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Abuse-Specific Self-Schemas and Self-Functioning: A Prospective Study of Sexually Abused Youth

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Abstract

Potential pathways from childhood sexual abuse (CSA) to negative self-schemas to subsequent dissociative symptoms and low global self-esteem were examined in a prospective longitudinal study of 160 ethnically diverse youth with confirmed CSA histories. Participants were interviewed at the time of abuse discovery, when they were 8-15 years of age, and again 1- and 6- years later. Abuse-specific indicators of stigmatization, in particular the combination of shame and self-blame, more than general self-blame attributions for everyday events, explained which youth with CSA histories experienced more dissociative symptoms and clinically significant levels of dissociation. Abuse-specific stigmatization was found to operate as a prospective mechanism for subsequent dissociative symptoms but not self-esteem.

Keywords

childhood sexual abuse; stigmatization; shame; self-blame; dissociation

Nationwide in 2006, an estimated 79,640 children were substantiated victims of child sexual abuse (U.S. Department of Health & Human Services, Administration on Children, Youth & Families, Child Maltreatment 2006). Although such estimates have declined since a peak of 149,800 substantiated cases in 1992 (Jones, Finklehor & Kopiec, 2001), a considerable proportion of youth growing up in recent decades experienced childhood sexual abuse (CSA). CSA is consistently associated with a variety of adjustment problems including: depression, post-traumatic stress disorder (PTSD), intimacy problems, substance abuse and antisocial behaviors (Coleman & Widom, 2004; Neumann, Houskamp, Pollock & Briere, 1996; Noll, Trickett, & Putnam, 2003; White & Widom, 2008; Widom, 1999; Widom & Ames, 1994; Widom, Marmostein & White, 2006). Problems in self-functioning are believed to be particularly important for understanding individuals' long-term adaptation following CSA (Bukowski, 1992; Westen, 1994). Self-functioning is defined in terms of four core components of the self that include processes of self-coherence, self-continuity, self-affectivity, and self-agency (Stern, 1985). Existing theory postulates that CSA increases the likelihood of developing a fragmented and negative view of the self (Ayoub et al., 2006; Harter, 1998).

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Consistent with these ideas, previous research finds links between a history of CSA and two indicators of poor self-functioning: dissociation and low self-esteem (Bolger, Patterson, & Kupersmidt, 1998; Johnson, Pike, & Chard, 2001; Swanston, Plunkett, O'Toole, Shrimpton, Parkinson, & Oates, 2003; Trickett, Noll, Reiffman, & Putnam, 2001; van Ijzendoorn & Schuengel, 1996; Yates, Carlson, & Egeland, 2008).

Although the association between CSA and poor self-functioning is supported by previous research, the processes that potentially explain when abuse victims are at risk for dissociative symptoms and poor self-esteem are not well understood. Demonstration of temporal precedence is an important step in showing that a particular mechanism operates as a risk factor for an outcome (Kraemer, Stice, Kazdin, Offord, & Kupfer, 2001). However, the preponderance of CSA work is limited by the use of cross-sectional designs, failure to consider intervening processes, small sample sizes, and retrospective reports of abuse. Longitudinal research is needed that focuses on mechanisms to explain which children with known histories of CSA are likely to develop poor self-functioning in adolescence and early adulthood. Such work is important for the design of more effective and timely interventions because it concerns mechanisms that are potential targets for therapeutic change.

The purpose of this study was to examine whether earlier individual differences in abuse severity, abuse-specific negative self-schemas, and general negative self-schemas would help explain which youth with CSA histories subsequently developed poor self-functioning, as indicated by dissociative symptoms and low self-esteem. Greater CSA trauma is believed to put youth at greater risk for disrupted self-development, especially in terms of a poorly integrated self-concept and tendency to view the self in negative terms (Bukowski, 1992; Putnam, 2000). Dissociation is conceptualized as a defensive process that enables CSA victims to cope with extreme stressors (Cordon, Pipe, Sayfan, Melinder, & Goodman, 2004; van der Kolk, van der Hart, & Marmar, 1996). It is believed to disrupt healthy development of self-coherence, continuity, affectivity, and agency (Putnam, 1994). Some children actively keep abuse events and related negative emotions separated rather than coordinated as an adaptive strategy to avoid being overwhelmed (Ayoub et al., 2006). Reliance on this strategy can lead to dissociation, defined as disruptions in the normal integration of memories, perceptions, and identity (American Psychiatric Association, 1994; Ogawa, Sroufe, Weinfield, Carlson, & Egeland, 1997). Over time, dissociation may become an automatic response that can be triggered by less severe stressors than the abuse (Post et al., 1998). Greater CSA trauma also may lead to the tendency to focus on negative rather than positive aspects of the self and others. Whereas children and adults prefer to characterize themselves in mostly positive terms, the experience of abuse appears to alter this tendency toward more negative self-evaluations (Ayoub at al., 2006; Fischer & Ayoub, 1994). Some individuals may develop poor self-esteem because they come to see their abuse as signifying that they are bad and unworthy (Finkelhor & Browne, 1985; Harter, 1998).

Indicators of CSA severity that suggest greater trauma, including penetration, the use of physical force, more frequent, and abuse of longer duration are linked to dissociative symptoms and poor self-esteem (Chu, Frey, Ganzel, & Matthews, 1999; Feiring, Taska & Lewis, 2002; Friedrich, Jaworski, Huxsahl & Bengtson, 1997; Johnson et al., 2001; Kendall- Tackett, Williams & Finkelhor, 1993; Mannarino, Cohen, Smith, & Moore-Motily, 1991; Trickett et al., 2001). Nevertheless, abuse severity accounts for little variance in poor self-functioning within or over time, and particular indicators of severity are not consistently related to such outcomes (Trickett et al., 2001). Furthermore, abuse severity provides limited understanding of how the experience of CSA may lead to poor self-functioning. Indicators of severity suggest but do not directly tap psychological processes that would be expected to disrupt healthy self development. In contrast to abuse severity, negative self-schemas are implicated in the development of poor self-functioning and are potential targets for therapeutic intervention.

Negative Self-Schemas and Self-Functioning

Abuse-specific self-schema pertaining to negative self-conscious emotions and cognitions were expected to explain individual differences in self-functioning. The traumagenic model of CSA proposes that processes related to the self, in particular those indicative of stigmatization, are important for understanding the mental health of victims (Finkelhor & Browne, 1985). As originally conceptualized, stigmatization involves negative feelings and thoughts about the self as bad and blameworthy as a result of CSA. A revised view of stigmatization and its role in adaptation to CSA defines this construct in terms of shame and a self-blaming attributional style (Feiring, Taska, & Lewis, 1996). The phenomenological experience of shame is a desire to hide the damaged and degraded self from exposure to the censure of others. To the extent that CSA and its discovery are experienced as a social transgression in which the damaged self is exposed, shame is likely and can persist for several years following abuse (Feiring & Taska, 2005). Self-blame involves viewing the self as responsible for the abuse. Several factors increase the likelihood that children will experience shame and self-blame for being involved in CSA. These include the secretive context in which CSA takes place; the condemnation of the victim by the perpetrator; and the social taboos and legal sanctions against sexual acts of adults with children. Negative emotions and cognitions about the self may occur during the abuse and discovery processes and even continue once the abuse and its discovery end. More severe CSA is associated with higher levels of stigmatization (Coffey, Leitenberg, Henning, Turner, & Bennett, 1996; Feiring & Cleland, 2007; Kallstrom-Fuqua, Weston, & Marshall, 2004). Because stigmatization is a disturbing form of self-condemnation, individuals who experience it will likely have greater difficulty processing abuse experiences into a coherent sense of self or evaluating the self in positive terms (Feiring et al., 1996; Lewis, 1992; Westen, 1994).

Although stigmatization is a putative risk factor for dissociation and poor self-esteem among CSA victims, research examining this link is quite limited. A few studies support an association between shame and dissociation, but we know of no research linking self-blame for abuse with dissociation. One study examined the association between shame-proneness and dissociation among a sample of female psychiatric patients (Talbot, Talbot, & Tu, 2004). Compared to those with no CSA history, women who reported a history of CSA showed a stronger relation between the tendency to feel shame and dissociative symptoms. Similar findings of significant associations between shame and dissociation among those with CSA histories were reported among college students and community sampled women (Irwin, 1998; Kallstrom-Fuqua et al., 2004). However, none of these studies examined shame specific to abuse experiences, and all relied on cross-sectional designs and retrospective reports of CSA status. With regard to self-esteem, a handful of studies have linked abuse stigmatization to low self-esteem. One short-term longitudinal study found abuse-specific shame predicted low self-esteem in children and adolescents with confirmed CSA histories (Feiring et al., 2002). This same study, as well as another by Mannarino and Cohen (1996), also reported associations between abuse-specific self-blame and low self-esteem among sexually abused children. The current longitudinal study is the first to examine long-term links between abuse-specific stigmatization and subsequent self-functioning. Self-schemas directly tied to abusive experiences should provide needed prospective evidence that negative self-processes that are a function of CSA are risk factors for subsequent dissociative symptoms and poor self-esteem.

In addition to abuse-specific self-schemas, negative self-schemas for more common events should improve our understanding of which CSA victims are likely to develop poor self-functioning. How individuals with CSA histories explain negative events in general and for the abuse in particular are each thought to be important for self-development and adjustment (Spaccerelli, 1994; Westen, 1994). A self-blaming attributional style for everyday events is a known risk factor for depression in abused and non-abused samples (e.g., Feiring & Cleland,

2007; Graber, Keiley, & Martin, 2002), and associations with poor self-esteem have been observed as well (Feiring et al., 2002; Graham & Juvonen, 1998; Mannarino & Cohen, 1996; McMillen & Zuravin, 1997). There is a paucity of work on the relation between a self-blaming attribution style for everyday events and dissociative symptoms. We could locate only one study that found a correlation between general self-blame attributions and dissociative symptoms (Wolfradt & Engelmann, 1999). Some have argued that abuse-specific compared to general processes are likely to yield more insight into which CSA victims are most at risk for poor mental health (Briere, 1992). On the other hand, a general self-blame style for negative events might suggest a pervasive disruption in self-development and therefore be predictive of dissociative tendencies and low self-esteem.

Conceptual Model for the Study

Most research on the associations between CSA and self-functioning fails to distinguish between concurrent relations (associations among variables measured at the same time point) and processes that have a prospective and potentially causal relation with such problems. In the current research, we addressed this weakness by considering longitudinal data from three time points: abuse discovery (T1), 1-year (T2), and 6-years later (T3). The central question of concern was the extent to which earlier differences in abuse severity, abuse-specific self-schemas (stigmatization), and general self-schemas (general self-blame attributions) predicted subsequent self-functioning. The study focused on which individuals with CSA histories were more at-risk for poor self-functioning rather than whether individuals with CSA histories were more at-risk for such problems compared to those without CSA histories. Consistent with this focus, we employed a within-group design to examine potential pathways to dissociative symptoms and low self-esteem in a sample of confirmed CSA victims. Using structural equation modeling, we tested the conceptual model shown in Figure 1. We hypothesized three direct relations among abuse severity, negative self-schemas and poor self-functioning outcomes. First, we predicted that abuse severity (such as penetration, the use of physical force, and more frequent abuse) would be related to higher levels of negative self-schemas that were abuse-specific (stigmatization) and general (self-blame for common events) at T1 (paths A and D, respectively). Second, higher levels of abuse-specific and general self-schemas at T1 were expected to be related to higher levels of such schemas at T2 (paths B and E). Third, we predicted that higher levels of abuse-specific and general self-schemas at T2 would be related to higher levels of dissociative symptoms and lower self-esteem at T3 (paths C and F). We also hypothesized two mediated relations whereby predictors measured at T1 were related to T2 mediators and the T2 mediators were related to the T3 outcomes (Shrout & Bolger, 2002). Specifically, we expected that: the relation of abuse severity with subsequent dissociative symptoms and self-esteem would be mediated by negative self-schemas (paths A × B × C and paths D × E × F); and the relation of self-schemas at T1 with subsequent dissociative symptoms and self-esteem would be mediated by T2 self-schemas (path B × C and path E × F).

The proposed model focuses on prospective pathways from earlier to later time points because temporal sequencing provides evidence for potential risk processes rather than merely correlates of negative outcomes (Kraemer et al., 2001). However, in addition to the prospective relations hypothesized in Figure 1, we considered concurrent relations between self-schemas measured at the same time as dissociative symptoms and self-esteem. We expected concurrent relations between self-schemas and self-functioning such that greater stigmatization and general self-blame at T3 would be related to more dissociative symptoms and lower self-esteem. Whereas schemas measured concurrently were expected to explain additional variance in outcomes, they were not expected to eliminate the effects of the same processes measured earlier. Examination of the proposed model tested the assumption that abuse-specific self-schemas, general self-schemas, and abuse severity would provide an understanding of which youth with CSA histories were most at-risk for subsequent dissociative symptoms and poor

self-esteem. If earlier abuse-specific and general self-schemas helped explain risk for subsequent problems in self-functioning, this would provide meaningful evidence for targeting these processes for early intervention around the time of abuse discovery.

Method

Participants

Participants were recruited from urban and suburban populations in southern, central, and northern New Jersey. The majority of the sample (95%) came directly from child protective services (CPS) offices or regional child abuse medical clinics working with CPS. Intake logs were reviewed by project staff to identify eligible cases. To be eligible, children had to be between 8-15 years of age, in the custody of a non-offending parent or caregiver, and identified as a CSA case within 8 weeks from the date CPS opened the case (i.e., the time of abuse discovery). Caseworkers contacted families to obtain permission for project staff to contact them to discuss the study. Sexual abuse was defined as sexual involvement with a juvenile or an adult perpetrator by coercion. Although in this sample sexual involvement typically meant children experienced physical contact (e.g., fondling or oral, anal or vaginal penetration), in a few cases they experienced nonphysical contact. Even in cases of non-contact other indicators of severity were present, such as a higher frequency of abuse or abuse by a close relative (e.g., forced to watch a parent masturbate on multiple occasions). The final recruited sample was comprised of children with confirmed cases of sexual abuse. Information on whether a case was confirmed came from CPS or court records. Confirmation was established if at least one of the following criteria were satisfied: specific medical findings, confession by the offender, abuse validated by an expert, or conviction of the offender in family or criminal court.

All but three of the 185 families approached by caseworkers agreed to be contacted by the project staff. Of those contacted, 160 agreed to participate and completed the initial assessment at abuse discovery (T1), before any treatment was received. One hundred forty-seven of the original participants were seen approximately one year later (T2, $M = 1.2$, $SD = .3$ years). The third assessment (T3) was obtained approximately six years following abuse discovery ($M = 6.2$, $SD = 1.2$ years) on 121 of the participants initially seen at T1; 118 participants were seen for all three assessments. There were no significant differences on demographic and abuse characteristics or on abuse-specific and general self-schemas for participants who remained or dropped out of the study. At T1, 55% of the sample were children ages 8-11 years ($M = 9.6$, $SD = 1.1$), and 45% were adolescents ages 12-15 years ($M = 13.5$, $SD = 1.1$). Seventy-three percent of the sample was female. The majority of the participants came from single-parent families (67%) and was poor (64%, with an income of $25,000 or less). The ethnicity of the sample was self-reported as African-American (41%), White (31%), Hispanic (20%), and other (8%, including Native American and Asian). Based on the most serious form of contact abuse reported by this sample, 66% experienced genital penetration (31% experienced fondling or attempted penetration and 3% had to watch the perpetrator masturbate). Almost all of the perpetrators were known to their victims with 35% a parent figure, 26% a relative, 36% a familiar person who was not a relative, and 3% a stranger. Forty-three percent of the participants lived with the perpetrator at the time of the abuse. Frequency of the reported abusive events was once for 32% of the sample, 2-9 times for 38%, and ten times or more for 30%. The abuse lasted for a year or longer in 39% of the sample. The use of physical force was reported in 25% of the sample, the threat of force in 20%, and in 55% of the cases no force or threat were reported.

After the initial and before the second assessment, the majority of participants received some form of intervention, typically from community-based agencies (68%, length of treatment $M = 5.4$ mo., $SD = 4.7$ mo.); only a minority of participants received intervention between the second and third assessments (39%, length of treatment $M = 8$ mo., $SD = 8.5$ mo.). Participants

in this study were not enrolled in a systematic treatment program, and we did not have control over who received treatment, the type of treatment received, or the expertise of the treatment providers. It therefore was not possible to reliably assess or understand how such varied interventions were related to the hypothesized relations in the proposed model in Figure 1.

Procedure

All the procedures for this study were approved by the institutional review boards of the academic institutions where the research took place. A certificate of confidentiality protected the data participants provided from being released without written consent. At each of the three assessment points, when participants were minors, written informed assent was obtained from the children and written informed consent was obtained from their parents/guardians. At T3, those participants who were 18 or older provided written informed consent. Participants were administered a structured interview by a trained clinician in a private office. Abuse-related information was obtained from CPS and law enforcement case records at T1 after the children were interviewed. Participants were reimbursed a total of $250 for completion of the initial and the two follow-up assessments.

Measures

Abuse Characteristics—Trained staff members copied information on specific abuse characteristics from law enforcement agencies and CPS records to a checklist. The checklist provided space to record information on: the relationship of the perpetrator to the victim; the frequency (number of events reported) and duration (dates began and ended) of the victimization; how the abuse was discovered; the types of abusive acts experienced (e.g., fondling, penetration); the use of physical force; medical findings; and how the case was confirmed. Based on the records of 20 participants, two staff members copied information from the same case files onto the checklist with 100% or nearly 100% accuracy for each category of information. Coding of abuse severity information from the checklist (e.g., identity of the perpetrator as a stranger = 1, familiar person = 2, relative = 3, parent figure = 4) was completed by trained project personnel, among whom acceptable inter-rater reliability was obtained (κ = .73 - 1.0).

Negative Self-Schemas—Abuse-specific shame at each assessment was obtained using four items: 1) I feel ashamed because I think that people can tell from looking at me what happened; 2) When I think about what happened I want to go away by myself and hide; 3) I am ashamed because I feel I am the only one in my school/work who this has happened to; 4) What happened to me makes me feel dirty. The items were rated on a 3-point scale from 0-2: not true, somewhat true, and very true. Items were summed with a higher score indicating greater abuse-related shame. Abuse-specific self-blame attributions were measured with eight items obtained at each assessment. Participants used a 3-point scale (2 = very true, 1 = somewhat true, 0 = not true) to rate the extent to which eight causal statements was true for why the abuse happened: 1) I was to blame for what happened; 2) I was not smart enough to stop it from happening; 3) I was a bad person and needed to be punished; 4) because of something I did; 5) I was not careful enough on those days; 6) I'm not a good person; 7) I am not a careful person; 8) because of the way I acted around “perpetrator name”. These items were summed such that higher scores indicated more abuse-specific self-blame. Although the measures of abuse-specific shame and self-blame were developed for this study, they showed acceptable internal consistency at each assessment (shame α = 0.85-.86; self-blame α = 0.75-.80) and expected positive relations with depressive and PTSD symptoms within and over time (Feiring et al., 2002; Feiring & Cleland 2007; Feiring, Taska, & Chen, 2002; Feiring & Taska, 2005). A summary stigmatization score was created because these two indicators theoretically define this construct and because abuse-specific shame and self-blame were moderately related at each assessment point (r= .36 - .44). Given the modest sample size, utilizing a single

summary score reduced both the probability of Type I error and the number of predictors in the planned analyses. To create stigmatization scores at each assessment point, both the abuse-specific shame and self-blame measures were scored as percentage of maximum possible (POMP; Cohen, Cohen, Aiken, & West, 1999) and then the two scores were averaged. For each assessment point, this yielded a stigmatization score that could range from 0 to 100, with higher values indicating more stigmatization.

General negative self-schema was assessed using age appropriate self-blame attribution measures. The Children's Attributional Style Questionnaire (CASQ; Gladstone & Kaslow, 1995; Thompson, Kaslow, Weiss, & Nolen-Hoeksema, 1998) was used for participants 16 years and under and the parallel instrument for adults, the Attributional Style Questionnaire (ASQ; Peterson & Villanova, 1988) was used with participants 17 years and older. At T1 and T2 when all of the participants were 16 years or younger the CASQ was used. At T3, the most age-appropriate measure was used for each participant. Both the child and adult attribution measures include an equal number of scenarios that describe events with positive and negative outcomes (e.g., CASQ “You get a bad grade in school;” ASQ “You meet a friend who acts hostile towards you”). The CASQ and ASQ provide three subscale scores for positive events on each dimension, Internal/External, Stable/Unstable, Global/Specific, and three parallel subscale scores for negative events. From these subscales, positive (positive outcome - internal, stable, global) and negative (negative outcome - internal, stable, global) composite scores are computed. The general self-blame attribution score is the positive composite score minus the negative composite score. This score indicates the extent to which a self-blaming style for negative events is balanced by a positive style for good events, with lower scores indicating more self-blaming (i.e., internal, stable, global) attribution styles for negative events. The internal consistency of this measure was moderate (CASQ, T1=.72, T2=.72, T3=.73; ASQ, T3=.66). The general self-blame attribution scores were converted to T scores to make them comparable across CASQ and ASQ instruments for analyses.

Self Functioning—The dissociation subscale of the Trauma Symptom Inventory (TSI; Briere, 1995) was used to index dissociative symptoms. This subscale has shown adequate criterion validity and is higher in individuals who report CSA histories (Briere, 1995; Briere, Elliott, Harris, & Cotman, 1995). Symptoms such as derealization, out-of-body experiences, depersonalization, and emotional numbing were rated for experiences in the past six months on a 4-point Likert scale from never to often. Although the TSI was designed for adults 18 years and older, the items are written at the middle school level and are very similar to items used on a common measure for adolescents (Armstrong, Putnam, Carlson, Libero, & Smith, 1997). In addition, using the TSI with the adolescents in our sample reduced the participant burden as it includes indices of other behaviors relevant for CSA samples such as PTSD and sexual anxieties. The internal consistency of the TSI dissociation scale for those younger than 18 and 18 years and older was good (<18 yrs. $\alpha = 0.85$; ≥ 18 yrs. $\alpha = 0.87$; total sample $\alpha =$. 86). The nine items on the dissociation subscale were summed such that higher scores indicate more dissociative symptomatology.

Global Self-esteem was measured using the Self Perception Profile for Adolescents and Young Adults (Harter, 1988; Messer & Harter, 1986). These measures have acceptable construct validity (Donnellan, Trzesniewski, Conger & Conger, 2007; Hymel, LeMare, Ditner, & Woody, 1999). Each of the five items that index global self-esteem are rated with a forced-choice format in which participants first choose which of two statements is most self-descriptive. One statement reflects a positive and the other a negative self-evaluation; participants then select whether the statement is “Sort of true for me” or “Really true for me.” Items are scored from 4 to 1 with 4 representing the most positive and 1 the most negative self-evaluation. The total global self-esteem scores is the mean of the summed items with higher

scores indicating more positive self-evaluations. The internal consistency for this sample is acceptable (adolescent, α =.82; adult, α =.79).

Missing Data

Missing data were handled by the full information maximum likelihood (FIML; Schafer & Graham, 2002) method in Mplus (Muthén & Muthén, 1998-2006), which is more powerful and less biased than ad hoc methods of handling missingness (e.g., listwise deletion). This method, also known as direct ML (Allison, 2002), works by finding model parameters that maximize the likelihood of each case's observed data (Wothke, 2000). This approach assumes data are missing at random (MAR), that is, missing at random conditional on values observed.

Results

Data Analyses

First, we provide descriptive information on the abuse characteristics of the sample and the study variables used in the proposed path model. Next, the results from structural equation modeling (SEM) examining the path model of abuse severity, abuse-specific and general self-schemas on dissociative symptoms and self-esteem are reported. Direct and mediated relations with dissociative symptoms and self-esteem in the proposed conceptual model (see Figure 1) were estimated using SEM (Kline, 1998). Based on literature showing that age and gender are related to self-functioning, these variables were used as covariates in the model (Feiring et al., 2002;Friederich, et al., 1997;Irwin, 1998;Putnam, Hornstein, & Peterson, 1996;Valentino, Cicchetti, Rogosch, & Toth, 2008). The models were just-identified, recursive, and included only observed variables. Since the models were not over-identified, the freely estimated model parameters (regression coefficients, covariances, and variances) are able to reproduce the observed covariance matrix exactly; therefore, no chi-square tests or fit indices are reported. The Mplus modeling program (Muthén & Muthén, 1998-2006) was used because it handles missing data using the full-information maximum likelihood approach and provides bootstrap confidence intervals for direct and mediated relations. Mediated relations were calculated and tested using the resampling method suggested by MacKinnon and colleagues. Confidence intervals not including zero indicate significant relations (MacKinnon, Lockwood, & Williams, 2004). The data were re-sampled a total of 10,000 times.

Descriptive Information

Table 1 shows the descriptive statistics and correlations for the variables in the study. The continuous measures of stigmatization, general self-blame, dissociative symptoms, and self-esteem showed good variability. Indicators of abuse severity were positively related to each other except for penetration and force. Both stigmatization and general self-blame showed modest stability over time and these negative self-schemas were related to each other within but not over time. More stigmatization and general self-blame at T2 and T3 were related to more dissociative symptoms at T3. More stigmatization and general self-blame at T3 were related to less self-esteem at T3.

Predicting Poor Self-Functioning from Abuse Severity, Stigmatization and General Self-Blame

To examine the direct pathways from abuse severity to negative self-schemas to dissociative symptoms and self-esteem, the following pathways were estimated: (1) the covariates of age at discovery, gender, and six indicators of abuse severity to T1 stigmatization and general self-blame; (2) the covariates, T1 stigmatization, and general self-blame predicting T2 stigmatization, T1 general self-blame and stigmatization predicting T2 general self-blame; (3) the covariates, T1 stigmatization, and T2 stigmatization predicting T3 dissociative symptoms

and self-esteem; and (4) the covariates, T1 general self-blame, and T2 general self-blame predicting T3 dissociative symptoms and self-esteem. Table 2 shows all path coefficients (β; standardized) for the direct relations to each endogenous variable, regardless of significance, and unstandardized regression coefficients, standard errors, and bootstrap 95% confidence intervals to support inferences for each direct relation. Figure 2 shows the sequences that unfold from abuse discovery to negative self-schemas (stigmatization, general self-blame), and then to poor self-functioning. Also shown are the significant direct relations and the variance accounted for in each endogenous variable. Overall the results showed, contrary to expectation, a direct relation from abuse severity (abuse of longer duration) to dissociative symptoms. As expected, there were direct and mediated relations from earlier stigmatization to later dissociative symptoms. Contrary to expectation, there were no direct or mediated relations from earlier general self-blame to later dissociative symptoms. Also, contrary to expectation, there were no direct or mediated relations from earlier stigmatization or general self-blame to later self-esteem[1].

Considering the findings for stigmatization to dissociative symptoms in more detail, penetration was the only abuse severity indicator that had a significant unique relation to T1 stigmatization. Being penetrated during the abuse was associated with higher stigmatization. In the next step of the sequence, T1 stigmatization had a significant association with T2 stigmatization. Higher levels at abuse discovery related to higher levels a year later. In the final step of the sequence, the direct relation of T2 stigmatization with dissociative symptoms was significant such that higher levels of stigmatization a year after abuse discovery predicted subsequent symptoms. We also predicted that the relation between earlier abuse severity and later self-functioning would be mediated by stigmatization and that the relation between T1 stigmatization and later self functioning would be mediated by T2 stigmatization. The mediated path from penetration to T1 stigmatization, then to T2 stigmatization and then directly to dissociative symptoms was significant (B = 0.468, 95% CI = 0.046 – 1.380; β = .02). The mediated path from T1 stigmatization to T2 stigmatization and then directly to dissociative symptoms was significant (B = 0.071, 95% CI = 0.018 – 0.149; β = .11).

To examine the concurrent relations of T3 stigmatization and general self-blame with dissociative symptoms and self-esteem, the SEM model was expanded in the following ways: 1) T3 stigmatization was added as a direct association with dissociative symptoms and self-esteem; and 2) T3 general self-blame was added as a direct association with dissociative symptoms and self-esteem. The inclusion of these additional direct relations increased the variance accounted for in dissociative symptoms from 20 to 47 percent (adding T3 stigmatization alone increased the variance accounted for from 20 to 42 percent and adding T3 general self-blame alone increased the variance accounted for from 20 to 33 percent). The direct relation of T3 stigmatization (concurrent with dissociative symptoms), controlling for past stigmatization, past and concurrent general self-blame, age, gender, and abuse characteristics, was significant (B = 0.367, 95% CI = 0.213 – 0.533; β = .47, $p < .01$). As would be expected, the significant direct association of T2 stigmatization with dissociative symptoms disappears when T3 stigmatization is added to the model. However, the persistent relation of earlier stigmatization over time is indicated by the significant mediated relation from T1 to T2 to T3 stigmatization and then to T3 dissociative symptoms (B = 0.056, 95% CI = 0.022 – 0.122; β = .09). In other words, even when concurrent relations between stigmatization and

[1]A version of the main structural equation model presented in Table 2 was fit to examine the unique relations of abuse-specific shame and self-blame on self-functioning. Each abuse-specific variable was entered separately, rather than as a summary score of stigmatization, along with general self-blame. In this model, none of the abuse-specific or general self-schema variables at T2 were significantly related to dissociative symptoms at T3. This suggests that later dissociative symptoms were related to what earlier shame and abuse-specific self-blame have in common rather than the unique components of each. Therefore, it is the combination of variables that define stigmatization that yields prospective relations with symptoms. Self-esteem at T3 was not predicted by any of the T2 negative self-schema variables when all three were entered separately.

dissociative symptoms are considered, there is a prospective pathway from the earlier abuse-specific mechanism to later functioning. Although there were no prospective relations from earlier general self-blame to dissociative symptoms, the concurrent relation was significant. More T3 general self-blame was associated with more dissociative symptoms (B = -0.32, 95% CI = -0.538 – -0.070; β = -.25, $p < .05$). These findings indicate that general self-blame had correlational but not prospective relations with dissociative symptoms.

The inclusion of these T3 stigmatization and general self-blame direct relations increased the variance accounted for in self-esteem from 11 to 35 percent (adding T3 stigmatization alone increased the variance accounted for from 11 to 22 percent and adding T3 general self-blame alone increased the variance accounted for from 11 to 32 percent). The direct relation of T3 stigmatization, controlling for past stigmatization, past and concurrent general self-blame, age, gender, and abuse characteristics, was significant (B = -0.010, 95% CI = -0.019 – -0.001; β = -.24, $p < .05$). The mediated relation from T1 to T2 to T3 stigmatization and then to T3 self-esteem was not significant. The direct relation of T3 general self-blame, controlling for past general self-blame, past and concurrent stigmatization, age, gender, and abuse characteristics, was significant (B = 0.029, 95% CI = 0.018 – 0.040; β = .42, $p < .01$). Although the mediated relation from T1 to T2 to T3 general self-blame and then to T3 self-esteem was significant (B = 0.005, 95% CI = 0.001 – 0.010; β = .07), there were no direct relations between earlier general self-blame and self-esteem. Overall, these findings indicate that stigmatization and general self-blame had correlational but not prospective relations with self-esteem.

Predicting Clinically Significant Dissociation from Abuse Severity, Stigmatization, and General Self-blame

There were a moderate number of individuals with elevated symptoms of dissociation (23% with a *T* score of 65 or higher). We therefore examined whether our findings applied to individuals with dissociative symptoms at clinically significant levels. The Mplus program (Muthén & Muthén, 1998-2006) was used to fit a parallel structural equation model in which the continuous dissociative symptoms variable was replaced by a dichotomous variable (i.e., dissociative symptoms T-score clinically significant >= 65 or not). Structural equation models with categorical variables based on probit models are described by Muthén and Satorra (1996). The pattern of results in this model was similar to the pattern in Table 2, except that duration of abuse was no longer directly related to subsequent symptoms[2]. T1 stigmatization had a significant association with T2 stigmatization, with higher levels at abuse discovery related to higher levels a year later. T2 stigmatization had a significant direct relation with the probability of clinically significant dissociation (B = 0.021; 95% CI = 0.005 – 0.037; β = 0.31, $p < .05$). The mediated path from T1 stigmatization to T2 stigmatization and then directly to clinically significant dissociation was significant (B = 0.008, 95% CI = 0.003 – 0.016; β = .14). The direct relation of penetration with T1 stigmatization was no longer significant, and the mediated pathway through stigmatization of penetration on clinically significant dissociation was not significant. Also, both the direct relation of T2 general self-blame and mediated relation of T1 general self-blame on clinically significant dissociation were not significant. In an expanded model with T3 stigmatization and general self-blame predicting membership in the clinical dissociative symptoms group, T1 and T2 stigmatization did not have significant direct relations with group membership. However, the persistent relation of earlier stigmatization over time is indicated by the significant mediated relation from T1 to T2 to T3 stigmatization and then to membership in the clinical dissociative symptoms group at

[2]Although duration of abuse was not related to having dissociative symptoms in the clinical range, the number of abuse events was related to being in this group (B = -0.896; 95% CI = -1.732 – -0.139; β = -0.37; $p < .05$). This finding must be approached with caution because: it was in an unexpected direction (more events less likely to be in the clinical group); it was not found in the analyses using a continuous outcome; and it involves a difficult to interpret suppression effect (i.e., the bivariate relation between number of events and dissociative symptoms was not significant).

T3 (B = 0.004, 95% CI = 0.001 – 0.008; β = .06). Hence the prospective importance of stigmatization for subsequent dissociative symptoms also applies to individuals with clinically significant symptom levels.

Discussion

This study investigated which children with confirmed cases of CSA were most at risk for subsequent poor self-functioning in adolescence and early adulthood. Extending previous cross-sectional work, this research focused on prospective relations from earlier experiences of trauma and negative self-schemas to later dissociative symptoms and global self-esteem. Risk factors specific to the experiences of CSA showed prospective relations with subsequent dissociative symptoms but not lower self-esteem. Children who experienced more severe CSA and who were higher in abuse-specific stigmatization around the time of abuse discovery showed more dissociative symptoms six years later. General negative self-schemas did not show significant prospective relations with poor self-functioning. However, both general and abuse-specific negative self-schemas were concurrently related to more dissociative symptoms and lower self-esteem.

Abuse Severity and Subsequent Self-Functioning

Support for the proposed model of the relations between abuse severity and subsequent self-functioning was mixed. Consistent with the proposed pathways to poor self-functioning, the relation between penetration and later dissociative symptoms was mediated by abuse-specific self-schemas. However, this relation was not observed when the clinically significant cutoff score for dissociation was the outcome. Whereas abuse severity was expected to be related through negative self-schemas to subsequent global self-esteem, this was not the case. Also, the relation between abuse of longer duration and dissociative symptoms was direct and not mediated by negative self-schemas; although this prospective relation was not observed when clinically significant dissociation was the outcome. While previous research found abuse that lasted longer was concurrently associated with dissociation (Friedrich et al., 1997), this is the first study to show that it may function as a prospective risk factor. To some extent it makes sense that abuse severity would show long-term relations with dissociative symptoms but not global self-esteem. Conceptually, dissociation is viewed as a defensive response that serves to psychologically remove children from the traumatic situation. Through cognitive avoidance, children may protect themselves from overwhelming stressors, at least in the short run (Carlson, Armstrong, & Lowenstein, 1977). Such responses may become enduring coping strategies in times of stress (Post et al., 1998). Consistent with this framework, we found that more severe trauma, as indexed by greater abuse severity, was related to more dissociative symptoms several years after CSA discovery. Whether aspects of abuse severity function directly or are mediated in their relation to subsequent symptoms, such markers of greater trauma are only proxies for risk. They do not further our understanding of self-processes that are implicated in the development of dissociative symptoms.

Negative Self-Schema and Subsequent Self-Functioning

Delineating how traumatic experiences become incorporated into views of the self is important for understanding youths' adaptation following CSA (MacFie, Cicchetti, & Toth, 2001; Valentino et al., 2008). This is the first study to provide longitudinal evidence for the idea that negative self-schemas involving abusive experiences, in particular the combination of shame and self-blame, is a risk factor for dissociative symptoms (Feiring et al., 1996; Lewis, 1992). Consistent with the proposed model, stigmatization at abuse discovery was related to stigmatization a year later, which in turn predicted dissociative symptoms six years after discovery. Earlier stigmatization was mediated by later stigmatization and was prospectively related in this way to subsequent dissociation. The amount of variance accounted for by the

prospective variables was modest (Cohen, 1988). Nevertheless, the observation of distal relations over several years suggests that stigmatization plays a role long-term role in which victims are likely to develop dissociative symptoms.

It may be the case that enduring self-schemas tied to CSA experiences impede active coping with abuse experiences. Dissociation may be an attempt to modulate shame and self-blame. Our ability to examine the likely interplay between abuse-specific self-schemas and dissociative symptoms over time was precluded by the absence of earlier measures of such symptoms. However, this interpretation fits broader theories of self and emotional development whereby abusive experiences undermine children's capacities to integrate affect and cognition into a coherent sense of self (Ayoub et al., 2006; Harter, 2006; MacFie et al., 2001). Once the abuse has ended, abuse-specific stigmatization may render CSA victims vulnerable to the type of splitting characteristic of dissociative coping.

General self-blame did not operate as a prospective mechanism of dissociative symptoms, although consistent with previous literature concurrent relations were observed (Wolfradt & Engelmann, 1999). Furthermore, neither abuse-specific nor general self-schemas were prospectively related to self-esteem. Previous work on this sample found abuse-specific stigmatization and general self-blame at abuse discovery were predictive of global self-esteem a year later (Feiring et al., 2002). These short-term prospective relations were not persistent over the 5-year interval between our second and third assessments. It is worth noting that abuse-specific rather than general self-schemas appear to be important for predicting dissociative symptoms rather than global self-esteem. The more general process of self-blame for everyday events and global self-evaluations do not tap into experiences of the abuse. In contrast, abuse-specific stigmatization and dissociation are manifestly more relevant and perhaps more salient over time to self-functioning of individuals with confirmed CSA histories.

Limitations

Whereas this study is among the few to find long-term effects of abuse-specific self-schema on later self-functioning on confirmed cases of abuse, limits to the research must be kept in mind. Given the non-experimental nature of the data, the findings are not conclusive concerning causal direction. The opportunity to observe patterns of prediction from abuse-specific stigmatization and general self-blame to dissociative symptoms and self-esteem was restricted by the considerable time gap between the second and third assessments. The results rely exclusively on self-report methodology. A multi-method assessment of stigmatization and general self-blame would provide stronger measurement of these processes and a more complete assessment of dissociation should include a diagnostic interview. Finally, the external validity of the study is limited to individuals for whom the abuse was reported to the appropriate authorities.

Implications for Research, Policy, and Practice

The current findings underscore the theoretical and clinical utility of longitudinal methods for identifying mechanisms by which CSA affects psychological functioning. Whereas linking abuse characteristics to risk helps identify vulnerable youth, identifying risk mechanisms points to psychological processes that may be amenable to clinical intervention. The persistence of abuse-specific stigmatization could contribute to the onset or maintenance of dissociative symptoms during a developmental period characterized by numerous changes in the self-system (Harter, 2006). Over time, stigmatization and dissociation may co-occur in a mutually reinforcing cycle that impedes the integration of self-relevant affects and cognitions. Additional longitudinal studies are needed to specify the ways in which stigmatization undermines the general psychological processes involved in developing a coherent self.

Nonetheless, prospective links between early abuse stigmatization and later dissociative symptoms provide important clinical information. First, they highlight the need for early intervention to reduce both concurrent distress and risk for subsequent dissociation. Separate findings from this sample suggest that the persistence of stigmatization over time also predicts posttraumatic stress disorder (PTSD) and intimacy problems (Feiring & Cleland, 2007; Feiring, Simon, & Cleland, in press; Feiring & Taska, 2005). Collectively, these findings indicate that early intervention is critical for the prevention of various pathological sequelae.

The current results also indicate that intervention should target abuse-specific processes, including youths' cognitive and emotional processing of the abuse. Reducing abuse-specific shame and self-blame is important for alleviating concurrent distress and may also help prevent reliance on dissociative coping strategies. The lack of prospective associations between general self-blame and later dissociation suggests that attention to broader psychological processes in the absence of attention to abuse-specific processes may do little to prevent dissociation. Several methods of trauma-focused therapy emphasize the assessment and treatment of abuse-specific shame and attributions (e.g., Celano, Hazzard, Campbell, & Lang, 2002; Cohen, Mannarino, & Deblinger, 2006; Saxe, Ellis, & Kaplow, 2007). Of these, trauma-focused cognitive behavioral therapy (TF-CBT) is most extensively researched. Results from multi-site, randomized clinical trials indicate that attending directly to abuse-specific processes is more effective than other forms of child-centered therapy in reducing negative attributions, shame, and psychopathological symptoms (e.g., PTSD, depression) up to one year following treatment (Cohen et al., 2006; Deblinger, Mannarino, Cohen, & Steer, 2006). Results from the current study suggest that by reducing stigmatization, early trauma-focused interventions may also prevent the development of dissociative symptoms. Reducing stigmatization also may facilitate the acquisition and generalization of more active coping strategies. Even when intervention occurs long after abuse disclosure, interventions for dissociation may be enhanced by attention to underlying abuse stigmatization that may contribute to such symptoms (Cohen, 2008).

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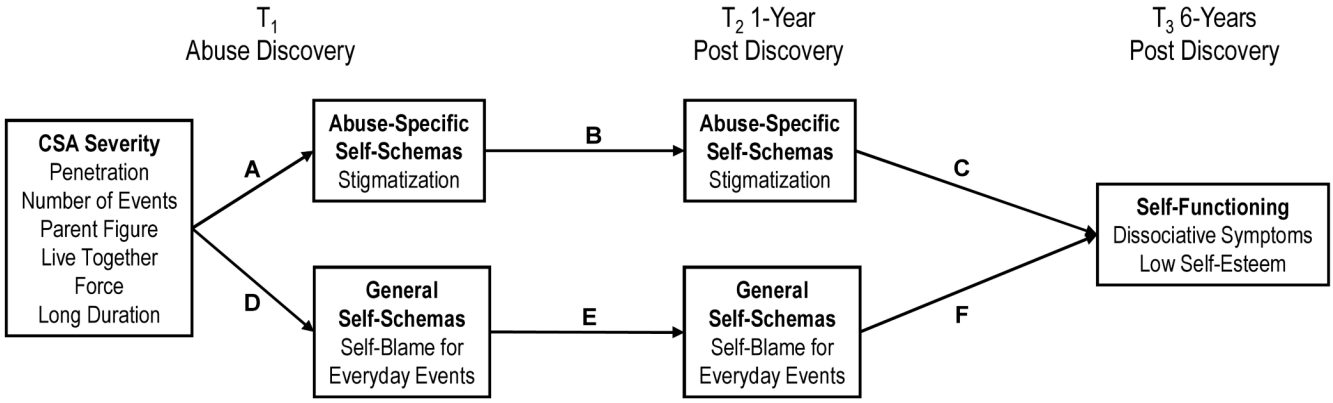

Figure 1.
Conceptual model of predictive pathways through abuse-specific and general self-schemas to self-functioning following childhood sexual abuse.

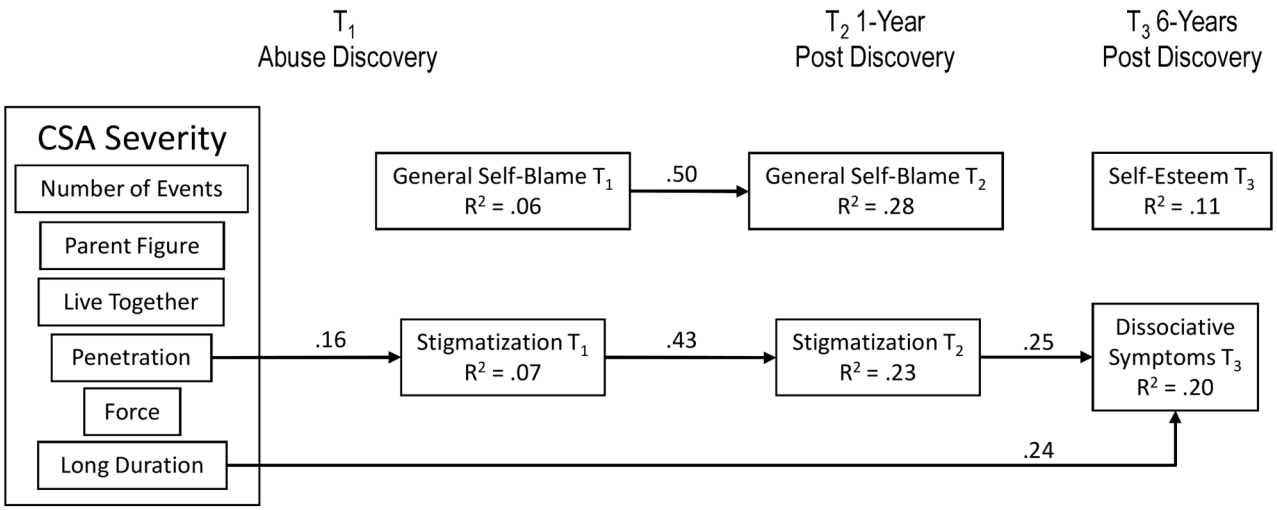

Figure 2.
Structural equation model results for predictive pathways to dissociative symptoms and global self-esteem through abuse severity, abuse-specific (stigmatization) and general (self-blame for everyday events) self-schemas. The figure shows significant pathways with standardized path coefficients and the variance accounted for in each endogenous variable.

Table 1

Descriptive Statistics and Correlations among Study Variables

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.	FEMALE	0.72 (0.45)															
2.	AGE	0.077	11.34 (2.23)														
3.	PEN	0.164	0.022	0.66 (0.47)													
4.	NEVENTS	0.051	-0.187	0.043	0.68 (0.47)												
5.	PARFIG	0.201	0.090	-0.014	0.226	0.35 (0.48)											
6.	LIVTOG	0.120	0.075	0.068	0.294	0.592	0.43 (0.49)										
7.	FORCE	0.030	0.134	0.041	-0.168	-0.104	-0.009	0.45 (0.50)									
8.	LONGDUR	0.061	0.020	0.048	0.535	0.206	0.270	-0.073	0.43 (0.49)								
9.	STIGMA1	0.136	0.059	0.186	0.050	-0.075	-0.075	0.034	0.080	31.93 (19.16)							
10.	STIGMA2	0.102	0.011	0.153	-0.001	-0.014	0.098	0.051	-0.050	0.438	19.96 (16.95)						
11.	STIGMA3	0.137	0.034	0.038	0.023	-0.011	0.069	0.032	0.148	0.234	0.454	20.81 (15.97)					
12.	GSB1	0.041	-0.076	-0.069	-0.131	-0.091	-0.108	-0.116	-0.103	-0.224	-0.147	-0.093	50.26 (9.73)				
13.	GSB2	-0.020	-0.010	-0.135	-0.020	-0.042	-0.055	-0.003	-0.130	-0.139	-0.239	-0.228	0.493	50.05 (9.87)			
14.	GSB3	0.123	-0.050	0.099	-0.082	-0.108	-0.028	0.024	-0.064	-0.047	-0.011	-0.299	0.188	0.295	49.93 (9.94)		
15.	DISSOC	0.158	-0.035	0.013	-0.045	-0.085	-0.042	0.152	0.131	0.031	0.227	0.583	0.030	-0.197	-0.344	55.90 (12.55)	
16.	SELFEST	-0.078	0.020	-0.093	-0.081	0.079	0.146	-0.119	-0.138	-0.081	-0.069	-0.357	0.047	0.145	0.444	-0.403	3.17 (0.70)

Note. For each variable, means and standard deviations (in parentheses) are on the main diagonal. All correlations, means, and standard deviations were estimated by maximum likelihood to take missing data into account. Conservatively (based on the listwise deletion sample size of n=106), correlations with an absolute value > .20 are significant at $p < .05$. Age= age at abuse discovery; Nevents= number of abuse events, value shows percent with two or more events; Parfig= parent figure perpetrator; Livtog= living with perpetrator at time of abuse; Force= use of force during abuse, value shows percent with threat or use of force; Longdur= duration of abuse a year or more; Stigma1-2-3 = stigmatization at T1, T2, and T3 respectively; Gsb1-2-3 = general self-blame at T1, T2, and T3 respectively, note that lower scores indicate more self-blame; DISSOC= T3 dissociative symptoms; SELFEST= T3 global self-esteem.

Table 2

Structural Equation Model Results for Pathways to Dissociative Symptoms and Self-Esteem through Abuse-Specific and General Self-Schemas

	Estimate	S.E.	*p*-value	β	95% CIL	95% CIU
STIGMA1 ON						
FEMALE	5.207	3.741	0.164	0.122	-2.436	12.319
AGE	0.563	0.728	0.439	0.066	-0.885	1.975
PEN	6.608	3.229	0.041	0.164	0.281	12.892
NEVENTS	2.362	4.182	0.572	0.057	-5.738	10.688
PARFIG	-2.733	4.003	0.495	-0.068	-10.421	5.289
LIVTOG	-3.984	3.765	0.290	-0.103	-11.453	3.145
FORCE	0.856	3.401	0.801	0.022	-5.522	7.666
LONGDUR	2.952	3.892	0.448	0.076	-4.707	10.459
GSB1 ON						
FEMALE	1.884	1.858	0.311	0.087	-1.612	5.692
AGE	-0.352	0.370	0.341	-0.081	-1.108	0.337
PEN	-1.409	1.702	0.408	-0.069	-4.638	1.925
NEVENTS	-2.889	1.865	0.121	-0.138	-6.629	0.657
PARFIG	-1.375	2.023	0.497	-0.068	-5.377	2.570
LIVTOG	-0.446	1.890	0.813	-0.023	-4.169	3.277
FORCE	-2.672	1.637	0.103	-0.136	-5.997	0.398
LONGDUR	-0.379	1.871	0.839	-0.019	-4.046	3.355
STIGMA2 ON						
FEMALE	1.436	3.141	0.648	0.038	-4.376	7.998
AGE	-0.243	0.648	0.708	-0.032	-1.483	1.061
PEN	1.954	2.665	0.464	0.055	-3.359	7.117
NEVENTS	-0.430	3.786	0.909	-0.012	-7.758	7.260
PARFIG	-2.873	4.400	0.514	-0.081	-12.395	5.084
LIVTOG	7.006	4.228	0.098	0.205	-0.982	15.783
FORCE	0.466	2.654	0.861	0.014	-4.801	5.579
LONGDUR	-4.305	3.911	0.271	-0.125	-12.181	3.250
STIGMA1	0.383	0.089	0.000	0.433	0.210	0.559
GSB1	-0.084	0.137	0.541	-0.048	-0.355	0.181

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	Estimate	S.E.	*p*-value	β	95% CIL	95% CIU
GSB2 ON						
FEMALE	-0.672	1.800	0.709	-0.031	-4.336	2.788
AGE	0.244	0.330	0.460	0.055	-0.404	0.887
PEN	-2.030	1.678	0.226	-0.098	-5.270	1.378
NEVENTS	3.258	1.850	0.078	0.154	-0.520	6.763
PARFIG	0.171	1.912	0.929	0.008	-3.370	4.194
LIVTOG	-0.066	1.793	0.971	-0.003	-3.667	3.311
FORCE	1.351	1.457	0.354	0.068	-1.487	4.186
LONGDUR	-3.019	1.709	0.077	-0.151	-6.369	0.316
STIGMA1	-0.002	0.045	0.961	-0.004	-0.092	0.087
GSB1	0.511	0.094	0.000	0.503	0.321	0.689
STIGMA3 ON						
FEMALE	3.517	2.968	0.236	0.099	-2.478	9.252
AGE	0.068	0.643	0.916	0.009	-1.191	1.338
PEN	-2.407	2.599	0.354	-0.072	-7.634	2.580
NEVENTS	-2.501	3.413	0.464	-0.073	-9.753	3.849
PARFIG	-2.194	4.796	0.647	-0.066	-11.711	7.003
LIVTOG	0.801	4.574	0.861	0.025	-8.227	9.609
FORCE	0.246	2.510	0.922	0.008	-4.531	5.286
LONGDUR	6.447	3.378	0.056	0.199	-0.111	13.346
STIGMA2	0.402	0.091	0.000	0.427	0.235	0.594
GSB2	-0.203	0.177	0.252	-0.125	-0.559	0.132
STIGMA1	0.019	0.085	0.827	0.022	-0.140	0.192
GSB1	0.060	0.168	0.719	0.037	-0.262	0.391
GSB3 ON						
FEMALE	3.146	1.917	0.101	0.142	-0.595	6.906
AGE	-0.303	0.428	0.478	-0.068	-1.126	0.562
PEN	2.534	1.977	0.200	0.121	-1.489	6.260
NEVENTS	-2.272	2.254	0.314	-0.106	-6.804	2.029
PARFIG	-2.925	3.045	0.337	-0.141	-9.093	2.710
LIVTOG	1.254	3.024	0.678	0.062	-4.429	7.388
FORCE	-0.082	1.810	0.964	-0.004	-3.624	3.426

	Estimate	S.E.	*p*-value	β	95% CIL	95% CIU
LONGDUR	0.838	2.268	0.712	0.042	-3.618	5.361
STIGMA2	0.033	0.058	0.564	0.057	-0.088	0.142
GSB2	0.318	0.114	0.006	0.315	0.105	0.552
STIGMA1	-0.035	0.055	0.519	-0.068	-0.138	0.077
GSB1	0.007	0.137	0.961	0.007	-0.267	0.270
DISSOC ON						
FEMALE	4.584	2.392	0.055	0.164	-0.103	9.205
AGE	-0.375	0.488	0.442	-0.067	-1.330	0.577
PEN	-1.534	2.636	0.561	-0.058	-6.640	3.639
NEVENTS	-2.862	2.896	0.323	-0.106	-8.789	2.677
PARFIG	-2.231	3.171	0.482	-0.085	-8.130	4.274
LIVTOG	-1.578	3.107	0.611	-0.062	-7.735	4.433
FORCE	3.927	2.051	0.056	0.155	-0.034	7.972
LONGDUR	6.033	2.755	0.029	0.237	0.681	11.465
STIGMA2	0.185	0.071	0.009	0.250	0.044	0.324
GSB2	-0.261	0.149	0.080	-0.205	-0.552	0.034
STIGMA1	-0.074	0.070	0.287	-0.113	-0.230	0.047
GSB1	0.181	0.158	0.250	0.140	-0.131	0.485
SELFEST ON						
FEMALE	-0.106	0.150	0.481	-0.068	-0.415	0.183
AGE	0.004	0.030	0.889	0.013	-0.053	0.065
PEN	-0.087	0.141	0.535	-0.059	-0.373	0.186
NEVENTS	-0.134	0.189	0.477	-0.090	-0.510	0.232
PARFIG	-0.020	0.196	0.920	-0.014	-0.397	0.378
LIVTOG	0.336	0.183	0.066	0.238	-0.037	0.677
FORCE	-0.202	0.146	0.168	-0.144	-0.491	0.081
LONGDUR	-0.206	0.173	0.235	-0.145	-0.537	0.138
STIGMA2	-0.002	0.005	0.634	-0.054	-0.011	0.007
GSB2	0.010	0.009	0.296	0.138	-0.008	0.028
STIGMA1	0.000	0.004	0.941	0.008	-0.007	0.009
GSB1	-0.003	0.008	0.690	-0.046	-0.019	0.014

Note. 95% CIL and 95% CIU refer to the lower and upper limits of the bootstrap confidence intervals. β refers to the standardized regression coefficient. Age= age at abuse discovery; Nevents= number of abuse events, value shows percent with two or more events; Parfig= parent figure perpetrator; Livtog= living with perpetrator at time of abuse; Force= use of force during abuse, value shows percent with threat or use of force; Longdur= duration of abuse a year or more; Stigma1-2-3 = stigmatization at T1, T2, and T3 respectively; GSB1-2-3 = general self-blame at T1, T2, and T3 respectively; DISSOC= T3 dissociative symptoms; SELFEST = T3 global self-esteem.