



Published in final edited form as:

Curr Dir Psychol Sci. 2011 February 1; 20(1): 11–15. doi:10.1177/0963721410388804.

Forensic Interviewing Aids: Do Props Help Children Answer Questions About Touching?

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Abstract

The belief that props help children report abuse has fostered the widespread use of anatomical dolls and body diagrams in forensic interviews. Yet studies involving alleged abuse victims, children who have experienced medical examinations, and children who have participated in staged events have failed to find consistent evidence that props improve young children's ability to report key information related to bodily contact. Because props elevate the risk of erroneous touch reports, interviewers need to reconsider the belief that props are developmentally appropriate in forensic interviews, and researchers need to explore new approaches for eliciting disclosures of inappropriate touching.

Keywords

children; eyewitness testimony; forensic interviews; anatomical dolls; body diagrams

When allegations of sexual abuse arise, informed decisions about child protection and criminal prosecution depend on the ability of forensic interviewers to help children provide accurate, detailed reports of events that might have involved touching. This goal is hampered by the myriad reasons children may fail to report experienced touches, including motivational factors (e.g., embarrassment and the desire to protect loved ones), linguistic issues (e.g., children's restricted understanding of the word "touch" and their limited vocabularies to describe abuse), and memory phenomena (e.g., failures to cue target memories). To address these concerns, clinicians and forensic interviewers sometimes question children with nonverbal props, such as anatomically detailed dolls and body diagrams. Supporters of props believe that children are "concrete thinkers" who often miss the point of questioning without props, that props allow children to respond without verbalizing embarrassing information, and that props are effective retrieval cues (Russell, 2008).

Researchers became interested in dolls and body diagrams because there was no evidence for the incremental validity of these assessment tools (Wolfner, Faust, & Dawes, 1993). That is, dolls and body diagrams gained popularity in the absence of data on whether props

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Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

produced more accurate details than traditional verbal interviewing without an unacceptable increase in false reports. The resulting research was illuminating, revealing developmental, theoretical, and methodological insights into the nature of children's reports of significant events involving bodily contact.

Anatomically Detailed Dolls

Dolls were imported into forensic interviewing from clinical practice, where it was thought that interactions with dolls revealed children's emotional issues and themes in their lives. It was only after the use of dolls had been firmly engrained in forensic practice that researchers began to ask two important questions: (a) Are children's reports of touching during doll-assisted interviews sufficiently accurate for forensic purposes? and (b) Do dolls help children provide more information than verbal questions alone? After years of research, the resulting answers were "no" and "no."

Children must have three cognitive skills to report past events accurately with anatomical dolls: an understanding that the dolls are simultaneously objects *and* symbols representing themselves (i.e., dual representation, which permits "representational insight"; see DeLoache, 2000), the ability to map past events onto the dolls, and the ability to stay on task and not drift off into play. There is a frequent misunderstanding that dolls are developmentally appropriate for children ages 3 and older due to the oft-cited finding that representational insight is "achieved" around 3 years of age. In fact, 3-year-olds perform accurately only 75% to 90% of the time on dual-orientation tasks involving three-dimensional objects (DeLoache, 2000), so the error rate is too high for forensic purposes. When representational tasks are more complicated, even 4-year-olds fail to pass a significant number of trials. In one study, for example, 12% of 4-year-olds failed to accurately place at least three out of four stickers on a doll when demonstrating where stickers had been placed on their bodies—even though most of the children still wore visible stickers (DeLoache & Marzolf, 1995).

Children who have achieved representational insight will still have problems using dolls to report events if the intriguing appearance of dolls, with novel genitalia and holes that permit exploration, cause them to ignore the purpose of interviews. In a field study with suspected victims of abuse, children provided with dolls engaged in more play and "reported" proportionately more fantastic details than children questioned without dolls (Thierry, Lamb, Orbach, & Pipe, 2005). Even immediately after medical examinations, dolls increased false reports of genital and anal touching among 3- and 4-year-old children, and some children who had been lightly touched by the doctor falsely showed insertions into anal or vaginal cavities (Bruck, Ceci, & Francoeur, 2000). Other evidence has confirmed that 3- to 6-year-olds produce more errors without a corresponding increase in accurate information when interviewers use dolls (Pipe & Salmon, 2009).

But there are some optimistic findings. For example, direct questions ("Did the doctor touch you here?") paired with a doll greatly increased true reports of vaginal touching by 5- and 7-year-old girls who had experienced medical examinations, without a similar increase in false reports (i.e., only 3% of children who had not experienced vaginal touching falsely said that they had; Saywitz, Goodman, Nicholas, & Moan, 1991). The encouraging cost-benefit ratio in this study likely reflected several factors: The girls were school-aged, were not in an atmosphere of concern about touching, and had not been suggested possible answers by being asked to label various body parts. There are other studies showing that additional questioning with dolls elicits more reports of experienced touching, but these conclusions are unclear because the designs rarely included comparison groups of untouched children or children who were similarly questioned without the dolls.

By the mid 1990s, researchers and policy groups had arrived at three conclusions: (a) that children's interactions with dolls were not diagnostic of abuse, (b) that interviewers should not use dolls in ways that ask children to demonstrate abuse prior to verbal reports of abuse (e.g., Boat & Everson, 1996), and (c) that dolls were especially risky with children under 5 years of age. Facing mounting concerns about dolls and the risk of false reports from direct questions, interviewers were advised to use dolls mainly to help children clarify and elaborate on their verbal reports of abuse.

However, analyses of actual forensic interviews (involving children from 2 to 12 years of age) have not consistently found that dolls help children describe abuse, partly because dolls tend to inhibit children from talking (Dickinson, Poole, & Bruck, 2005). Using a laboratory paradigm to provide more control over the ways interviewers used the dolls, Malloy, MacKay, Salmon, and Pipe (2010) questioned 5- to 7-year-old children 1 week after they had experienced bodily contact that was central to several activities (e.g., getting a pirate badge). After the children had spontaneously reported touch, interviewers asked them to elaborate either with or without a doll. Children interviewed with the dolls did not report more information than children who were asked to elaborate verbally (e.g., "You said he put it on your arm. Tell me more about that.").

In short, dolls have not lived up to expectations as a means of helping children recount important abuse-relevant information. As anatomical dolls were gradually disappearing from forensic assessments, some professionals responded by replacing them with another prop: body diagrams.

Body Diagrams

Forensic interviewers who endorse body diagrams typically use realistic drawings of children and adults to elicit names for body parts, prompt disclosures of abuse, and/or clarify verbal disclosures. When used to prompt disclosures, interviewers display a body diagram, ask children to label specific parts on the diagram (including the genitals, breasts, and buttocks), and then attempt to raise the topic of abuse with a question such as, "Has anyone touched you in any of these places?" A more common practice is to use diagrams after children have already disclosed touching, often to make sure that interviewers understand children's body part names and descriptions of events.

Similar to the history of doll use, diagrams enjoyed popularity without evidence that they were developmentally appropriate or added value to interviews. Supporters of body diagrams have argued that young children appreciate the symbolic nature of pictures, so it is safe for interviewers to elicit disclosures by asking questions with a diagram (e.g., Russell, 2008). As with dolls, however, symbolic understanding is not a sufficient condition for children to use diagrams appropriately because there are other potential sources of error, such as the demand characteristics of the diagram.

In investigative interviews, adding diagram-assisted questions after other questions does lead children to recall additional information (e.g., Aldridge et al., 2004), including elaborations of bodily contact (Teoh, Yang, Lamb, & Larsson, 2010), but the accuracy of this information and the reason children recall more (i.e., diagrams vs. additional retrieval attempts vs. more specific questions) are unclear. Controlled laboratory studies that provide accuracy assessments do not support the use of body diagrams to elicit disclosures. Just as anatomical dolls permit children to inspect genitals and insert fingers in holes, body diagrams make it easy for children to point to body parts that were not touched during target experiences. Consequently, body diagrams elevate false reports of touching—even among children who actually experienced some touching (i.e., prompting them to report additional touches that had not occurred), and even among school-aged children (Poole & Dickinson,

2010). Moreover, some false reports are forensically meaningful (e.g., 7% of children falsely reported genital touching and 24% falsely reported touching to their breasts in Willcock, Morgan, & Hayne, 2006, Experiment 2). It is difficult to justify this risk when studies have failed to prove that diagrams elicit a greater number of true disclosures than identical questions delivered without diagrams (Brown, Pipe, Lewis, Lamb, & Orbach et al., 2007; Bruck, 2009).

What about using body diagrams to clarify disclosures? In one study, there were no differences in the amounts of accurate or false information provided by children questioned for clarification with body diagrams and by children asked to elaborate without the diagrams (Malloy et al., 2010). Moreover, there is evidence that the introduction of body diagrams leads interviewers to use a more specific questioning style than is recommended by forensic protocols (Aldridge et al., 2004; Malloy et al., 2010).

Why Are Touch Reports Sparse Among Children Who Have Not Yet Disclosed?

A consistent message in the studies reviewed here is the lack of evidence that dolls and diagrams produce increases in accurate details of touching compared to verbal questions alone. Furthermore, these studies also found that, in general, the children reported few of the experienced touches, whether they were genital/anal touches (which are memorable but embarrassing to report; e.g., Steward & Steward, 1996) or less salient touches (which are less memorable and emotionally neutral). These findings thus prompted related investigations to explore why young children have difficulty reporting actual touches when there are no obvious motivational barriers to reporting.

There appear to be several sources of difficulty. First, young children do not always understand that the word “touch” can refer to common touching actions, such as patting and hugging (Bruck, 2009; Bruck & Landau, 2009). Second, children may not readily encode touching actions that occur in complex activities. Although children can identify touching when shown still photographs of touching actions, they are poor at remembering touch when these actions are embedded in a sequence of interesting actions (Bruck & Landau, 2009; Poole & Dickinson, 2010). Of course, laboratory studies focus on innocuous and socially sanctioned touches, not the type of painful or embarrassing touching we would expect children to process differently. Still, many actions of sexual abuse are not painful and take place while children are engaged in other activities, rendering them less likely to be recalled when interviewers unexpectedly ask about touch. If children’s failure to provide complete and accurate reports of touching partly reflects semantic and attentional difficulties, then it is not surprising that dolls or diagrams do not enhance performance, as these aids were not designed to overcome such difficulties.

Barriers to Policy Change and Future Directions

As in other professions, there are numerous barriers to policy change in the field of forensic interviewing. For example, the admission that a technique is prone to false positive findings may call prior case decisions into question, and the adoption of new procedures requires enormous retraining efforts. Most important, basic assumptions are deeply rooted (e.g., that prompts help children tell).

Two conceptual barriers also limit the speed with which research informs practice. One barrier is a tendency to use findings based on one group of children to render conclusions regarding another. Forensic interviewers do not question only abused children (including those who have disclosed and those who have not); they also interview nonabused children

who do not believe they were abused and nonabused children who have received false suggestions about abuse. It is important to keep in mind that the reporting patterns of one of these groups may not generalize to others. For example, an interview technique may elicit few false reports from nonabused children who have not been misled about abuse, yet this same technique might have great risks when nonabused children are in an environment of concern about possible abuse. Because individual studies address only some groups and forensic interviewers usually do not know what proportion of their case assignments represents each group, it has been challenging for policymakers to agree on which interviewing techniques are appropriate for eliciting touch reports.

A second barrier is the “missing perfect study” problem. Three types of studies have contributed the majority of evidence on props, each with different strengths and limitations. First, there are field studies of actual interviews with suspected victims of abuse. Because there is usually no evidence to verify these children’s actual experiences, it is not possible to determine the accuracy of their reports. As a result, these studies only tell us if nonverbal props produce more details (e.g., Aldridge et al., 2004). Second, there are studies in which children described medical examinations (e.g., Bruck et al., 2000; Steward & Steward, 1996). Although some of these studies asked children to recall anal or genital touch, conclusions are limited because the social acceptability and emotional associates of these touches are quite different from what occurs in abusive scenarios. Finally, there are laboratory studies where touching occurred in the context of games or educational events (e.g., Brown et al., 2007). Although these studies offer control over the types and numbers of touches, they do not involve inappropriate touching.

It is easy for advocates of interviewing aids to dismiss unwanted findings by mentioning the limits of each type of study in turn. But of course, the most definitive conclusions summarize findings that are consistent across study types—and there are consistent findings. For example, touched children who have not previously disclosed tend not to report all touches (whether those touches were actual abuse or laboratory analogs), specific questions elevate rates of false of touch reports (whether children have experienced actual medical evaluations or playful events), and there is no collective evidence that interviewing props improve the quality of children’s testimony compared to verbal questions alone (whether children have participated in actual or simulated forensic interviews).

In response to these findings, investigators are beginning to explore new ways of encouraging children to discuss inappropriate touching that abandon old ideas about the natural compatibility between children and props. One line of thought is based on the fact that nondisclosing children behave differently from disclosers even before sensitive topics are raised, which suggests that reticent children need more acclimation time and perhaps more extensive use of relatively safe memory retrieval techniques (e.g., questions that reinstate the context of key events) prior to addressing abuse issues (Orbach, Shiloach, & Lamb, 2007). If laboratories begin exploring creative solutions, the next decade of research could provide an answer to the ultimate challenge of forensic interviewing: the need to encourage disclosures without dramatically elevating false reports.

Acknowledgments

Funding

Preparation of this article, and some research summarized in it, was supported by the National Science Foundation under Grant No. SES-0718889 and the National Institute of Child Health and Human Development under Grant No. 5R01HD52034 (MB).

References

- Aldridge J, Lamb ME, Sternberg KJ, Orbach Y, Esplin PW, Bowler L. Using a human figure drawing to elicit information from alleged victims of child sexual abuse. *Consulting and Clinical Psychology*. 2004; 72:304–316. [PubMed: 15065963]
- Boat BW, Everson MD. Concerning practices of interviewers when using anatomical dolls in child protective services investigations. *Child Maltreatment*. 1996; 1:96–104.
- Brown DA, Pipe M-E, Lewis C, Lamb M, Orbach Y. Supportive or suggestive: Do human figure drawings help 5- to 7-year-old children to report touch? *Journal of Consulting and Clinical Psychology*. 2007; 75:33–42. [PubMed: 17295561]
- Bruck M. Human figure drawings and children's recall of touching. *Journal of Experimental Psychology: Applied*. 2009; 15:361–374. [PubMed: 20025421]
- Bruck M, Ceci SJ, Francoeur E. Children's use of anatomically detailed dolls to report genital touching in a medical examination: Developmental and gender comparisons. *Journal of Experimental Psychology: Applied*. 2000; 6:74–83. [PubMed: 10937313]
- Bruck, M.; Landau, B. Children's reports of touching experiences; Paper presented at the annual meeting of the Association for Psychological Science; San Francisco. 2009, May;
- DeLoache JS. Dual representation and young children's use of scale models. *Child Development*. 2000; 71:329–338. [PubMed: 10834468]
- DeLoache JS, Marzolf DP. The use of dolls to interview young children: Issues of symbolic representation. *Journal of Experimental Child Psychology*. 1995; 60:155–173. [PubMed: 7545206]
- Dickinson JJ, Poole DA, Bruck M. Back to the future: A comment on the use of anatomical dolls in forensic interviews. *Journal of Forensic Psychology Practice*. 2005; 5:63–74.
- Malloy A, McKay K, Salmon K, Pipe M-E. Do dolls and human figure diagrams increase the effectiveness of a protocol-guided interview in eliciting touch reports from young children?. 2010 Manuscript submitted for publication.
- Orbach, Y.; Shiloach, H.; Lamb, ME. Reluctant disclosers of child sexual abuse. In: Pipe, M-E.; Lamb, ME.; Orbach, Y.; Ceberborg, A-C., editors. *Child sexual abuse: Disclosure, delay, and denial*. Routledge; New York, NY: 2007. p. 115-134.
- Poole, DA.; Dickinson, JJ. Evidence supporting restrictions on uses of body outlines in forensic interviews. Manuscript submitted for publication; 2010.
- Pipe, M-E.; Salmon, K. Dolls, drawings, body diagrams, and other props: Role of props in investigative interviews. In: Kuehnle, K.; Connell, M., editors. *The evaluation of child sexual abuse allegations: A comprehensive guide to assessment and testimony*. Wiley; Hoboken, NJ: 2009. p. 365-395.
- Russell A. Out of the woods: A case for using anatomical diagrams in forensic interviews. Update. 2008; 21(1):2–6. Retrieved from http://www.ndaa.org/pdf/update_vol_21_no_1_2008.pdf.
- Saywitz KJ, Goodman GS, Nicholas E, Moan SF. Children's memories of a physical examination involving genital touch: Implications for reports of child sexual abuse. *Journal of Consulting and Clinical Psychology*. 1991; 59:682–691. [PubMed: 1955603]
- Steward MS, Steward DS. Interviewing young children about body touch and handling. Monograph of the Society for Research in Child Development. 1996 with Farquhar, L., Myers, J.E.B., Reinhart, M., Welker, J., Joye, N., Driskill J., & Morgan, J. Serial No. 248, Volume 61, Nos. 4-5.
- Teoh Y-S, Yang P-J, Lamb ME, Larsson AS. Do human figure diagrams help alleged victims of sexual abuse provide elaborate and clear accounts of physical contact with alleged perpetrators? *Applied Cognitive Psychology*. 2010; 24:287–300. [PubMed: 20174591]
- Thierry KL, Lamb ME, Orbach Y, Pipe M-E. Developmental differences in the function and use of anatomical dolls during interviews with alleged sexual abuse victims. *Journal of Consulting and Clinical Psychology*. 2005; 73:1125–1134. [PubMed: 16392985]
- Willcock E, Morgan K, Hayne H. Body maps do not facilitate children's reports of touch. *Applied Cognitive Psychology*. 2006; 20:607–615.
- Wolfner G, Faust D, Dawes RM. The use of anatomically detailed dolls in sexual abuse evaluations: The state of the science. *Applied & Preventive Psychology*. 1993; 2:1–11.

Recommended Reading

- DeLoache JS. Mindful of symbols. *Scientific American*. 2005; 293:72–77. [PubMed: 16053140] A brief explanation of why symbols are not intuitive to children, with applications to interviewing and education.
- Dickinson JJ, Poole DA, Bruck M. A summary of concerns about anatomically detailed dolls, including the effects of dolls on child and interviewer behavior. 2005 See References.
- Kuehnle K, Connell M. The evaluation of child sexual abuse allegations: A comprehensive guide to assessment and testimony. WileyHoboken, NJ Essays on issues in child sexual abuse allegations, including the logic of indicators and research on forensic interviewing techniques.
- Lamb ME, Hershkowitz YO, Esplin PW. Tell me what happened: Structured investigative interviews of child victims and witnesses. 2008WileyHoboken, NJ Summaries of research on the value of structured interviewing protocols.
- Pipe M-E, Salmon K. A chapter on how props influence the amount of accurate and inaccurate details in children's reports of events. 2009 See References.