The Influence of Narrative Practice Techniques on Child Behaviors in Forensic Interviews

Gwendolyn D. Anderson[a], Jennifer N. Anderson[b] & Jane F. Gilgun[c]

[a] University of Minnesota, Duluth, Duluth, Minnesota, USA

[b] CornerHouse, Minneapolis, Minnesota, USA

[c] University of Minnesota, Twin Cities, Minneapolis, Minnesota, USA
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FORENSIC INTERVIEWING OF CHILDREN

The Influence of Narrative Practice Techniques on Child Behaviors in Forensic Interviews

GWENDOLYN D. ANDERSON
University of Minnesota, Duluth, Duluth, Minnesota, USA

JENNIFER N. ANDERSON
CornerHouse, Minneapolis, Minnesota, USA

JANE F. GILGUN
University of Minnesota, Twin Cities, Minneapolis, Minnesota, USA

During investigations of child sexual abuse, forensic interviewers must maintain a delicate balance of providing support for the child while collecting forensic evidence about the abuse allegation required for credible evidence for court purposes. The use of narrative practice techniques can achieve both goals by creating conditions that facilitate the possibility that children will feel safe enough to provide detailed descriptions of the alleged abuse. This article reports findings from an evaluation of a change in practice using the CornerHouse Forensic Interview Protocol in which narrative practice techniques were incorporated into the interview format. Findings show that children provided more detailed accounts of abuse when interviewers used open-ended questions and supportive statements through narrative practice.

KEYWORDS child sexual abuse, forensic interviews, narrative practice, content analysis, children's advocacy centers, CornerHouse Forensic Interview Protocol, child victims, disclosure

Researchers and practitioners continually evaluate and modify forensic interviews when necessary in cases of child sexual abuse in order to provide the most child-supportive and reliable forensic interviews possible. This is a difficult task, fraught with potential conflicts of interest. On the one hand, forensic interviews have to meet high legal standards because they are potentially part of a dossier of evidence in court proceedings. On the other hand, many interviewers are obligated by codes of ethics to do no harm to children.

The purpose of this article is to evaluate two versions of an interview protocol in cases of alleged child sexual abuse. The difference involves the comparative number of open-ended questions used in each version. The rationale for the change stems from research on an approach to forensic interviewing in cases of abuse called narrative practice, which involves two main procedures. One is the use of open-ended questions as a means of increasing rapport between children and interviewers at the beginning of interviews (Sternberg et al., 1997). The second is interviewers' increased use of supportive statements (Davies, Westcott, & Horan, 2000). Use of these two procedures have resulted in helping children overcome initial discomfort and anxiety and increases in the number of details that children provide in the interview. Narrative practice, therefore, shows promise of fostering two main goals of forensic interviews: harm reduction to children and interview results with the kinds of detail that indicate credible legal evidence. There is a significant body of research that already demonstrates the effects of narrative practice when used within the National Institute of Child Health and Development's investigative interview protocol. The present research explores the impact of this technique within the context of an entirely different and frequently used forensic interview protocol, the CornerHouse Forensic Interview Protocol, to assess if similar outcomes are present.

BACKGROUND

Using Open-Ended Questions during Rapport Building

The structure and techniques of interviews play a vital role in eliciting disclosure (Cronch, Viljoen, & Hansen, 2006; Lamb & Brown, 2006). Interviewers using improper techniques may elicit incomplete or false reports potentially resulting in the loss of credibility regarding a child's report, both of which can have significant negative consequences for case outcomes (Wood & Garven, 2000). In an effort to evaluate interview structure and technique, research has focused primarily on which types of questions elicit the most informative responses from children. Studies show that forensic interviews utilizing open-ended questions during rapport building and throughout the interview are superior to directive or closed-ended questions during rapport and in the duration of the interview (Hershkowitz, 2009; Lamb, Hershkowitz, & Sternberg, 1996; Lamb et al., 2003; Lamb & Brown, 2006; Lyon, 2010;

Sternberg et al., 1997). Sternberg and colleagues (1997) found that children who were interviewed using open-ended questions during the rapport stage provided significantly more details during the interview as compared with children who were interviewed with direct questions during rapport. This study established the importance of preparing children to answer open-ended questions with more depth and detail as opposed to direct questions that children often answer with a few words or short phrases. Similarly, Lamb and colleagues (1996) found that using open-ended question styles elicited lengthier and more detailed answers as compared with children who were interviewed using directive or suggestive questioning.

While younger children have been found to provide fewer details overall (Davies et al., 2000; Hershkowitz, Orbach, Lamb, Sternberg, & Horowitz, 2002; Sternberg, Lamb, Orbach, Esplin, & Mitchell, 2001), younger children have still been found to provide significantly more details when interviewed using open-ended questions as compared with children who answered directive or closed-ended questions (Lamb et al., 1996; Lamb et al., 2003; Lamb & Brown, 2006). Although other researchers caution against using only open-ended questions with young children and suggest using specific nonleading questions (Cronch et al., 2006; Davies et al., 2000). Children are also less likely to make contradictory statements when interviewers use open-ended questions (Lamb & Fauchier, 2001), thus making their statements more credible.

Facilitators and Interviewer Support

A growing body of research indicates that the use of facilitators and supportive statements by interviewers during rapport helps children provide more detailed disclosures during the substantive portion of the interview (Davies et al., 2000; Hershkowitz, 2009). In a study of 36 forensic interviews, Davies and colleagues (2000) found that children were more likely to provide more details when interviewers provided verbal affirmations and supportive utterances. Similarly, Hershkowitz (2009) identified less talkative children as more likely to provide more details later in the interview if they received more interviewer support through the use of facilitators and supportive statements as they were talking.

Narrative Practice

To support the use of open-ended questioning styles during the rapport section of the forensic interview, researchers and practitioners widely recommend using narrative practice (Lyon, 2010; National Children's Advocacy Center, 2011b; Saywitz, Lyon, & Goodman, 2011; Snider & Everson, 2011). Narrative practice can increase rapport and trust between the child and interviewer as the interviewer asks the child to talk about a neutral topic of

interest while genuinely attending to what the child has to say. This allows the child to do most of the talking, thus making him or her the expert during the interview, and it also allows the child to become accustomed to the unique conversational style of a forensic interview as he or she progresses into discussing the allegation (Cordisco Steele, 2010). Open-ended questioning has been promoted in forensic interview protocols for some time as in the cognitive interview (Fisher & Geiselman, 1992; Saywitz, Geiselman, & Bornstein, 1992). However, training in episodic memory during the forensic interview was first developed and researched by the National Institute of Child Health and Human Development (NICHD) in its investigative interview protocol (Orbach et al., 2000).

Forensic Interview Protocols

The most widely researched protocol is the NICHD investigative interview protocol (Orbach et al., 2000). Offering a highly structured format, the NICHD protocol outlines steps and carefully worded questions for forensic interview professionals to follow through several phases, including the introductory phase, the rapport building phase, training in episodic memory, and substantive phases of the interview (Lamb, Orbach, Hershkowitz, Esplin, & Horowitz, 2007). Evaluated in both lab and field contexts, the research on the NICHD protocol suggests that use of the protocol results in more open-ended questioning, therefore increasing the details provided by children both during rapport and in the substantive phase of the interview (Lamb et al., 2007). However, despite the published research and evidence that the NICHD protocol is very successful in helping children provide accurate and detailed answers regarding abuse, only 7% of all child advocacy centers (CACs) throughout the United States report being trained in the model (National Children's Advocacy Center, 2011a).

The CornerHouse Forensic Interview Protocol

The CornerHouse Forensic Interview Protocol is the most widely trained forensic interview protocol in the United States, and 52% of all CACs report being trained in the model (National Children's Advocacy Center, 2011a). The protocol was initially developed in 1989 by CornerHouse, a Children's Advocacy Center in Minneapolis, Minnesota, and first taught in a five-day forensic interview training format by CornerHouse in 1990. The protocol has undergone regular updating and revisions over the years as new research and information has emerged in the field; the most recent significant revisions included the identification of stages, approaches, and methods as of January 2013. To date, CornerHouse has trained almost 26,000 professionals from every state in the continental United States, Alaska, 16 foreign countries, and five continents. The CornerHouse interview is not only widely used but is

highly regarded within the United States legal system and has been upheld in several states through appellate court opinions for providing expert forensic testimony (*Baker v. State*, 2001; *Mooneyham v. State*, 2005; *State v. Douglas*, 2006; *State v. Hollander*, 1999; *Wright v. Texas*, 2007).

The CornerHouse protocol holds three guiding principles as it is person-centered, semistructured, and forensically sound. Individuals are treated with dignity and respect. The interview is based on the idea that children are experts on their own experiences and are less likely to experience harm if they have opportunities to communicate in their own ways. The semistructured nature of the interviews provides for coverage of similar topics in each interview. It also allows for flexibility in how the interviewer approaches the topics. The flexibility of semistructured interviews allows interviewers to be sensitive and responsive to the developmental and emotional needs of the children. Inquiry is intended to elicit accurate narrative. Interviewers using this protocol rely on open-ended questions and an unbiased perspective and avoid leading and suggestive techniques. In addition to questions, interviewers may also employ the use of interview aids including drawings, diagrams, and anatomical dolls if deemed appropriate by a trained interviewer (Anderson et al., 2010). The format of questions used is guided by invitation and inquiry, which emphasizes open-ended prompts and questions (CornerHouse Interagency Child Abuse Evaluation and Training Center, 2013).

The Current Study

This study compared two versions of the CornerHouse Forensic Interview Protocol. In the narrative event practice version, children were asked to tell the interviewer "everything" or "all about" a specific, episodic, and preferably significant autobiographical event. Interviewers then followed up children's narratives with open-ended prompts intended to solicit further narrative. In the traditional practice version, interviewers used fewer open-ended prompts by initially asking children to "tell about" some autobiographical topic or event but then placed less emphasis on soliciting further narrative and episodic memory by abandoning narrative prompts for more focused questioning. Facilitators or supportive statements were offered by the interviewers throughout the child's narrative after the initial open-ended questions were posed to the child during rapport in both the traditional practice version and the narrative event practice version. Although these supportive statements were used by interviewers in both interview versions, they were used more in narrative event practice to encourage the child to continue to talk without interruption and to indicate to the child that the interviewer was genuinely attending to what the child had to say. For example, in the traditional practice version in response to a child describing a recent art project he or she enjoyed doing, an interviewer might pose a new,

more direct question to the child such as, "That's interesting. Do you enjoy doing that?" In the narrative event practice version, the child may pause in the description, at which point the interviewer may use a facilitator such as "mm hmm" instead of posing a new, more direct question, and the child may continue to talk about the topic more in depth. By comparing both versions, this study tests whether children provide more details during the substantive portion of the interview in the narrative event practice rapport building interview group as compared with the traditional rapport building interview group.

Hypotheses

We hypothesized that (a) narrative practice through the use of increased open-ended questions during rapport would result in more details provided by children as compared with using fewer open-ended questions in the traditional rapport group, (b) the use of facilitators during rapport would result in significantly more details provided by children, and (c) when combined the use of more open-ended questions and facilitators during rapport would result in significantly more details provided by children.

METHOD

In the evaluation of the change in protocol we did a content analysis of 115 videotaped forensic interviews of children and adolescents. We also did a content analysis of each child's case record. Referring professionals were primarily from law enforcement and child protective services. An average of approximately 500 children and adolescents are interviewed at the child advocacy center each year. The majority of these interviews are pursuant to allegations of child sexual abuse, but interviews are also conducted with alleged witnesses to violent crime and regarding other types of abuse or neglect allegations.

Sample

Cases were examined using traditional rapport techniques ($n = 62$) and narrative event practice rapport techniques ($n = 53$). Interviews were conducted from December 2010 through March 2012. Data were collected from two separate periods of time, from December 2010 to March 2011 and again from January to March of 2012. Only cases that satisfied inclusion criteria were examined, which included any interview where the child disclosed sexual abuse during a single session forensic interview. It is important to note that since this was a field study, we could not verify the extent to which the sexual abuse allegations provided by the children were accurate accounts of

actual events. We obtained institutional review board (IRB) approval prior to the commencement of the study.

The average age of children in the sample was 10.4 years, with an age range of 3.1 to 18.3 years old, with more females ($n = 89$) than males ($n = 26$). Most of the children were African American ($n = 37$) or Caucasian ($n = 38$). Other children were identified as African ($n = 3$), American Indian ($n = 3$), Hispanic ($n = 16$), or multiracial ($n = 17$). The first language of most children was English ($n = 98$), although other languages included Spanish ($n = 15$), Arabic ($n = 1$), and American Sign Language ($n = 1$). All forensic interviews were conducted in English. In cases in which a child's first language was not English, an interpreter was made available throughout the duration of the interview ($n = 10$). Some children chose to use the interpreter for the entire interview, portions of the interview, or not at all. Most of the children in the sample did not have any identified disability or mental health diagnoses ($n = 87$), but some were identified as having diagnoses of attention-deficit/hyperactivity disorder (ADHD) ($n = 6$), developmental disabilities ($n = 3$), or mental health diagnoses such as anxiety or depression ($n = 13$).

Interviewers

Eight trained interviewers conducted all of the forensic interviews used in the evaluation. Interviewers were employees at CornerHouse. They have a range of one to over 20 years of experience completing forensic interviews. Five of the eight have advanced degrees in social work or education. Interview staff underwent extensive specialized training in conducting forensic interviews and in the CornerHouse Forensic Interview Protocol. At the outset of the study, interviewers adhered to a range of practice in regard to the use of open-ended inquiry and narrative practice techniques. While all had been exposed to these techniques, their practice in actual forensic interviews varied significantly from interview to interview and between interviewers. As is standard agency practice for any shift in interview protocol, interviewers engaged in critical analysis of interviews, supplemental training in narrative practice techniques, and peer review in both group and individual settings. These activities occurred when no data was being collected, between April and December of 2011. The goal of these activities was to improve interviewers' overall implementation of narrative practice techniques. It should be noted that peer review and self-reflection are part of interviewers' ongoing professional development plans and standard practice at the agency regardless of the change in practice and program evaluation.

Data Analysis

As mentioned, content analysis was completed on 115 videotaped interviews and corresponding case files. Content analysis is research on existing records,

or recordings, of human communications. It makes replicable and valid inferences from participant communication in specific contexts (Berelson, 1971; Krippendorff, 2012). With its roots in communication studies, it is now most widely used in humanities and social sciences, although it is being used more in legal and political research as well. Content analysis is most appropriate for research wishing to study subjects without affecting their communication or behavior, which could ultimately reduce the validity of the data (Babbie, 2010). In the present study, having a researcher present during the forensic interviews could have changed the way that the children responded to the interviewer's questions and caused the children more anxiety in an already stressful situation.

Content analysis has several core components when used in reliable and valid research (Krippendorff, 2012). First, definitions of meaning units and coding instructions must be clear. According to Graneheim and Lundman (2004), meaning units are words, sentences, or paragraphs containing aspects related to one another through their content and context. In the present study, meaning units are both words and sentences. Second, coding instructions must clearly define the units coded, followed by examples. This not only ensures the reliability of the data but also the validity. Deductive content analysis was used in this study. Deductive content analysis answers a research question or set of questions as related to a hypothesis or set of hypotheses (Mayring, 2000). Therefore, coding is purposeful and based on previous research or theory. By assigning codes to clearly defined phenomena, content analysis allows for qualitative communication to be quantified for statistical analysis. In the present study, content analysis is appropriate because it uses existing case files and videotaped forensic interviews.

We created a coding scheme and tested it for interrater reliability using Cohen's kappa co-efficient (Cohen, 1960) in a pilot study ($n = 15$) with 90% agreement between coders and a kappa value of 0.80. When using content analysis, Krippendorff (2012) offers conservative guidelines for assessing whether kappa indicates conclusions about interrater reliability, with values between 0 and 0.67 as being unreliable, values between 0.67 and 0.80 as being tentatively reliable, and values above 0.80 as being reliable and conclusive. According to these guidelines, the calculated kappa value of 0.80 of interrater reliability of codes is conclusive. Coded data included the child's demographic information, relationship of child to the alleged perpetrator, type of abuse allegation, question types asked by the interviewer during the narrative building portion of rapport, facilitators provided by interviewers during the narrative building portion of rapport, and the number of details provided by the child during the interview after disclosure. In this study, disclosure was when a child made a verbal statement regarding a specific abuse allegation and the alleged perpetrator (e.g., "My dad touched me"). Indirect question types included free recall, free focused recall, and focused recall ("WH" questions). More directed questions included multiple

choice, yes/no, and leading/misleading. Facilitators or supportive statements included any word used by interviewers such as "mm hmm", "okay," or "uh-huh" expressed as a response to the child during the narrative building portion of the interview. Details were any words related to time, place, people, events, and descriptive words used by the children regarding the abuse allegation. Repeated details were included because they are considered forensically relevant since they indicate consistency and validity in a child's description of the abuse allegation. Furthermore, excluding repeated details presented logistical concerns because the interviews were coded by viewing the video recording rather than from a written transcript.

In the original design, we had planned on distinguishing between the traditional practice version and the narrative event practice version by comparing interviews from two distinct time periods, December 2010 to March 2011 for the traditional version and January 2012 through March 2012 for the narrative event practice version. However, during data collection it became clear that the execution of the various rapport building techniques was more fluid than originally anticipated. When coding began, we saw that some interviewers were already using narrative practice before the protocol was officially launched and some other interviewers used a mixture of the previous protocol and narrative practice after the narrative practice was launched. While the coding for the number of open-ended questions, facilitators, details, and case file information did not change, we did change the design to more accurately capture the practice of narrative event practice in the forensic interviews. Therefore, instead of distinguishing between two time periods for whether interviews were considered "traditional" or "narrative," we used the definition of narrative practice as using more open-ended questioning as an overall proportion of questions asked during rapport by the interviewers. While, generally speaking, setting a specific standard of exactly how many open-ended questions should be asked during rapport could serve to diminish the interviewers' capacity to adjust to the unique needs of the individual, for the purpose of this research, open-ended question proportions ranging from 0 to 0.20 were considered to be representative of traditional practice and from 0.21 to 1 were considered narrative practice. Question proportions were determined by calculating the number of open-ended questions related to the total questions asked during rapport.

As was the case in the current study, in practice evaluation research it is important to stay attuned to unanticipated issues in the way that the evaluation goals, definitions, and outcomes are being assessed. Understanding that evaluations of practice in the field are often complex and rarely straightforward, Patton (2011) suggests that evaluators adjust to the complexities of real world practice evaluation research by using developmental evaluation strategies. These include paying close attention to unanticipated issues and making adaptations to the evaluation in order to accurately assess outcomes. In the

current study, we reconfigured the research design to more closely align with actual practice and to ensure the validity of the data being collected.

Statistical Analysis

We employed a series of multiple regression analyses to assess whether specific narrative event practice techniques resulted in more details than traditional techniques, where children were often initially asked to "tell all about" some autobiographical topic or eventbut where there was a lesser emphasis on specific episodic memory and where attempts to solicit narrative were more quickly abandoned for more focused questioning. We built three models to test our three hypotheses. Model 1 tests the first hypothesis of whether using narrative practice with more open-ended questions during rapport will predict whether children will provide significantly more details during the substantive portion of the interview than when using fewer open-ended questions in the traditional interview. Model 2 examines the second hypothesis of whether using more facilitators by the interviewers during rapport will result in more details provided by the children during the substantive portion of the interview. Finally, Model 3 evaluates the third hypothesis of whether a combination of more open-ended questions and facilitators will result in significantly more details provided by the children during the substantive portion of the interview. Full models were built with variables of interest and other sociodemographic variables as controls including age, gender, language, race/ethnicity, and disability/mental health diagnosis status. While gender was insignificant in the full model, it was included in the final predictive models due to previous research suggesting that gender may influence how detailed children are in their disclosures (Lamb & Garretson, 2003). We assessed each predictive model for appropriateness of fit with linear regression and all were found to be within normal limits of the distribution of residuals and homogeneity of variance.

We performed a sensitivity analysis to evaluate each model's assumptions and to determine whether each variable had adequate power within the regression analysis. The sensitivity analysis showed that the variables of disability/mental health diagnosis and race/ethnicity had some subcategories with extremely small numbers of participants. Rather than excluding these participants from the final analysis, some subcategories were combined into an alternate category, other. Children who had diagnoses such as ADHD, developmental disabilities (not specified), learning disabilities (other), were deaf, or had chronic medical condition (not specified) were combined into the category of disability/mental health diagnosis, other. Children who identified as African, American Indian, or unknown were collapsed into the category of race/ethnicity, other, due to small numbers in each of the subcategories in the sample.

Data Transformation

The outcome variable of the number of details provided by children during the substantive portion of the interview was positively skewed beyond normal limits in the distribution. Therefore, the variable of number of details was transformed using a logarithmic base 10 transformation, which resulted in a normal distribution falling within normal limits of skewness and kurtosis values. Upon completion of the regression analysis, reverse transformation was performed to rescale the coefficients (*B*) and standard error of the coefficients (*SE B*).

RESULTS

Narrative Practice

The average proportion of open-ended questions used by interviewers in this sample was 0.20 (*SD* = 0.16), or 20% of all questions posed during narrative building. The ratio of open-ended questions as compared with overall questions was higher in the narrative interviews (*M* = 0.32, *SD* = 0.15) than in the traditional (*M* = 0.10, *SD* = 0.08). Children interviewed in the traditional interview protocol group provided fewer details (*M* = 827, *SD* = 758) than children interviewed in the narrative practice protocol group (*M* = 1383, *SD* = 959). When controlling for the sociodemographic characteristics of gender, age, race/ethnicity, disability/mental health diagnosis, and language in the model, children provided significantly more details when interviewed using narrative practice with more open-ended questions than children interviewed in the traditional group with fewer open-ended questions (*t* = 2.30, *p* = 0.023). The total variance of the predictive model accounted for 49% in the number of details provided by children (adjusted R^2 = .45). See Table 1, model 1 for more details.

Facilitators

While not included as a specific step of traditional episodic memory training (Lamb et al., 2007), facilitators and other measures of interviewer support are associated with increased information sharing (Hershkowitz, Orbach, Lamb, Sternberg, & Horowitz, 2006) and, therefore, are relevant to the current analysis. Overall, interviewers used an average of 15 facilitators (*SD* = 10.9) during the narrative building stage of rapport. To determine whether the number of facilitators used here would predict the number of details provided by children later in the interview, we built a second predictive model. Like the first model, this second predictive model controlled for sociodemographic variables including age, gender, disability or mental health diagnosis, race/ethnicity, and language and showed that facilitators

TABLE 1 Simultaneous Regression Analysis of Narrative Practice Techniques (N = 115)

Variables	Model 1 (Traditional vs. narrative practice)			Model 2 (Facilitators)			Model 3 (Combined facilitators and open-ended question proportions)		
	B	SE B	t	B	SE B	t	B	SE B	t
Intercept	169.37	1.40	15.41***	150.96	1.40	14.94***	117.09	1.42	13.63***
Traditional vs. narrative	1.37	1.15	2.30*						
Facilitators				1.01	1.01	2.08*			
Combined facilitators and open-ended questions							2.65	1.42	2.78**
Gender	1.19	1.17	1.11	1.12	1.17	0.74	1.07	1.17	0.41
Age	1.14	1.02	6.98***	1.14	1.02	6.91***	1.14	1.02	7.18***
Disability/Mental health diagnosis (none)	1.15	1.25	0.63	1.33	1.25	1.29	1.212	1.24	0.91
Disability/Mental health diagnosis (other)[a]	0.60	1.31	–1.86	0.68	1.31	–1.42	0.64	1.30	–1.70
Race/Ethnicity (Caucasian)	0.92	1.17	–0.49	0.91	1.17	–0.62	0.91	1.17	–0.59
Race/Ethnicity (Hispanic)	2.17	1.51	1.87	1.98	1.52	1.63	2.05	1.51	1.75
Race/Ethnicity (multi)	0.62	1.22	–2.38*	0.60	1.22	–2.53*	0.64	1.22	–2.26*
Race/Ethnicity (other)[b]	0.72	1.34	–1.15	0.65	1.34	–1.47	0.73	1.34	–1.07
Language	0.33	1.50	–2.71**	0.36	1.51	–2.48**	0.35	1.50	–2.57**

Note. Model 1 (traditional versus narrative groups) $F(10, 102) = 9.986$ and $p < 0.001$; $R^2 = 0.4902$, adjusted $R^2 = 0.4402$. Model 2 (facilitators) $F(10, 102) = 9.809$ and $p < 0.001$; $R^2 = 0.4902$, adjusted $R^2 = 0.4402$. Model 3 (combined facilitators and question proportions) $F(10, 102) = 10.45$ and $p < 0.001$; $R^2 = 0.5059$, adjusted $R^2 = 0.4575$. Reference groups for each category included: males (gender), mental health diagnosis (disability/mental health diagnosis), African American (race/ethnicity), and English (language).

[a] In the category of Disability, identified mental health diagnoses or disabilities of ADHD, learning disabilities (not specified), developmental (not specified), deaf, and chronic medical condition (not specified) were collapsed due to small numbers in the sample into one category of Other.

[b] In the category of Race/Ethnicity, participants who identified as African, American Indian, or unknown were collapsed into the category of Other due to small numbers in the sample.

*$p < 0.05$. **$p < 0.01$. ***$p < 0.001$.

significantly predicted the number of details children provided ($t = 2.08$, $p = 0.04$) with an overall variance of 44% (adjusted $R^2 = 0.44$). Each one unit increase in facilitators was associated with an increase of 1.01 of the number of details children provided. See Table 1, model 2 for details.

Combined Question Proportions and Facilitators

When combined, open-ended questions and facilitators were used by interviewers on average for just over half of the overall questions posed during the narrative building portion of rapport ($M = 0.55$, $SD = 0.19$). To assess whether interviews with both higher proportions of open-ended questions and more facilitators would result in more details provided by children after disclosure, we built a third predictive model with the combined facilitators and open-ended questions as proportional to the number of questions as the predictor variable. Similar to the other models, this model controlled for age, gender, disability/mental health diagnosis, race/ethnicity, and language. The regression analysis showed that the combined open-ended questions and facilitator proportions significantly predicted the number of details provided by children ($t = 2.78$, $p = 0.006$), and the overall model accounts for 46% of variance (adjusted $R^2 = 0.46$) in the number of details provided by children during the interview. The combined open-ended questions and facilitator proportions show that for every one unit increase in open-ended questions and facilitators in proportion to the number of question asked during rapport, the number of details increases by 2.65. See Table 1, model 3 for more details.

Sociodemographics

Several demographic characteristics of the children interviewed significantly predicted the number of details children provided during the interview. Since each of these variables was included in all three models, the numbers vary slightly in each model. However, each significant variable had the same level of significance across the models and had similar effects.

Age was the most significant variable in predicting the number of details children provided during the interview after initial disclosure ($t = 7.18$, $p > 0.001$). As children increase in age, each additional year of age was associated with a 1.14 increase in the number of details they provided. Children who identified as multiracial were significantly less likely to provide more details as compared with children who identified as African American, Caucasian, Hispanic, or other ($t = -2.53$, $p = 0.01$). Finally, children whose first language was English provided significantly more details than children whose first language was Spanish or Arabic ($t = -2.71$, $p = 0.008$). Gender and identified disability or mental health diagnosis did not significantly predict the number of details provided by children (see Table 1).

DISCUSSION

Narrative Practice

Consistent with previous research, both the use of open-ended questions (Sternberg at al., 1997) and the use of facilitators (Hershkowitz et al., 2006; e.g. supportive statements) appeared to enhance the forensic value of interviews conducted using the CornerHouse Forensic Interview Protocol. It is interesting to note that it was not the intention of the practitioners who completed the interviews to explicitly increase the number of facilitators as a tool for increased information sharing but rather to increase indirect, narrative eliciting prompts and questions while decreasing the number of focused prompts or questions used in the rapport building. Since the CornerHouse Forensic Interview Protocol is unscripted, it is difficult to fully understand the context in which the facilitators were used and the possible impact of child behavior on interviewer behavior. For example, it is possible that facilitators may have been used more readily with children who were already predisposed to provide copious amounts of narrative detail. Furthermore, while our study coded verbal questions, utterances, and responses, it could be hypothesized that voice intonation, something not measured by this study, may have a greater influence on the function of "facilitative" utterances than on open-ended prompts, which are less reliant on the receiver to assess and determine their meaning. Our results also indicate that the use of facilitators in combination with specific narrative prompts or questions is associated with the greatest improvement in forensic outcomes. From a practice standpoint, this may be representative of a shift from making modest but only minimally successful attempts to solicit narrative by, for example, following open-ended prompts with detail-seeking "who" or "what" questions and following open-ended prompts with facilitative utterances that indicate the child being interviewed should and can say more (such as "uh-huh"). Further practice implications to note include the initial anecdotal impressions of interviewers who reflected a belief that they had asked more open-ended questions than were actually asked. Forensic interviewers integrating any shift in technique or protocol are strongly encouraged to use multiple strategies for peer review and self-reflection including viewing of video-recorded interviews in order to accurately assess fidelity.

Sociodemographics

Consistent with previous research (Davies et al., 2000; Sternberg et al., 1997), as children increased in age in our sample the number of details they provided during the substantive portion of the interview increased significantly. This is not surprising, given that older children are developmentally more likely to have stronger verbal communication skills than younger children. Since our analysis controlled for age, our results support the use of narrative

practice with all ages because the overall number of details increased significantly. However, even when using narrative practice, interviewers used more focused questions with younger children than with older children. This strategy is part of the assessment that the interviewers use during rapport to assess whether children are developmentally able to participate in the conversation. This is also consistent with previous research that cautions against using only open-ended questions with young children and suggests using specific nonleading questions (Cronch et al., 2006; Davies et al., 2000).

There was also a significant difference between the number of details children provided if their first language was Arabic, Spanish, or bilingual, with these children providing fewer details than children whose first language was English. This is not surprising, given that children whose first language is not English may not be able to communicate as fluently in English as they may have been able to if the interview was conducted in Spanish or Arabic. Furthermore, many of these children used interpreters during the interview, which not only slowed the overall pacing of the interview but also likely resulted in children providing shorter narratives to the interviewers for translation. To our knowledge, previous research has not fully explored the impact of language and the use of interpreters during forensic interviews. This is an area of research that needs further exploration. In addition to language, it is very possible that cultural factors inhibited the information these children felt comfortable providing, resulting in shorter narratives and less information sharing. It is important to note that the same factors cited as barriers to disclosure in Spanish-speaking children—consequences for tight-knit communities, economic repercussions, and family loyalties (Center for Innovation and Resources, 2011)—may also serve to inhibit the number of details and overall length of narratives provided.

Interestingly, our findings did indicate a significant difference between the detailed disclosures of children who were identified as multiracial as compared with the rest of the sample, with these children providing fewer details. The most likely explanation is that English was not the first language of many of these children and may have not have been accurately noted in the case file. And, as previously mentioned, our results showed that children whose first language was not English were significantly less likely to provide as many details. It is difficult to fully understand other reasons for this finding. The literature on differences in detailed disclosures due to differences in race, ethnicity, and culture is scarce (London, Bruck, Ceci, & Shuman, 2005), although some research is now exploring cultural factors, including values, that may influence whether children will disclose and how much they will disclose about sexual abuse in the context of forensic interviews (Fontes & Plummer, 2010). As Fontes and Plummer (2010) suggest, understanding cultural values held by certain groups may help one to understand why some

children may be less likely to disclose sexual abuse in a formal investigation. Some cultural values that may inhibit detailed disclosure of CSA may include shame, taboos and modesty, virginity, women's status, or honor, respect, and patriarchy, among others. Some groups who are overrepresented in the child welfare system (Hill, 2006) may be wary of reporting abuse and inviting further investigation and scrutiny, known as reporting costs (Massat & Lundy, 1998). It is unclear to what extent cultural values played a role in the number of details provided by children in our sample, although it likely played a role and could perhaps offer some explanation for why children who identified as multiracial offered fewer details overall. This is an area of research that is severely underdeveloped and needs further exploration. In practice, both forensic interviewers and clinicians providing mental health support to child victims of abuse should maintain cultural considerations in the forefront of their decision making.

Obviously the field has much to learn about the abuse disclosures of children who are racial and ethnic minorities. While further research can, in time, serve to illuminate best practice, the disparate outcomes in this study for both children whose first language was not English and multiracial children imply an immediate need to consider practice implications for these groups. When feasible, forensic interviews should clearly be conducted in a child's first language. Our practice experience has been that a first-language interview conducted with the child by a bilingual interviewer, including an interpreter translating in real-time for any observing team members, and both video recording of the interview and audio recording of the interpretation, can most effectively bridge the needs of the child, investigators, and court. When this is not feasible, interviewers should rely on practice recommendations for using interpreters in forensic interviews in order to give children an opportunity even when conditions are not optimal.

Our findings did not indicate significant differences between the number of details provided by girls and boys. Little research has actually looked at the differences between the detailed disclosures of girls and boys, although one study found that girls provide more detailed responses than boys in forensic interviews (Lamb & Garretson, 2003). Since our sample had over three times as many girls as boys, it could be that our sample of boys was not robust enough to detect true differences. This is an area of research that should further evaluate whether there is a difference in order to inform practice in interviewing male children.

Strengths and Limitations

The study had several strengths and limitations. One strength of the study was that it is the only study to explore the use of open-ended questioning and interviewer support using the CornerHouse Forensic Interview Protocol.

Since the majority of published research has examined the use of open-ended questions using the NICHD protocol, this research fills a gap in the existing body of literature. This is especially important since over half of all CACs use the CornerHouse interview in the United States. Thus, this research provides further evidence that the use of narrative practice is beneficial with several interview protocols.

Another strength of this study is that it examines the separate and combined effects of open-ended questions and interviewer support through the use of facilitators. While both have been examined in previous research separately, to our knowledge no other studies have looked at the combined impact of both. Our findings show that increasing both open-ended questions and facilitators results in more detailed disclosures by children as compared with a lower proportion of combined open-ended questions and facilitators.

While our study had several significant findings, these findings are limited. First, since the research was conducted in a field setting, the use of a randomized control design was not feasible. Therefore, our results can only point to associations between variables and cannot attribute causation to the use of narrative practice as the only reason for the more detailed disclosures. Furthermore, since the research was conducted in the field, it is not possible to determine whether the disclosures by the children were accurate or true. Another limitation was that our study had one primary coder, reducing the reliability of our findings. While we tested for interrater reliability using our coding scheme in a pilot study with a kappa co-efficient of 0.80, our results would be more reliable if we were able to use two coders throughout the entire study. Finally, it should be noted that the variance in actual practice that we encountered caused us to deviate from the initial study design. A higher degree of consistency in implementation of pre- and postconditions may have resulted in differential outcomes.

This study lends additional evidence that the use of narrative practice, along with interviewer support, can help all children provide more detailed disclosures in forensic interview settings. Although participating in a forensic interview is often an anxiety-provoking event for children, this research shows that children respond to interviewers who provide them with opportunities to talk about the alleged abuse through a combination of interview protocol techniques and clinical expertise.

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AUTHOR NOTES

Gwendolyn D. Anderson, PhD, MSW, is an assistant professor in the Social Work Department at the University of Minnesota, Duluth. Her research interests include child sexual abuse prevention policy, global sexual violence, and child welfare outcomes for children who have been sexually abused.

Jennifer N. Anderson, MSW, LISW, is the associate director of CornerHouse, a Children's Advocacy Center in Minneapolis, Minnesota, where she has worked for 12 years serving alleged victims of abuse and violence and their families.

Jane F. Gilgun, PhD, LICSW, is a professor in the School of Social Work at the University of Minnesota, Twin Cities. She does research on the meanings of violence to perpetrators, the development of violent behaviors, and how persons overcome adversities. She has a particular interest in understanding and preventing sexual abuse violence in families and communities.