



The effect of drawing on children's experiences of investigations following alleged child abuse



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ABSTRACT

The primary aim of the study was to evaluate investigative interviews from the perspectives of the children, comparing children who drew with children who did not. One hundred twenty-five children, alleged victims of sexual abuse, were asked about their investigative experience. The uniqueness of the study is that all of the interviews were conducted according to the NICHD Protocol and that children were randomly assigned into one of the two research conditions (drawing vs. non-drawing). The results clearly demonstrate the advantage that drawing has on the children's experience of the investigation, with children in the drawing group more often reporting feelings of hope and success. This study provides practical guidelines for practitioners by emphasizing the beneficial effects that drawing can have. The study stresses the importance of integrating into forensic investigations interventions that enhance children's testimonies and ensure that the investigation is an empowering experience that generates feelings of trust, self-worth, and justice.

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Introduction

Child Sexual Abuse

Childhood sexual abuse (CSA) is one of the most serious public health problems facing society and, more importantly, children and young people themselves (Putnam, 2003). Sexual abuse is defined as a behavior that includes: "any sexual interaction with person[s] of any age that is perpetrated (a) against the victim's will, (b) without consent, or (c) in an aggressive, exploitive, manipulative, or threatening manner" (Ryan, 2010, p. 3).

Data from published research illustrate that CSA is a historical constant that occurs in all cultures and societies and at any social level (Pereda, Guilera, Forns, & Gomez-Benito, 2009). Pereda and colleagues (2009) performed a meta-analysis of the prevalence of CSA and reported that 7.9% of men and 19.7% of women had suffered some form of sexual abuse before the age of 18. Statistics from the United Kingdom suggest that 1.2% of children younger than 11 and 16.5% of 11- to 17-year-olds experienced sexual abuse, including non-contact offenses, by an adult or a peer at some point in childhood (Radford et al., 2011).

Statistics on CSA only exist for those cases that are reported to child protection agencies (CPS) or law enforcement offices, and it is therefore highly probable that official statistics underestimate the true extent of the problem. According to Finkelhor (1994) and based on a national survey conducted in the United States, the actual number of cases being reported is 2.4/1,000.

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Melton (2005) further stressed this notion by writing that child maltreatment is underreported to social services; therefore, basing conclusions on this number will essentially produce unreliable results.

CSA is an extremely difficult experience, and children are especially vulnerable when exposed to sexual abuse because child sexual abuse has harsh consequences, in both the short- and long-term (Van der Kolk, 2005; Van der Kolk & Courtois, 2005). CSA might determine the child's future perception of himself, how he relates to others, and how he understands the outside world (Browne & Finkelhor, 1987; Howe, 2005; Jonas et al., 2011). This is why, even though many factors affect the adjustment of children, abuse can profoundly affect their socio-emotional, cognitive, and physical development (Corwin & Keeshin, 2011; Malloy, Lamb, & Katz, 2011; Swanston et al., 2002; Tyler, 2002).

The increase in awareness of child abuse in the 1970s was followed by an increased participation by children in the legal system in the 1980s (Malloy et al., 2011). Child maltreatment is a crime that is difficult to investigate because evidence is often absent, the perpetrators are often closely linked to the victim, and in most cases, the victims are the only sources of information (Malloy et al., 2011). These reasons particularly apply to cases of sexual abuse because the nature of the abuse does not lend itself to physical evidence (e.g., fondling), delayed reports are common, and physical evidence disappears (Malloy et al., 2011). Thus, investigative interviewers play a vital role in gathering accurate information and contending with this alarming phenomenon.

Investigative Interviews With Children

Investigative interviews with children need to integrate two parallel lines that some might view as contradictory. One line represents the formal aim of the investigative interview: obtaining clear and reliable testimonies rich in forensically relevant details to enhance the criminal investigation. The other line relates to the wellbeing of the child and the need to guard children, especially maltreated children, from a second traumatization following the interview (Katz, 2013). Thus, it is important to develop professional tools to help ensure that (a) the investigation is not a traumatic experience and that the investigation does not increase the child's feelings of anxiety, stress, guilt, and self-blame; and (b) the investigation provides the child with an empowering experience and enhanced feelings of trust, self-worth, and justice.

In recent years, policy makers, practitioners, and researchers from different disciplines have been dealing with the issue of investigative interviews with children and their legal context and consequences (Lamb, La Rooy, Malloy, & Katz, 2011). The understanding that the children's testimonies are a crucial step that can profoundly affect any decision making with respect to the children, their families, and the alleged perpetrators have led to intensive efforts to investigate and disseminate the best practical guidelines for investigative interviewers (Lamb et al., 2011; Malloy et al., 2011). There is consensus on some aspects that their integration in investigations reflects best practice. For example, rapport building, practice with communication rules, training on episodic memory, and the use of open-ended questions were found to enhance the production of rich, detailed, coherent, and reliable testimonies from children (Lamb, Hershkowitz, Orbach, & Esplin, 2008; Lamb et al., 2011; Lamb, Orbach, Hershkowitz, Esplin, & Horowitz, 2007; Malloy et al., 2011). However, researchers have rarely examined the impact of investigative interviews on the child's perception of the CSA or interview experience.

The investigative interview demands a wide range of cognitive and communicative abilities from children for their narrative to be heard and understood in the legal context (Lamb et al., 2008; Lamb et al., 2011; Poole & Lamb, 1998). However, the emotional state of the child may present a significant barrier during the interview (Pipe, Lamb, Orbach, & Cederborg, 2007). When children arrive at a forensic investigation, they are interviewed by a stranger about an alleged traumatic experience that they may not have disclosed previously (Pipe et al., 2007). Providing relevant forensic testimony on the alleged abuse may be experienced as a stressful event that may generate feelings of shame, guilt, fear, and uncertainty (Kuehnle & Connell, 2011).

Three qualitative studies have explored how children and young people under the age of 18 experienced investigative interviews (Roberts & Taylor, 1993; Wattam, 1992; Westcott & Davies, 1996). Children in all of the studies stressed the importance of feeling that the interviewer believed them and the importance of receiving support and active listening from the interviewer. The children found it more difficult if the interviewer started to question them immediately about the abuse with no rapport building; this situation made it harder to recall the details about the abusive event. In Wattam's (1992) study, the children felt isolated in the interview room and harassed by the interviewer. Conversely, Roberts and Taylor (1993) observed that the majority of the children were notably positive about talking openly about the abuse and would tell other sexually abused children to do the same.

One study that was conducted by Westcott and Davies (1996) aimed to assess children's perceptions of investigative interviews. Fourteen children and young people aged 6 to 18 years were questioned about all aspects of the investigative interview (i.e., location, duration, structure and content). Additionally, the children were asked about their feelings concerning the interview. The young people talked about what was happening and difficulties they experienced with some interviewers' language. The interviews were experienced as stressful by the majority of the children, who indicated that they were being rushed by the interviewers and were asked many demanding questions, which made them feel unimportant or bored.

Clearly, there is a deficiency with respect to the children's experiences in the context of investigative interviews, which requires further exploration. Most of the focus within the field of forensic investigations of children has focused on intensive efforts to achieve best practices within investigative interviews. Researchers have explored different practical guidelines and types of questions and techniques with the potential to help the children retrieve and report their traumatic experiences

and to provide rich and reliable accounts for the legal system. However, more practical knowledge is needed with respect to interviewing tactics that not only enhance children's testimonies, but that also modify the interviews to the children's emotional needs and to the children's experiences of the investigation.

Drawings and Investigative Interviews

Drawing is one medium that has been a focus for many researchers who have studied its effect on children's narratives (Butler, Gross, & Hayne, 1995; Gross & Hayne, 1998, 1999; Katz & Hershkowitz, 2010; Salmon, Roncolato, & Gleitzman, 2003; Wesson & Salmon, 2001). All of these studies except one (Katz & Hershkowitz, 2010) were lab studies that assessed the children's richness and narrative accuracy following the use of drawing. The types of questions directed to the child have been a major focus of research on drawing and children's memory. Most of the studies included open-ended or direct questions (Butler et al., 1995; Cain, 2004; Gross & Hayne, 1998, 1999) while others involved suggestive interviewing (Bruck, Melnyk, & Ceci, 2000; Gross, Hayne, & Poole, 2006; Strange, Garry, & Sutherland, 2003). In addition, drawing instructions varied across studies. In most studies, children were asked to freely draw and talk about the events (e.g., "Draw and tell me everything that happened to you when you felt sad on the day you visited the chocolate factory"; Butler et al., 1995; Cain, 2004; Gross & Hayne, 1998, 1999; Gross et al., 2006; Salmon et al., 2003; Weinle, 2002; Wesson & Salmon, 2001), but in some studies, children were given specific instructions regarding the content of the drawing (e.g., "Draw the nurse and draw you with her" or "I heard there might have been some things the doctors used at the checkup. Draw me those things"; Salmon & Pipe, 2000). The systematic findings revealed that when the drawing was integrated with best practice guidelines, that is, *free recall questions*, the children's narratives were richer without compromising accuracy.

Studies exploring the effects of drawing combined with open-ended questions showed that free recall had beneficial effects on the amount of information reported by children (Brennan & Fisher, 1998; Butler et al., 1995; Cain, 2004; Drucker, Greco-Vigorito, Moore-Russell, Avaltroni, & Ryan, 1997; Gross & Hayne, 1998; Gross & Yong, 2001; Lev-Wiesel & Liraz, 2007; Salmon et al., 2003; Weinle, 2002; Wesson & Salmon, 2001), with some researchers reporting that the number of details doubled (Butler et al., 1995; Gross & Hayne, 1998; Weinle, 2002; Wesson & Salmon, 2001) or even tripled (Drucker et al., 1997) when children were allowed to draw.

One field study that aimed to apply this understanding to practice (Katz & Hershkowitz, 2010) showed clearly that integrating drawing in investigative interviews of alleged victims of sexual abuse helped them to retrieve more new information about the alleged abuse compared to the children in the comparison group. Although it was a field study and the credibility of the children's testimonies could not be assessed, the new information they reported was elicited by open-ended questioning, which made it possible to assume that the reports were reliable (Lamb et al., 2011; Malloy et al., 2011).

Although most of the research efforts have been directed toward achieving best practices within the investigative interviews, there is also a need to create more sensitive interviews so that the children will not relive the trauma or experience new trauma following intrusive and inappropriate interviews. Apart from various qualitative studies (Roberts & Taylor, 1993; Wattam, 1992; Westcott & Davies, 1996), no studies have attempted to assess the way children comprehend their experience in investigative interviews, including how drawing can shape the children's interview experience. With that said, testimonies from the clinical context may shed some light on the potential of drawing to lead to a more positive perception of the interview by the children.

Putting the focus on the clinical context, clinicians reported on voluble effects of the use of drawing during the therapy process or a clinical interview on the children's emotional wellbeing (Burgess & Hartman, 1993; Kelley, 1984; Pynoos & Eth, 1986). The reports from the practitioners present a strong conclusion: talking about a traumatic experience using drawings gives the children control and empowers them (Cohen Liebman, 1999). Silver (2001) wrote that drawing is an accepted tool to report on an unaccepted experience and that drawing gives the children control in a place where control was taken away from them. The use of drawing with children who experienced sexual abuse is extremely important because it helps them express their emotions more freely (Cohen Liebman, 1999).

The Current Study

Although the cognitive contribution of drawing is well-documented (Brennan & Fisher, 1998; Butler et al., 1995; Cain, 2004; Drucker et al., 1997; Gross & Hayne, 1998; Gross & Yong, 2001; Lev-Wiesel & Liraz, 2007; Salmon et al., 2003; Weinle, 2002; Wesson & Salmon, 2001), its effect on children's perception of the investigative interview experience has never been explored. In the present study, 125 children who were interviewed according to the NICHD Protocol on alleged sexual abuse by a suspect who was not a family member were asked after the interview (by the same investigative interviewer who conducted the interview) how they felt before the interview, during the interview, and after the interview finished. The main aim of the study was to learn from the children's narratives how they experienced the investigative interviews and to compare children who drew with children who did not.

In the current study, all the interviews were conducted according to the NICHD Protocol, which reflects best practice guidelines for investigative interviewers (Lamb et al., 2008; Lamb et al., 2011). Another advantage of the present study is that children were randomly assigned into one of the two research conditions (drawing vs. non-drawing). The main

prediction for the study was that children in the drawing group would report a more positive experience than children in the comparison group.

Methods

Sample

One hundred twenty-five children were referred to an investigative interview following a complaint of a single incident of sexual abuse by an alleged perpetrator who was not a family member. The children's ages ranged from 4 to 14 years ($M = 9.9$, $SD = 2.41$), and the sample consisted of 31 boys and 94 girls. The alleged abuse included 29 cases of exposure (when the alleged perpetrator revealed his private body parts to the victim), 35 cases of touching private body parts over clothes, 36 cases of skin to skin touching of private body parts, and 25 cases of penetration (including vaginal, anal, or oral penetration). The time delay between the alleged incidents and the investigative interviews ranged from 1 to 730 days ($M = 37.63$, $SD = 79.84$). Table 1 presents the key sample characteristics of the two research conditions.

All interviews that were conducted in Israel between November 2005 and July 2007 were included in the sample if they matched the study criterion: the children provided allegations with respect to the alleged abuse, Hebrew was the child's first language, and no developmental disabilities were reported in the child. The interviews were conducted in Israel by nine trained investigative interviewers. The interviewers all had similar professional backgrounds: a Bachelor's degree in social work and five years of experience conducting investigative interviews with children.

The Interviews

All the interviews were conducted according to the NICHHD Protocol (Lamb et al., 2008; Lamb et al., 2011), and the changes that were made to the protocol were systematic for the two research conditions (with and without drawing).

All the interviews began with an introductory phase, where the interviewer introduced herself to the child and practiced with her basic communication rules (e.g., telling the truth, stating when she does not understand or does not know). Following this phase, there was a phase of rapport building, with the aim of creating a supportive relationship with the child, while introducing the preferred interviewing techniques. When the child appeared comfortable, the interviewer "trained" the child's episodic memory using a neutral experience so that the child became familiar with the interviewer's questioning style.

All children were interviewed using the NICHHD protocol until the interviewers had exhaustively probed the children's memory of the alleged event using open-ended questions. The interviewer then opened an envelope revealing to which condition the child had been randomly assigned.

In the *drawing group*, interviewers gave the children a blank sheet of paper, a pencil, and a rubber eraser and said, "You've told me what happened to you. Now I would like you to draw what happened, and then we will continue." Seven to ten minutes were allowed for drawing. During the drawing, interviewers limited their interventions to facilitators, such as "hmm," or repeating the children's words. After the children finished drawing, the interviewers said, "You told me earlier what happened to you and now you've drawn it. The drawing is right here in front of you. Now please tell me again everything that happened to you from the beginning to the end as best as you can. You can also look at the drawing if you want." After the children's first post-drawing narratives, the interviewers continued the interviews in accordance with the protocol, moving from open-ended questions to more focused questions. Interviewers were instructed to ignore the drawing completely, to avoid offering any interpretations of it and to focus only on the verbal information that the children provided. Any deviations from these instructions were coded as suggestive utterances.

In the *comparison group*, the children took a break for 7–10 minutes, during which time they could choose to play or rest. This break was designed to equal the drawing time allowed to children in the research group and the total duration of the interview. No drawing was allowed during the break. After the break, the interviewers said: "You've told me what happened to you and then you've played/taken a rest. Now please tell me again everything that happened to you from the beginning to the end as best as you can." After the children's first narratives, the interviewers continued the interviews in accordance with the Protocol.

Table 1

Key sample characteristics according to the research condition.

Sample characteristic	Values	Drawing	Comparison group
Gender	Boys	19	12
	Girls	50	44
Severity of abuse	Exposure and touch over	14	15
	Touch under and penetration	55	41
Suspect familiarity	Stranger	45	39
	Familiar suspect	24	17

At the end of the interview, the interviewer asked the child the following free recall questions: (a) Tell me how you felt before the interview; (b) Tell me how you felt during the interview; and (c) Tell me how you are feeling now that the interview is finished.

The instruction for the interviewers was to try to help the children to elaborate their narratives using cue invitations; for example, “Tell me more about you feeling scared.” Finally, in an attempt to help the children relax again, the interviewers were instructed to move the focus of the conversation to neutral topics (e.g., “What are you going to do after the interview?”).

Procedure

By law, all interviews were video recorded and transcribed by experienced professional transcribers. The transcripts were sent to the researchers only after removing potentially identifying details about those involved in the incidents.

Data coding. After being checked to ensure that all interviews were performed in accordance with the study protocol, the interviews were coded to identify the children’s responses to the questions with respect to their experiences of the investigations. Any word that the children produced was marked and later on was categorized using the following categories.

Experiences before the interview:

- Words indicating negative experiences before the interview – for example: “I was afraid,” “I felt stress.”
- Words indicating positive experiences before the interview – for example: “I was excited,” “I was looking forward for the meeting with you.”

Experiences during the interview:

- Words indicating negative experiences during the investigation – for example: “It was hard,” “It was difficult for me.”
- Words indicating positive experiences during the investigation – for example: “I felt good since I helped you understand what happened to me,” “I felt safe.”

Experiences following the interview:

- Words indicating experiences of relief – for example: “I am feeling relief after telling you everything that happened to me.”
- Words indicating experiences of hope – for example: “I am feeling hope that now maybe someone will help me.”
- Words indicating experiences of success – for example: “I am feeling that I succeeded in explaining to you what happened to me.”
- Words indicating negative emotions were searched for in the transcripts; no words were identified that fell into this category.

Two highly trained coders performed the coding, and inter-coder reliability was checked by having more than 15% of the transcripts independently rated by both coders. There was 100% agreement between coders in the categories.

Ethical Approval

The research was approved by the manager of the investigative interview unit in Israel, the head of youth department for the Israeli police, the vice president of the Israeli juvenile court, and the chairman of the ethics board of the University of Haifa.

Results

Each child received a score of 0 if she did not provide any words indicating positive/negative/other experiences and 1 if she provided a word. The mean number represents the mean number of each target variable. For all the analyses, age was related as three groups – 4–6 years old, 7–9 years old and 10–13 years old.

Manipulation Check

The first step was to assess whether there were differences between the children in the different research conditions with respect to their experiences before the interview. A 2 (interview condition: drawing vs. no drawing-between subjects) \times 2 (children’s experiences: negative, positive-within subjects) multivariate analysis of variance (MANOVA) revealed no condition differences in the experiences of the children before the interviews. However, there was a significant difference between negative and positive experiences before the interview, $F(1,123) = 12.28$, $p < 0.001$, $\eta^2 = 0.09$. Children displayed more words indicating negative experiences before the interview ($M = 0.66$, $SD = 0.79$) than words indicating positive experiences ($M = 0.30$, $SD = 0.55$).

Further analyses were carried out to explore children’s experiences before the investigation with respect to various variables. A 2 (interview condition: drawing vs. no drawing-between subjects) \times 2 (children’s experiences: negative, positive-within subjects) \times 2 (children’s gender: male, female-between subject) MANOVA revealed no condition differences in the experiences of children before the interviews, with no interactions. However, there was a significant effect for gender, $F(1,121) = 4.95$, $p < 0.028$, $\eta^2 = 0.04$, with girls providing more words indicating negative experiences ($M = 0.75$, $SD = 0.82$).

Table 2

The means and standard deviations of emotions displayed before the interview with respect to the research conditions.

Sample characteristics	Values	Drawing		Comparison group	
		Negative experiences <i>M (SD)</i>	Positive experiences <i>M (SD)</i>	Negative experiences <i>M (SD)</i>	Positive experiences <i>M (SD)</i>
Gender	Boys	0.52 (0.69)	0.42 (0.69)	0.16 (0.38)	0.25 (0.45)
	Girls	0.80 (0.83)	0.32 (0.58)	0.70 (0.82)	0.25 (0.48)
	Total	0.72 (0.80)	0.34 (0.61)	0.58 (0.78)	0.25 (0.47)
Severity of abuse	Exposure and touch over	0.78 (0.97)	0.42 (0.64)	1.00 (0.65)	0.33 (0.48)
	Touch under and penetration	0.70 (0.76)	0.32 (0.61)	0.43 (0.77)	0.21 (0.47)
	Total	0.72 (0.80)	0.34 (0.61)	0.58 (0.78)	0.25 (0.47)
Suspect familiarity	Stranger	0.77 (0.82)	0.37 (0.64)	0.76 (0.84)	0.23 (0.42)
	Familiar	0.62 (0.76)	0.29 (0.55)	0.17 (0.39)	0.29 (0.58)
	Total	0.72 (0.80)	0.34 (0.61)	0.58 (0.78)	0.25 (0.47)
Children's age	4–6	0.47 (0.66)	0.47 (0.73)	0.28 (0.46)	0.21 (0.42)
	7–9	0.85 (0.84)	0.32 (0.54)	0.80 (0.87)	0.19 (0.40)
	10–13	0.83 (0.85)	0.22 (0.54)	0.57 (0.81)	0.33 (0.57)
	Total	0.72 (0.80)	0.34 (0.61)	0.58 (0.78)	0.25 (0.47)

than boys ($M=0.38$, $SD=0.61$). No significant differences were found among boys and girls with respect to their positive experiences (*girls*: $M=0.28$, $SD=0.54$; *boys*: $M=0.35$, $SD=0.60$).

With respect to the severity of abuse, a 2 (interview condition: drawing vs. no drawing-between subjects) \times 2 (children's experiences: negative, positive-within subjects) \times 2 (severity of abuse: exposure and touch over clothes vs. touch under clothes and penetration-between subjects) MANOVA revealed no differences in the experiences of the children before the interviews, with no interactions. However, there was a significant effect for the severity of the abuse, $F(1,121)=7.28$, $p<0.008$, $\eta^2=0.06$, with children who were interviewed following suspected exposure or touching over clothes providing more negative experiences before the interview ($M=0.89$, $SD=0.81$) than children who were interviewed following suspected touching under clothes or penetration ($M=0.59$, $SD=0.77$). No significant differences were found among children in the differing severity of the abuse with respect to their positive experiences before the interviews (*exposure and touch over*: $M=0.37$, $SD=0.56$; *touch under and penetration*: $M=0.28$, $SD=0.55$).

With respect to the suspect familiarity, a 2 (interview condition: drawing vs. no drawing-between subjects) \times 2 (children's experiences: negative, positive-within subjects) \times 2 (suspect familiarity: stranger vs. familiar-between subjects) MANOVA revealed no condition differences in the experiences of children before the interviews, with no interactions. However, there was a significant effect for suspect familiarity, $F(1,121)=7.08$, $p<0.009$, $\eta^2=0.05$, with children who were interviewed following suspected abuse by strangers providing more negative experiences before the interview ($M=0.77$, $SD=0.82$) than children who were interviewed following suspected abuse by familiar suspects ($M=0.43$, $SD=0.67$). No significant differences were found among children with respect to their positive experiences before the interviews (*strangers*: $M=0.30$, $SD=0.55$; *familiar*: $M=0.29$, $SD=0.55$).

Table 2 presents the means and standard deviations of the emotions displayed before the interview with respect to the research condition and the sample's key characteristics.

With respect to the children's age and the time delay between the alleged incidents and the interviews, no cell effects, interactions or main effects were found. Therefore, the child's age and time delay did not affect the experiences of children before the interviews.

The Effect of Drawing on Children's Experiences During the Investigations

To assess the effect of drawing on children's experiences during the investigation, a 2 (interview condition: drawing vs. no drawing-between subjects) \times 2 (children's experiences: negative, positive-within subjects) MANOVA revealed a main effect for the type of experience, $F(1,123)=26.50$, $p<0.000$, $\eta^2=0.17$, with children in both research conditions overall using more words indicating positive experiences during the investigation ($M=0.68$, $SD=0.80$) than negative experiences ($M=0.24$, $SD=0.42$). There was also an interaction between the research condition and the type of experience, $F(1,123)=26.50$, $p<0.000$, $\eta^2=0.17$, with children in the drawing group reporting more positive experiences during the investigation ($M=0.98$, $SD=0.86$) than children in the comparison group ($M=0.26$, $SD=0.48$), with no differences between the research conditions in the negative experiences of the children (*drawing*: $M=0.22$, $SD=0.41$; *comparison*: $M=0.26$, $SD=0.44$).

In other analyses, no main effects or interactions were found with the children's gender, the children's age, the suspect familiarity, the type of abuse, and the time delay. **Table 3** presents the means and standard deviations of the emotions displayed during the interview with respect to the research condition and the sample's key characteristics.

Table 3

The means and standard deviations of emotions displayed during the interview with respect to the research condition.

Sample characteristics	Values	Drawing		Comparison group	
		Negative experiences <i>M (SD)</i>	Positive experiences <i>M (SD)</i>	Negative experiences <i>M (SD)</i>	Positive experiences <i>M (SD)</i>
Gender	Boys	0.21 (0.41)	0.98 (0.85)	0.16 (0.38)	0.41 (0.51)
	Girls	0.22 (0.41)	0.96 (0.80)	0.29 (0.46)	0.22 (0.47)
	Total	0.21 (0.41)	0.97 (0.84)	0.26 (0.44)	0.26 (0.48)
Severity of abuse	Exposure and touch over	0.21 (0.42)	0.85 (0.66)	0.20 (0.41)	0.26 (0.59)
	Touch under and penetration	0.21 (0.41)	0.95 (0.91)	0.29 (0.46)	0.26 (0.44)
	Total	0.21 (0.41)	0.90 (0.86)	0.26 (0.44)	0.26 (0.48)
Suspect familiarity	Stranger	0.20 (0.40)	0.98 (0.68)	0.28 (0.45)	0.25 (0.49)
	Familiar	0.25 (0.44)	0.91 (1.13)	0.23 (0.43)	0.29 (0.46)
	Total	0.21 (0.41)	0.96 (0.56)	0.26 (0.44)	0.26 (0.48)
Children's age	4–6	0.08 (0.28)	0.95 (0.82)	0.07 (0.26)	0.14 (0.36)
	7–9	0.25 (0.44)	0.98 (0.94)	0.23 (0.43)	0.23 (0.53)
	10–13	0.33 (0.48)	0.83 (0.78)	0.42 (0.50)	0.38 (0.49)
	Total	0.21 (0.41)	0.93 (0.86)	0.26 (0.44)	0.26 (0.48)

The Effect of Drawing on Children's Experiences Following the Investigations

Three different univariate analyses were carried out to examine the effect of drawing on the children's experiences of relief, hope, and success following the investigation.

A univariate analysis was conducted to assess the effect of drawing on children's experiences of relief following the investigation. No main effect was found for the research condition (*drawing: M = 0.44, SD = 0.50; comparison: M = 0.35, SD = 0.48*). When gender, suspect familiarity, and time delay were integrated into these analyses, no main effects or interactions with the research conditions were found. With respect to the type of abuse, no interaction with research conditions was found. However, a main effect for the type of abuse was found, $F(1,121) = 5.46, p < 0.021, \eta^2 = 0.04$, with children interviewed about exposure and touch over expressing more experiences of relief ($M = 0.58, SD = 0.50$) than children who were interviewed about suspected touch under or penetration ($M = 0.35, SD = 0.48$). In addition, with respect to the children's age, no interaction with research conditions was found. However, a main effect for the children's age was found, $F(2,119) = 7.94, p < 0.001, \eta^2 = 0.12$, with children aged 4–6 reporting less experience of relief ($M = 0.16, SD = 0.37$) than children aged 7–9 ($M = 0.51, SD = 0.50$) and children aged 10–14 ($M = 0.51, SD = 0.50$).

A univariate analysis was conducted to assess the effect of drawing on children's experiences of hope following the investigation. No main effect was found for the research condition (*drawing: M = 0.36, SD = 0.48; comparison: M = 0.25, SD = 0.43*). When gender, type of abuse, suspect familiarity, and time delay were integrated into these analyses, no main effects or interactions with the research conditions were found. With respect to the children's age, no interaction with the research condition was found; however, a main effect for the children's age was found, $F(2,119) = 4.17, p < 0.018, \eta^2 = 0.06$, with children aged 4–6 reporting fewer experiences of hope ($M = 0.13, SD = 0.34$) than children aged 7–9 ($M = 0.36, SD = 0.48$) and children aged 10–14 ($M = 0.41, SD = 0.49$).

A univariate analysis was conducted to assess the effect of drawing on children's experience of success following the investigation. A main effect was found for the research condition, $F(1,123) = 28.87, p < 0.000, \eta^2 = 0.19$, with children in the drawing group using more words relating to experiences of success following the investigation ($M = 0.98, SD = 0.62$) than children in the comparison group ($M = 0.42, SD = 0.35$). When gender, type of abuse, suspect familiarity, and time delay were integrated into these analyses, no main effects or interactions with the research conditions were found. Interestingly, even age did not have an effect or interaction; children from all age groups reported experiences of success (*4–6 years old: M = 0.99, SD = 0.55; 7–9 years old: M = 0.95, SD = 0.64; 10–14 years old: M = 0.96, SD = 0.32*).

Discussion and Practical Implications

The current study assessed the consequences of investigative interviews from a different perspective than previous studies. Past studies focused mainly on the legal outcomes of the investigative interviews with children in terms of quality of investigations and subsequent to that, the quality of the children's testimonies. The focus of the current study was on the children's perceptions and experiences before, during, and following the investigations. Moreover, the current study aimed to learn from these experiences by comparing children who were interviewed with drawing to children who were interviewed without drawing. The uniqueness of this study is that it is a field study with children who were interviewed following suspected CSA and randomly assigned to the two research conditions. All the children were interviewed with the NICHD Protocol, which allowed for standardized interviews.

When exploring the children's experiences before the investigations, it was found that children displayed more negative feelings toward the investigation than positive feelings. The children knew that they were going to be interviewed, and apparently and naturally felt stress and fear before the investigation. This was evident in both research conditions, allowing us to conduct a manipulation check and assure that there were no basic differences between the groups. It seems that children had negative expectations about the interview, as can be learned from their narratives in response to the invitations:

"I thought to myself, what is going to happen to me? Where are they taking me? What is this place? Who is this person? I was terrified."

"I thought, they are taking me here because I did something wrong, and I was afraid maybe they will take me to jail."

There were no differences in the display of emotions before the interview among children of different ages and among different time delays between the alleged incidents and the investigations. Differences were found with respect to gender, with girls displaying negative feelings more often than boys. This finding is similar to previous studies (Aldridge & Wood, 1997; Buckner & Fivush, 1998; Fivush, Brotman, Buckner, & Goodman, 2000) that indicated gender differences with respect to emotional language. However, no differences were found between boys and girls in the display of positive emotions, suggesting another explanation for these findings. The explanation might be embedded in gender socialization. Crawford (1995) discussed ways in which talk, conversation, and the use of language in society operates in ways that makes it easier for boys to assert their views and experience and marks words and experiences of girls as deficient and devalued, thus making the act of conversation fraught with ambiguity and danger. It might be that the girls felt stress from the interviews more often because they tended to expect that no one would believe their story.

Differences were also found with respect to the severity of the abuse, with children who were interviewed about alleged exposure or touch over displaying more negative emotions before the interview than children who were interviewed on alleged touch under and penetration. Further exploration of this finding is clearly needed, given previous studies related to the severity of the abuse as the variable that can profoundly affect children's disclosure patterns and richness of testimonies (Lamb et al., 2011). One explanation for this difference may be that children with the "severe" abuse had not yet acknowledged at the time of the investigation what had happened to them, which might have prevented them from expressing or admitting their emotions. Another explanation may be that children who experienced exposure and touch over feel that the interviewer, and society, might minimize their experience and their pain; this gap between their inner turmoil and the expected minimization generated stress. It is important to note the relief that those children described when they felt that the interviewer took their words and experiences seriously. This direction is important to strengthen the notion that CSA is a complex and individually experienced phenomenon.

It was also found that children who were interviewed about alleged incidents by strangers displayed more negative emotions than children who were abused by perpetrators familiar to them before the investigations. This finding is surprising given previous studies (London, Bruck, Ceci, & Shuman, 2005; Pipe et al., 2007) which indicated difficulties in disclosure when the perpetrators are familiar or family members. It might be that these children experienced more threats from the strangers, which can be observed through their difficulties (Malloy et al., 2011; Pipe et al., 2007). However, because the current study did not include family members in the sample, it is crucial to further explore the experiences of children following investigative interviews in such cases.

During the interview, children in both research conditions displayed more positive experiences with respect to the interview than negative emotions. Nonetheless, children in the drawing condition provided more words indicating positive experiences during the interview than children in the comparison group. Interestingly, this finding was evident regardless of any other variable in the study, meaning that children in the drawing group reported more positive experiences during the investigation, regardless of age, gender, the type of abuse, the suspect familiarity, and the time delay between the alleged incident and the investigation.

This finding stresses the contribution of drawing to the investigation. Apparently, during the investigation, drawing gave the children control and strengthened them during the process, as some of the children reported:

"I started to draw, and it was important to me to explain to you and to tell you everything that happened to me because this is the only way you will understand. I felt good, like I can help you."

Following the interview, in response to free recall invitations, the children used three main words indicating their experiences following the investigation – relief, hope, and success. Children in both research conditions displayed experiences of relief and hope following the investigation. As for the relief, it was interesting to discover that children who were interviewed following alleged incidents of exposure and touch over (who reported negative experiences before the interview more often) reported relief following the investigation. Other variables did not affect the display of relief, but age was found to be significant, with children aged 7–14 expressing more relief than children aged 4–6.

Moreover, children in both research conditions displayed experiences of hope following the investigation. This was evident regardless of gender, severity of abuse, suspect familiarity, and time delay. Age was also significant here, with children aged 4–6 displaying hope less often than children aged 7–14.

It is important to stress the developmental differences within the current study. Surprisingly, age was not found to be a significant variable regarding most of the target variables, besides relief and hope, relative to previous studies (see Malloy et al., 2011 for review) that indicated that older children have more developed cognitive abilities than younger children.

Apparently, the use of drawing reduced the developmental gap between children, as reported before by Cain (2004) indicating that drawing reduced cognitive and social differences between children.

These findings revealed important issues that required discussion. One issue is related to the children's relief following a very intensive experience. This assessment was carried out immediately after the investigation; more research is needed to clarify the experience of the investigation after a period of time. However, it is important to note that children, especially these who were more stressed before the interview, found relief after the experience. This can be elaborated using the second issue: it seems that the NICHD Protocol promotes not only the legal outcomes of the investigations but also the children's perceptions and experiences. Impressively, the NICHD Protocol integrated interventions (such as building rapport with the children) that contributed to the children's experiences of this challenging encounter.

Although relief and hope were evident, regardless of the research condition, success was more prevalent among children in the drawing group than children in the comparison group. This finding was evident regardless of the type of abuse, the suspect familiarity, the time delay, the child's gender, and most interesting, the child's age. A feeling of success can be observed as part of an empowering process that the children experienced during and following the investigations. The children's narratives emphasize this process:

"After drawing I felt ok. Now I can talk to you. Now I can tell you everything that had happened to me and I am proud of myself for succeeding in doing so."

"Now that the interview is finished, I am feeling good. I am feeling right and just because I am not alone anymore."

Although a previous study emphasized the contribution of drawing to the children's testimonies (Katz & Hershkowitz, 2010), the current study focused on its valuable contribution to the children's experiences of the investigation by demonstrating that drawing helps to not only make forensic investigations less damaging but also more empowering. Observed in this light, it seems that incorporating drawings into forensic investigations is a win-win situation – enhancing both the forensic context and empowering the child.

The conclusions from the current study should be considered carefully, given the study limitations. One important limitation is that the quality and reliability of the children's testimonies cannot be assessed, meaning that it is possible that some of the children in the current study did not experience the alleged abuse they reported on, so that the conclusions from the current study should be assessed while considering this limitation, which is a basic limitation in any field study. Another limitation of the study that needs to be addressed is the large standard deviations in the study. Following strict confidentiality limitations, the researchers only had access to the children's age, gender, and the characteristics of abuse. Apparently, other variables, such as family-related variables, might have a considerable effect and might explain the variance in the study data.

In addition, for reasons of child protection and ethics, the children were asked the questions about their experiences by the investigative interviewers who interviewed them. One can definitely say that the children's answers were affected by their need and will to the interviewer and their obligation and suggestibility toward the interviewer. However, it must be stressed that all the children's narratives were provided in response to open-ended invitations and that the children chose the words to characterize their own narratives and experiences. In addition to that, there is a clear advantage that the same investigative interviewer who interviewed the children will ask and hear these questions as a closure of the process for both of them, allowing the children to receive power and control in the place and context where control was taken away from them. The set of questions used in the current study presented short and easy to apply practical guidelines to any investigative interview, allowing the children the opportunity to provide interview feedback about their experiences. Given the knowledge that was gathered from the narratives of children in the current study, it seems that these questions generate important information for the forensic interviewers.

Future studies should also explore the investigation experience in cases where the alleged perpetrators are family members. In these cases, previous studies reported on higher difficulties to disclose the abuse and more evident conflict in loyalty (Lamb et al., 2011; London et al., 2005; Pipe et al., 2007), so it is important to address their experiences given their special context.

Putting the focus on developing interventions that will enhance not only the children's testimonies but also their wellbeing is highly important. These types of efforts are intended to promote the notion that investigative interviews should be viewed as not only a step within the legal process but as a significant step in the child's recovery process.

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