Shame, Humiliation, and Childhood Sexual Abuse:
Distinct Contributions and Emotional Coherence

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Abstract

Childhood sexual abuse (CSA) may produce powerful and enduring emotion reactions, including intense shame, anger, and humiliation. While shame and anger have received considerable interest from researchers, less attention has been paid to humiliation or associated coherence among these emotions as it relates to the psychological adjustment in CSA survivors. In the current investigation, we coded shame, anger, and humiliation from narrative transcripts of CSA survivors as they either voluntarily disclosed an abuse experience or described a distressing nonabuse experience and from nonabused individuals as they described a distressing experience. Verbal humiliation was found to be significantly associated with nonverbal displays of shame. Coherence between verbal humiliation and facial shame among CSA nondisclosers was associated with increased symptoms of Posttraumatic Stress Disorder.

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History of childhood sexual abuse (CSA) has been linked to increased risk for long-term consequences on the lives of survivors (e.g., Adams-Tucker, 1982; Briere & Runtz, 1988; Brooks, 1983; Browne & Finkelhor, 1986; Peters, 1988; Spaccarelli, 1994; Trickett & Putnam, 1993). For example, CSA survivors are more likely to experience PTSD related symptoms such as moments of increased arousal and extreme affective reactivity and, alternatively, a general predisposition toward numbing of responsiveness including feelings and affects (American Psychiatric Association [APA], 1994). There has been considerable focus in recent years on developing therapeutic interventions that target the cognitions and associated emotional experiences associated with traumatic symptoms experienced by CSA survivors. Treatments of choice typically focus on helping CSA survivors gain a greater sense of emotional stability around the traumatic episode through a variety of interventions such as support and corrective processing of the cognitions around the event, imaginary or actual exposure (with the goal of increased habituation or decreased anxiety), and stress management, among others (e.g., Deblinger, McLeer, & Henry, 1990; Foa, Dancu, Hembre, Jaycox, Meadows, & Street, 1999; Rothbaum, Meadows, Resick, & Foy, 2000). Although there is a growing consensus by scholars and practitioners in the identification and treatment of PTSD symptoms in cases of CSA, until lately little attention had been given to investigating emotional coherence among this group. Specifically, there is an imperative need for further research to clarify how physiological, experiential, and expressive response domains in emotional experiencing (e.g., Ekman, 1992; Levenson, 1994) may inform psychological functioning and response to treatment.

Recent research has offered some initial empirical support for the links between history of trauma, PTSD, and emotional noncongruence (Wagner, Roemer, Orsillo, & Litz, 2003). Many questions, however, have yet to be addressed. For example, what are the primary emotions associated with CSA and related trauma? Does the experience and expression of these emotions vary within and across individuals? A recent study raised the intriguing possibility that for some CSA survivors, emotional noncoherence may serve an adaptive end (Bonanno et al., 2002). The present study was designed to examine these important questions further. Specifically, we examined three emotions (i.e., shame, anger, and humiliation) often salient in the experience of CSA and whether the coherence between the experience and expression of these emotions informed adjustment and disclosure behavior.

Shame, Humiliation, Anger, and Embarrassment

The experience of CSA is often dominated by the negative emotions of shame and anger. Shame is seen as a central feature influencing the extent of social and emotional adjustment by CSA survivors. It has been suggested that internalized shame may result from incidents of CSA following the experience of the abuse as a personal attack on the self, leaving the individual feeling deeply defective and defeated. Survivors then continue to engage in activities that reinforce the low self-worth (e.g., Finkelhor & Browne, 1985). While describing the connection of shame and CSA, Hunter (2000) suggested that

The paradox is that the person who has been violated is the one who has a sense that there is something wrong with him.... Since shame is related to a person's "self" and not merely to an experience, the shame becomes part of the victim's identity, and it follows him into adulthood affecting his view of himself and everything he does....the victim often assumes that everyone somehow knows that he has been abused, is dirty, or is a "pervert". (p. 81)

The link between shame and adjustment among CSA survivors has some empirical support. In a longitudinal study involving 147 children and adolescents over the course of a year, Feiring, Taska, and Lewis (2002) looked at adjustment (i.e., depressive symptoms, self-esteem, and PTSD symptoms) following CSA as a function of shame and attribution style. Results showed that both shame and attribution style were predictive of adjustment over time, with shame explaining the pattern of change across all three adjustment measures. Other studies have offered support for the link between shame and incidents of adult victimization (e.g., Kessler & Bieschke, 1999) and PTSD (e.g., Andrews, Brewin, Rose, & Kirk, 2000).

Extensive support also exists in the literature linking anger to CSA (e.g., Mannarino, Cohen, & Gregor, 1989; Newman & Peterson, 1996; Scott & Day, 1996; Whealin, 2002) and to PTSD (e.g., Andrews, Brewin, Rose, & Kirk, 2000; Heffernan & Cloitre, 2000; Riggs, Dancu, Gershuny, Greenberg, & Foa, 1992). CSA survivors often report feelings of anger linked to the experience of frustration and insult at the hands of the perpetrator (Bonanno et al., 2002). At least in part, these feelings are likely to be associated with being forced to do something against one's wishes (Izard. 1977). It comes as no surprise, therefore, that numerous studies investigating the emotional impact of shame on CSA also tend to include anger, and vice-versa.

Based on the available empirical evidence, shame and anger represent core emotional responses in the traumatic cases of CSA that are thought to impact future emotional adjustment and psychopathology such as PTSD. Less attention, however, has been paid to the experience of humiliation. Despite clinical support suggesting that humiliation is an important theme in the psychological functioning of individuals following CSA, empirically it has often been subsumed under the category, or as a synonym, of shame (e.g., Andrews, Brewin, Rose, & Kirk, 2000; Gold, Swingle, Hill, Elfant, 1998; Lisak, 1994), or associated to the shame-anger link (e.g., humiliated fury; Lewis, 1971; Tangney, Wagner, Fletcher, & Gramzow, 1992). Thus, it remains unclear what

constitutes the distinct contribution of humiliation to the psychological adjustment of CSA survivors.

Several writers have distinguished humiliation from shame. Generally, humiliation is thought to include a perception that one is being degraded or ridiculed at the hands of another individual (e.g., Klein, 1991; Miller, 1985). Stamm (1978) suggests that humiliation is experienced in situations when others demean the individual and one is likely to "feel belittled or slandered, lowered in the eyes of others or in his own eyes." (p. 425) Similarly, Gilbert (1997) wrote that humiliation is likely to occur when one feels "criticized, degraded, and abused by a bad other." (p. 134) He proposes that in those cases of extreme humiliation "one might feel stripped of one's dignity, exposed and rendered vulnerable to attack." (p. 133) Gilbert further suggests that for humiliation to occur, there must an attribution to the other who is seen as bad, but does not necessarily require one to devalue the self (as in shame). In the present paper, we propose that for humiliation to be felt, the individual must experience the self in a negative light while concurrently holding a negative attribution of blame to the other. Thus, humiliation differs from shame in that there is a significant attribution of blame to the other, and differs from anger in that the action of the other is experienced, with or without awareness, as exposing the perceived deficiencies in the self.

An additional emotion considered in the present study is embarrassment. Embarrassment has been linked to the perception that one has violated social conventions resulting in increased social exposure and a loss of self-esteem (e.g., Edelmann, 1981; Keltner & Buswell, 1997). While embarrassment shares some attributes with shame (e.g., feeling inept and self-blame), it differs from shame in that the latter reflects violations of a deeper moral standard whereas the former is generally seen as less intense and associated with social transgressions (Keltner & Buswell, 1997). In contrast to verbal embarrassment, nonverbal displays of embarrassment are generally thought to serve an appeasement function for perceived transgressions. There is at present little empirical

evidence connecting embarrassment, when properly distinguished from the emotion of shame, to the occurrence of CSA per se (or to PTSD for that matter). However, some studies have suggested that embarrassment may be more likely to occur during investigative interviews following the disclosure of CSA by the survivor (e.g., Furniss, 1998).

Finally, there is a paucity of research investigating whether emotional coherence (i.e., between verbal and nonverbal expressions) of shame, humiliation, and anger offers a partial account of the link between CSA and future psychological health. Understanding this relationship has important implications for treatment. As discussed earlier, current treatment of PTSD related issues generally requires, at least in part, coherent expression of emotions, such as anger, shame, and humiliation, during exposure (imaginary) to the CSA/traumatic event. Given the importance of anger, shame, and humiliation in the emotional lives of CSA survivors, we would expect treatment of trauma symptoms in the cases of CSA to target coherence for these emotions. Unlike anger, however, shame and humiliation have been associated with concealment or, alternatively, with the priority of expression in nonverbal channels. How this impacts the nature and extent of emotional coherence for shame and humiliation, and how it informs the link between CSA and psychological health remains unclear. Thus, we set out to examine whether coherence among these emotions would be associated with better psychological health expressed in lower PTSD symptoms.

Expression and Voluntary Disclosure of Abuse

It is widely believed that emotional coherence (e.g., the simultaneous experience and expression of an emotional response) is the standard for optimum adaptation to critical environmental events (e.g., Levenson, 1994; Rosenberg & Ekman, 1994; Tomkins, 1962). Conversely, the lack of emotional coherence is thought to be more prevalent among psychopathological groups (e.g., individuals with psychotic presentations). Indeed, a recent study found that individuals with post-traumatic stress disorder were more likely to exhibit greater

incongruence between emotional expression and the self-reported experience of emotion relative to their nonPTSD counterparts (Wagner, Roemer, Orsillo, & Litz, 2003). It is unclear, however, how the extent of trauma present in CSA survivors relates to emotional coherence and choice to disclosure history of CSA.

It is arguable that emotional coherence may not always be fully adaptive for all CSA survivors. Individuals with PTSD are susceptible to extreme emotional arousal and reactivity as well as a tendency toward numbing of general responsiveness and emotional experiencing (American Psychiatric Association [APA], 1994). Emotional reactivity, thus, may be quite overwhelming and dysfunctional to the CSA survivor. And, as reviewed above, shame and humiliation have been associated with self-blame and the tendency toward emotional concealment. Therefore, we anticipated that for CSA survivors who may typically avoid or minimize disclosure of the abuse event, emotional coherence might be less common and less fully adaptive. In other words, emotional coherence is thought to be maladaptive in those cases where (a) the individual has a history of trauma that predisposes her to emotional reactivity (as seen through emotional coherence of negative affect), (b) the individual tends toward avoidance (nondisclosure) of abuse. and (c) the emotions experienced are generally negative and associated with a desire for concealment. It is primarily, although not exclusively, among these individuals that emotional noncoherence may be an adaptive form of coping (whether within or without the individual's awareness) with the risk of emotional reactivity by selective utilization of one aspect of emotional communication over the other (i.e., verbal / nonverbal).

For various reasons, many survivors fail to disclose or even to conceal their abuse histories. Williams (1994) reported that over one-third (38%) of a sample of women with a verified history of abuse failed to disclose the specific CSA event. Failures to disclose prior abuse experiences have been attributed to factors such as avoidance, normal forgetting, unwillingness to revisit the

experience, or defensive memory blockage (e.g., Briere & Conte, 1993; Femina, Yeager, & Lewis, 1990; Loftus, Garry, & Feldman, 1994; Williams, 1994). It has also been suggested that nondisclosure may be associated with intense shame (e.g., Hoglund & Nicholas, 1995; Madanes, 1997; Talbot, 1996; Zupancic & Kreidler, 1999). A previous study using the same database as the current investigation found that CSA survivors who did not disclose a history of abuse when asked to describe the most distressing event in their lives displayed significantly more nonverbal (i.e., facial) shame than CSA survivors who disclosed the history of abuse or individuals with no known history of CSA (Bonanno et al., 2002). One of the important implications of this finding is that CSA survivors who do not disclose history of abuse may tend to express shame nonverbally rather than through words. This may allow one to avoid verbally acknowledging the shame while at the same time offering nonverbal signals of appearement to others for assumed culpability or self-blame in a transgression of moral norms. Given the shared characteristics of humiliation and shame, we expected that nondisclosers would be less likely to verbally express both shame and humiliation than participants who disclose history of abuse.

Original Disclosure of Abuse and Emotional Coherence

An additional topic explored was the extent to which shame and humiliation related to the manner in which the abuse was first discovered (i.e., whether the abuse was originally disclosed by the survivor [purposeful disclosure] or discovered by a third party [accidental disclosure]). The likelihood that accidental disclosure is associated with higher levels of shame was suggested by Feiring, Taska, and Lewis (1996): "being discovered, as compared to purposeful telling, may also constitute a higher risk factor for shame. Discovery involves the public exposure of the self which may be more immediately shameful" (p. 772). Bonanno et al. (2002) also speculated that accidental discovery may also cause the survivor to mistakenly attribute her own silence to either complicity or purposeful involvement in the abusive act, thereby leading to increased self-blame and shame.

Consistent with these ideas, Bonanno et al. found that accidental original disclosure was associated with greater facial displays of shame. In the current study, we examined whether accidental original disclosure might also be associated with verbal measures of shame and humiliation.

The Current Investigation

The current study aimed to further investigate the contributions by shame, humiliation, and anger by examining the relationship between emotional coherence, disclosure of childhood sexual abuse, and trauma.

Shame and anger were coded as discrete emotions using appraisal components specified by Lazarus (1991) and operationalized for narrative coding in a previous study (Bonanno, Mihalecz, & Lejeune, 1999). Humiliation was coded as a blend of shame-related self-attribution and angerrelated other-attribution manifesting within the same appraisal moment. To achieve this, the parameters of unique ideas or thoughts within the narratives were defined as narrative units (NU). Presence or absence of shame, anger, and humiliation were then coded in each NU. The resulting narrative variables were then compared within narratives for their co-occurrence, and for their relation to facial displays associated with shame.

One benefit of the narrative approach is that in addition to capturing underlying psychological processes, spontaneous autobiographical narratives are also thought to constitute, rather than reflect, aspects of cognition, identities, emotions, and moral positions (e.g., Brunner, 1990; Gergen & Gergen, 1997) and offer important cues as to their significances to the narrator (e.g., Capps & Bonanno, 1999; Bauer & Bonanno, 2001). The narratives obtained in the current investigation were obtained from a group of late adolescent and early adult women who were survivors of CSA, and a matched, nonabused comparison group. Verbal indicators of shame and humiliation were compared to nonverbal expressions of shame assessed from facial displays, and to symptoms of Posttraumatic Stress Disorder. The above relations were compared across CSA

survivors who had voluntarily disclosed a past abuse experience, CSA survivors who described a distressing nonabuse experience, and the nonabused group who also described a distressing nonabuse experience.

Method

Participants

The participants in the current study were from a longitudinal study of the psychobiological impact of childhood sexual abuse on female development that began in 1987 (see Trickett & Putnam, 1993). The sample for the current study consisted of those individuals who participated in the fourth wave (Time 4) of data collection (N = 163) approximately half of whom had experienced some form of childhood sexual abuse. Participants were referred by city or county service agencies in greater Washington, DC area, and met four eligibility criteria: 1) females, six years of age or older; 2) disclosure of abuse occurred within six months of referral; 3) the abuse involved genital contact and/or penetration; and 4) perpetrator was a family member, defined as a parent, stepparent, older sibling, mother's live-in boyfriend, uncle, or other relative. In addition to the CSA group, comparison females were also recruited via community advertising and presented similar to the CSA participants in terms of age, socioeconomic status, ethnic group, and family constellation.

Data collection of the fourth wave, analyzed in the current study, occurred an average of 7.1 years (SD = 1.5) since participants' original abuse-related assessment. By the fourth wave, the attrition rate was 14%. The remaining sample of participants did not differ from the original sample with respect to demographics or group membership. During the course of the study, 12 comparison subjects revealed significant unwanted sexual experiences and were dropped from the comparison group. As a result of this loss, 19 new comparison participants were recruited (with the same procedures used for drawing the initial sample; ie matched for age, race, SES, and family constellation) for participation in Time 4. Of the 163 participants, eight did not provide information

about trauma histories (two were too young to receive the trauma history interview, one participated by mail, two refused to answer the questions, and three provided incomplete information). Finally, data from six participants could not be coded for facial expressions of emotion because the video quality was poor, a portion of the face was obscured (by hair or turned head), or the participant moved out of visual range. Thus, the current analysis was based on 137 (67 abused, 70 comparison) of the original participants. The average age of these participants was 18.2 years (SD = 3.4 years). There were slightly more white (N = 72, 53%) than minority (black or Hispanic) participants (N =65, 47%) in the sample. The mean Hollingshead score for the sample was 35 (SD = 13.03). Abused and comparison groups did not differ with respect to these demographics (all ps > .15). The families of the participants in the sample ranged from low to middle socioeconomic status, with a mean Hollingshead (1976) score of approximately 35 (defined as "blue collar" or working class).

Measures

Disclosure groups. Two-thirds (N = 44, 66%) of the 67 CSA participants described an abuse event (CSA disclosure group) as the most distressing event of their life. The remaining 23 participants in the abuse group described nonabuse topics as the most distressing event in their life (CSA nondisclosure group). The average age of the participants in the CSA disclosure group was 18.9 years (SD = 3.24), 18.3 years (SD = 3.45) for the nondisclosure group, and 17.8 years (SD = 3.37) for the nonabused group. There were slightly more minority participants (N = 24) than whites (N = 20) in the disclosure group, more whites (N = 16) than minorities (N = 7) in the nondisclosure group, and a nearly identical split in the nonabused group (36 whites and 34 minorities). The most frequent topics described by the CSA nondisclosure group were the death of a close friend or family member (N = 8), followed by family conflict or divorce (N = 4), and conflicts with friends or peers (N = 4). Seventy participants comprised the nonabused comparison sample. Similar to the CSA nondisclosure group, the most frequent topics described by the nonabused comparison sample were

the death of a close family or friend ($\underline{N} = 19$), family conflict or divorce ($\underline{N} = 15$), and conflicts with friends or peers (N = 15).

Facial expressions of emotion. A version (EMFACS) of the Facial Action Coding System (FACS, Ekman & Friesen, 1976; 1978) was used to code the participants' facial behaviors during the open-ended narrative interview. The EMFACS targets only the emotion-relevant facial muscle movements that have been derived from previous theory and research (reviewed in Ekman, 1984). EMFACS criteria were used to translate the coded facial muscle movements into facial expressions of anger, shame, and embarrassment. Each facial muscle movement was scored on a 5 point scale (1 = minimal intensity, 3 = moderate intensity, 5 = extreme intensity). The facial magnitude variable was based on the product of each expression's frequency, duration, and intensity (see Bonanno et al., 2002 for a more detailed description of the facial magnitude variable).

Coders were blind to the participants' status and responses on other measures, and intercoder reliability was estimated by calculating the pairwise agreement of two pairs of coders for four subjects per pair. A ratio was calculated in which the number of facial action units on which the two coders agreed was multiplied by two and then divided by the total number of action units scored by the two persons. Pairwise agreement was above .75 in all cases, and the mean ratio of agreement was .80. For additional discussion on the facial expressions of emotions included in the present study, see Bonanno et al. (2002).

Lifetime Post-traumatic Stress Disorder (PTSD) symptoms. The PTSD symptoms scale was derived from Davidson, Kudler, and Smith (1989) but was modified to be DSM-IV compliant. Eighteen questions were administered concerning the trauma identified as the "worst" or "most upsetting". Participants were given one point for every symptom endorsed in each of the three PTSD diagnostic categories (6 items each); arousal symptoms (a = .81), re-experiencing symptoms (a = .79), and avoidant symptoms (a = .80).

Narrative Coding of Shame Related Emotions

Segmentation into Narrative Units (NU). The narrative interviews used in the current study were previously transcribed in an earlier study from audio taped recordings using standards developed for psychotherapy sessions (Mergenthaler & Stinson, 1992). Judges segmented each transcript into Narrative Units (NUs) based on their intuitive understanding of the natural boundaries of a complete thought or idea (Butterworth, 1975; Stinson, Milbrath, Reidbord, & Bucci, 1994). In contrast to segmentation procedures suggested for psychotherapy transcripts (Stinson et al., 1994), interruptions by the interviewer were not used to define NU boundaries unless they altered the content of the participant's disclosure. Inter-rater reliability for the segmentation was calculated by summing the number of NU markers upon which judges agreed, multiplying this sum by two, and dividing by the total number of NU markers coded. The ratio of agreement was .87.

Specific emotion codes. Coding rules for determining the presence or absence of shame and anger within each NU were identical to those used in a previous narrative study (e.g., Bonanno, Mihalecz, & LeJune, 1999) and are based on the definitions offered by Lazarus (1991). The coding for shame was based on the view that the experience of shame reflects a failure to live up to an ego-ideal and where the blame is put on the self (e.g., Babcock & Sabini, 1990; Keltner & Buswell, 1997; Lazarus, 1991; Lindsay-Hartz, 1984; Morrison, 1989; Piers & Singer, 1953; Tangney, 1992). An example of shame is "I felt dirty, different from my peers". Anger was defined as a demeaning offense against me and mine with associated harm to self- or social-esteem and the blame is on another person (e.g., "She had no right to say those lies about us.") The coding of humiliation was predicated by the co-existence within the same narrative unit of shame-related self-attribution and anger-related other-attribution. Thus, humiliation is expected to occur when the blame is primarily on the other, and there are concurrent shame-based appraisals (e.g., the self is seen as defective or

weak). An example of humiliation is "Her accusations made me feel cheap." Only one of the above narrative emotions could be coded for each NU (i.e., although humiliation requires certain shame and anger related themes, these emotions would not be coded for a given NU if humiliation was also coded.) All narratives were coded by the first author of the current paper. A Masters level psychology student coded 40 randomly selected narratives. Intercoder agreement was good for shame (kappa = .93), anger (kappa = .86), and humiliation (kappa = .86).

Results

Frequency of Shame, Humiliation, and Anger

There were relatively few incidents of narrative shame and humiliation in comparison to narrative anger, and any overlap among verbal emotions in individual narratives was infrequent. Thirty-five narratives (27%) included incidents of verbal shame, 31 (23%) had verbal humiliation, and 70 (51%) had verbal anger (see Table 1). The mean occurrence for shame was 2.50 per narrative ($\underline{SD} = 2.17$), humiliation 1.7 ($\underline{SD} = 1.24$), and anger 2.13 ($\underline{SD} = 3.35$). Twelve narratives included occurrences of verbal shame and humiliation, 24 had verbal anger and humiliation, and eight narratives contained all three verbal emotions (i.e., shame, anger, and humiliation). We explored whether the frequencies of these emotions were moderated by abuse severity, event remoteness, type of nonabused event disclosed, age, and minority status. None of these effects were significant. Therefore these variables were not considered further in this study.

Verbal Shame, Humiliation, and Anger as Binary Variables

In response to the modest frequency of shame and humiliation among the participants, three binary variables were created reflecting the presence or absence of verbal shame, humiliation, and anger. These binary variables were used instead of the original continuous data for all of the statistical analyses in this section. Both binary and continuous configurations for facial emotions were used depending on the research question being asked and type of statistical analysis being

conducted.

The remainder of the results section describes co-occurrence of the verbal emotions with each other and across disclosure groups, followed by coherence between verbal emotions and nonverbal emotions across groups as well as in relation to PTSD symptoms across groups.

Co-occurrence among Variables

The different shame related emotions tended to co-occur within the same narratives. Specifically, shame appeared in nearly half ($\underline{\mathbf{n}} = 13, 41\%$) of the narratives also containing expressions of humiliation, $\chi^2(1, \underline{\mathbf{N}} = 137) = 5.71$, $\underline{\mathbf{p}} < .05$, and in 29% of narratives containing expressions of anger ($\underline{\mathbf{n}} = 20$), $\chi^2(1, \underline{\mathbf{N}} = 137) = 3.73$, $\underline{\mathbf{p}} = .05$. Humiliation occurred in one-third of those narratives also containing anger ($\underline{\mathbf{n}} = 24, 34\%$), $\chi^2(1, \underline{\mathbf{N}} = 137) = 24.68$, $\underline{\mathbf{p}} < .001$. Narratives containing humiliation were often accompanied by descriptions of anger themes, although most narratives containing anger (65%) did not show incidents of humiliation. Finally, verbal humiliation tended to occur more frequently in those narratives ($\underline{\mathbf{n}} = 8, 40\%$) that contained incidents of both verbal shame and anger, $\chi^2(1, \underline{\mathbf{N}} = 137) = 7.43$, $\underline{\mathbf{p}} < .01$.

Verbal Emotions Across Disclosure Groups

Chi-square analyses tested for the expected linear effects in which CSA disclosing participants (i.e., participants disclosing history of abuse in their narratives) would show greater evidence of shame and humiliation in their narratives relative to CSA nondisclosing participants who in turn would show greater evidence of shame and humiliation relative to the nonabused comparison sample. As predicted, verbal shame exhibited a significant linear effect across the groups, $\chi^2(1, \underline{N} = 137) = 6.49$, $\underline{p} < .05$. Participants in the CSA disclosure group were more likely to evidence verbal shame ($\underline{n} = 18$; 41%) while the participants in the nonabused group were less likely to evidence verbal shame ($\underline{n} = 13$; 19%) relative to the overall tendency across the sample ($\underline{n} = 35$; 26%). Verbal humiliation exhibited a marginal linear effect across the groups, $\chi^2(1, \underline{N} = 137) =$

3.23, \underline{p} = .07. Participants in the CSA disclosure group were more likely to evidence verbal humiliation (\underline{n} = 13; 30%) while the participants in the nonabused group were less likely to evidence verbal humiliation (\underline{n} = 11; 16%) relative to the overall tendency across the sample (\underline{n} = 31; 23%). An additional analysis for verbal anger showed a similar significant linear effect across the groups, $\chi^2(1, \underline{N} = 137) = 5.52, \underline{p} < .05$.

Relationship Between Verbal and Nonverbal Emotions Across Groups

Chi-square analyses were used to assess possible contingency relationships between the presence of verbal shame, humiliation, and anger, and presence of facial displays of shame, embarrassment, or anger. These analyses were conducted separately for each of the three groups of participants (i.e., CSA disclosure, CSA nondisclosure, nonabused).

Approximately 77% of the participants in the CSA disclosure group with verbal shame in their narratives showed a significant contingency with facial displays of anger, $\chi^2(1, \underline{N} = 44) = 4.40$, $\underline{p} < .05$. Similarly, 77% of those in the disclosure group verbalizing anger also displayed facial anger, $\chi^2(1, \underline{N} = 44) = 6.71$, $\underline{p} = .01$. No other contingencies were observed. There were no significant contingencies among any of the verbal and facial displays of emotion for the CSA nondisclosure group. Among the nonabused comparison group, a significant contingency for verbal humiliation and facial shame was found, $\chi^2(1, \underline{N} = 70) = 4.24$, $\underline{p} < .05$, with 63% of those in the nonabused group expressing verbal humiliation also displaying facial shame. No other contingencies were observed for this group.

An additional binary variable was created to distinguish narratives that included both shame and anger but not humiliation (i.e., shame and anger co-occurring in the narrative but not within the same NU). A chi-square analysis showed a significant congruence for presence of verbal shame and anger and facial anger in the CSA disclosure group, while no contingencies were observed for facial displays of shame or embarrassment.

Narrative Emotions Compared to Magnitude Scores for Facial Displays of Emotions

The present study also examined the co-occurrence of verbal and facial manifestations of the shame-related emotions using a more reliable magnitude measure of facial displays. The magnitude scores for facial displays of shame, embarrassment, and anger were subject to a series of 2 (presence or absence of shame, humiliation, or anger) by 3 (disclosure group) Analyses of Variance (ANOVAs). The main effects of abuse group membership on facial displays of shame, embarrassment, and anger have been reported elsewhere (Bonanno et al., 2002) and are not described in the present study.

Verbal humiliation and nonverbal emotions.

A significant main effect was found for the presence of verbal humiliation on facial displays of embarrassment, F (1, 137) = 3.66, p < .05. Facial embarrassment was more evident for participants with humiliation in their narratives (M = .85, SE = .48) than those without it (M = -.21, SE = .29). A significant interaction between group membership and the presence or absence of verbal humiliation on facial embarrassment was also observed, F (2, 137) = 3.81, p < .05. The interaction appeared to be due to markedly elevated facial embarrassment among participants in the CSA nondisclosure group who evidenced verbal humiliation (M = 3.04, SE = 5.91) in comparison to those in the disclosure group (M = .14, SE = .2.68) and the nonabused group (M = -.63, SE = 1.90). See Figure 1. To further understand the interaction effect, separate analyses across groups for participants with and without verbal humiliation in their narratives were conducted. Participants evidencing verbal humiliation showed a marginal group effect, F (2, 30) = 2.56, p < .10. Pairwise comparisons indicated that participants in the CSA nondisclosure group who had verbal humiliation in their narratives showed significantly greater facial embarrassment than nonabused participants who had verbal humiliation. Participants in the CSA disclosure group with verbal humiliation showed an intermediate level of facial embarrassment and were not statistically differentiated from

the other two groups. A similar analysis for the participants who did not evidence verbal humiliation was not significant (i.e., participants who did not evidence verbal humiliation in their narratives did not differ across groups in the display of facial embarrassment).

The analysis for verbal humiliation revealed a significant main effect for facial shame, \underline{F} (1, 137) = 5.29, \underline{p} < .05 (See Table 2). Facial displays of shame were greater among participants with presence of humiliation in their narratives (\underline{M} = 1.29, \underline{SE} = .43) than those without it (\underline{M} = .14, \underline{SE} = .26). The interaction of abuse group and presence of verbal humiliation on facial shame showed a trend toward a similar effect as was evidenced for facial embarrassment, \underline{F} (2, 137) = 2.00, \underline{p} = .14; that is, facial shame was greatest for those participants in the CSA nondisclosure group with evidence of humiliation in their narratives (\underline{M} = 3.64, \underline{SE} = 3.24) when compared to the disclosure group (\underline{M} = -.06, \underline{SE} = 2.29) and the nonabused group (\underline{M} = .28, \underline{SE} = 2.07). No significant results were observed for verbal humiliation and abuse group on facial anger.

Verbal anger and nonverbal emotions.

A significant main effect was found for presence of verbal anger on facial anger, \underline{F} (2, 137) = 9.75, \underline{p} < .01, with greater displays of anger observed for participants with presence of verbal anger in their narratives (\underline{M} = .50, \underline{SE} = .27) than among those without (\underline{M} = -.88, \underline{SE} = .35). No interaction effect was found with abuse group type. There were no additional effects for verbal anger and facial displays of shame or embarrassment.

Verbal shame, shame-anger binary, and nonverbal emotions.

There were no significant main effects or interactions between verbal shame and abuse group type as a function of the magnitude scores for facial displays of shame, embarrassment, or anger.

The previously defined shame-anger binary variable (i.e., presence of both verbal shame and anger in a narrative with no occurrence of verbal humiliation) showed a main effect for facial anger,

 \underline{F} (2, 137) = 4.65, \underline{p} < .05, while no main effects or interactions for facial displays of shame or embarrassment were found.

Verbal Emotions and PTSD

Verbal humiliation and PTSD across abuse groups.

An ANOVA for the effects of the presence or absence of verbal humiliation and abuse group on PTSD revealed a significant interaction effect, \underline{F} (2, 130) = 3.10, \underline{p} < .05 (see figure 2). Analysis of only those participants who evidenced verbal humiliation in their narratives resulted in a significant group effect, \underline{F} (2, 30) = 5.46, \underline{p} = .01. Pairwise comparisons showed that participants in the CSA disclosure group (\underline{M} = 10.00, \underline{SE} = 4.18) and the nondisclosure group (\underline{M} = 10.43, \underline{SE} = 4.20) who had verbal humiliation in their narratives did not differ from each other but had greater PTSD than nonabused participants with verbal humiliation (\underline{M} = 5.18, \underline{SE} = 3.68). In contrast, for participants without evidence of verbal humiliation, the CSA nondisclosure group (\underline{M} = 6.80, \underline{SE} = 4.63) and the nonabused group (\underline{M} = 6.39, \underline{SE} = 4.57) did not differ from each other and both of these groups had less PTSD than CSA disclosure participants (\underline{M} = 12.27, \underline{SE} = 3.81). In other words, CSA survivors with elevated PTSD tended to more often describe events containing verbal humiliation even when they are not specifically talking about sexual abuse.

Verbal shame and PTSD across abuse groups.

A similar ANOVA for the verbal shame variable revealed a marginal effect on PTSD, \underline{F} (1, 130) = 2.74, \underline{p} = .10 when collapsing across groups. Participants with evidence of verbal shame had more PTSD (\underline{M} = 9.81, \underline{SE} = .90) than participants without evidence of verbal shame (\underline{M} = 8.13, \underline{SE} = .49). There was no significant interaction effect between verbal shame and abuse group, with all three groups tending to have had more PTSD symptoms whenever verbal shame was in the narratives.

Verbal anger and PTSD across abuse groups.

A third ANOVA was conducted for verbal anger and PTSD across disclosure group. No main effect for verbal anger or interaction effect was found for this variable.

Verbal-Facial Coherence and Symptoms of PTSD

A final ANOVA compared PTSD symptoms as a function of whether or not participants showed coherence between verbal humiliation and facial shame and disclosure group (CSA disclosure, CSA nondisclosure, nonabused). This analysis revealed a significant interaction between disclosure group and verbal-facial coherence, $\underline{F}(2,130) = 3.88$, $\underline{p} < .05$. As can be seen in Figure 3, participants in the CSA nondisclosure group who described humiliation verbally and also showed shame nonverbally ($\underline{M} = 11.50$, $\underline{SE} = 3.39$) had greater PTSD than CSA nondisclosers who tended to show shame only ($\underline{M} = 7.00$, $\underline{SE} = 5.12$). The CSA disclosing and nonabused groups did not appear to differ as a function of verbal-facial coherence. Follow-up tests confirmed this impression. For the CSA nondisclosure group, those with verbal humiliation and facial shame had nearly twice as much lifetime PTSD ($\underline{M} = 11.5$, $\underline{SD} = 3.39$) compared to those with only facial shame ($\underline{M} = 6.6$, $\underline{SD} = 4.53$), $\underline{t}(20) = 2.28$, $\underline{p} < .05$.

Additional analyses did not reveal any further significant findings regarding coherence among any of the other verbal / nonverbal emotions in relation to PTSD.

Discussion

In this paper, we examined three emotions that are often salient in the study of CSA: shame, anger, and humiliation. These emotions were coded from narrative transcripts of late adolescent and young adult women, some of whom have been sexually abused as children (i.e., history of childhood sexual abuse, or CSA). We also looked at facial expressions of shame, embarrassment, and anger (coded in Bonanno et al., 2002) as they occurred concurrently with the narrative discourse, and then compared both the prevalence and coherence of facial and narrative emotions across disclosure groups and in relation to measures of psychological adjustment.

Results offered additional support for the view that CSA survivors are more likely to verbalize shame, humiliation, and anger, especially among those individuals who chose to disclose the abuse event. Survivors who disclose the abuse may be processing the event and the intense feelings (i.e., shame, humiliation, and anger) around the event, while nondisclosers might tend to repress these feelings by minimizing or avoiding the topic. A reasonable follow-up question would be whether CSA disclosers are deriving more benefits from processing the event/feelings than their nondisclosing counterparts. We pick up this point a little later in the discussion as we explore emotional coherence across these groups in terms of PTSD symptoms.

An aim of this study was to examine the coherence across response channels (i.e., verbal and facial) for these emotions. One of the more intriguing qualities to emerge for humiliation was that it was a sensitive marker of a <u>lack</u> of emotional coherence among survivors of sexual abuse.

Participants from the nonabused comparison group who described humiliation in their narratives also tended to display shame nonverbally, suggesting event-response coherence for this emotion. However, no such congruence was observed for either of the CSA groups, suggesting that verbal and facial expressions may serve more diversified functions for this population. This specific finding parallels that of an earlier study that looked at the congruence between facial expressivity and self-report of emotions in women with post-traumatic stress disorder exposed to negative stimuli (Wagner, Roemer, Orsillo, & Litz, 2003). In contrast to the comparison group, women with PTSD in that study showed an inverse relationship between facial expressivity and self-report of overall emotional arousal, suggesting a similar disconnection between self-report of emotional arousal and facial expressivity.

Additional findings in the current study offer support for the lack of coherence between verbal expressions and facial displays among abuse survivors. As expected, participants who disclosed the history of CSA were more likely to describe either verbal shame or verbal

humiliation, while participants who did not disclose CSA were less likely to do so. This finding contrasts with those by Bonanno et al. (2002) who detected a strong link between nondisclosure of abuse and facial displays of shame. Taken together, these results suggest that participants who chose to voluntarily disclose their abuse histories tended to express shame and humiliation through words, while CSA participants who did not disclose a history of abuse tended to express shame nonverbally in facial displays of emotions.

How can we understand the lack of verbal-facial coherence of negative affect (i.e., shame, humiliation, and anger) among survivors of sexual abuse? On one hand, such findings suggest that emotional incoherence for these affects may reflect the relatively poorer psychological adjustment of this group. On the other hand, a more complex but also more compelling interpretation is suggested by functional accounts of emotion. Functional theories distinguish the verbal and experiential aspects of emotion as facilitating the identification and understanding of an emotional episode and the expressive aspects of emotion as being primarily communicative and as facilitating interpersonal processes (e.g., Ekman, 1993; Keltner, 1995). From this interpretive lens, we might conclude that abuse survivors who chose to disclose or not to disclose history of abuse utilized verbal and expressive aspects of emotion to different extents because of their functional relevance.

Our data indicated that the selective utilization of one aspect of emotion over the other for the affects in the present investigation proved to be particularly adaptive for CSA nondisclosers. For CSA disclosers and for nonabused participants, the coherence of verbal humiliation and facial shame was unrelated to symptoms of PTSD. However, among CSA survivors who chose not to disclose their abuse history, the coherence of verbal humiliation and facial shame actually predicted poorer adjustment (i.e., greater PTSD symptoms) whereas CSA survivors who tended to evidence facial shame in the absence of verbal humiliation had better adjustment. A reasonable explanation for this finding is that emotional coherence is adaptive for most CSA survivors except those

individuals who tend not to disclose history of abuse. In those cases, presence of coherence between verbal and nonverbal displays of negative emotions reflects extreme emotional reactivity characteristic of PTSD. In other words, among nondisclosing survivors, emotional reactivity may represent a break down in the ability to manage thoughts and feelings associated with the abuse by minimization or avoidance of the abuse topic (i.e., nondisclosure) or by limiting communication of related emotions to only one aspect (i.e., verbal or nonverbal).

The broader literature on emotional coherence has to some extent been mired in controversy; although there is some research supporting the view that emotional coherence is expected and normal (e.g., Ekman, 1984, 1992; Ellgring, 1997; Rosenberg & Ekman, 1994), many scholars remain skeptical (e.g., Fernandez, Sanchez, Carrera, & Ruiz-Belda, 1997; Fridlund, 1994). Ellgring (1997) reported a lack of emotional coherence to be associated with certain psychopathologies while emotional coherence was more prevalent among nonpathological individuals. The current findings extend this idea even further by suggesting that for survivors of CSA, the lack of coherence for negative affects actually predicts healthier functioning. Clearly, further research is needed to better clarify these issues.

Limitations

There were several important methodological limitations to the present study worthy of mentioning. First, verbal shame and humiliation were present in relatively few participants. Thus, the implications from present results should be viewed with some reservation until they can be replicated, hopefully using larger samples. Future studies consisting of additional CSA participants may yield better hints at explanatory relationships between verbal emotions and the various variables examined in the present study. The relatively low number of participants with verbal shame and humiliation may have also limited the chances of empirically detecting any contribution by moderating variables (e.g., age, race) to the observed findings. It will also be important to

examine the relationship of facial displays associated with verbal shame and humiliation in an "online" manner as they occur in the interview (e.g., Bonanno & Keltner, in press).

Another important limitation is that all the data from the current study were cross-sectional. It would have been informative, for example, to compare the presence or absence of verbal humiliation, or the coherence of facial and verbal measures with adjustment measured prospectively. In a similar vein, the measure of adjustment used in the current study was limited to lifetime PTSD symptoms. It would have been informative to compare these variables to current as well as future levels of PTSD.

A third limitation is related to the open-ended nature of the narrative interview in which participants discussed only one stressful topic. Although this procedure allowed for the purpose of the present investigation to distinguish CSA survivors who voluntarily disclosed or chose not to disclose their abuse histories, it did not permit to examine how each group would have reacted when discussing other topics. An alternative task that might be used in future research would be to ask CSA survivors to describe their abuse experiences on one trial and a distressing, nonabuse experience on another trial, in balanced order across participants.

A final point has to do with the inherent limitation of self-report measures. In the present study, PTSD symptoms are assessed via self-report. The reader should, therefore, exercise caution around some of the conclusions drawn in this paper. For example, it is conceivable that low scores in PTSD symptoms among some of the participants may reflect a self-report bias to under-report (PTSD) symptoms rather than the actual absence of symptoms.

Clinical Implications

Within the context of the above limitations, the findings of the current study suggest several implications for the assessment and intervention of childhood sexual abuse. The most important finding in this regard was that verbal humiliation was associated with trauma-related pathology

among individuals who tend to withhold disclosing history of abuse, whereas facial shame was not. A parsimonious explanation for this finding is simply that among CSA survivors who are reluctant to overtly disclose their abuse histories, those who experienced the blend of self-and other-blame suggested by humiliation tend to be less well adjusted. Thus, the verbal expression of humiliation among nondisclosing CSA survivors may emerge as an important indicator of unresolved issues related to self- and other-blame and thus of possible avenues of exploration and intervention.

By the same token, CSA nondisclosers who expressed shame nonverbally in the absence of more explicit verbal descriptions of humiliating events (i.e., the lack of emotional coherence) tended to have healthier adjustment histories. In a previous study, CSA nondisclosers were also more likely to exhibit repressive defensiveness (as reported in Bonanno et al., 2002; Bonanno et al., 2003). One obvious implication of these findings, then, is that CSA survivors who are reluctant to disclose their abuse histories may be the type of people for whom indirect expressions of shame-related emotions are more functionally useful. Indeed, one of the key functions of the nonverbal expression of shame is that it allows people to communicate their perceived role in moral transgressions, whether real or imagined, indirectly through appeasement gestures (e.g., Keltner, 1995). For these individuals, such indirect and perhaps even unconscious expressions may suffice in the maintenance of healthy adjustment.

This issue touches on an important ongoing debate regarding CSA related treatment—whether or not it is appropriate or even helpful to probe into the traumatic past of all individuals exposed to potentially highly stressful events (e.g., Bonanno, 2004; McNally, Bryant & Elhers, 2003). In the case of CSA, disclosure may promote increased support, availability of treatment, and appropriate expression of painful feelings associated with disclosure (e.g., Agosta & McHugh, 1987; Swink & Leveille, 1986). However, explicit disclosure of past sexual abuse may also carry a cost; in addition to being potentially exceedingly painful, verbal disclosure may also be upsetting to

others and may undermine avenues of support (e.g., Kelly & McKillop, 1996; Silver, Wortman, & Crofton, 1990). The verbal disclosure of past abuse may also evoke unexpected reactions in others; they may doubt the legitimacy of the abuse claim (e.g., Pope, 1996; Reviere, 1996), or may be unsympathetic (e.g., Femina, Yeager, & Lewis, 1990) or even blame the victim. Further empirical exploration continues to be needed to flush out the experiences of CSA survivors and clarifying the circumstances surrounding the suitability of treatment for this population.

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Emotion	CSA disclosure $N = 44$ $\underline{n} (\%)$	CSA nondisclosure N = 23 \underline{n} (%)	Nonabused control $N = 70$ $\underline{n} (\%)$	
Shame $(\underline{n} = 35)$	18 (41)	4 (17)	13 (19)	
Humiliation ($\underline{n} = 31$)	13 (30)	7 (30)	11 (16)	
Anger ($\underline{n} = 70$)	26 (38)	13 (19)	30 (44)	
Shame and humiliation $(\underline{n} = 13)$	6 (14)	4 (17)	2 (3)	
Anger and humiliation $(\underline{n} = 24)$	10 (23)	4 (17)	10 (14)	
Shame, anger, and humiliation ($\underline{n} = 8$)	5 (11)	1 (4)	2 (3)	

<u>Table 2</u>. Narrative Emotions by Abuse Group on Facial Shame.

Verbal emotion	$\frac{\text{CSA}}{\text{nondisclosure}}$ $\frac{(N = 23)}{}$	CSA disclosure (N = 44)	Nonabuse Group (N = 70)	Total $(N = 137)$	<u>F</u>	Abuse group	Verbal emotion X Abuse group
Shame	2.75 (3.98)	.42 (2.63)	72 (2.35)	.26	.91	8.08***	.35
No shame	1.80 (2.63)	25 (2.25)	68 (2.07)	11			
Humiliation	3.64 (3.24)	06 (2.29)	.28 (2.07)	.90			
No	1.23 (2.37)	.06 (2.49)	86 (2.08)	28	5.29*	9.89***	2.00
humiliation				_,			

Note. CSA = childhood sexual abuse.

^{* =} p < .05; ** = p < .01; *** = p < .001

Figure captions

<u>Figure 1</u>. Mean facial embarrassment in relation to the presence/absence of verbal humiliation and abuse group type.

<u>Figure 2</u>. Mean PTSD symptoms in relation to the presence/absence of verbal humiliation and abuse group type.

<u>Figure 3</u>. Mean PTSD symptoms in relation to the coherence of verbal humiliation and facial shame across abuse group type.





