Predictors of Children's Emotional Reactions When Disclosing Abuse

Patricia A. Amaral

Writer's comment: The idea for this article came about when I joined the McNair Scholars program. The program is designed to assist disadvantaged students who are interested in conducting research and working towards a PhD program. One of the requirements entails finding a faculty mentor. During the winter of 2003, I met Dr. Gail S. Goodman. I later became an undergraduate researcher for her developmental research lab. After I discussed the details of the program with her, she became my mentor and gave me the opportunity to work on a project and make it my own. In her lab I began my research on "Predictors of Children's Emotional Reactions when Disclosing Abuse." I found the topic fascinating and proceeded to write an article. It has since been published in the McNair Scholars journal as well as in the National Conference of Undergraduate Research. Dr. Gail S. Goodman's insightful criticism and never ending support along with that of her grad student Liat Sayfan helped me recognize my potential as a writer.

—Patricia A. Amaral

Instructor's comment: Most people, be they laypersons or legal professionals, seem to assume that when a child victim discloses abuse, the child will cry, look upset, or appear depressed. What a surprise to find that this is not typically true. Patricia Amaral took the opportunity to examine children's emotional reactions when the children disclosed being victims of various types of child maltreatment, specifically, child sexual abuse, child physical abuse, or child neglect. Patricia found that older compared to younger children appear more upset when discussing their sexual abuse experiences, perhaps because the older children realize the implications of such abuse. The study is of interest to those who want to help maltreated children, to those who deal with child maltreatment cases in the legal system, and to those who are interested in emotional development more generally. Patricia is to be highly commended for her contributions to the project. Ms. Amaral has a bright future ahead of her as a scholar in this area.

-Gail S. Goodman, Psychology Department

ABSTRACT

One hundred twenty three children were psychologically evaluated in a hospitalization program for allegedly abused children. Videotaped forensic interviews were used to examine emotional reactions of children while disclosing abuse incidents. Four variables were investigated as potential predictors of the children's emotional reactions: gender, age, abuse severity, and child's relationship to perpetrator. The results for sexually abused children differed from those for physically abused children. For the sexually abused group, older children were more distressed than the younger children at disclosure. Conversely, in the physically abused group, none of the predictors were significant.

1. INTRODUCTION

"She was extremely timid, and I think there's no way she'd put herself through this if she were lying. She became visibly upset when she began recalling the molestation incidents" (Myers et al., 1999, p.419). Children's strong adverse reaction toward abuse, that is, being highly upset, is often expected. In particular, prosecutors and jurors often believe that abused children must be upset when discussing the abuse incident, otherwise they think the child is not telling the truth (Myers et al., 1999). However, this expectation may not hold in reality, and some children may display unexpected emotions. Therefore, we need to investigate what emotions children typically express when they disclose abuse and what predicts children's affect during abuse disclosure. Thus far, only two studies have been conducted in this area.

In one study, Wood et al. (1996) examined videotaped forensic interviews of sexually abused children (aged 2–11 years) and assessed the children for emotional behaviors. The majority of the children displayed a relaxed/neutral affect when disclosing abuse. The researchers also found that the majority of abused children displayed few of the following emotional behaviors while disclosing abuse: crying, anger, or sadness. Thus, the assumption that children should display a certain set of emotions when disclosing abuse was not supported in this study. The Wood et al. study highlights the fact that while many people feel that children who are abused sexually, physically, or emotionally should be upset when disclosing abuse, such children are in fact more likely to be relaxed or neutral.

In another study, Bonanno and colleagues (2002) examined the voluntary disclosure and involuntary disclosure of adults who experi-

enced childhood sexual abuse in relation to nonverbal emotional display. The researchers used structured interviews to assess the adults' nonverbal facial expressions while disclosing their childhood sexual abuse. They found that adults who did not voluntarily disclose childhood sexual abuse were most likely to show greater facial expressions of shame, whereas adults who voluntarily disclosed childhood sexual abuse were most likely to evince greater facial expressions of disgust.

The present study sought to examine the emotional reaction of physically or sexually abused children when they disclose their abuse experiences and to find what predicts these emotional displays. Children's affect when disclosing their abuse experiences was assessed using videotaped forensic interviews while the children were hospitalized. We used four predictors for explaining differences in emotional affect at disclosure: gender, age, abuse severity, and relationship to the perpetrator.

When examining emotional reactions in children, we first need to know what is the normal developmental path of displaying different emotions and the emotional development path of maltreated children.

1.1 Normal Development of Emotional Display

Nonmaltreated children display a wide array of positive emotions. Unlike their maltreated counterparts, non-maltreated children are better able to cope with their emotions and possess better language skills. They express greater confidence and assertiveness when dealing with their environment. Nonmaltreated children are also shown to be more independent, happy, and have higher self-esteem when observed in social interactions (Pollack et al., 2000). Camras and colleagues (1990) examined children's expressive behavior in both well-suited and poor environments and also tested children's recognition of their mothers' emotional expression. The study involved forty children (ages 3-7 years), of whom half were classified as maltreated, and the other half as nonmaltreated. The researchers found that nonmaltreated children who have positive relationships with their mothers are better off at expressing and recognizing facial expressions than are maltreated children.

1.2 Emotional Development of Maltreated Children

According to Pollack and colleagues (2000), maltreated children demonstrate few if any positive emotions and many negative emotions.

Maltreated children also demonstrate problems with coping skills in emotionally arousing situations, personality development, and varied emotions, such as crying, anger, frustration, and sadness. For example, neglected preschoolers are generally confused by the emotional displays of others and are less able to discriminate emotions than nonmaltreated and abused children (Pollack et al., 2000). Maltreated children are found to score low on confidence and assertiveness when dealing with their environment. According to Egeland et al. (1983), maltreated children are found to be more dependent and express low ego control. In addition, Erickson et al. (1989) suggested that "maltreated children receive the lowest ratings on self-esteem and were observed to be the most unhappy group of children, displaying the most negative affect and the least positive affect" (p. 685). Interestingly, maltreated children show symptoms of dissociation, are isolated, withdrawn, and have deficits in basic understanding of emotions in their social interactions. Overall, it appears that maltreated children show deficits in general expressive language skills and behavior and their emotional expressive vocabulary is less developed than those of nonmaltreated children (Erickson et al., 1989). Finally, maltreated children tend to have poor social competence, which in turn may be linked to the experience of maltreatment. In general, maltreated children have been found to be the least competent in their social environment. Thus, we need to realize that child maltreatment poses a significant challenge to children's development and their well-being. In particular, children's well-being is dependant on the severity of the abuse.

1.3 Abuse Severity and Psychological Outcomes of Maltreated Children

The adjustment following child abuse discovery can be different for every individual depending on such factors as the type (physical abuse or sexual abuse) and severity of abuse. Child maltreatment tends to carry mild to severe psychological outcomes usually depending on the type and characteristics of abuse. According to Narr-King and colleagues (2002), depression and anxiety are two symptoms that appear among adolescents with histories of sexual and physical abuse. Specifically, with physical abuse, children seem to display normal to elevated symptoms of depression and anxiety following an abuse incident and these symptoms can persist for short to long periods,

depending on the severity and duration of the abuse. Conversely, with sexual abuse, children tend to have higher posttraumatic symptoms after the abuse incident, for example, long-term effects of depression, isolation, anxiety, and bipolar disorder. Callahan and colleagues (2003) analyzed the relationship between abuse severity and long-term effects among CSA survivors as well as differences between abused and non-abused individuals. The overall findings suggested that abused children show greater symptoms of psychiatric distress and poorer interpersonal functioning than those of the non-abused group. Abuse severity was also a significant predictor of increased symptoms of distress and poorer interpersonal functioning.

When children choose to disclose abuse, it is often because they are being pressured to do so or because the perpetrator is not related to them. In fact, it has been found that many children who experience child abuse do not report it because they are afraid of what might happen to them, innocent others, or the perpetrator if they disclose, since in many cases of abuse, the perpetrator is a close member of the family (Goodman-Brown et al, 2002). Conversely, more maltreated children are beginning to disclose their abuse experiences in many different forms in an attempt to stop the abuse and deal with the experience of prior abuse incidents.

1.4 The Disclosure Processes in Maltreated Children

The disclosure process in maltreated children can take different forms (verbal or nonverbal, descriptive or evaluative) and serve many different functions (promoting more, better, and earlier reports of suspected abuse; helping and working with abuse victims in the aftermath; and testifying as credible witness in the court system). Disclosure of abuse also varies greatly depending on the age of the child. Because younger children are less capable of understanding societal norms regarding sexual activity and because it is more difficult for them to disclose molestation verbally, they in turn are more likely to use non-verbal disclosure in the form of sexual acting out behaviors, which were most likely learned from the incident (Finkelhor & Williams, 1988). Older children, on the other hand, have greater knowledge and understanding of the norms regarding sexual activity. Therefore, we expect them to be more reliable when verbally disclosing abuse and also to be able to regulate the amount of disclosure in detail. We also expect them to choose the person to whom they disclose. For example,

a study by Bussey and Grimbeek (1995) demonstrates an interesting point that children will disclose abuse only to a certain extent, depending on the person to whom they choose to disclose. Their study examined disclosure processes and issues for child sexual abuse victims. They found that for some children who are sexually abused by a family member rather than a non-family member, these children may be less likely to disclose abuse due to the concern they feel for the perpetrator and the concern they feel regarding their family's unity if they report the abuse. Apart from the possible threats made by the perpetrator, it is likely that victims of child abuse will often not disclose their abuse because of the reactions they anticipate from the person to whom they disclose it. Still, little research exists on children's disclosure of abuse, the psychological impact of such disclosure, and their emotional display while disclosing.

1.5 The Current Study

The present study was undertaken to examine the expressive emotional reaction during disclosure of maltreatment by children who were either physically or sexually abused. The sample consisted of 123 children (3 to 17 years of age) who were physically and psychologically evaluated in an intensive in-patient child abuse program. In this study, we assessed children's affect when disclosing their abuse experiences using videotaped interviews taken while the children were hospitalized. Our goal was to find predictors of the children's emotional reactions. To that end, we used the following variables as predictors: gender, age, abuse severity, and child's relationship to the perpetrator.

2. METHOD

2.1 Participants

A sample of 123 participants was evaluated for a 5-day period in an intensive in-patient child abuse program. One hundred and nineteen of the participants disclosed some form of abuse during a forensic interview; thus, their videotaped interviews were included. Sixty-two percent of the sample was females, and 75% of the sample was African-American (the others were Caucasians). Twenty-five percent of the participants were between ages 3 and 5, 31% were between ages 6 and 8, and 44% were between ages 9 and 17.

2.2 Materials

- *2.2.1 Coding of affect at disclosure.* The forensic interviewer rated emotional affect at disclosure using a 6-point scale. The scale ranged from 1 ("Very Happy") to 6 ("Very Upset").
- *2.2.2 Relationship to perpetrator.* The child's relationship to the perpetrator was determined based on the information provided by the current caretakers and the evaluation program using previous history and reports. The relationship of the abused child to the perpetrator was coded as 0 ("non-family member") or 1 ("family member").
- 2.2.3 Abuse type. Abuse type was determined based on the information provided by the evaluation program using previous history, medical reports, and strength of evidence for the abuse. Abuse type was then determined as "Physical Abuse," "Sexual Abuse," "Physical and Sexual Abuse," "Neglect," "Parental Addiction," or "Child denies all abuse." For the purpose of this report, we used only the physical abuse and the sexual abuse categories. Thirty-eight percent of the children were classified as sexually abused (N = 49), and the remaining 48% were classified as physically abused (N = 74).
- 2.2.4 Severity of physical abuse. Severity of physical abuse was determined based on the information provided by the in-patient evaluation program using previous history, medical reports, and strength of evidence for the abuse. Severity of physical abuse was then determined using a scale ranging from 1 through 4, with 1 being "Corporal Punishment," 2 being "hit with belt or something else/leave marks on body," 3 "being broken bones/concussion," and 4 being "needed hospitalization."
- 2.2.5 Severity of sexual abuse. Severity of sexual abuse was determined based on the information provided by the in-patient evaluation program using previous history, medical reports, and strength of evidence for the abuse. Severity of sexual abuse was then determined using a scale ranging from 1 through 4, with 1 being "verbal abuse," 2 being "fondling," 3 being "genital—no penetration," and 4 being "penetration."

2.3 Procedure

The 123 videotaped for ensic interviews obtained from a 5-day inpatient child abuse evaluation program were used to assess children's affect while disclosing their abuse experiences and to attempt to relate the affect to the child's gender, the abuse type, its severity, the child's age in years, and the child's relationship to the perpetrator. These variables were used to explore children's emotional reaction when they disclose abuse incidents. Child Protective Services removed the majority of these children from their homes due to suspicions or allegations of child abuse. While in the hospital, the children were clinically interviewed (usually on the second or third day) by a psychologist who checked for specific signs and symptoms related to child abuse. The clinical psychologist used a structured interview in which he or she asked each child specific questions, for example, "What happens to you when you've done something bad at home or school?" "Has anyone ever spanked you?" "Has anyone ever touched you on your private parts?" The forensic/clinical interviewer then rated the child's affect at the end of each interview.

3. RESULTS

3.1 Predictors of Affect in Sexually Maltreated Children

Several variables were examined as possible predictors of the ratings of emotional distress at disclosure for sexually maltreated children (see Table 1). Relationship to perpetrator was not significantly correlated with emotional affect at disclosure, r = -.12, p < .54. However, surprisingly, the direction of this correlation suggests that the closer the relationship between the child and perpetrator, the less distressed the child appeared to be when disclosing abuse during the forensic interview. Furthermore, more severe sexual abuse was not significantly related to more distress during disclosure, r = .17, p < .26. However, children's age and gender were somewhat related to affect during disclosure. Specifically, older children showed more distress during disclosure, r = .27, p < .06, although the correlation fell just short of statistical significance. Also, females tended to be more distressed than males when disclosing abuse, r = .14, p < .34, although again the correlation was not statistically significant. A simultaneous multiple regression analysis was conducted including the following variables to predict affect at disclosure: relationship to the perpetrator, severity of abuse, gender, and age. This model explained 22.6 % of the variance in children's affect but was not statistically significant, F(4, 24) = 1.75, p <.17. Within this new significant model, the child's age was the only significant predictor of children's affect when disclosing abuse, $\beta = .51$, p < .05, indicating that older children showed more distress when disclosing (see Table 2).

Table 1. Correlations for Sexually Abused Children

	Age	Gender	Relationship to perpetrator	Severity of sexual abuse	Affect at disclosure
Age	1 (49)	-	-	-	-
Gender	.39** (49)	1 (49)	-	-	-
Relationship to perpetrator	.35 (30)	.00 (30)	1 (30)	-	-
Severity of sexual abuse	.02 (48)	.05 (48)	.02 (29)	1 (48)	-
Affect at disclosure	.27 (49)	.14 (49)	12 (30)	.17 (48)	1 (49)

Note. The number of cases upon which the bivariate correlation was calculated is indicated in parentheses.

Table 2. Regression Analysis:
Predicting Affect at Disclosure for Sexually Abused Children

		Affect at disclosure			
	Predictor	В	SE	β	
Constant		3.6	.55		
Gender		46	.35	25	
Child's age in years		.10	.04	.51	
Relationship to perpetrate	or	42	.28	30	
Severity of sexual abuse		.07	.15	.08	

Note. The forgoing predictors account for 22.6% of the variance (R^2 =. 226). The adjusted R² is .097. N=49

^{**}p < . 01.

3.2 Predictors of Affect in Physically Maltreated Children

Several variables were examined as possible predictors of the ratings of emotional distress at disclosure for physically maltreated children (see Table 3). Gender was not significantly correlated with emotional affect at disclosure, r = -.11, p < .34. Although non-significant, this correlation suggests that males were somewhat more likely than females to show distress when disclosing abuse. This correlation clearly is opposite to what was found for sexually abused children. As was true for sexual abuse, more severe forms of physical abuse was not significantly correlated with more distress during disclosure, r = .15, p < .20. Additionally, relationship to perpetrator was also not correlated with emotional affect at disclosure, r = .05, p < .71. Finally, children's age was not related to affect during disclosure, r = -.01, p < .94. These results differ from what was found for sexually maltreated children. A simultaneous multiple regression analysis was conducted including the variables gender, severity of physical abuse, child's age in years, and relationship to the perpetrator to predict affect at disclosure. This model explained 6.2% of the variance in children's affect but was not statistically significant, F(4,53) = .87, p < .49. None of the variables were significant predictors of affect; however, the direction of the coefficients indicated that males were more likely than females to show distress when disclosing abuse, and children who experienced more severe forms of physical abuse showed more distress during disclosure.

Table 3. Correlations for Physically Abused Children

	Age	Gender	Relationship to perpetrator	Severity of abuse	Affect at disclosure
Age	1 (74)	-	-	-	-
Gender	.31** (74)	1 (74)	-	-	-
Relationship to perpetrator	03 (58)	.14 (58)	1 (58)	-	-
Severity of sexual abuse	.13 (74)	16 (74)	11 (58)	1 (74)	-
Affect at disclosure	01 (74)	11 (74)	.05 (58)	.15 (74)	1 (74)

Note. The number of cases upon which the bivariate correlation was calculated is indicated in parentheses. **p<. 01.

Table 4. Regression Analysis:
Predicting Affect at Disclosure for Physically Abused Children

		Affect at Disclosure			
	Predictor	$\boldsymbol{\mathit{B}}$	SE	β	
Constant		2.0	1.2		
Gender		25	.29	13	
Child's age in years		03	.04	09	
Relationship to perpetrat	or	.26	.39	.09	
Severity of sexual abuse		.84	.54	.21	

Note. The forgoing predictors account for 6.2% of the variance (R^2 =. 062). The adjusted R² is -.009. N=74.

4. DISCUSSION

The current study examined children's emotional reactions when disclosing abuse during a forensic interview. Our plan was to investigate children's affect while disclosing their abuse experiences and attempt to relate their emotional reactions to the abuse type, the severity of abuse, and the relationship between the perpetrator and the victim. When children disclose abuse, many people expect children to show distress. In particular, prosecutors and jurors often believe that abused children must be upset when discussing the abuse incident and that otherwise the children are not telling the truth (Myers et al., 1999). However, children seem to display other emotional reactions. In the current study, variables such as relationship to the perpetrator, severity of abuse, gender, and age in years were used to predict affect at disclosure.

Several of these variables were unrelated to the ratings of emotional distress at disclosure for sexually maltreated children. Relationship to the perpetrator, severity of abuse, and gender were not significantly correlated to the affect ratings. Therefore, these variables did not predict affect. The child's age was the only variable that came closest to being a significant predictor of children's affect when disclosing abuse, indicating that older children showed more distress when disclosing. It may be possible that variables not examined, such as depression, would have resulted in significant findings.

One would probably expect that children who were physically abused would evince very similar if not the same emotions as those of sexually abused children. Interestingly, the affect at disclosure for physically abused children showed different results. None of the variables were statistically significant. A reason for this may be due to limitations of the study. Specifically, our sample size was relatively small. Perhaps if we had examined a larger sample size, our results for some of these variables might have resulted in significant findings. For example, in regards to gender, previous studies found gender to be related to the emotional expressiveness of children. According to Fuchs and Thelen (1988), boys express more anger than girls, and girls on the other hand tend to express more fear and sadness than boys. This is also supported by cultural expectations that boys should be stronger and tougher in controlling their emotional reactions than females, so the form of punishment should be harsher and more severe for boys than girls. Boys tend to be more successful at hiding their distress than girls (Alessandri and Lewis, 1996).

Researchers' suggest that non-abused children tend to have a normal development of emotional display (e.g., Pollack et al., 2000). They are much more independent, happy, and have higher self-esteem. In addition, non-abused children express greater confidence and assertiveness when dealing with their environment. On the other hand, abused children tend to develop different patterns of emotional display. Recent studies indicate that abused children evince different symptoms of distress and psychological functioning depending on the frequency, type, and severity of the abuse (e.g., Narr-King et al., 2002; Callahan et al., 2003). Ultimately, the results of this study suggest that children evince different emotional displays while disclosing abuse, particularly depending on the type of abuse (sexual or physical).

Limitations to the study included a sample size that was small. In this study only 123 children who were removed from home by child protective services were included. There was also a problem with limited ethnicity because 75 % of the sample was African American. To gain a better understanding of the emotions children evince when they disclose abuse, we need to have a much larger sample of the population and investigate an equal portion of children from other ethnic groups like Hispanics, Asians, Caucasian, Filipinos, and so forth, because there may be cultural differences.

Future studies should further examine sexually abused children because they are the ones whose credibility is most crucial and/or

criticized. Studies should also examine their emotional display in more detail. The 6-point scale used in this study may be too general to capture different nuances of emotion and behavior. A possible suggestion may be to investigate emotional behaviors like shame, guilt, and disgust. Bonanno et al. (2002) conducted a study examining these emotional behaviors. Their study found that adult victims of childhood sexual abuse who willingly disclosed the abuse incident/s when asked to discuss their experience showed facial expressions consistent with the emotion of disgust. Conversely, adult victims of childhood sexual abuse who chose not to willingly disclose their sexual abuse experiences showed facial expressions consistent with the emotion of shame. These expressions of shame were later theorized by the researchers as an association with self-blame and concealment which would perhaps lead to the abuse being discovered by a parent, teacher, or person of trust to the child.

Overall, further research is clearly needed in this area of study because decisions about child protection and criminal cases are daily made bind, in part, to children's affect when they disclose abuse.

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