Crying Equals Honesty

How Different Emotions Influence the Perceived Credibility of a Child Witness

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Crying Equals Honesty: Emotional Expression Affects a Child Witness’ Credibility

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Abstract

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The present study examines how expressed emotions by a child disclosing an alleged incident regarding child sex abuse (CSA) may affect the child’s perceived credibility and other factors regarding guilt and punishment. A mock police interview was conducted at the children’s House in Oslo, where the interrogation interviews of children usually are conducted. The participants (n=119) were shown one of four videotaped police interviews. The video contained a girl, 11 years of age, testifying an incident of alleged sexual abuse by her father. The testimony had identical wording, but the emotional expression was different in the four conditions, divided into neutral, sad, angry, and positive emotional conditions. The results showed the angry emotional condition received significantly lower credibility scores than the other emotional conditions among all participants. Male and female participants differed upon their credibility scores in the positive emotional condition only. Female participants also rendered more guilty verdicts than male participants.
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Crying equals honesty: How different emotions influence the perceived credibility of a child witness

One of the major problems in cases involving child sexual abuse (CSA) is the lack of concrete evidence. In many cases, the only evidence available is statements from the defendant and the victim. A child’s statement is often used as the central piece of evidence in cases of CSA. The content of the child’s statement has been, and is still, to some degree, considered the most influential factor when it comes to jurors’ decisions about guilt and sentencing in cases concerning CSA (Shaw, Garcia, & McClure, 1999). But, there are indications to suggest that a child’s demeanor (i.e., facial expression, tone of voice, and emotional expression) may have a larger impact on juror’s decisions than the content itself (Golding, Fryman, Marsil, & Yozwiak, 2003). This points to a widespread expectation among jurors and laypeople, that children ought to cry and/or show negative emotions when they disclose maltreatment (especially CSA). Studies have shown that children’s credibility may be questioned if they do not display emotions which accord with these expectations (Golding, et al., 2003; Regan & Baker, 1998). Studies from real forensic interviews have shown that children express a wide range of emotions, ranging from sad and neutral emotional states, to expressing anger, anxiety, confusion, shame, guilt, and even positive emotions (Goodman et al., 1992). These expectations that abused children should display negative, sad emotions are held by laypeople (Regan & Baker, 1998) and even by professionals (Coolbear, 1992).

The same pattern is found when it comes to adult victims. Previous studies have shown robust effects when assessing how different emotional expressions alter the credibility of an adult witness who had been sexually abused (Bollingmo, Wessel, Sandvold, Eilertsen, & Magnussen, 2009; Bollingmo, Wessel, Eilertsen, & Magnussen, 2008; Kaufmann, Drevland, Wessel, Overskeid, & Magnussen, 2003; Wessel, Drevland, Eilertsen, & Magnussen, 2006). The victim’s expressed emotional behavior made a significant difference when the victim’s credibility was rated. Sad and crying behavior elicited a higher credibility rating among laypersons than happy and neutral behavior. The question of the perpetrator’s guilt and length of their sentencing was also affected by different emotions expressed by the victim. The perpetrator was judged to be guilty more frequently and given a significantly higher prison sentence when sad behavior was expressed by the victim. Adult victims are also rated as more trustworthy and receive more sympathy when they display “correct” emotional behavior.
(Rose, Nadler, & Clark, 2006; Tsoudis & Smith-Lovin, 1998). Different judgments of credibility due to different emotions expressed persist despite instructions to the jury regarding this, and were even present in police officers’ judgments of the credibility of an alleged rape victim (Baldry, Winkel, & Enthoven, 1997; Bollingmo, et al., 2009; Bollingmo, et al., 2008). Studies have shown that the appropriateness of emotions displayed in different situations can be explained by display rules (i.e., meaning rules) (Ekman, 1993). These rules shape social expectations and regulate judgment of people. The display rule for which emotion corresponds to which social setting is fundamental and is also found in social and forensic settings, where judgment of credibility is affected by these rules (Bargh, Chen, & Burrows, 1996; Hess, Blairy, & Kleck, 2000; Hess et al., 2000; Rose, et al., 2006; Shields, 2005).

These expectations of specific and “appropriate” emotions in response to abuse may represent a serious threat to the child’s legal protection, since the statement and behavior make up a major part of the evidence. Perceptions of the child’s emotional behavior and the impression they make are of great value when it comes to considering the child’s credibility and reliability. There seems to be a widespread expectation that children resort to crying when disclosing cases of sexual abuse and children’s testimonies are graded as more credible when they cry (Regan & Baker, 1998; Wood, Orsak, Murphy, & Cross, 1996). However, researchers have found- after reviewing authentic police questionings and interrogations of children- that it is as common for a child to express ‘flat’ emotional behavior when talking about abuse as it is for them to express negative behavior (Sayfan, Mitchell, Goodman, Eisen, & Qin, 2008). This suggests that the common expectation that the child will cry may damage or alter the child’s credibility and affect the sentencing of the perpetrator. Recent research has shown that the behavior of the child may even alter the way the investigator asks or directs questions to the child to a much larger extent than previously thought (Melinder & Gilstrap, 2009).

Children are vulnerable and investigators may be inclined to exacerbate and misinterpret children’s abilities, competence, and emotional expression as witnesses (Goodman & Melinder, 2007). As the literature reviewed above suggest, the relationship between how the child witness is perceived and children’s actual abilities does not coincide with each other. This limitation can affect the credibility of the child, and in turn may cause the CSA case to depend on which emotion was expressed by the victim.
Different emotions expressed during disclosure

It is normal for a child to experience strong and, in many cases, conflicting emotions during disclosure of CSA. A common belief found among lay people and professionals is the assumption that a truthful child disclosing CSA will express strong negative emotions. Studies from real forensic interviews of children disclosing CSA have shown that children express a wide array of different emotions during disclosure (i.e., anger, shame, positive emotions and sadness) (Goodman, et al., 1992). The child’s experience is still strong even when efforts to comfort and support them are present (Goodman & Melinder, 2007; Jensen, Gulbrandsen, Mossige, Reichelt, & Tjersland, 2005). There are several reasons why children display different emotional behavior (i.e., stress) within the forensic setting in response to the trauma in question (e.g., CSA). In addition to the demanding situation presented by the forensic setting, a child’s ability to cope with stress seems to be a factor that affects the emotional behavior displayed (Christianson, Aring, Ke, & Lindholm, 1998; Ehlers & Clark, 2000). Children’s age has also been found to be important, as older children (age 10-12) were more able to use different strategies to cover up or hide their emotions compared to younger children (age 5-9), especially sad younger children. Older children also possessed greater knowledge about the legal system; They knew more about the different consequences testifying may have (Sayfan, et al., 2008). Seyfan et al.’s study also refers to the possibility that one reason that children may mask or hide their emotions is that they may have previously experienced negative consequences (e.g., physical abuse or yelling) in response to expressing negative emotions in reaction to abuse.

There are studies which point to the notion that children who have been subjected to maltreatment (e.g., CSA), may show aversive emotional reactions (i.e., depression, dissociation, and even PTSD) (Burnam et al., 1988; Pollak, Cicchetti, & Klorman, 1998; Quas, Bottoms, Haegerich, & Nysse-Carris, 2002; Toth, Manly, & Cicchetti, 1992), and various atypical behavioral symptoms which accompany these reactions (e.g., withdrawal, anger, irritability, passivity, and lack of adequate facial expressions). The symptoms described above could affect the child’s emotional behavior during disclosure, and in turn lead these children to be perceived as unaffected and even emotionally incongruent (Bonanno et al., 2007). Infants who have been subjected to physical abuse are likely to show more anger in early childhood compared to non-abused infants. During childhood these children are also prone to expressing more irritability and aggression in situations where empathy and concern
are the appropriate expressed emotions (Bennet, 2005). Additionally results showed that maltreated children experienced anger as having a suppressing effect on their feelings of shame. In this way, expression of aggression can become an adaptive emotional response in association with shame, but maladaptive in social settings. This may result in problems with emotional regulation and behavior, problems which are well documented among children subjected to maltreatment (Bolger & Patterson, 2001; Shonk & Cicchetti, 2001).

Studies have also shown that there is an adaptive value to positive emotions (Bonanno, 2004; Bonanno, et al., 2007; Tedlie Moskowitz, Folkman, & Acree, 2003). In these studies, positive emotions are related to resilience and have been found to decrease stress by diminishing and removing negative emotions. Results from Bonanno et al.’s (2007) study showed that many young adults -who had a documented history of being subjected to CSA- actually smiled when disclosing their past CSA experiences. Women from this study, who expressed positive emotions when relating descriptions of past experience with CSA, had poorer social adjustment compared with those women who showed positive emotions during conversations not related to CSA. As pointed out by Bonanno et al. (2002), smiling may function as a mechanism for self-protection during disclosure of CSA because of the feelings of humiliation and shame associated with details of the abusive situation in question.

Different characteristics of the abuse may also affect which emotions a child displays during disclosure. Violent abuse may be related to greater anger and shame, whereas child victims of severe, long lasting and repeated abuse report more frequently feeling detached, ashamed and numb (Bonanno, et al., 2007; Hoffman-Plotkin & Twentyman, 1984). On the basis of the studies reviewed above, a vast variety of expressed emotions are to be expected when a child is disclosing CSA. But, the limited research available on the subject of beliefs about the emotional behavior of the child witness indicates a big difference between the emotional behavior expected and the actual behavior a child is likely to express during disclosure of CSA.

**General beliefs concerning child witnesses’ emotional behavior**

Research into expectations regarding appropriate emotional behavior in children disclosing CSA suggest, that legal professionals are quite inaccurate on a number of different topics related to credibility (Leander, Christianson, Svedin, & Granhag, 2007; Melinder,
Goodman, Eilertsen, & Magnussen, 2004). Defense attorneys, when compared to police
detectives, psychologists, and judges, were the most skeptical among the legal professionals
towards the children as witnesses, indicating a bias which may be connected to the attorney’s
role within the legal system (Melinder, et al., 2004). In addition, strong negative emotions
(i.e., sadness, crying, or anxiety) were expected to be displayed during disclosure by both lay
people and professionals (Myers, Redlich, Goodman, Prizmich, & Inwinkelried, 1999; Regan
& Baker, 1998). Results from Myers et al. (1999) showed that jurors thought that the
demeanor of the child witness was the single most important factor when assessing and
forming their impression of how believable the child was, and subsequently, how the
perceived believability would affect the juror’s verdict. Regan and Baker (1998) have
evidence supporting the notion that a crying child is rated as more credible, honest, and
reliable by jurors (who read descriptions of testimonies). In addition, a crying child produced
a greater number of guilty verdicts of the alleged perpetrator. Although children are perceived
as more credible, reliable and more honest when expressing sad emotions, Wood et al. (1996)
discovered in their study through observation of children while they disclosed maltreatment,
that children were as likely to display neutral and relaxed behaviors as angry, anxious or sad
behavior. Display of neutral emotions (despite having experienced maltreatment) is supported
by Sayfan et al.’s (2008) study, where an analysis of 124 videotaped interviews was
conducted, and the majority of the children expressed neutral emotions during disclosure.
There is, without any doubt, a large discrepancy between a child witness’ actual emotions
expressed during disclosure of CSA, and expectations regarding appropriate emotions during
disclosure held by lay persons and professionals.

**Children’s perceived credibility and gender difference**

Research into the topic of gender differences –regarding the credibility of children
disclosing maltreatment- reveals that women tend to perceive child victims as more credible,
regardless of the age of the child. In addition, women are more prone to possess pro-child
victim attitudes and tend to perceive children as more honest and as likely to have a better
memory, compared with men’s attitudes to and perceptions of child victims (Davies &
Rogers, 2009; McCauley & Parker, 2001). Children (i.e., in CSA cases) are rated as more
truthful and less suggestible by women, compared with men (Bottoms & Goodman, 1994).
Men are more prone to perceiving a child in a CSA case as more responsible for the sexual
abuse, and look upon the sexual abuse as a less serious crime compared to women (Davies & Rogers, 2009). When it comes to judgment of the alleged perpetrators’ guilt, there is not a conclusive amount of research pointing in the same direction; where some studies have found a gender difference which influences judgment (Bottoms & Goodman, 1994), other studies have not found any evidence for gender differences influencing judgments of perpetrators’ guilt (McCauley & Parker, 2001).

The studies reviewed above have concentrated on beliefs about emotional behavior, and analysis of real emotional child witnesses during disclosure. Results from recent research have produced a growing body of data that illustrates that lay persons’, juries’, and psychologists’ explicit beliefs do not correspond to current scientific knowledge mentioned previously (Magnussen & Melinder, 2011; Magnussen, Melinder, Raja, & Stridbeck, 2008).

**Displayed emotions and effects on perpetrators’ guilt and length of sentence**

Studies of real court settings and mock studies have shown a tendency for emotions to influence judgments of guilt and length of sentence. For instance, if defendants display emotions of a negative character (i.e., sad and remorseful) during testimony, fewer convictions are found to be given in contrast to when positive emotions (i.e., smiling and not remorseful) are displayed. In addition to this effect on assessment of guilt, fewer acquittals and reduced length of prison sentencing are also found when defendants show signs of remorse and sadness. When victims display emotions during testimony, these emotions appear to be subsequently perceived and interpreted as an indication of the seriousness of the crime in question and its impact on the victim, and, in relation to the victim’s suffering, a willingness to punish and sentence the perpetrator emerges (Ask & Landström, 2010; Hackett, Day, & Mohr, 2008; Heath, 2009; Wessel et al., 2011). These effects described above are well documented among adult victims, but there has been little research into this topic when it comes to children’s emotional display and how this affects perceptions of guilt and sentencing of defendants. The limited amount of research available indicate that a child’s demeanor may predict a guilty verdict, if the child is found to be believable (Golding, et al., 2003; Myers, et al., 1999; Regan & Baker, 1998).
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The present study

This thesis will follow previous research into the perceived credibility of adult victims, and focus on how children’s emotional expression affects their perceived credibility and reliability. In this thesis we examined whether the emotional behavior of a child witness disclosing CSA influenced lay people’s legal judgments (e.g., credibility and reliability) regarding the witness. The design included manipulation of emotional expressions. Highly realistic videotaped police interviews were constructed of two girls (11 and 13 years old) individually playing the role of a victim of CSA by their father. The interviews were filmed in four different emotional conditions (i.e., sad, neutral, angry, and positive); the children were also interrogated at the Children’s House in Oslo by a specially trained child interrogator. We decided to use only the interview of the 11 year old girl due to lack of time in the data gathering process. Prior to viewing the videotaped police interviews, participants were led to believe that they were about to see the authentic testimony of a child disclosing CSA. The participants were then presented with one of four different emotional conditions (i.e., sad, neutral, angry, and positive), and afterwards filled out a questionnaire (this is described in details in the methods section) containing questions regarding the child’s credibility and reliability, the father’s guilt and recommended length of sentencing.

We made several predictions. We predicted a main effect of emotions, where the display of a sad negative emotional expression including tears would be perceived by participants as the most credible and most reliable condition. We also predicted that the sad emotional condition would produce the highest ratings of probability of guilt, the largest number of guilty verdicts, and longest suggested lengths of punishment. Research reviewed above suggested that we would find a gender difference for perceived credibility, reliability, the question of guilt, and recommended length of time in prison. Female participants were expected to perceive the child as more credible and reliable compared to male participants. Women were also expected to deliver more guilty verdicts and to recommend a longer prison sentence for the father. When predicting number of guilty verdicts, high credibility, different emotional expression, and female participants were expected to be strong predictors of guilty verdicts.
Method

Participants

There were one hundred and nineteen participants recruited (58% female) from the student population at the University of Oslo. The mean age of the participants was 23 years. The participants were randomly assigned to one of the four experimental conditions. The participants were placed in small groups to view a video of a recorded police interview of a child disclosing sexual abuse by her father.

Materials

The video tapes. The child, a girl (age 11) was an experienced actor and performed the role of a child that had been sexually abused by her father. The child’s statement was memorized by the actor (see appendix) who acted it out in four different emotional conditions. The different emotional conditions were sad, neutral, angry, and positive. In the sad condition, the girl showed some distress, she was upset, at times sobbing, and sustained a sad emotional expression during the whole interview. In the neutral condition, the girl answered the interviewer’s questions in a flat, straight-to-the point manner; She displayed little emotion during the interview session. In the angry condition, the girl demonstrated clearly agitated and angry behavior when responding. In the fourth condition, the girl responded in a positive manner, smiling at different points of the interview. The video interview clearly showed both the police interrogator and the child sitting on chairs on each side of a table facing each other. In the lower left-hand corner of the picture a close-up of the child’s upper torso and facial expressions was displayed. The different clips (sad, neutral, angry, and positive) were recorded in the same interrogation room, with the same lighting, sound, and clothing. The position of the child, the interrogator, and furniture was also kept the same throughout all conditions.

The clips to be used were selected by 2 psychologists and one senior student in the psychology program. Four final clips (one for each condition) were selected on the basis that those clips were the most authentic and as close to a real life situation as possible.

The interrogator’s word phrasing and demeanor were also controlled for; The exact
same questions with identical wording were asked in all four conditions. The interrogator’s appearance was also controlled for by using the same clothing, make-up, and hairstyle in all four conditions. The interrogator’s body posture, movement, and facial expressions were close to identical in the different conditions.

The duration of each video clip was around (+/-) 2 minutes, and the video clips were shown to the test participants by using a laptop projecting the video onto a wide screen.

**The interview and protocol and manuscript.** The question set that the interrogator used was developed from former eye-witness studies (Melinder, 2004), and recommended practice (Lamb et al., 2003) by Ellen M. Wessel at the department of psychology at the University of Oslo. The question set contained open-ended questions such as “*tell me more about what happened with your father*” and more focused questions such as “*you said that your father was naked, could you tell me more about that*”. Different verbal statements and emotional behavior were discussed by the research team and tried out by the child actress and the interrogator multiple times to ensure that the statements were as close to real life interrogation scenarios as possible.

**Credibility and the general questionnaire.** The issued questionnaire (see appendix) contained questions about the child’s general credibility and reliability, the father’s guilt, and suitable punishment for the alleged felony. In addition, the questionnaire also contained questions regarding the participant’s general experience, knowledge about children as witnesses, and other questions regarding participant’s general perception of the content and the child’s behavior during the interview. We decided to exclude questions regarding the participants’ experience with judgment of child maltreatment, follow-up measures for the child, and participants’ general knowledge about witness psychology due to time limitations and lack of significant results. Rating of the child’s credibility was done by using a seven-point Likert grading scale with “not credible” and “credible” labeling the poles. In addition, the participants were asked to rate (on a Likert scale) the child’s presentation and the content of their testimony in regard to the participant’s overall judgment of the child’s credibility and reliability. The questionnaire also contained a hypothetical scenario where the participants imagined themselves as part of a mock jury and were asked to give their verdict on the question of the perpetrator’s guilt. To indicate whether they believed the father of the child was guilty or not guilty, the participants answered by rating the likelihood of the father’s guilt
on a ten step percentage scale (0-100%), and were asked to give a verdict on the question of guilt. If the participants voted guilty, that person would then be asked to propose a suitable punishment of up to 72 months’ imprisonment. Lastly three questions regarding participants’ prior experience of and competence in making judgment of children’s reports were included.

**Procedure**

After recruitment, the participants were informed that they were about to participate in a forensic psychology study, and their contributions would be used to strengthen the knowledge about the usefulness of video recordings in police interrogations of child witnesses. The participants were told that they were about to see an authentic interrogation of a child disclosing an alleged episode of sexual abuse, recorded at the Children’s House in Oslo.

After the participants gave their consent to participate, a video of the alleged episode was shown to the participants. They were asked to wait to ask questions about the study until everyone had filled out their questionnaire. The participants were thoroughly debriefed after the session. They were told the real purpose of the study (i.e., that the child was an actor, and that the police interrogator was a specialist in child interrogation, but that her questions were rehearsed). Additional questions and comments from the participants were welcomed. There were only a few participants who commented that they had a suspicion that the interview was not authentic. Only one decided to withdraw his contribution. He was allowed to leave and thoroughly debriefed.
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Results
All data was analyzed using PASW statistics (version 18, SPSS Inc., Chicago, IL) software. Statistical significance was defined at an alpha level of 0.05. In this study we examined whether stereotypical expectations about emotional expressions from a child witness during disclosure of sexual abuse (CSA) would influence participants’ credibility and reliability ratings. We predicted that the highest rating of credibility and reliability would be given to the child in the sad condition. We further hypothesized that credibility would predict ratings of the probability of guilt, guilty verdicts, and length of suggested sentencing, specifically that the child considered most credible would elicit recommendations of the longest sentence. In addition, we hypothesized that gender would predict ratings of the probability of guilt, guilty verdicts, and length of suggested sentencing.

The Impact of Emotional Expression Upon Credibility and Reliability
We used the child’s perceived credibility and reliability as dependent variables, and gender and emotional condition as independent variables. We tested for equality of variance for both models (i.e. credibility and reliability), and Levene’s test for homogeneity showed that the assumption of equality of variance among the variables was not violated for perceived credibility \( F (1,111) = .889, p = .518 \) nor was it violated for perceived reliability \( F (1,111) = 1.111, p = .361 \). In addition, the sample distribution of perceived credibility and perceived reliability were normally distributed. This allowed us to conduct a parametric analysis of variance (ANOVA univariate) of the two dependent and two independent variables.

Credibility. We tested our first hypothesis by entering credibility ratings as the independent variable and emotional condition as the independent variable into the full model of analysis of variance (ANOVA univariate). We found a main effect of emotions on the victim’s credibility \( F(3,111)=6.202, p=.001, \eta^2=.012 \). Post hoc test (Bonferonni) showed that the angry emotional condition \((M = 3.8, SD = 1.4)\) was significantly lower than two other emotional conditions. The neutral condition differed significantly from angry emotions \( p =.005, n =119, (M = 5.1, SD = 1.3) \). The sad emotional condition was also significantly higher than the angry emotional condition \( p =.004, n =119, (M = 5.2, SD = 1.5) \). The positive emotional condition was not significantly different from the other three emotional conditions.

To assess whether men and women were influenced differently by emotions, we
entered credibility as the dependent variable and gender as the independent variable into the ANOVA univariate model. The results showed that there was no main effect between gender and the child’s credibility $F(1, 111) = .526, p = .470, \eta^2 = .0003$. However, combining emotional condition and gender in the ANOVA univariate model suggested that there was an interaction effect between gender, emotional condition, and credibility $F(3, 111) = 4.216, p = .007, \eta^2 = .008$.

Splitting up gender, and selecting females only, revealed that the emotions expressed had a significant influence on perceived credibility $F(3, 66) = 5.07, p = .003, \eta^2 = .016$. Post hoc test (Bonferroni) showed that the angry condition differed significantly from all the other emotional conditions, $p < .005, n = 66 (M = 5.2, SD = 1.6)$. The neutral emotional condition was significantly different from the angry condition, $p = .025, n = 66 (M = 4.9, SD = 1.4)$. The sad emotional condition differed significantly from the angry condition, $p = .095, n = 66 (M = 5.2, SD = 1.6)$. The positive condition was also significantly different from the angry condition, $p = .007, n = 66 (M = 5.2, SD = 1.3)$.

Selecting males only showed that the expression of different emotions had a significant emotional influence on credibility ratings $F(3, 45) = 4.77, p = .006, \eta^2 = .0025$. Post hoc test (Bonferroni) showed that the positive emotional condition ($M = 3.4, SD = 1.8$) was the emotional condition that had the most significant influence upon credibility. Further analysis showed that the neutral condition was significantly different from the positive condition, $p = .011, n = 45 (M = 5.4, SD = 1.1)$. The sad condition differed from the positive conditions as well, $p = .045, n = 45 (M = 5.1, SD = 1.3)$. This gender difference showed that females rated the angry condition as less credible than the other conditions (neutral, sad, and positive), whilst males rated the positive condition as less credible than the other conditions (sad, neutral, and angry). The display of sad emotions was also significantly different from angry emotions, $p = .005, n = 119, (M = 5.2, SD = 1.5)$. Figure 1 shows the mean of the child’s rated credibility for the different emotions displayed by the child during disclosure of CSA for male and female participants.
Reliability. Entering reliability as the dependent variable and emotional condition as the independent variable into the ANOVA univariat model, revealed a main effect of the child’s reliability $F(3,111) = 4.24, p = .007, \eta^2 = .008$. Post hoc analysis (Bonferonni) showed that the angry emotional condition ($M = 3.9, SD = 1.5$) elicited lower reliability ratings than the two other emotional conditions. The neutral condition was significantly different from the angry condition, $p = .025, n = 119$ ($M = 5.0, SD = 1.4$). The sad condition was significantly different from the angry condition as well, $p = .019, n = 119$ ($M = 5.1, SD = 1.2$). The highest reliability rating of the child was obtained in the sad condition (5.1), and the lowest reliability rating was obtained in the angry condition (3.8). The correlation between the two questions (credibility and reliability) was high $r = .78$, $p < .001$, $n = 119$, confirming a high linearity between credibility and reliability.

By entering gender and emotional condition as independent variables and reliability as the dependent variable into the ANOVA univariat model, we found that the results from reliability ratings of the child’s statements were very similar to the results from the perceived credibility ratings. We found no main effect of gender on the child’s reliability $F(1,111) = .716, p = .399, \eta^2 = .0004$. Further testing showed no significant interaction effect.
between gender, condition, and reliability $F(3,111) = 1.554, p=.205, \eta^2=.003$.

The similarity between reliability and credibility results led us to decide to split up gender. By selecting females only, the results revealed a barely significant gender difference in the perceived reliability of different expressed emotions $F(3, 66) = 2.808, p=.046, \eta^2=.003$. Post hoc test (Tukey HSD) showed only slight significant differences between the sad condition ($M = 5.2, SD = 1.3$) and the angry condition ($M = 3.8, SD = 1.7$), $p=.044, n = 66$. There were no significant differences between the other conditions.

Selecting males only did not reveal a significant effect of emotional condition on the reliability ratings $F(3, 45) = 2.71, p=.057, \eta^2=.014$. These results show that ratings of reliability are not affected by gender, but that men and women differ slightly when rating which expressed emotion is more reliable during a scenario were CSA is disclosed.

Figure 2 gives a graphical presentation of the ways in which male and female participants rated the child’s reliability for different expressed emotions during disclosure of CSA.

Figure 2 Reliability

**Probability of Guilt and guilt verdicts**

Probability of guilt was judged by the participants by rating the father’s guilt on a scale that ranged from 0 to 100%. The guilty verdicts were ranged on a nominal level (0= not guilty, and 1= guilty). The mean probability of guilt was 63.1% ($SD = 19.9$). Of all the participants, 62.3% voted guilty, and 37.7% voted not guilty.
**Rated probability of guilt.** We entered probability of guilt as the dependent variable and emotional condition as the independent variable into the ANOVA univariate model. The results showed that the participants were not influenced by emotions when judging the probability of the father’s guilt $F(3,109) = 2.092$, $p = .105$, $\eta^2 = .004$. By using gender as an independent variable, the results did not show any significant effect of gender upon probability of guilt $F(1,109) = 2.547$, $p = .113$, $\eta^2 = .002$. There was no interaction effect between emotional condition and gender upon probability of guilt $F(3,109) = 1.427$, $p = .239$, $\eta^2 = .003$. Levene's test for homogeneity showed that the assumption of equality of variance among the variables was violated $F(1,107) = 2.91$, $p = .008$. In addition, the sample distribution of probability of guilt scores was not normally distributed.

On the basis of the skewed sample distribution of probability of guilt scores and the violation of Levene’s test of homogeneity, we decided to use non-parametric tests to investigate the effects of emotional condition and gender upon possibility of guilt. A Mann-Whitney U test was conducted to evaluate the effect of gender on judgments of the probability of the father’s guilt. The test, which was corrected for tied ranks, was not significant, $\chi^2(1, N = 117) = -1.52$, $p = .129$. A Kruskal-Wallis H test was conducted to evaluate whether emotional condition had any effect upon the rated probability of guilt. The test, which was corrected for tied ranks, was not significant $\chi^2(3, N = 117) = 5.89$, $p = .117$. There was no significant direct effect of either gender or emotions upon rated probability of guilt. Owing to the violated assumption of equality of variances, a $t$ statistic not assuming homogeneity of variance was computed to investigate the influence of expressed emotions upon probability of guilt. One emotional condition was selected and isolated at a time (i.e. neutral, sad, angry, & positive). An independent $t$-test was conducted to see whether men and women differed in judgments of the probability of guilt for the different emotional conditions. The analysis demonstrated a significant difference between genders in the positive emotional condition $t(30) = 2.52$, $p = 0.17$. In the positive emotional condition, female participants judged the probability of guilt to be 73% ($SD=12$), whilst male participants judged the probability of guilt to be 55% ($SD=29$). There was no significant difference between male and female participants in the other three emotional conditions.
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**Guilty verdicts.** In order to investigate whether there was a main effect of emotions on guilty verdicts, we entered emotional condition and guilty verdicts into a non-parametric test. A Kruskal-Wallis H test was conducted, and the test showed no main effect of emotions on guilty verdicts $\chi^2 (3, 117) = 6.2, p = .102$. The results showed that 73% of the sample voted guilty in the sad emotional condition, 66% voted guilty in the neutral emotional condition, 43% voted guilty in the angry emotional condition, and 67% voted guilty in the positive emotional condition. A presentation of the different percentage distributions of guilty verdicts for the different emotional conditions is shown in figure 3.

Figure 3

![Percentage of Guilty verdicts among different emotional conditions](image)

We entered gender and guilty verdicts into the Mann-Whitney U test and discovered that gender had a main effect on guilty verdicts $\chi^2 (1, 114) = 5.9, p = .015$. Seventy two percent of female participants gave a guilty verdict, whereas 48% of male participants voted for a guilty verdict, while 52% of the men and only 28% of the women did not vote for a guilty verdict. Figure 4 presents the gender differences in guilty verdicts.
Figure 4 Guilt question

Regression analysis. We wanted to unveil the factors that could predict guilty verdicts. To explore these factors, we used a binary logistic regression analysis. Entering verdict as the dependant variable and credibility and gender as predictors, the model showed that credibility $\beta = 0.683$, $p < 0.001$, and gender $\beta = 1.066$, $p < 0.001$, are strong predictors of guilt, explaining between 24% - 35% (Cox & Snell, Nagelkerke) of the variance in the guilty verdicts, chi square indicates a good model fit [$\chi^2 (8, N = 119) = 6.39, p < .603$]. Further regression analysis showed that verdicts were not influenced by emotional condition, $\beta = -0.059$, $p = .736$.

The results showed that there was no main difference between the genders in terms of judgments of probability of the father’s guilt and the award of guilty verdicts. However, it showed that females were affected by different emotional conditions when judging the guilt question (i.e., probability of guilt, and guilty verdicts), where males were not significantly influenced by different emotional expressions when judging the same guilt questions. The only emotional condition which had a significant influence upon female participants’ ratings of the probability of guilt was the positive emotional condition. The same applies for guilty verdicts, where women’s verdicts were significantly affected by the positive emotional
condition, compared to the other emotional conditions. Females gave a higher probability of guilt. Females also gave a greater number of guilty verdicts compared to men.

Credibility and gender seems to be strong predictors of guilt, showing that high credibility of the child witness predicts a higher rate of guilty verdicts among participants. In addition, female participants predict a greater number of verdicts that the perpetrator is guilty than male participants.

**Length of punishment**

Participants who gave a guilty verdict were asked to suggest a suitable length of imprisonment for the father. Participants responded using a ratio scale ranging from one month up to six years of imprisonment. Seventy-one participants voted guilty, with an average of 33 months as the recommended length of imprisonment ($SD = 26.4$).

The sample distribution of suggested punishment was normally distributed and homogeneity of variance was also obtained. This was assessed by Levene's test for equality of variances for emotional condition $F(3, 72) = .104, p = .957$, perceived credibility $F(3, 69) = .939, p = .427$, and gender $F(1, 71) = 2.581, p = .113$ upon suggested length of punishment. This allowed us to proceed with the normal ANOVA univariate model, entering suggested length of punishment as the dependent variable, and gender, perceived credibility, and emotional condition as the independent variables into the model.

To investigate whether expressed emotions influenced judgments of recommended prison term, an analysis of variance (ANOVA univariat) was conducted. We entered recommended length of punishment as the dependent variable and different expressed emotions, gender, and perceived credibility as the independent variables into the ANOVA univariat model. We did not find any significant effect of emotions upon suggested length of punishment $F(3,38)=1.67, p=.190, \eta^2=.0024$.

We entered suggested length of punishment as the dependent variable and gender as the independent variable into the ANOVA univariat model. The results showed no main effect of gender upon suggested length of punishment $F(1,38) = .584, p = .449, \eta^2 = .0008$. We entered suggested length of punishment as the dependent variable and perceived credibility as the independent variable. We found a significant effect of perceived credibility upon suggested prison term $F(6,38) = 2.45, p = .042, \eta^2 = .028$. To
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...investigate whether there were interaction effects, we entered suggested length of punishment as the dependent variable and gender, perceived credibility, and emotional condition as independent variables into the ANOVA univariate model. Homogeneity of variance was obtained, and Levene's test for equality of variances $F(34, 38) = 1.288, p = .224$ showed that the model did meet the criteria for equal variance.

There was no significant interaction effect between perceived credibility and gender on suggested length of sentencing $F(3,38) = .421, p = .739, \eta^2 = .002$.

The data showed no significant interaction effect between emotional condition and perceived credibility on suggested length of sentencing $F(11,38) = 1.259, p = .285, \eta^2 = .025$.

There was an significant interaction effect between gender and emotional condition on length of punishment $F(3,38) = 1.962, p = .040, \eta^2 = .017$.

On the basis of the interaction effect between emotional condition and gender on suggested length of punishment, we decided to split up and focus on one emotional condition at a time in order to investigate whether there were differences between male and female participants’ recommendations for length of prison term. An independent sample t-test was conducted, focusing on the neutral emotional condition only. The test showed a significant difference between male and female participants upon suggested term in prison in the neutral condition $t(16) = 2.802, p = 0.013$. Female participants suggested an average of 50.5 months ($SD=22.2$), and male participants suggested an average of 23.0 ($SD=12.0$) months in prison in the neutral emotional condition. When we focused on the other three emotional conditions (i.e. sad, angry, & positive) the results did not reveal significant differences between male and female participants in terms of suggested length of prison sentence ($p > .05$). Figure 5 is a graphical presentation of gender differences in suggested prison term for the different emotional conditions.
These results show that perceived credibility had a significant influence upon suggested length of prison sentence. High perceived credibility led to a higher suggested length of punishment. An indirect influence upon suggested length in prison was also found, where gender and different expressed emotions influenced the length of suggested punishment. There was a significant gender difference in the neutral emotional condition, where the expression of neutral emotions resulted in longer suggested prison sentences for the father among female participants, compared to male participants. Males and females are again seen to have been affected differently when they are asked to suggest punishment and length of sentencing, this time in the neutral emotional condition. Males suggest significantly milder punishment compared to female participants, who are more likely to suggest a longer sentence when the child expresses neutral emotional behavior.
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Discussion

Previous research on the topic of child witness credibility and child testimony has mainly focused on subjects such as beliefs about emotional display during disclosure (i.e., in children) and actual displayed emotions in court and forensic setting (Golding, et al., 2003; Goodman, et al., 1992; Myers, et al., 1999; Regan & Baker, 1998; Sayfan, et al., 2008; Wood, et al., 1996). This study extends this research by measuring how displayed emotions influence legal judgment. Children exposed to abuse and maltreatment (e.g., CSA) are known to display different types of emotional behavior. Neutral and flat emotional display is often frequent (Sayfan, et al., 2008), shame disguised as anger is also not uncommon among children in forensic settings (Bennet, 2005). In addition, one should also expect to observe positive emotions expressed, since positive emotions are known to mediate or calm down negative emotions and be a reaction to embarrassment and shame (Bonanno et al., 2002). Clearly, the observed emotional behavior expressed by children disclosing CSA in real forensic settings differs greatly from what laypeople believe to be “correct” emotional behavior during disclosure. The fundamental aim of this thesis was to investigate how laypeople’s belief establishes itself when judging children’s credibility and reliability during disclosure of CSA. Our first hypothesis stated that the emotions displayed during disclosure are paramount in the formation of participants’ judgment of credibility and reliability. In addition we hypothesized that emotional condition, participant’s gender, and the child’s credibility would predict responses regarding guilt and suggested length of punishment. As other studies on the topic of child witness credibility have done, we hypothesized that women would evaluate the child as more credible and reliable than men would, and that women would deliver a higher number of guilty verdicts and harsher (i.e., longer) prison sentencing.

Credibility and Reliability

In regards to our first hypothesis, our analysis of the data showed a significant main effect of expressed emotions on judgments of credibility and reliability. We did not find, contrary to our expectations and prior research that female participants rated the child witness as significantly more credible compared to male participants (Bottoms & Goodman, 1994; Davies & Rogers, 2009; McCauley & Parker, 2001). We did, however, find that male and female participants differed in their credibility and reliability ratings in one specific emotional
condition (i.e., the positive condition).

The results from this present study showed that when the child displayed the negative emotions perceived to be appropriate (distress and crying), she received the highest ratings for credibility and reliability from the participants. This finding is also supported by other studies (Regan & Baker, 1998; Wessel & Melinder, in press). The angry emotional condition received the lowest perceived credibility and reliability scores. The discrepancy between male and female participants’ scores in the positive emotional condition is important to investigate further. How can one explain the difference between the genders in rating the child’s credibility and reliability in the positive emotional condition? Male participants seemed to find it hard to believe that a child who had been subjected to sexual abuse would show positive emotions while disclosing such an event. Females on the other hand, seemed to be more in sync with some of the research literature, and gave the child in the positive emotional condition a relative high credibility score. Female participants’ scores for perceived credibility and reliability were almost identical in the neutral, sad, and positive emotional conditions. The angry emotional condition was the only condition that deviated from the other emotional conditions. The angry emotional condition received significantly lower scores for assessments of credibility and reliability than the other three emotional conditions. The angry emotional condition seems to support the general expectation that a child subjected to abuse would display sad emotions, and not anger. Males are more distant from the general research literature and more in line with the general assumption that certain emotions are more appropriate and fit better with what males believe to be a more credible and reliable expression during disclosure. Results may indicate that male participants are not convinced that laughter and positive emotions are associated with CSA. Male participants may not be as sensitive, empathetic, or as able to identify themselves with the girl, and therefore rely on stereotypical assumptions of how a girl subjected to sexual abuse should behave. Females seems to be aware that different expressed emotions may be mechanisms to protect oneself from unpleasant emotions or that laughter may be a sign of shame, with the exception of the expression of angry emotions (Bennet, 2005; Bonanno, et al., 2002; Sayfan, et al., 2008). One explanation for why male and female participants differ in this emotional condition may be provided by female scores on interpersonal sensitivity measures. Female participants score significantly higher on interpersonal sensitivity tests, and females also show increased levels of empathetic accuracy compared to males (Brody, 1997; Hall & Schmid Mast, 2008).
Identification with the girl victim may also serve as an explanation for why female participants perceive the girl victim as more credible and reliable; female participants are known to identify themselves with the girl, and the role of being a victim more easily (Kaplan & Miller, 1978; Quas, et al., 2002). It may therefore serve as an explanation that interpersonal sensitivity, higher empathy and identification help female participants to rate and maybe understand the neutral, sad, and positive conditions as credible and reliable, with the exception being the angry emotional condition that clearly supports the emotional witness effect.

Further supporting evidence for the emotional witness effect is found among adult rape victims (i.e., female). These victims are also rated as more trustworthy, credible, and reliable by lay people when the emotions perceived to be appropriate (i.e., sad and crying) are displayed by the victim. They receive even more sympathy when displaying sad and tearful emotions (Kaufmann, et al., 2003; Rose, et al., 2006; Tsoudis & Smith-Lovin, 1998). This raises questions regarding the legal protection of children for those who do not express the ‘appropriate’ emotional display during testimony, and may therefore be perceived as less credible, reliable, in turn affecting how the perpetrator’s guilt is evaluated.

Guilt Questions
Our next hypothesis stated that ratings of the probability of the father’s guilt would be influenced by the different emotions expressed and by gender. To our surprise, the results did not show that expressed emotions and gender had any significant direct influence on ratings of the probability of guilt. However, there was a gender difference in one emotional condition. Male and females were differently influenced by emotions in the positive emotional condition when judging probability of guilt. The significant difference between male and female participants in the positive emotional condition was surprising, since this discovery was totally different from the credibility and reliability ratings which showed that the sad and crying condition was perceived as the most credible and reliable among all participants. This is not in line with previous research (Ask & Landström, 2010; Ask & Pina, 2011; Bodenhausen, Sheppard, & Kramer, 1994; Feigenson & Park, 2006; Keltner, Ellsworth, & Edwards, 1993). Our research showed that women gave a higher rating of the probability of guilt in the positive emotional condition, compared to men. This finding could be interpreted
as somewhat uplifting news (for females) since previous research has shown that there is an adaptive value to positive emotions (Bonanno, 2004; Bonanno, et al., 2007; Tedlie Moskowitz, et al., 2003). These positive emotions are related to resilience and found to decrease internal stress by diminishing and even removing negative emotions among informants. Results from Bonanno et al.’s (2007) showed that many young adults -who had a documented history of being subjected to CSA- actually smiled when disclosing their past CSA experiences. Women from this study, who expressed positive emotions while relating descriptions of past experience with CSA, had poorer social adjustment compared with women who expressed positive emotions during conversations not related to CSA. As pointed out by Bonanno et al. (2002), smiling may be used as a mechanism for self-protection during the disclosure of CSA because of the feelings of humiliation and shame associated with details of the abusive situation in question. This is somewhat concerning regarding male participants, because they seem to be affected by the emotional witness effect to a much larger extent than female participants are, taking into account the large gender difference in the positive emotional condition. Several studies have shown that characteristics of the abuse may also influence which emotions a child displays during disclosure of CSA. Violent abuse may be related to greater anger and shame. Feeling such as detachment, shame, and numbness are associated with severe, long-lasting, and repeated abuse (Bonanno, et al., 2007; Hoffman-Plotkin & Twentyman, 1984). Male participants may be more influenced by this finding than females, meaning that a positive child disclosing CSA may be perceived by males as less affected, the incident described may be perceived as less serious and the probability of guilt may therefore be judged to be lower. Even if not significant, there was another trend worth mentioning; the sad and crying condition received the highest number of guilty verdicts among male participants. In addition, the angry emotional condition was associated with the lowest probability of guilt among female participants. It would be pure speculation to try to provide definite explanations, but the higher ratings for probability of guilt among females in the positive emotional condition could be a result of women’s ability to identify themselves with female victims, and their ability to perceive positive expressed emotions as a protective measure against other more troubling emotions in the child. Ratings for the probability of guilt among male participants might be different if the alleged perpetrator was female, and that the victim was a boy. The expression of positive emotions by a boy victim might be interpreted differently, in a sense that the crime was of a less severe character, and may have
The hypothesis regarding the influence of emotions expressed upon guilty verdicts was not supported by the results. The sad emotional condition did not produce the highest number of guilty verdicts, as we initially hypothesized. Figure 3 clearly shows a difference between the sad and angry emotional conditions, but the analysis did not confirm our hypothesis that the sad emotional condition would produce a significantly larger number of guilty verdicts compared to the other three emotional conditions. On the other hand, our hypothesis regarding females giving more guilty verdicts than males was confirmed. A large proportion of female participants voted in favor of the father’s guilt, whereas less than half of male participants did so. Again, there is a prominent gender difference in questions regarding the father’s guilt. It would be interesting to see whether this gender difference was sustained if the alleged perpetrator were female. One could unveil if jurors are more prone to giving guilty verdicts when the alleged perpetrator is of the opposite sex than the same sex. We also predicted that perceived credibility, emotional expression, and gender would be predictors of guilty verdicts. This prediction was partly supported by the regression analysis, where perceived credibility and gender were significant variables that had an influence on judgment of guilt verdicts. Both perceived credibility and gender explained a large quantity of the variance in guilty verdicts. This finding shows that both the juror’s gender and high perceived credibility are important factors that may influence the guilty verdicts of defendants in cases of CSA.

Suggested Length in Prison

We hypothesized that suggested length of punishment (i.e. length of time in prison) would be affected by expressed emotions, gender, and perceived credibility. Suggested length of time in prison was not directly affected by emotions (i.e., sad & crying) as we initially hypothesized. Further analysis demonstrated that there was a significant difference between male and females’ suggested length of prison term in the neutral emotional condition only. The sad emotional condition did elicit the most severe recommended punishment among male participants, but the sentences recommended were not significantly longer than for the other three emotional conditions. Our analysis of suggested length in prison showed that suggested length of prison was influenced by several factors (i.e., credibility, gender, emotions). Some of these factors have by themselves a direct effect upon length of punishment, but this finding is somewhat confusing. We did find a significant main effect of credibility upon suggested
length of punishment, which implies that an indirect effect of emotions upon suggested length of punishment exists. Where high perceived credibility is highly associated with sad and neutral emotions, the neutral emotional display is the factor that elicits highest amount of punishment among female participants, and not among male participants, even though high perceived credibility is associated with longer suggested prison sentences. One would expect that since the neutral emotional condition received quite a high credibility rating among all participants, that the neutral emotional condition would also elicit recommendations for relatively long punishments from both male and female participants. This was clearly not the case when we consider punishments for the father recommended by male participants in the neutral emotional condition. It seems quite clear from our results that men seemed to be more unwilling to suggest a long prison sentence if the child victim had a neutral emotional expression. The reason for this may be that a neutral emotional expression is not associated with serious abuse by male participants, and subsequently that the alleged perpetrator is given a lighter punishment. Male participants did recommend the longest prison sentence in the sad emotional condition, giving support to the emotional witness effect. Sadly the sad emotional condition was not significantly higher than the other three emotional conditions. The low suggested length of punishment recommended by male participants in the neutral emotional condition does however support the emotional witness effect, where a neutral emotional expression is not considered appropriate emotional behavior by a child disclosing CSA. These results were surprising since studies have shown that participant who are exposed to anger before rating different types of legal questions, are known to submit a harsher rating (e.g., punishment) after this exposure to anger when compared to neutral or sad emotions (Ask & Landström, 2010; Ask & Pina, 2011). Our results showed that anger seemed to be associated with milder suggested punishment. A possible explanation could be that a victim’s emotional display has no direct influence on the punishment of a perpetrator; in Ask et al.’s (2010, 2011) studies, there were no victims that could induce emotions, just a general type of emotion inducement followed by judgment of crime and intent. The positive finding is that the neutral emotional display is the only condition that is significantly higher on the suggested length of imprisonment, which suggests that female participants in this study may have used the content of the testimony to evaluate the suggested length of punishment. Even if not significantly different, male participants seemed to evince more of the emotional witness effect than female participants in the neutral emotional condition.
Another factor that could explain the surprising result is that people find it hard in general to evaluate and suggest suitable punishment in criminal cases. Studies have investigated Norwegian people’s opinions regarding deserved punishment, and the results from these studies suggest that people are quite uncertain regarding appropriate lengths of imprisonment (Olaussen, 2005, 2010). Other studies have shown that emotions (i.e., sadness & anger) may influence and even produce a desire to punish, as well as affecting judgments of blame and guilt (Bodenhausen, et al., 1994; Feigenson & Park, 2006; Keltner, et al., 1993), and that angry participants are more willing to punish the alleged perpetrator, compared to sad or neutral participants (Ask & Landström, 2010; Ask & Pina, 2011). This uncertainty could be argued to be evident in our study where the neutral emotional condition, rather than the angry emotional condition, produced the longest recommended punishment among female participants. These results also show that males and females are again affected differently when it comes to suggesting punishment and length of sentencing. Males are more inclined to suggest longer prison sentence for the father in the sad emotional condition, while females are more likely to suggest a longer sentence when the child expresses neutral emotional behavior compared to male participants. One possible explanation for this gender difference may be different levels of interpersonal sensitivity, identification, and empathy between men and women towards the child and the alleged perpetrator (Brody, 1997; Hall & Schmid Mast, 2008; Kaplan & Miller, 1978; Quas, et al., 2002). Female participants’ “close” identification with the girl may influence women’s suggested length of punishment. On the other hand, men may not be as “close” to the girl and may therefore identity themselves more with the perpetrator, since they share the same gender. This in turn, could serve as an explanation to why there is a gender difference in suggested length of punishment.
Conclusion

In this study we discovered that the emotions displayed by a child witness are strong determinants of how the child’s credibility and reliability will be perceived. Results further showed that there was an effect of different emotions expressed on different questions regarding guilt, and on the length of recommended punishment. One could term this effect the emotional witness effect. In general, a sad and crying child is perceived to be more credible than a neutral, angry, or positive child. When looking at gender differences, women and men differed significantly when it came to the positive emotional condition. Men perceived a positive child as less credible and less reliable compared to the other three conditions, whereas women see the positive child as almost as credible and reliable as in the sad condition. This gender difference in the positive condition may express a general difference in sensitivity, identification, and empathy among men and women. It could be argued that women are more sensitive and therefore more able to identify themselves with the girl witness. A second reason could be that because women share the same gender as the witness, identification with the girl is obtained more easily, combined with higher levels of empathy than men, this may allow women to perceive and recognize positive emotions as Duchenne smiles and in turn perceive positive expressed emotions as more credible and reliable. Men’s lower credibility and reliability ratings of positive emotions may be based on their identification with the father. Male participants’ suggested length of punishment was lower, but not significantly so, compared with the female participants’ suggested prison term. Men may see positive expressed emotions as a sign of joking and lack of seriousness, but women may see positive emotions as more of a cover (i.e., Duchenne smiles), used to decrease tension, shame, and other negative feelings. In addition, women may be more aware of the fact that some children mask their negative emotions with positive or neutral emotions for fear of negative consequences (i.e., violence) from family members if they reveal or express negative emotions.

We found, as expected, that displayed emotions had an effect upon credibility, which in turn had a significant effect upon the suggested length of prison term. We were not able to fully determine how this emotional witness effect influenced the suggested length of time in prison since the data did not confirm our initial hypothesis which stated that sad and crying behavior would elicit longer prison sentences. This does not mean that there is no influence
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from displayed emotions on suggested length in prison; in fact, the results clearly show that there could be an indirect influence from displayed emotions through credibility on suggested length in prison. Credibility appears to serve as a mediator variable upon suggested length in prison, which could explain why there was no significant direct effect from displayed emotions upon suggested length in prison. Figure 6 gives a graphical presentation of this indirect effect.

Figure 6

Implications

The emotional witness effect has serious implications for the legal protection of children who disclose CSA. The expression of different emotions can, in fact, influence perceptions of the child’s credibility and reliability, the father’s guilt, and the suggested length of time in prison. The preparations prior to the child’s statement and before entering the courtroom are designed to prepare the child, make them as comfortable as possible and to reduce stress, fear and other negative emotions. In many cases the child discloses the maltreatment event several times over a period of time. This repetition of disclosure does in some cases make the child seem more neutral and distanced. The child may seem less emotionally affected by the alleged incident and subsequently be perceived as less credible.
and less reliable by the jury if the child does not express the “correct appropriate emotions”. The measures created to protect and aid the child through the whole legal process may to some extent decrease the child’s credibility and reliability. In a worst case scenario this could result in the child being perceived as less trustworthy and the perpetrator potentially not being convicted as a result.

This leads us to the importance of greater knowledge about how children are perceived when expressing different emotions during disclosure of CSA. It is essential to develop better knowledge of how lay people perceive children displaying different types of emotions during disclosure of CSA, so that interviews and the interpretation of information obtained by these interviews are correct and not just affected by the emotional witness effect. Our results seem to be a step in the right direction towards clarifying how the emotional witness effect influences different factors involved in CSA. This study is part of a larger study, where professional (e.g., police officers, child protection services) and lay people were investigated to find out how the emotional witness effect influenced people with different levels of experience in CSA cases. Our results contributes to the larger study by exploring the operation of the emotional witness effect in lay people and helps to raise awareness about how different expressed emotions influence several important factors relating to the legal and the forensic setting. These results will also help to strengthen the small body of knowledge that exists on the topic of child witness credibility, and may be used in building a stronger theory of the emotional witness effect.

Limitations

Results from this study are based on what lay people perceive as credible and reliable factors regarding child witness testimony. Our results have thoroughly demonstrated that the emotional witness effect was present in our target sample. However, a child’s (i.e., subjected to maltreatment) testimony is often assessed by professionals to evaluate the credibility and reliability of the statement and the child. One needs to be careful when generalizing based on our results. What previous studies have shown, is that professionals are influenced by the same emotional witness effect as lay people are (Bollingmo, Wessel, Eilertsen, & Magnussen, 2007; DePaulo et al., 2003). In addition, the child often first discloses CSA to a lay person (e.g., family member, friend, or teacher) (Goodman, et al., 1992). It is therefore highly
relevant to explore how displayed emotions influence lay people’s perception and decisions regarding child maltreatment and CSA. Our results could therefore be argued to be highly valid, reliable, and relevant.

The lack of significant differences between the different emotional conditions for the probability of guilt, guilty verdicts, and suggested length of punishment is another limitation to this study. A possible explanation for why there were no significant direct effects of emotions on probability of guilt could be that there were not enough participants in the different emotional conditions (especially male), resulting in very large standard deviations and low explanatory power. Another reasonable explanation could be that people generally have difficulties with estimating probability, especially when emotions are involved. This limits people to rely on heuristics when estimating probability (Tversky & Kahneman, 1973, 1974). This suggests that the participants in our sample were not entirely confident when assessing the probability of guilt. The lack of significant difference between the emotional conditions regarding guilty verdicts and suggested length of time in prison could be explained by looking at male participants’ answers to these questions. Regarding the question about guilt and punishment, a large portion of male participants did not judge the father to be guilty, which meant that the number of male participants offering a suggested length of punishment was very low. This gender difference in the number of participants answering these questions may not be easy to combat by simply adding more participants to the sample. If females are more prone to giving a guilty verdict to a male perpetrator, one would still have a discrepancy between gender and guilty verdicts because of this effect.

There is another possible limitation to this experimental study, and that limitation relates to the legal settings. In real court room settings, assessment of the child’s credibility and reliability are not made in isolation, but in the light of relevant information accessible in the case. This presents a threat to the external validity of this study.

One additional limitation to this study is that we were not able to untangle and identify how the indirect effect from emotions through credibility influenced suggested length in prison and the guilt questions. One could have untangled this indirect effect by gaining access to an Amos analysis; sadly, we were not able to gain access to such an analysis method due to time- and access limitation to the Amos analysis.
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References


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Appendix

The interview
A=avhører, B=barn
Alder 11 år

A: Hvordan trives du på skolen?
B: Brah.
A: Hva er det du liker best med skolen?
B: Mest friminuttene, for da er jeg sammen med venner og sånn.
A: Utenom friminuttene, da? Er det noen fag du synes er morsomme?
B: Jeg liker naturfag, fordi da lærer jeg om dyr og sånne ting.
B: Mener du det med pappa og sånn?
A: Ja, fortell meg om det med pappa’n din.

Seksuelt misbrukt av far:

(...) A: Du sa at Pappa’n din var naken,[liten pause] fortell mer om det.

(...) 

The questionnaire
VITNETROVERDIGHET
Du har nå sett et utdrag fra en vitneforklaring. Du skal nå besvare dette spørreskjemaet, hvor vi ønsker din umiddelbare vurdering.

Dette er ikke en juridisk-, men troverdighetsvurdering. Vi ønsker din personlige oppfatning. Derfor er det viktig at du svarer ut fra din vurdering.
Kvinne

Mann

Alder

Arbeid

Du skal ringe rundt 1-7 for hvert spørsmål. Ved hvert spørsmål vil det stå beskrevet hva ytterpunktene i dimensjonen er.

BARNETS FORKLARING

Barnet fremstår som

1-----2-----3-----4-----5-----6-----7

Troverdig                  Ikke troverdig

Barnets forklaring fremstår som:

1-----2-----3-----4-----5-----6-----7

Pålitelig                  Ikke pålitelig

I din vurdering av troverdighet, hva la du mest merke til ved barnet?

Kryss av på hver skala:

Følelsesuttrykk

1-----2-----3-----4-----5-----6-----7

Uten betydning       Helt avgjørende

Blikk

1-----2-----3-----4-----5-----6-----7

Uten betydning       Helt avgjørende

Tonefall

1-----2-----3-----4-----5-----6-----7

Uten betydning       Helt avgjørende

Kroppsspråk

44
Crying Equals Honesty: Emotional Expression Affects A Child Witness’ Credibility

I din vurdering av troverdighet, hva la du mest vekt på ved innholdet i forklaringen?

Kryss av på hver skala:

Omtendighetene

1----2----3----4----5----6----7

Uten betydning Helt avgjørende

Barnets reaksjon

1----2----3----4----5----6----7

Uten betydning Helt avgjørende

Beskrivelsen av selve overgrepet

1----2----3----4----5----6----7

Uten betydning Helt avgjørende

Annet (fyll inn):

________________________________________________________________________________________
_______________________________________________________________________________________
________________________________________

I hvor stor grad påvirket innholdet din vurdering?

1----2----3----4----5----6----7

Liten grad Helt avgjørende

I hvor stor grad påvirket fremstillingen din vurdering?

1----2----3----4----5----6----7

Liten grad Helt avgjørende

HELHETLIG VURDERING

Vi er her klar over at andre momenter i saken må tas med i vurderinger av skyldspørsmål, men sett at du skulle vurdere et eventuelt skyldspørsomål i en rettssak ut fra disse vitneforklaringene, hva mener du om følgende:
Crying Equals Honesty: Emotional Expression Affects A Child Witness’ Credibility

Jeg tror sannsynligheten for at den faren er skyldig er:

0 % --- 10 --- 20 --- 30 --- 40 --- 50 --- 60 --- 70 --- 80 --- 90 --- 100 %

Ved skyldspørsmål ville jeg alt i alt stemt for:

Ikke skyldig [ ] Skyldig [ ]

Utuktig handling

I følge straffelovens § 212,2, har utuktig handling mot mindreårig, en strafferamme på inntil 3års fengsel.

Kun dersom du har stemt for skyldig, hvor lang fengselsstraff mener du er passende:

1 mnd --- 6 mnd --- 9 mnd --- 1 år --- 2 --- 3 --- 4 --- 5 --- 6 år

Evt.

Annen form for straff/behandling [ ]

OPPFØLGNING AV BARNET

Hva ville du foreslått som tiltak for dette barnet?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

I hvilken grad er du enig i påstandene nedenfor

1=enig, 4=vet ikke, 7=uenig

Barns fortellinger om overgrep er ofte falske

1 - - - 2 - - - 3 - - - 4 - - - 5 - - - 6 - - - 7

Barn blir ofte manipulert til å gi falske forklaringer

1 - - - 2 - - - 3 - - - 4 - - - 5 - - - 6 - - - 7

Barn som gir lite detaljerte forklaringer forteller trolig ikke en sann historie

1 - - - 2 - - - 3 - - - 4 - - - 5 - - - 6 - - - 7

Barn forteller oftere om overgrep enn at de lar vær å fortelle om det

1 - - - 2 - - - 3 - - - 4 - - - 5 - - - 6 - - - 7
Crying Equals Honesty: Emotional Expression Affects A Child Witness’ Credibility

Barn som ikke viser stress eller tristhet forteller trolig ikke sannheten om misbruk

1-----2-----3-----4-----5-----6-----7

Man bør være skeptisk hvis et barn har utsatt å fortelle om et overgrep

1-----2-----3-----4-----5-----6-----7

Små barn er ikke troverdige vitner

1-----2-----3-----4-----5-----6-----7

Ungdom er ikke troverdige vitner

1-----2-----3-----4-----5-----6-----7

Sammenlignet med voksne husker barn bedre

1-----2-----3-----4-----5-----6-----7

Hvis et barn gir en detaljrik forklaring, er det en indikasjon på at den er sann

1-----2-----3-----4-----5-----6-----7

Hvis barnet snakker på en voksen måte, så svekker det min troverdighetsvurdering av barnet

1-----2-----3-----4-----5-----6-----7

Kommentarer: ________________________________________________________________

Egen kompetanse / erfaring

Min kompetanse til å vurdere omsorgssvikt.

1-----2-----3-----4-----5-----6-----7

Ingen kompetanse Meget god kompetanse

Min kompetanse i å vurdere barns trovertighet.

1-----2-----3-----4-----5-----6-----7

Ingen kompetanse Meget god kompetanse

Min erfaring i å vurdere/ gjennomføre avhør av barn

1-----2-----3-----4-----5-----6-----7

Ingen erfaring Mange års erfaring