.1%), there was one type of substantiation, in 48 cases (36.6%) there were two types, and in three cases (2.3%), there were three.

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 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 correct the interviewers when appropriate). The rapport-building 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 section, children are prompted to describe in detail at least one recently experienced event in order to further develop rapport between children and interviewers and familiarize children with the level of detail expected of them. 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.

The Revised NICHD Investigative Interview Protocol

Changes were made to the rapport-building component of the SP for the purposes of the current study. First, to enhance children's emotional comfort, trust, and cooperation, the rapport building preceded (rather than followed) explanation of the ground rules and expectations. Second, interviewers were trained to use non-suggestively supportive comments, which included: expressions of interest in the children's experiences ('I really want to know you better'), using the children's names, echoing children's feelings ('You say you were [sad/angry/the feeling mentioned], acknowledging such feelings ('I see/ I understand what you're saying') or exploring them ('Tell me more about [the feeling]'), positively reinforcing the children's efforts ('Thank you for letting me listen' or 'You're really helping me understand') but not what they said, and expressing empathy about the

interview experience ('I know [it is a long interview/there are many questions/other difficulties the child expressed]'). Third, interviewers were encouraged to use supportive comments in response to instances of children's reluctance specifically.

Data Coding

Interview videos were transcribed and checked to ensure completeness and accuracy. Interviewer support was coded for each conversational turn. Support included addressing children by name, acknowledging children's feelings ('You said you were annoyed. Tell me more about being annoyed. '), reinforcing children's efforts during the interview ('You are helping me understand'), and/or empathising about the interview experience ('I know it is a long interview'). The variable "support" was the sum of all the types of support displayed during each conversational turn.

Child reluctance was also coded for each conversational turn. Reluctant responses included omissions ('no answer', 'don't remember', 'unsure'), resistance ('you ask too many questions', 'don't want/can't tell', 'I'll answer only this last question'), and denials ('nothing happened'). The variable "reluctance" was the sum of all the types of reluctance displayed during each conversational turn.

Two coders were trained on an independent set of transcripts until they achieved at least 90% agreement before coding the transcripts. To ensure reliability throughout the course of coding, 20% of the transcripts were independently coded by both coders and subjected to periodic checks to ensure that the same (or better) level of reliability was evident. Coders were blind to protocol condition.

Analytic Plan

The data were prepared so each conversational turn contained a dichotomous score for the presence of support and another dichotomous score for the presence of reluctance. Specifically, turns containing at least one instance of support were coded as supportive (1)

and turns without support were coded as non-supportive (0). Turns containing at least one instance of reluctance were coded as reluctant (1) and turns without reluctance were coded as non-reluctant (0).

Data were analysed using the Generalized Sequential Quierier program in order to assess support and reluctance on a turn-by-turn basis (GSEQ version 4.2.0; Bakeman & Quera, 2011). Sequential analysis describes how, in the flow of exchanges in an interaction, some behaviors are temporally related. Typically, a sequential research question asks which behavior (the given) is more likely to have come before another behavior (the target) of interest (Bakeman & Quera, 2011).

In the first layer of analyses, support was the target, and reluctant (versus non-reluctant) utterances were the givens. That is, the focus was on what preceded the onset of support. Thus, chains of reluctance followed by support and chains of non-reluctance followed by support were identified to compute the dependent variables. In another layer of analyses, children's non-reluctant utterances were the targets, and child reluctance followed by support (versus no support) were the givens. Thus, chains of reluctance followed by support followed by non-reluctance and chains of reluctance followed by no support followed by non-reluctance were identified. Lag-sequential analysis was used to test the hypotheses explained above (Bakeman & Gottman, 1997). Conditional and transitional probabilities (the proportion of occurrences of a particular target at lag 1, relative to the proportion of a specified given at lag 0) were calculated for planned analyses of variances (ANOVAs).

The numbers of relevant conversational turns were converted into proportions to control for variations in the absolute number of conversational turns. Mean proportion scores were normally distributed as shown by measures of skewness and kurtosis.

Did Reluctant Utterances Elicit Support More Often in RP than SP interviews?

The average numbers and percentages of conversational turns containing reluctance and support are shown in Table 1. All instances of interviewer support were examined to assess interviewer sensitivity to reluctant as opposed to non-reluctant child utterances. We hypothesized that reluctant utterances would be followed by support more than non-reluctant responses would be, and that support would be offered in the RP more often than in the SP.

A mixed model analysis of variance was conducted to compare effects due to Protocol on interviewer responses to child reluctance (Table 2). Child utterance (reluctant, not reluctant) was entered as the within subjects factor with Protocol (SP, RP) and age group (younger: 3.02 to 8.07 year olds [$M = 6.09$, $SD = 1.33$], older: 8.08 to 13.30 year olds [$M = 10.55$, $SD = 1.57$]) entered as between subjects factors. The dependent variable was the average proportion of child utterances followed by support. Nineteen cases involved no reluctant utterances during the pre-substantive phase and were excluded from the analyses (SP: $n = 6$; RP: $n = 13$). Only a main effect due to Protocol emerged, $F(1, 175) = 13.56$, $p < .001$, $\eta_p^2 = .07$, showing that, when using the RP, the interviewers provided proportionally more support ($M = .27$, $SD = .12$) than when using the SP ($M = .20$, $SD = .12$) regardless of whether the interviewer was responding to reluctant or non-reluctant child utterances. However, interviewers did not respond selectively to reluctant as opposed to non-reluctant utterances, and this was demonstrated further by Yule's Q for SP and RP ($M = .40$, $SD = .50$ and $M = .42$, $SD = .43$, respectively). Yule's Q is a measure of effect size that indicates how commonly a given behavior preceded the target rather than non-target behaviors and can range from -1 to 1.

Given a Reluctant Utterance, Did Support (Rather than Non Support) Affect Children's Subsequent Non-Reluctance?

We hypothesized that, when reluctance was followed by support, it was more likely to be followed by non-reluctance than when reluctance was followed by no support and that this effect would be especially apparent in RP interviews.

A mixed model analysis of variance was conducted to assess differences between interview Protocols on the effects of support on children's subsequent non-reluctance (Table 3). Support (support, no support) following a child's reluctant utterance, was entered as the within subjects factor with Protocol (SP, RP) and age group (young, old) entered as between subjects factors. The dependent variable was the average proportion of subsequent turns on which children provided non-reluctant utterances.

A main effect emerged for support, $F(1, 97) = 5.18, p = .03, \eta_p^2 = .05$. Children provided proportionally more non-reluctant utterances in response to support ($M = .68, SD = .38$) than no support ($M = .60, SD = .28$). Support interacted with Protocol, $F(1, 97) = 3.87, p = .05, \eta_p^2 = .04$. To investigate the predicted interaction, ANOVAs were conducted for each Protocol, with support entered as the repeated subjects factor. An effect due to support emerged for the RP, $F(1, 41) = 6.15, p = .02, \eta_p^2 = .13$, with children in the RP providing proportionally more non-reluctant utterances in response to support ($M = .73, SD = .39$) than in response to no support ($M = .53, SD = .29$). However, no effect due to support emerged for the SP, $F(1, 58) = .002, p = .97, \eta_p^2 = 0$, as children responded to support ($M = .65, SD = .37$) and no support ($M = .65, SD = .26$) with similar rates of non-reluctance. No effects due to age emerged. Yule's Q was significantly greater than 0 for the RP ($M = .42, SD = .82$), $t(37) = 3.13$, so non-reluctance was more likely to have been preceded by reluctance-support than reluctance-no support in the RP condition. Yule's Q was not significantly greater than 0 for the SP ($M = .03, SD = .83$), $t(47) = .29, p = .77$.

Discussion

The purpose of this study was to examine the momentary effects of interviewer support on children's reluctance when alleging abuse as well as any differences in those effects attributable to the specific interview protocol being employed. Analyses focused on the pre-substantive phase because non-disclosing children exhibit reluctance during this phase (Katz et al., 2012; Orbach, Shiloach, & Lamb, 2007) to which interviewers' supportive responses are especially critical to ensure children's comfort and participation (Hershkowitz et al., 2006; Katz et al., 2012). We expected the effects of support to be especially marked when the RP was being used. This was the first study to examine patterns of support and reluctance on a turn-by-turn basis in investigative interviews of children alleging maltreatment.

Protocol Effects

Contrary to our first prediction, children's reluctant utterances were not followed by interviewer support more often in RP than in SP interviews. Although higher percentages of support were provided in RP than in SP interviews, RP support was not attuned to reluctance specifically. The results thus suggested that, although interviewer training had some effects on interviewer behavior (i.e., the interviewers complied with recommendations to provide more support generally), the effects were non-specific (i.e., the interviewers did not provide support immediately and selectively in response to reluctant utterances).

In accordance with our second prediction, reluctance that was followed by support was more likely to promote non-reluctant behavior than was reluctance followed by no support, though only for children interviewed using the RP. Thus, the provision of support during RP interviews appeared to facilitate cooperation but the provision of no support in the RP interviews appeared to decrease children's subsequent cooperation, which suggests possible negative effects.

Why Didn't Interviewers Immediately Respond to Reluctance with Support?

Interviewers' failure to respond to reluctance with immediate support may have prevented them from promoting children's cooperation. It is possible that interviewers did not have sufficient opportunities to practice responding to reluctance because reluctant utterances comprised a relatively small portion of the total number of utterances in the pre-substantive portions of these interviews (23%). In addition, interviewers might not have perceived children's omissions (e.g., 'I don't know') as indices of reluctance but as factual statements that did not require supportive responses. Prior research also shows that interviewers tend to respond to children's uncooperativeness negatively, rather than supportively (Hershkowitz et al., 2006). Thus, interviewers may find it difficult, even when trained to be supportive, to behave accordingly when faced with uncooperativeness.

Use of Support in Investigative Interviews

Benefits of support in investigative interviews of cases with strong suspicions of abuse include increasing the likelihood of abuse disclosure (Hershkowitz et al., 2006; Hershkowitz et al., 2014). Previous research on the RP shows its aggregate effects on reducing reluctance and that, in turn, decreased reluctance was associated with increases in the number of forensic details reported (Hershkowitz et al., 2013, 2014). In the present study, the fact that support provided in response to reluctant utterances promoted children's cooperation in the RP highlights the localized effects of supportive comments that meet children's reluctance without delay.

At a more global level, it is likely that the generally supportive environment reduced the children's anxiety, while increasing their confidence and sense of self efficacy, thereby facilitating their cooperativeness (Bottoms et al., 2007). The friendlier, more casual, structure of the RP, with rapport-building occurring before ground rules and the provision of more support overall, appeared to help children in the RP become more responsive to support at the

outset of the interview, allowing for better cooperation and communication between interviewers and children altogether.

However, children were less likely to be non-reluctant following no support than support in the RP. These negative effects might indicate that children in the RP had come to expect support, and thus became less responsive when not provided with support. In addition, because the RP is associated with slightly higher rates of disclosure than the SP (Hershkowitz et al., 2014), the RP condition may have contained some additional children who would otherwise have not disclosed, thus making a small portion of the children in the RP sample especially reluctant.

Limitations and Future Directions

To address the difficulty some interviewers had responding to reluctance with support, a more elaborated protocol on how and when to react to children's reluctance may be necessary. In particular, recommendations might be developed based on reluctant utterance type, an appropriate fit between reluctant utterance type and supportive comment, and the phase of the interview. In cases where children do not disclose despite strong suspicions of abuse, it may sometimes be appropriate to continue building rapport in a follow-up interview session (Carnes, Nelson-Gardell, Wilson, & Orgassa, 2001; Faller, Cordisco-Steele, & Nelson-Gardell, 2010; Faller & Nelson-Gardell, 2010), although it is important that the process be non-suggestive (and see below).

Understanding interviewers' immediate reactions to children's uncooperativeness may also be key in formulating interviewer training. Future lines of research might investigate interviewers' emotional reactions (e.g., frustration) and the techniques they use to decrease their own displays of negative affect and increase empathy. If interviewer frustration is tied to lack of support in response to reluctance, interviewer training might include relaxation techniques, the use of breaks to reduce frustration, and the use of written examples of

reluctant utterances (e.g., 'I want to go' 'I don't know' 'Nothing') and supportive statements (e.g., 'It is ok' 'You are doing well') to remind and guide them in the interview room.

Future work might also examine the effects of different supportive statements on children's reluctance. In the present study, instances of support included referencing the child in a personal way (e.g., using the child's name or terms of endearment), which suggests that it may not take much for interviewers to increase children's cooperativeness early in the interview. However, more explicit statements of support (e.g., inquiries into children's emotional states, expressions of empathy, explicit reassurances) may be especially effective in securing rapport and continued cooperation when the interview transitions from neutral topics into the substantive phase. Moreover, despite the fact that support in the present study was equally effective for younger and older children, certain forms of support might be especially beneficial for children at different ages (Hershkowitz, 2009; Saywitz, Goodman, Nicholas, & Moan, 1991) and this possibility should be explored. Although the present study examined the effects of support at the micro-level, the sample sizes for such analyses decreased and the cumulative effects of support were not considered.

Future research should investigate other modifications to the rapport-building phase of investigative interviews. In the present study, it was unclear which component(s) of the RP enhanced the efficacy of support on subsequent responding. Modifying the content of the episodic memory training section of the pre-substantive phase to include emotional events rather than neutral events might enhance trust and cooperation between children and interviewers (Sharpley, Fairnie, Tabary-Collins, Bates, & Lee, 2000). Specifically, reporting emotional events during the pre-substantive phase may increase children's comfort in disclosing other emotional events, including abuse. This may be because children gain increased confidence about reporting upsetting information during the pre-substantive phase (Ahern & Lyon, 2013).

Although the present study showed that support had positive effects on children's responsiveness, such findings may be limited to children who are eventually willing to disclose abuse. Children who ultimately do not disclose abuse may respond differently to support, perhaps requiring explicitly supportive statements or interview sessions exclusively devoted to the establishment of rapport. Thus, future work might examine both disclosing and non-disclosing children.

Child victims and child offenders may be reluctant to disclose for different reasons though they both may be responsive to empathic and supportive interviewing interventions. In turn, future work might investigate revisions to the existing Suspect Interview Protocol (Hershkowitz, Horowitz, Lamb, Orbach, & Sternberg, 2004) to include supportive components.

The findings highlight the utility of supportive comments designed to manage children's reluctance while demonstrating the difficulties interviewers have in responding to reluctance with targeted support. Future studies on the use of support in child investigative interviews are critical to enhancing our understanding of children's willingness to disclose maltreatment, and of effective ways of managing such reluctance, to ensure children's safety.

References

- Ahern, E. C., & Lyon, T. D. (2013). Facilitating maltreated children's use of emotional language. *Journal of Forensic Social Work, 3*(2), 176–203.
doi:10.1080/1936928X.2013.854124
- Anderson, J., Martin, J., Mullen, P., Romans, S., & Herbison, P. (1993). Prevalence of childhood sexual abuse experiences in a community sample of women. *Journal of the American Academy of Child and Adolescent Psychiatry, 32*(5), 911–919.
- Berliner, L., & Conte, J. (1990). The process of victimization: The victims' perspective. *Child Abuse & Neglect, 14*, 29–40.
- Bottoms, B. L., Quas, J. A., & Davis, S. L. (2007). The influence of the interviewer-provided social support on children's suggestibility, memory and disclosures. In M. E. Pipe, M. E. Lamb, Y. Orbach, & A. C. Cederborg (Eds.), *Child sexual abuse: Disclosure, delay, and denial* (pp. 135-157). Mahwah, NJ: Erlbaum.
- Carnes, C. N., Nelson-Gardell, D., Wilson, C., & Orgassa, U. C. (2001). Extended forensic evaluation when sexual abuse is suspected: A multisite field study. *Child Maltreatment, 6*(3), 230–242. doi:10.1177/1077559501006003004
- Carter, C. A., Bottoms, B. L., & Levine, M. (1996). Linguistic and socioemotional influences on the accuracy of children's reports. *Law & Human Behavior, 20*, 335–358.
- Cornah, C. E. and Memon, A. (1996) 'Improving children's testimony: The effects of social support', presented at the biennial meeting of the American Psychology–Law Society, Hilton Head, TX.
- Davis, S. L., & Bottoms, B. L. (2002). The effects of social support on the accuracy of children's reports: Implications for the forensic interview. In I. B. Weiner (Ed.), *Personality and clinical psychology series* (pp. 437–457). Chichester, England: Wiley.

- Faller, K. C., Cordisco-Steele, L., & Nelson-Gardell, D. (2010). Allegations of sexual abuse of a child: what to do when a single forensic interview isn't enough. *Journal of Child Sexual Abuse, 19*(5), 572–89. doi:10.1080/10538712.2010.511985
- Faller, K. C., & Nelson-Gardell, D. (2010). Extended evaluations in cases of child sexual abuse: how many sessions are sufficient? *Journal of Child Sexual Abuse, 19*(6), 648–68. doi:10.1080/10538712.2010.522494
- Fleming, J., Mullen, P., & Bammer, G. (1997). A study of potential risk factors for sexual abuse in childhood. *Child Abuse & Neglect, 21*(1), 49–58. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/9023022>
- Goodman, G., & Bottoms, B.L. (Eds.). (1993). *Child victims, child witnesses: Understanding and improving testimony*. New York, NY: Guilford.
- Greenstock, J. and Pipe, M. E. (1996) 'Interviewing children about past events: The influence of peer support and misleading questions', *Child Abuse and Neglect, 20*, 69–80.
- Greenstock, J. and Pipe, M. E. (1997) 'Are two heads better than one? Peer support and children's eyewitness reports', *Applied Cognitive Psychology, 11*, 461–83.
- Hershkowitz, I. (2009). Socioemotional factors in child sexual abuse investigations. *Child Maltreatment, 14*(2), 172–81. doi:10.1177/1077559508326224
- Hershkowitz, I., Horowitz, D., & Lamb, M. E. (2005). Trends in children's disclosure of abuse in Israel: A national study. *Child Abuse & Neglect, 29*(11), 1203–1214. doi:10.1016/j.chiabu.2005.04.008
- Hershkowitz, I., Horowitz, D., Lamb, M. E., Orbach, Y., & Sternberg, K. J. (2004). Interviewing youthful suspects in alleged sex crimes: a descriptive analysis. *Child Abuse & Neglect, 28*(4), 423–38. doi:10.1016/j.chiabu.2003.09.021

- Hershkowitz, I., Lamb, M.E., & Katz, C. (2014). Allegation rates in forensic child abuse investigations: Comparing the Revised and Standard NICHD Protocols. *Psychology, Public Policy, and Law*, 20, 336-344. doi: [10.1037/a0037391](https://doi.org/10.1037/a0037391)
- Hershkowitz, I., Lamb, M. E., Katz, C., & Malloy, L. C. (2013). Does enhanced rapport-building alter the dynamics of investigative interviews with suspected victims of intra-familial abuse? *Journal of Police and Criminal Psychology*. doi:10.1007/s11896-013-9136-8
- Hershkowitz, I., Orbach, Y., Lamb, M. E., Sternberg, K. J., & Horowitz, D. (2002). A comparison of mental and physical context reinstatement in forensic interviews with alleged victims of sexual abuse. *Applied Cognitive Psychology*, 16(4), 429–441. doi:10.1002/acp.804
- Hershkowitz, I., Orbach, Y., Lamb, M. E., Sternberg, K. J., & Horowitz, D. (2006). Dynamics of forensic interviews with suspected abuse victims who do not disclose abuse. *Child Abuse & Neglect*, 30(7), 753–769. doi:10.1016/j.chiabu.2005.10.016
- Hynan, D. J. (1999). Interviewing: Forensic psychological interviews with children. *Forensic Examiner*, 8, 25-28.
- Imhoff, M. C., & Baker-Ward, L. (1999). Preschoolers' suggestibility: Effects of developmentally appropriate language and interviewer supportiveness. *Journal of Applied Developmental Psychology*, 20, 407-429.
- Katz, C., Hershkowitz, I., Malloy, L. C., Lamb, M. E., Atabaki, A., & Spindler, S. (2012). Non-verbal behavior of children who disclose or do not disclose child abuse in investigative interviews. *Child Abuse & Neglect*, 36(1), 12–20. doi:10.1016/j.chiabu.2011.08.006
- Lamb, M. E., Hershkowitz, I., Orbach, Y., & Esplin, P. W. (2008). *Tell me what happened:*

Structured investigative interviews of child victims and witnesses. Chichester, UK: Wiley.

- Lamb, M. E., Orbach, Y., Hershkowitz, I., Esplin, P. W., & Horowitz, D. (2007). A structured forensic interview protocol improves the quality and informativeness of investigative interviews with children: a review of research using the NICHD Investigative Interview Protocol. *Child Abuse & Neglect, 31*(11-12), 1201–31. doi:10.1016/j.chiabu.2007.03.021
- London, K., Bruck, M., Ceci, S. J., & Shuman, D. W. (2005). Disclosure of child sexual abuse: What does the research tell us about the ways that children tell? *Psychology, Public Policy, and Law, 11*(1), 194–226. doi:10.1037/1076-8971.11.1.194
- Lyon, T. D. (2002). Expert testimony on the suggestibility of children: Does it fit? In B. L. Bottoms, M. B. Kovera, & B. D. McAuliff (Eds.), *Children, social science, and the law* (pp. 378–411). New York: Cambridge.
- Malloy, L. C., Brubacher, S. P., & Lamb, M. E. (2011). Expected consequences of disclosure revealed in investigative interviews with suspected victims of child sexual abuse. *Applied Developmental Science, 15*, 8–19.
- Mcbride, K. L (1996). Child sexual abuse investigations: A joint investigative approach combining the expertise of mental health and law enforcement professionals. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 56*, 51-52.
- Moston, S. (1992). Social support and children's eyewitness testimony. In H. Dent and R. Flin. (Eds.), *Children as Witnesses* (pp. 33–46). Oxford, UK: John Wiley and Sons.
- Orbach, Y., Shiloach, H., & Lamb, M. (2007). Reluctant disclosers of child sexual abuse. In M. E. Pipe, M. E. Lamb, Y. Orbach, & A. C. Cederborg (Eds.), *Child sexual abuse:*

Disclosure, delay and denial (pp. 115–134). Mahwah, NJ: Lawrence Erlbaum Associates.

Paine, M. L., & Hansen, D. J. (2002). Factors influencing children to self-disclose sexual abuse. *Clinical Psychology Review, 22*(2), 271–95. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/11806022>

Powell, M. B., & Thomson, D. M. (1994). Children's eyewitness- memory research: Implications for practice. *Families in Society, 75*, 204-216

Roberts, K., 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

Quas, J., Wallin, A.R., Papini, S., Lench, H., & Scullin, M.H. (2005). Suggestibility, social support, and memory for a novel experience in young children. *Journal of Experimental Child Psychology, 91*, 315-341.

Ruddock, A. C. (2006). *The relationship of interviewer rapport behaviors to the amount and type of disclosure from children during child abuse investigations*. California School of Professional Psychology.

Sas, L. D., & Cunningham, A. H. (1995). *Tipping the balance to tell the secret : Public discovery of child sexual abuse* (Vol. 6). London Family Court Clinic.

Saywitz, K. J., Goodman, G. S., Nicholas, E., & Moan, S. F. (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*(5), 682–691.

Sharpley, C. F., Fairnie, E., Tabary-Collins, E., Bates, R., & Lee, P. (2000). The use of counsellor verbal response modes and client-perceived rapport. *Counselling Psychology Quarterly, 13*(1), 99–116.

Siegman, A.W., & Reynolds, M.A. (1983). Effects of mutual invisibility and topical intimacy on verbal fluency in dyadic communication. *Journal of Psycholinguistic Research, 12*, 443-455.

Sternberg, K. J., Lamb, M. E., Hershkowitz, I., Yudilevitch, L., Orbach, Y., Esplin, P. W., & Hovav. (1997). Effects of introductory style on children's abilities to describe experiences of sexual abuse. *Child Abuse & Neglect, 21*(11), 1133–1146.

Teoh, Y. S., & Lamb, M. E. (2010). Preparing children for investigative interviews: Rapport-building, instructions, and evaluation. *Applied Developmental Science, 14*(3), 154–163.

Table 1

Number and Percentage of Reluctant and Supportive Turns in the Pre-Substantive Phase

	Revised	Standard	Mean
	Mean (SD)	Mean (SD)	Mean (SD)
Number of turns	24.02 (9.48)	24.06 (7.90)	24.04 (8.70)
Number of reluctant turns	5.31 (5.57)	6.86 (6.20)	6.09 (5.93)
Percentage of reluctant turns	0.20 (.15)	0.27 (.17)	0.23 (.16)
Number of supportive turns	6.01 (3.10)	4.75 (2.96)	5.37 (3.09)
Percentage of supportive turns	0.27 (.12)	0.20 (.12)	0.23 (.13)

Table 2

Probabilities that Interviewers Responded to Reluctance and Non-Reluctance with Support

<u>Age</u>	<u>Revised</u>		<u>Standard</u>		<u>Mean</u>	
	Reluctant	Non-Reluctant	Reluctant	Non-Reluctant	Reluctant	Non-Reluctant
Young	0.23 (0.25)	0.29 (0.13)	0.29 (0.13)	0.23 (0.12)	0.25 (0.14)	0.21 (0.2)
Old	0.29 (0.32)	0.27 (0.14)	0.27 (0.14)	0.18 (0.12)	0.23 (0.13)	0.22 (0.27)
<i>Mean</i>	0.26 (0.28)	0.28 (0.14)	0.28 (0.14)	0.20 (0.12)	0.24 (0.14)	0.21 (0.24)

Table 3

Probabilities that Children Responded to Support or No Support with Non-Reluctance by
Procedure by Age

<u>Age</u>	<u>Revised</u>		<u>Standard</u>		<u>Mean</u>	
	<u>Support</u>	<u>No Support</u>	<u>Support</u>	<u>No Support</u>	<u>Support</u>	<u>No Support</u>
Young	0.72 (0.39)	0.49 (0.23)	0.75 (0.33)	0.66 (0.27)	0.74 (0.36)	0.58 (0.26)
Old	0.73 (0.40)	0.58 (0.34)	0.58 (0.39)	0.64 (0.26)	0.64 (0.40)	0.62 (0.29)
<i>Mean</i>	0.73 (0.39)	0.53 (0.29)	0.65 (0.37)	0.65 (0.26)	0.68 (0.38)	0.60 (0.28)