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## Neglected Children, Shame-Proneness, and Depressive Symptoms

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### Abstract

Neglected children may be at increased risk for depressive symptoms. This study examines shame-proneness as an outcome of child neglect and as a potential explanatory variable in the relation between neglect and depressive symptoms. Participants were 111 children (52 with a Child Protective Services [CPS] allegation of neglect) seen at age 7. Neglected children reported more shame-proneness and more depressive symptoms than comparison children. Guilt-proneness, in contrast, was unrelated to neglect and depressive symptoms, indicating specificity for shame-proneness. The potential role of shame as a process variable that can help explain how some neglected children exhibit depressive symptoms is discussed.

### Keywords

child neglect; depressive symptoms; shame; guilt

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Children with histories of neglect are at risk for increased depressive symptoms in adulthood (e.g., Horowitz, Widom, McLaughlin, & White, 2001; Spertus, Yehuda, Wong, Halligan, & Seremetis, 2003; Widom, DuMont, & Czaja, 2007). However, the extent to which neglect is related to depressive symptoms in childhood is less clear. Physical neglect has been associated with higher initial levels of depressive symptoms in middle childhood (Kim & Cicchetti, 2006), while neglect occurring during adolescence, but not during childhood, was associated with greater depressive symptoms in early adolescence (Thornberry, Ireland, & Smith, 2001). In contrast, some studies have failed to find a relation between neglect and depressive symptoms during childhood (Kaufman, 1991; Romano, Zoccolillo, & Paquette, 2006).

Although neglect may increase children's risk for depressive symptoms, the process by which neglected children become susceptible to developing depressive symptoms is unclear. One model focuses on the role of emotional processes (Cole, Luby, & Sullivan, 2008). Specifically, children who experience neglect may be at increased risk of experiencing shame, which in turn increases their risk for depressive symptoms. Prior research suggests that shame may mediate the relation between maltreatment and adjustment following

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childhood sexual abuse, physical abuse, and harsh parenting, though this model has not been examined in the context of neglected children (Andrews, 1995; Bennett, Sullivan, & Lewis, 2005; Feiring, Taska, & Lewis, 1998; Stuewig & McCloskey, 2005). Some of these studies (Andrews, 1995; Feiring et al., 1998) assessed shame and adjustment concurrently and as such may provide a biased estimate of parameters in their test of mediation (Maxwell & Cole, 2007). Mediation should ideally be tested using three different time points to assess the initial, mediating, and outcome variables (Maxwell & Cole, 2007). The purpose of the current study was to examine whether neglect in early childhood is associated with later shame-proneness and depressive symptoms. In doing so, we conducted a preliminary test of mediation. Our test of mediation is considered preliminary in that shame-proneness, the mediator, was assessed concurrently with depressive symptoms, the outcome, and as such can be considered only suggestive evidence of mediation.

Shame is a highly negative and painful state in which the individual perceives the whole self as defective (M. Lewis, 2000). Heterogeneous groups of maltreated children, which have included neglected as well as physically and sexually abused children, exhibit elevated levels of shame (Alessandri & Lewis, 1996; Bennett et al., 2005; Feiring et al., 1998). Similarly, children whose parents are negative and rejecting or who use an authoritarian style of parenting are at increased risk of exhibiting shame, as are children whose parents provide low rates of positive evaluative feedback (Alessandri & Lewis, 1996; Kelley, Brownell, & Campbell, 2000; Mills, 2003; Stuewig & McCloskey, 2005). Research, however, has yet to examine whether neglected children, when examined separately rather than as part of a larger maltreatment group with physically and sexually abused children, are at increased risk of experiencing shame. Given that neglectful parents tend to provide low amounts of interaction and positivity to their children (Wilson, Rack, Shi, & Norris, 2008) and that low rates of positivity have been linked to increased shame, neglected children may be at elevated risk for becoming shame-prone. Support for this hypothesis has been found among young adults who perceived their mothers as ignoring them during childhood and who reported experiencing more shame as adults (Claesson & Sohlberg, 2002).

Shame-proneness may increase neglected children's risk for depressive symptoms. There are several explanations as to how shame, which has been related to increased depressive symptoms in children and adolescents (Luby et al., 2009; Stuewig & McCloskey, 2005; Tilghman-Osborne, Cole, Felton, & Ciesla, 2008), might lead to increased depressive symptoms among neglected children. When experiencing shame, individuals may try to suppress such an aversive feeling. Shame suppression, in turn, may lead to sadness and depression (H. B. Lewis, 1987; M. Lewis, 1992). Alternatively, shame, which is characterized by a desire to hide the damaged self from others and to "disappear," may be associated with social isolation and withdrawal, which are risk factors for depression (M. Lewis, 1992; Rubin, Coplan, & Bowker, 2009; Tangney, 1993). Shame also is associated with a depressogenic attributional style (i.e., making internal, stable, global attributions for negative events and external, unstable, specific attributions for positive events) that may increase risk for developing depressive symptoms (Joiner & Wagner, 1995; M. Lewis, 2007; Tangney, Wagner, & Gramzow, 1992). Finally, shame has been related to increased proinflammatory cytokine activity and to cortisol changes, both of which may increase risk for depressive symptoms (Antonijevic, 2006; Dickerson, Gruenewald, & Kemeny, 2004). Although the precise mechanisms by which shame may lead to the development of depressive symptoms is currently unknown, the extent to which neglected children are prone to experience shame may also lead them to experience increased depressive symptoms.

Early childhood is an important developmental period in which to examine the role of shame and depressive symptoms in neglected children. Neglect is the most common form of maltreatment, with most cases occurring among children aged 7 years and younger (U.S.

Department of Health and Human Services [USDHHS], 2009). Maltreatment that occurs during the first 5 years of life places children at the greatest risk for developing future adjustment problems, including increased depressive symptoms (Kaplow & Widom, 2007; Keiley, Howe, Dodge, Bates, & Pettit, 2001; Manly, Kim, Rogosch, & Cicchetti, 2001). During this time, children begin to engage in self-recognition and to make rudimentary self-appraisals. Following these developments, self-evaluative emotions such as shame emerge at around age 3 years (M. Lewis, 1992; Lewis, Alessandri, & Sullivan, 1992; Lewis & Sullivan, 2005; Stipek, Recchia, & McClintic, 1992). Collectively, these findings suggest that the preschool and early elementary school years provide an important window in which to examine the effects of neglect on shame-proneness and depressive symptoms.

Guilt differs from shame in its focus on remorse over a specific behavior rather than condemnation of the whole self (H. B. Lewis, 1971; Tangney & Dearing, 2002). Guilt also tends to be less intense and painful than shame and is less of a risk factor for psychopathology, including depressive symptoms (Tangney & Dearing, 2002; Tilghman-Osborne et al., 2008). As such, we would expect neglect to elicit greater shame- than guilt-proneness, and that shame-proneness would be more strongly associated than guilt-proneness with depressive symptoms among neglected children.

Neglect often occurs in the presence of other psychosocial risk factors, such as low socioeconomic status (SES) and exposure to violence (Osofsky, 2003; Sedlak et al., 2010). Low SES and exposure to violence have each been associated with increased depressive symptoms in childhood (Buka, Stichick, Birdthistle, & Earls, 2001; Tracy, Zimmerman, Galea, McCauley, & Vander Stoep, 2008) and so were examined as covariates in the current study. Three main hypotheses were examined in the current study. We hypothesized that (a) early neglect would predict higher levels of later shame-proneness; (b) early neglect would predict higher levels of later depressive symptoms; and (c) guilt-proneness would be unrelated to neglect history and to depressive symptoms. In addition to testing these hypotheses, the current study provided a preliminary test of whether shame mediates the relation between neglect and depressive symptoms.

## Method

### Participants

Participants were 111 children (47 boys, 64 girls; 52 with a Child Protective Services [CPS] history of neglect) seen initially at either 4 or 6 years of age. At the time of the current follow-up, children were age 7 years ( $M = 7.51$ ,  $SD = 0.28$ ). Participants came from urban neighborhoods in Philadelphia and central New Jersey. Mothers' ethnicity was 77.4% African American, 8.0% Caucasian, 8.0% Hispanic, and 5.3% Other. Children with a CPS history of sexual abuse and children with known histories of mental retardation or physical disabilities were excluded from the study. Six neglected children also had CPS histories of substantiated physical abuse.

Participants were recruited via flyers posted in publicly funded preschool or therapeutic programs and other community agencies (e.g., Women, Infants, and Children program offices). The flyers announced a study of development in young children and requested parents to call the research program, if they were interested in obtaining more information. Upon calling, parents were told that the study involved comparing the development of neglected and non-neglected children and that they would be asked to sign a consent form permitting the research team to review CPS records for classification of maltreatment status. At their initial visit, parents signed the Institutional Review Board approved study consent form before initiating any study activities.

Participants were part of a longitudinal study of 189 children. There were two waves of children seen in an overlapping cohort design. One cohort was seen from 4 to 7 years ( $n = 86$ ) and one cohort from 6 to 9 years ( $n = 103$ ). Both cohorts were seen at 6-month intervals. Here, data from the age 7 visit, the first for which the shame-proneness and depressive symptom measures were administered, were used in this report. There were no significant cohort differences in terms of neglect status, gender, ethnicity, maternal education, maternal occupation, public assistance, exposure to violence, shame- and guilt-proneness, or depressive symptoms at 7 years. Twenty-nine of the 86 children initially seen at age 4 years completed the age 7 visit; 82 of 103 children initially seen at 6 years completed the age 7 visit. Greater retention among those initially seen at 6 years was due to the briefer period of time between enrollment and the age 7 visit. Children who were seen versus not seen at this visit did not differ in terms of neglect status, gender, ethnicity, maternal education, maternal occupation, or public assistance.

### Procedure

Two female research assistants who were blind to the family's CPS status conducted the procedures at the research program's office. Measures of shame-proneness, guilt-proneness, depressive symptoms, SES, and exposure to violence were completed at the 7-year visit, with child measures administered as interviews. Families were paid \$40 in gift cards for their participation at the 7-year visit.

### Measures

**Neglect**—Neglect status was extracted from reviewing case records in CPS databases. CPS records were reviewed at study intake and at 1-year intervals throughout the study by a staff member who was blind to child performance. Local CPS agencies coded each allegation for the presence or absence of neglect, and this dichotomous variable was used for the current study (0 = *no neglect history* and 1 = *has a history of neglect*). Children with unsubstantiated allegations were included as research has indicated that unsubstantiated cases may be indistinguishable from substantiated cases in terms of adjustment (Hussey et al., 2005). The six children with neglect histories, who were also physically abused were retained in the neglect group as there was inadequate statistical power to examine them as a separate group and the pattern of correlations between variables was similar when they were excluded (see results below).

**SES**—Mothers were interviewed to assess their education level (highest year), occupation level, and public assistance status (0 = *not receiving assistance* and 1 = *receiving assistance*). Occupation level was coded from 1 (*unemployed*) to 6 (*professional or major business owner*) based on Watt (1976). Public assistance status was a dichotomous variable (yes/no) based on whether the family received any form of government based economic assistance (e.g., Temporary Assistance for Needy Families, Food Stamps, disability).

**Exposure to violence**—The Violence Exposure Scale for Children–Revised (VEX-R; Fox & Leavitt, 1996) is a 22-item self-report. Children are shown cartoons depicting violent and criminal acts across settings and are asked to describe the frequency of their exposure to those acts (e.g., “How many times have you seen a person push or shove another person really hard?”; 0 = *never* and 3 = *lots of times*) as either a witness or a victim. The VEX scales have been validated with urban African American children (e.g., Shahinfar, Fox, & Leavitt, 2000). Cronbach's alpha was .89 for the total score.

**Shame- and guilt-proneness**—The Test of Self-Conscious Affect for Children (TOSCA-C; Tangney, Wagner, Burggraf, Gramzow, & Fletcher, 1990) contains 15 brief hypothetical scenarios (10 negative and 5 positive) designed to assess shame- and guilt-

proneness. Each scenario is followed by responses assessing the likelihood that the child would feel shame, guilt, or other emotions (e.g., pride) on a 5-point scale, ranging from 1 (*not at all likely*) to 5 (*very likely*). For the current study, only the shame and guilt subscales were analyzed. The TOSCA-C has been administered previously to ethnically and socioeconomically diverse public school children (Tangney & Dearing, 2002). Consistent with recent research showing no difference in the extent of shame exhibited between African American and Caucasian children (Lewis, Takai-Kawakami, Kawakami, & Sullivan, 2010), our mean shame-proneness scores were similar to those reported by Tangney and Dearing. Cronbach's alpha was .70 for the shame subscale and .72 for the guilt subscale.

**Depressive symptoms**—The Children's Depression Inventory–Short Form (CDI-S; Kovacs, 1992) is a 10-item self-report measure of depressive symptoms during the past 2 weeks. Each item is rated on a 3-point scale ranging from 0 to 2, with higher scores indicating greater depressive symptoms. The CDI-S is normed for children aged 7 years and older and correlates highly ( $r = .89$ ) with the full 27-item version of the CDI (Kovacs, 1992). The CDI-S has been used with African American populations (e.g., Kovacs) and the full-length CDI on which the CDI-S is based on has been shown to be equally valid for African American and Caucasian school children (Cole, Martin, Peeke, Henderson, & Harwell, 1998). Cronbach's alpha was .67.

## Results

Independent group  $t$  tests are presented to examine differences between groups on study variables. Correlations between study variables are presented next. Maternal education, maternal occupation, public assistance status, and exposure to violence were examined as potential covariates of the relation of neglect with both shame-proneness and depressive symptoms. Each of these possible covariates was unrelated to shame-proneness and to depressive symptoms ( $p > .40$ ) and thus were not included as covariates. Partial correlations controlling for guilt-proneness were computed between neglect and shame-proneness and between shame-proneness and depressive symptoms, given the significant relation between guilt-proneness and shame-proneness. Similarly, partial correlations controlling for shame-proneness were computed between guilt-proneness and both neglect and depressive symptoms. Finally, we examined whether shame-proneness and guilt-proneness mediate the relation between neglect and depressive symptoms using a bootstrapping method (with  $n = 5,000$  bootstrap resamples) to assess the indirect effects (see Preacher & Hayes, 2008). This bootstrap method has been recommended in the methodological literature because it is more powerful than alternatives as it involves multiple resampling of the observed data with replacement to produce an interval estimate of an indirect effect (Fritz & MacKinnon, 2007; MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002; Shrout & Bolger, 2002). Indirect effects are estimated by multiplying component direct effects (i.e., the unstandardized coefficient in ordinary least squares regression) for each bootstrap sample. Many estimates of an indirect effect are calculated, one per bootstrap sample, and the distribution of those multiple estimates provides an approximation of the sampling distribution of the indirect effect and can be used to form a confidence interval. If a 95% confidence interval for an indirect effect formed via this bootstrapping approach does not include 0, one can reject a null hypothesis of no indirect effect. M-Plus version 5.21 (Muthén & Muthén, 1998-2007) was used to estimate the direct effects of neglect, shame-proneness, and guilt-proneness on depressive symptoms and the indirect effects of neglect on depressive symptoms as mediated by shame-proneness and guilt-proneness.

## Descriptive Statistics for Neglect and Comparison Groups

Means and standard deviations are presented for all variables as a function of neglect status in Table 1. As shown, neglect and comparison groups were similar on the demographic variables of maternal education and maternal occupation. A non-significant trend was found for neglected children to report greater exposure to violence. Neglected children, as hypothesized, did report greater shame-proneness, but not guilt-proneness. Depressive symptom scores were positively skewed and were log transformed to correct for skew; the transformed variable was used in all subsequent analyses. Prior to correcting for skew depressive symptom, scores were not significantly greater among neglected children.

## Relations Between Neglect, Shame-Proneness, Guilt-Proneness, and Depressive Symptoms

As shown in Table 2, neglect was related to greater shame-proneness. Neglect was also related to greater depressive symptoms at 7 years. Shame-proneness, but not guilt-proneness, was related to greater depressive symptoms. Although shame- and guilt-proneness were positively correlated, guilt-proneness was not related to either neglect or depressive symptoms. When guilt-proneness was partialled out from shame-proneness, shame-proneness was still related to depressive symptoms ( $r = .35, p < .001$ ). When shame-proneness was partialled out from guilt-proneness, guilt-proneness was still unrelated to depressive symptoms. Analyses conducted without the six neglected children who also had histories of physical abuse yielded the same pattern of correlations between neglect, shame-proneness, guilt-proneness, and depressive symptoms.

## The Relation of Neglect to Depressive Symptoms as a Function of Shame- and Guilt-Proneness

The direct effects of neglect, shame-proneness, and guilt-proneness on depressive symptoms were examined in a single regression model. The direct effect for shame-proneness was significant as shame-proneness was associated with increased depressive symptoms,  $0.023, SE = 0.006, p < .001$ ; standardized coefficient =  $.335$ ; 95% CI =  $[0.163, 0.245]$ . The direct effect for guilt-proneness was not significant, however,  $-0.012, SE = 0.007, p = .09$ ; standardized coefficient =  $-.156$ ; 95% CI =  $[-1.135, 0.208]$ . The direct effect for neglect on depressive symptoms was no longer significant once shame- and guilt-proneness were entered into the model as mediators,  $0.217, SE = .141, p = .13$ ; standardized coefficient =  $.143$ ; 95% CI =  $[-0.057, 0.492]$ .

The effects of shame- and guilt-proneness on the relation between neglect and depressive symptoms were examined using the procedures of Preacher and Hayes (2008). Shame-proneness and guilt-proneness were simultaneously entered as potential mediators using a bootstrap approach with bias corrected confidence intervals (Shrout & Bolger, 2002) in a multiple mediation model. The model was significant,  $F(3,102) = 5.34, p < .01$ , and accounted for 13.6% of the variance in depressive symptoms. The indirect effect of neglect on depressive symptoms via shame-proneness was positive,  $0.101, SE = .056$ , and significant based on the bootstrap confidence interval, as the 95% confidence interval did not include zero; CI =  $[0.013, 0.234]$ . Thirty-five percent of the total effect of neglect on depressive symptoms was accounted for by the indirect effect of shame-proneness. In contrast, the indirect effect via guilt-proneness was negative,  $-0.031, SE = 0.034$ , and nonsignificant, 95% CI =  $[-0.137, 0.008]$ , and only 11% of the total effect of neglect on depressive symptoms was accounted for by the indirect effect of guilt-proneness.

## Discussion

Neglect in early childhood was found to predict depressive symptoms among school-age children, consistent with most studies of older children and adults that show a relation between neglect and depressive symptoms (Bifulco, Bernazzani, Moran, & Ball, 2000; Brown, Cohen, Johnson, & Smailes, 1999; Horowitz et al., 2001; Kim & Cicchetti, 2006; Spertus et al., 2003; Thornberry et al., 2001; Widom et al., 2007). Shame-proneness, as hypothesized, was related to a history of neglect and to greater depressive symptoms. Shame-proneness also had a significant indirect effect on the relation between neglect and depressive symptoms, consistent with studies of maltreatment and adjustment among children with histories of sexual abuse, physical abuse, and harsh parenting (Andrews, 1995; Bennett et al., 2005; Feiring et al., 1998; Stuewig & McCloskey, 2005). Although neglect and shame-proneness were each significantly related to depressive symptoms, their effect sizes were in the small to medium range (Cohen, 1988) as additional factors are clearly involved in the onset of depressive symptoms.

The precise processes by which shame may relate to neglect and depressive symptoms remains unclear, although self-cognitions are likely involved. If children receive minimal attention, warmth, and positivity from their primary caregivers, they are likely to develop negative, global beliefs about the self (e.g., that they are unwanted or worthless). Maltreated children are at risk of developing such negative representations of themselves, and neglected children in particular possess less positive self-representations (Toth, Cicchetti, Macfie, & Emde, 1997). Such a poor sense of self is believed to be a primary elicitor of shame (M. Lewis, 1992). Shame, in turn, may lead to a depressogenic attributional style characterized by internal, global, and stable attributions for negative events, as well as to rumination over one's perceived failure that threatens their sense of belonging, leading to increased depressive symptoms (Orth, Berking, & Burkhardt, 2006). Shame, characterized by an attempt to hide the self, also may lead to avoidant coping and social withdrawal, and to an increase in depressive symptoms (Herman-Stahl, Stemmler, & Petersen, 1995; Jeney-Gammon, Daugherty, Finch, Belter, & Foster, 1993; Rubin et al., 2009). Prospective studies are needed to better assess the timing and extent to which negative self-cognitions and shame precede the development of depressive symptoms following neglect.

Neglected children reported more depressive symptoms than non-neglected children, but the amount of symptoms reported was modest, consistent with prior research finding depressive symptoms to be less common among school-age children than among adolescents and adults (e.g., Cole et al., 2002). The overall low level of depressive symptoms is also consistent with research indicating that some children with histories of neglect are well adjusted, although it is important to consider domains in addition to depressive symptoms (e.g., externalizing problems, social competence, and academic competence) and to assess adjustment across time (Jaffee & Gallop, 2007). Despite the modest amount of depressive symptoms observed, early childhood marks an important time to identify risk factors for depressive symptoms as children with depression in childhood are at heightened risk for depression during adolescence and adulthood (Costello et al., 2002).

Neglected children reported somewhat increased exposure to violence, though violence exposure was unrelated to both shame-proneness and to depressive symptoms. Some prior research has also found that children who witness violence are not necessarily at increased risk for depressive symptoms, especially if they have high levels of social capital (Fitzpatrick, 1993; Fitzpatrick, Piko, Wright, & LaGory, 2005). In contrast to neglect, it is likely that witnessing violence does not have the same negative effects on the self that may lead to negative self-cognitions, shame-proneness, and depressive symptoms. In addition, neglect may be a somewhat specific predictor of depressive symptoms rather than of other

types of internalizing symptoms. In an earlier sample, neglect failed to predict an internalizing symptoms composite that included anxiety and somatic symptoms as well as depressive symptoms (Bennett et al., 2005). This is consistent with studies suggesting that neglect and negative parenting are more strongly associated with children's depressive symptoms than with their anxiety symptoms (McGinn, Cukor, & Sanderson, 2005; Suliman et al., 2009).

Guilt- and shame-proneness were correlated, consistent with prior research (Stuewig & McCloskey, 2005; Webb, Heisler, Call, Chickering, & Colburn, 2007). Guilt-proneness, however, was unrelated to both neglect and depressive symptoms, also consistent with prior research (Stuewig & McCloskey, 2005; Tangney et al., 1992; Webb et al., 2007). Guilt as assessed by the TOSCA-C involves feeling remorse over a specific behavior and a desire to make amends for the behavior. As such, guilt defined by the TOSCA scales tends to have positive or at least neutral relations with interpersonal adjustment, whereas scales that confound guilt with shame or use guilt as an adjective whose precise meaning the participant must interpret often have negative relations with adjustment (Tangney & Dearing, 2002). Such "maladaptive" guilt is believed to start with a negative evaluation of one's specific behavior but then becomes magnified and generalized to the self. Once generalized, such maladaptive guilt may become fused with shame and may be related to increased psychopathology, including depressive symptoms (Tangney & Dearing, 2002).

The current findings are noteworthy, given the nature of the study design, as our sample consisted of children still residing with their biological mothers. Hence, the sample did not include the most severe cases of neglect, which involve the child's removal from the home. Inclusion of such severe cases might reveal a greater relation between neglect and depressive symptoms, as prior research has found the severity of neglect, particularly when it occurred during the preschool years, to predict later internalizing symptoms (Manly et al., 2001).

Several limitations need to be considered. Although the relation between neglect and depressive symptoms was partially explained by the indirect effect of shame-proneness, shame-proneness and depressive symptoms were assessed concurrently. The concurrent assessment of mediators and outcome variables concurrently may provide a biased estimate of parameters in testing mediation (Maxwell & Cole, 2007). Doing so prevented us from conducting the most rigorous test of mediation across three time points and as such our examination of shame-proneness as a mediator of the relation between neglect and depressive symptoms should be considered preliminary. However, we did assess neglect prior to both shame-proneness and depressive symptoms. Consistent with our hypothesis, prior research suggests that shame may precede changes in depressive symptoms (Andrews, Qian, & Valentine, 2002). Furthermore, our results were consistent with studies indicating that shame mediates the prospective relation between maltreatment and adjustment among children with histories of physical abuse and harsh parenting (Bennett et al., 2005; Stuewig & McCloskey, 2005). Additional direct tests, however, of the temporal relation between shame and depressive symptoms among neglected children are needed.

Although children with histories of sexual abuse were screened from the study and most of the neglected children had histories of neglect without physical abuse, it is possible that other forms of maltreatment may have contributed to the greater shame-proneness and depressive symptoms among neglected children. Emotional maltreatment, for example, may increase risk for shame-proneness and depressive symptoms, given that it is particularly damaging to one's sense of self (Lumley & Harkness, 2009; Soffer, Gilboa-Schechtman, & Shahar, 2008) and has been related to increases in both shame-proneness and depressive symptoms (Harper & Arias, 2004; Hoglund & Nicholas, 1995). Similarly, subtypes of



neglect need to be considered in future research as emotional neglect has been related to depressive symptoms in adulthood (Spertus et al., 2003). Finally, our results relied on children's self-ratings of their shame-proneness and depressive symptoms. Given the modest agreement typically found between raters (Achenbach, McConaughy, & Howell, 1987), it would be of interest to test the relations between neglect, shame, and depressive symptoms using latent constructs aggregated across multiple raters (e.g., child, parent, and teacher ratings) and methods (e.g., self-reports and structured interviews).

In summary, our findings indicate that shame- but not guilt-proneness is related to neglect and to depressive symptoms. Although prospective relations between shame and depressive symptoms need to be established among neglected children, these findings suggest that interventions aimed at helping neglected children to be less shame-prone may decrease their risk for developing depressive symptoms. Treatment aimed at helping children to openly describe shame-producing experiences, to evaluate the verbal and nonverbal messages they receive from others, and to assist caregivers in their own coping, communication, and discipline skills may help reduce mal-treated children's proneness to shame and their subsequent adjustment problems (Deblinger & Runyon, 2005). As evidence accrues to indicate that maltreatment may lead to heightened shame-proneness, it will be important to test such interventions for their ability to reduce shame and its sequelae among at-risk children. In doing so, it will be important to consider the unique aspects of neglect, which is often marked by chronically inadequate parental emotional attention and low positivity, from physical and sexual abuse in which a series of specific traumatic events may precipitate feelings of self-blame. Whereas interventions for abused children may include working with children to process traumatic events and to minimize self-blame for such events (Deblinger & Runyon, 2005), neglect interventions might place greater emphasis on working with parents to be more interactive and positive with their children, a goal of parent-child interaction therapy (Brinkmeyer & Eyberg, 2003).

Further research is needed to (a) identify the specific neglectful parenting behaviors that may lead to increased shame-proneness, as well as protective factors that prevent the onset of shame-proneness among some neglected children. For example, a measure of parental rejection characterized by parental criticism and embarrassment of the child was related to shame-proneness and to later depressive symptoms among adolescents, whereas a lack of parental warmth was unrelated to both (Stuewig & McCloskey, 2005); (b) examine whether the prospective relation between neglect with both shame and depressive symptoms persists into later childhood and adolescence, when depression becomes more prevalent; and (c) validate interventions aimed at reducing shame and depressive symptoms among neglected children. At present, age-appropriate prevention and treatment programs for depression among young children are still in the early stages of development (Luby, 2010), and the extent to which such interventions reduce shame-proneness are unknown.

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## Biography

**David S. Bennett** is an associate professor in the Department of Psychiatry at Drexel University College of Medicine. His research focuses on the emotional and behavioral adjustment of children from at-risk populations, including children with histories of neglect, physical abuse, prenatal substance exposure, and chronic physical problems.

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**Michael Lewis** is the University Distinguished Professor of Pediatrics and Psychiatry, the director of the Institute for the Study of Child Development, at Robert Wood Johnson Medical School, and a professor of psychology and cognitive science at Rutgers University. His studies of emotional development resulted in *Children's Emotions and Moods*, the first attempt to delineate the normal course of emotional growth. He is a coeditor of the *Handbook of Emotions* and has authored numerous other books, including *Shame, the Exposed Self*, and articles on emotional development and adjustment. His research on the self-conscious emotions include work with sexually abused, as well as physically abused and neglected, children.

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**Table 1**

Means (and Standard Deviations) of Demographic and Model Variables by Neglect Status

	Controls ( <i>n</i> = 59)	Neglect ( <i>n</i> = 52)	Total ( <i>n</i> = 111)	Range	<i>t</i> (109)
1. Maternal education (years)	12.40 (1.65)	12.04 (1.54)	12.23 (1.60)	9 to 18	1.15
2. Maternal occupation <sup>a</sup>	2.35 (1.73)	2.10 (1.73)	2.23 (1.73)	1 to 6	0.73
3. Exposure to violence (VEX-R)	19.80 (11.51)	24.13 (10.39)	21.92 (11.09)	3 to 49	1.79 <sup>#</sup>
4. Shame-proneness (TOSCA-C)	39.52 (11.85)	43.88 (9.81)	41.58 (11.07)	15 to 71	2.06 <sup>*</sup>
5. Guilt-proneness (TOSCA-C)	58.63 (9.94)	61.18 (9.73)	59.83 (10.06)	35 to 75	1.34
6. Depressive symptoms (CDI-S)	2.05 (2.84)	2.81 (2.74)	2.37 (2.79)	0 to 11	1.42
7. Depressive symptoms (log transformed <sup>b</sup> )	0.80 (0.76)	1.08 (0.74)	0.92 (0.76)	0 to 2.48	2.00 <sup>*</sup>

Note. CDI-S = Children's Depression Inventory Short form; TOSCA-C = Test of Self Conscious Affect for Children; VEX-R = Violence Exposure Scale for Children-Revised.

<sup>a</sup>Maternal occupation was assessed using a 6-point scale (Watt, 1976) ranging from 1 (*unemployed*) to 6 (*professional or major business owner*).

<sup>b</sup>Correction for skew was computed by adding 1 to each CDI-S score and taking the natural log of the resulting score.

<sup>#</sup>*p* < .10.

<sup>\*</sup>*p* < .05.

Table 2

Correlations Between Variables

	Neglect	Maternal Education	Maternal Occupation	Public Assistance	Exposure to Violence	Shame-Proneness	Guilt-Proneness	Depressive Symptoms
1. Neglect status	–							
2. Maternal education (years)	-.13	–						
3. Maternal occupation <sup>a</sup>	-.08	.36***	–					
4. Public assistance	.13	-.24*	-.31**	–				
5. Exposure to violence	.22*	-.24*	-.12	.04	–			
6. Shame-proneness (TOSCA-C)	.22*	-.06	-.03	-.08	.06	–		
7. Guilt-proneness (TOSCA-C)	.14	.08	.02	-.08	.10	.33**	–	
8. Depressive symptoms (CDI-S)	.20*	-.02	-.05	.07	.07	.32**	-.03	–

Note. CDI-S = Children's Depression Inventory-Short Form; TOSCA-C = Test of Self Conscious Affect for Children; VEX-R = Violence Exposure Scale for Children-Revised. Spearman correlations are reported for neglect (0 = *no neglect history* and 1 = *has a history of neglect*) and for public assistance (0 = *not receiving* and 1 = *receiving*). Pearson correlations are reported for all other correlations.

#  $p < .10$ .

<sup>a</sup> Maternal occupation was assessed using a 6-point scale (Watt, 1976) ranging from 1 (unemployed) to 6 (professional or major business owner).

\*  $p < .05$ .

\*\*  $p < .01$ .

\*\*\*  $p < .001$ .