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The Impact of Cumulative Maternal Trauma and Diagnosis on Parenting Behavior

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Abstract

This study examines the relative contributions of cumulative maternal trauma, substance use, depressive and post-traumatic stress diagnoses on parental abuse potential, punitiveness, and psychological and physical aggression in a sample of 176 urban mothers. Participants were categorized into four groups: substance use ($n = 41$), depressed ($n = 40$), comorbid ($n = 47$), and control ($n = 48$). Participants in the three diagnostic groups reported significantly greater interpersonal trauma exposure than did controls. Hierarchical regressions reveal that cumulative trauma is a significant predictor of all parenting outcomes, even after controlling for demographic and diagnostic variables. Substance use and depression are significantly related to abuse potential, and PTSD is significantly negatively related to physical discipline, with no other significant associations between diagnostic status and parenting outcomes. These findings add to an important growing literature examining the impact of cumulative trauma on parental functioning. Implications for future research and parenting interventions are discussed.

Keywords

trauma; parenting; substance abuse; depression; child maltreatment

Both substance use and depressive disorders among mothers have been consistently linked to poorer parenting skills, including an increased likelihood of using more punitive and aggressive discipline. There has also been growing recognition of the need to consider the impact of psychosocial risk factors that women with substance use and/or depression bring to their parenting that may directly or indirectly contribute to poor parenting skills. Maternal history of victimization has been identified as one such important factor, with recent research illustrating that cumulative interpersonal trauma experiences can seriously disrupt a parent's caretaking abilities (Banyard, Williams, & Siegal, 2003).

The aim of the current study is to build on these findings by exploring the relative contributions of cumulative maternal trauma, substance use, depressive and posttraumatic stress diagnoses on parental abuse potential, punitiveness, and psychological and physical aggression in a sample of urban mothers.

Substance Abuse, Depression, and Parenting

Substance-abusing mothers are likely to be more punitive, authoritarian, and aggressive toward their children (Hien & Miele, 2003; Miller, Smyth, & Mudar, 1999; Wellisch & Steinberg, 1980) and to use disciplinary practices that are more severe and threatening

(Bauman & Dougherty, 1983; Hien & Honeyman, 2000). Research on parenting with school-aged and older children suggests increased use of problematic parenting behaviors (Harmer, Sanderson, & Mertin, 1999), parent–child dissatisfaction (Wright, Garrison, Wright, & Stimmel, 1991), and poor parenting attitudes (Kettinger, Nair, & Schuler, 2000) in substance-using families in contrast to non–substance users. Furthermore, there is ample evidence for a link between parental substance abuse and an increased risk for child maltreatment. Children whose parents abuse substances may be at twice the risk of experiencing physical or sexual abuse compared to children with non-substance-abusing parents (Walsh, Macmillan, & Jamieson, 2003). Mothers who abuse substances are often responsible for such maltreatment (Chaffin, Kelleher, & Hollenberg, 1996; Eliason & Skinstad, 1995; Kaplan-Sanoff & Leib, 1995; Magura & Laudet, 1996).

Studies exploring the impact of psychiatric diagnoses on parenting have primarily focused on maternal depression, the most common mental disorder in women of childbearing age (for reviews, see Lovejoy, Graczyk, O'Hare, & Neuman, 2000; Oyserman, Mowbray, Meares, & Firminger, 2000). Similar to findings in substance-abusing mothers, depressed mothers also manifest higher levels of hostility and irritability toward their children and have more negative parent–child interactions (Cohn, Campbell, Matias, & Hopkins, 1990). They are often less responsive to their child's communicative behavior (Field, Healy, Goldstein, Guthertz, 1990; Goodman & Brumley, 1990) and more likely to use coercion rather than negotiation in trying to control their child's behavior (Cohn et al., 1990).

Taken together, the bulk of existing studies suggest that mothers who struggle with substance abuse and/or depression are at higher risk for using harsher, more coercive, and more punitive parental strategies, which at the extreme end of the continuum can perpetuate a cycle of child maltreatment. However, recently there has been more emphasis on the importance of considering psychosocial risk factors, including current and past experiences of victimization, women with substance use and/or psychiatric disorders bring to their parenting that may directly or indirectly contribute to poorer parenting skills (e.g., Hans, Bernstein, & Henson, 1999; Lovejoy et al., 2000).

Trauma Exposure and Parenting

The movement to broaden the contextual approach in examining parenting deficits converges with recent research focusing on the impact of maternal trauma history on parenting. Studies examining the relationship between childhood physical or sexual abuse and a range of parenting outcomes have found that parents' own abuse histories are risk factors for negative consequences in the parenting role, including use of more punitive, aggressive, and physical discipline (Banyard, 1997; Gara, Allen, Herzog, & Woolfolk, 2000). One conceptual framework used to understand these findings is the cycle of violence theory, an intergenerational model whereby traumatic experiences and their impact get transmitted within a family across generations (Cole, Woolger, Power, & Smith, 1992; Downs, Miller, Testa, & Panek, 1992; Kashani, Daniel, Dandoy, & Holcomb, 1992; Miller, 1990; O'Keefe, 1994; Truscott, 1992). Derived from the social learning model, the cycle of violence theory suggests that children learn to become abusive through socialization experiences in their families, making survivors of abuse at risk for using greater physical punishment with their own children. Though support for the cycle of violence theory has been found in samples of physical abuse (e.g., Caliso & Milner, 1992; White & Humphrey, 1994) and sexual abuse survivors (e.g., Cole et al., 1992; Cole & Woolger, 1989), it is equally clear that not all abusive parents have trauma histories and that not all traumatized children become abusive parents. In an extensive review, Widom (1989) found that estimates of a history of abuse among abusing parents range from 7% to 70%. Such a wide

range suggests that there are multiple pathways and combinations of risk and protective factors that influence whether violence and trauma get transmitted to the next generation.

One pathway may be through the development of posttraumatic stress disorder (PTSD), which involves a characteristic set of behavioral and emotional reactions to traumatic stress. All individuals exposed to trauma do not develop PTSD, though it is more likely to develop along with impaired emotional and social competencies when the trauma begins in childhood and is of an interpersonal nature (Herman, 1992; Roth, Newman, Pelcovitz, van der Kolk, & Mandel, 1997; van der Kolk et al., 1996). PTSD is highly comorbid with a variety of psychiatric disorders, including substance abuse and depression (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). Clinical evidence indicates that PTSD symptoms can negatively affect a parent's functioning and ability to parent effectively (Appleyard & Osofsy, 2003). Unfortunately, very little empirical work in this area has been done. Recent studies on male veterans have found that PTSD symptoms are associated with parenting dissatisfaction, even after controlling for major depression and alcohol abuse disorders (Sampller, Taft, King, & King, 2004).

In the field of trauma, there has been an increasing focus on the detrimental impact of cumulative experiences and how women who are victims of multiple or prolonged traumas beginning in childhood often exhibit a range of serious psychological, emotional, and interpersonal problems (van der Kolk, 1996). Banyard and colleagues (2003) were the first to apply these concepts to the parenting role. They explored the impact of cumulative trauma on parenting in a sample of 152 mothers with different types of interpersonal trauma exposure in both childhood and adulthood. Findings showed that overall higher levels of trauma exposure were linked with decreased parenting satisfaction, reports of child neglect, use of physical punishment, and a history of protective service reports.

This emerging literature on trauma and parenting confirms longstanding clinical observations that an individual's relationship history is an important variable in mediating parenting behavior and that a history of abuse can negatively affect a parent's caretaking abilities in ways that can have far-reaching consequences. Research as to how cumulative trauma exposure may affect parenting attitudes and behavior is still in its infancy, and more empirical investigation in this area is needed. We aim to build on this growing body of research by examining the associations among cumulative trauma, posttraumatic stress, substance use, and depressive disorders on parental abuse potential, punitiveness, psychological, and physical aggression. Our sample consists of four groups of mothers, those with current or past substance use disorders, those with current or past depressive disorders, those with current or past comorbid substance use and depressive disorders, and a comparison group. We hypothesize that higher levels of trauma exposure will be related to more negative parenting behavior and that maternal exposure to trauma will be a significant predictor of parenting outcomes above and beyond diagnostic status, which we also expect to be significant. We also expect to find significantly higher rates of interpersonal trauma and of parenting difficulties in the three diagnostic groups than in the comparison group.

METHOD

Procedure

The sample consists of 176 mothers who were taking part in a larger cross-sectional, cross-generational study designed to examine associations among maternal substance abuse, psychopathology, neuropsychological functioning, child-rearing deficits, and corresponding adverse child outcomes, including aggressive behavior and substance use. Participants were recruited through the OB/GYN clinic at a large, urban, public hospital in New York City serving a primarily poor, minority population. This site was chosen based on previous

research in which it was found to serve a population who are at high risk for negative life events, violence, substance abuse, and depression with adequate variability and generalizability (Hien & Honeyman, 2000).

A brief screening was conducted at the OB/GYN clinic on recruitment days to determine whether or not participants met eligibility criteria. Inclusion criteria were (a) age of participant between 18 and 55 years, (b) at least one child aged 9 to 15 years, and (c) willingness to participate in approximately 6 hours of interviews for the mother and 3 hours for the child. The selection of the 9 to 15 age range for children was based on the goal of the larger study to examine the consequences of maternal impairment and parenting on adverse child outcomes, including initiation of substance use, which tends to occur during pre- or early-adolescent years and is a risk factor for subsequent development of substance use disorders. Exclusion criteria were (a) a clear history of severe organic symptomatology, (b) active AIDS, (c) history of head trauma to mother or child, (d) any serious physical ailment or chronic disease which would prevent participation in interviewing, and (e) diagnosis of a psychotic or bipolar disorder.

During the 5-year study period, a total of 506 women presenting for treatment at the OB/GYN clinic were screened for study inclusion. In all, 314 (62%) met eligibility criteria and were invited to participate. Of these, 254 (81%) scheduled an interview and 190 (75%) attended the interview, giving informed consent prior to beginning assessments. Of the 190 women enrolled in the study, 3 did not return for a second interview visit needed to complete assessments, and 3 participants were removed from analyses because they met criteria for bipolar disorder based on clinical interview, an exclusion criterion of the study. Also, 7 participants were removed from sample analyses because they did not meet lifetime criteria for depression or a substance use disorder but did meet criteria for lifetime PTSD, making them ineligible for being placed in the control group. Finally, 1 participant was removed from analyses because urine tests indicated inconsistency with self-report.

The mother completed an initial 3-hr interview and then returned on a second occasion with her child, though in many cases the entire interview procedure was done in one visit, based on the participant's schedule and preference. Participant reimbursement was \$100 and roundtrip travel expenses. Mothers were given measures of crystallized intelligence, psychiatric functioning, substance use, and treatment history. They also completed parenting measures, answered questions about their child's functioning, and provided a urine sample.

Diagnosis was determined by the Structured Clinical Interview for DSM-III-R/IV (SCID), which was conducted by experienced assessors who were doctoral candidates with at least a master's degree. On the SCID interview, assessors were required to have at least a .70 level of agreement with expert trainer diagnostic ratings. Reliability of the SCID diagnostic interview was determined by having an expert trainer review 20% of randomly chosen taped interviews. In addition, assessors received ongoing weekly supervision from a clinical psychologist to ensure standardized administration of the SCID interview.

Based on SCID results, women were categorized into four study groups. Participants with current or past substance use disorders but no history of depressive disorders were placed in the substance use disorder group (SUD, $n = 41$, 23.3%), participants with a current or past depressive disorder but no history of substance use disorders were placed in the depressed group (dep, $n = 40$, 22.7%), and participants with both substance use disorders and depression currently or in the past were placed in the comorbid group ($n = 47$, 26.7%). Participants in any of these three diagnostic groups could also have a current or past diagnosis of PTSD. The rationale for using lifetime diagnoses to determine study group is based on a lifespan model of psychiatric and substance use disorders. Participants in our

current and previous studies typically described recurrent episodes of these disorders and often experienced them as chronic and relapsing conditions, even if they did not meet current diagnostic criteria. Thus, focusing on current diagnosis does not fully capture the clinical picture of our population. Participants with no current or past substance use, depressive disorders, or PTSD were placed in the control group ($n = 48$, 27.3%). Participants in this group could report current or past substance use as long as it was not regular or problematic use.

Participants

Demographics are presented in Table 1. Given that no significant differences among the four study groups on these variables were found, numbers and percentages are presented for the entire sample. The mothers were primarily of minority status: African American (70.8%) and Hispanic (20.0%). The majority were currently unmarried: single (54.0%) and divorced or separated (19.3%). The sample was diverse in education, ranging from high school dropouts to college graduates, and more than half of the sample were employed either full-time (46.0%) or part-time (27.0%). The mean IQ score for the sample was 89.82 ($SD = 13.48$), and the mean age was 37.49 ($SD = 6.47$).

Substance use disorders—In the sample, 88 women (50.0%) had a history of substance use disorders, with 67 (38.1%) meeting lifetime criteria for dependence on at least one substance. A total of 17 women (9.7%) met criteria for current dependence, and 3 (1.8%) met criteria for current abuse. Also, 72 participants (81.1%) who had substance use disorders had more than one substance as the focus of their diagnosis: 61.4% were related to cocaine, 51.1% were related to alcohol, 51.1% were related to crack, 35.2% were related to cannabis, 25.0% were related to heroin, 4.5% were related to sedatives, and 2.3% were related to stimulants. In terms of treatment, 53 women (30.1%) had received outpatient and 38 (22.0%) had received inpatient substance use treatment.

Depression and PTSD—In all, 52 women (30.1%) had a history of depression, and 35 (20.2%) met criteria for a current depressive disorder. Also, 30 women (17.0%) met criteria for current PTSD, and 18 (10.2%) met criteria for past PTSD. A total of 68 participants (38.6%) had received outpatient psychiatric treatment, with 14 (8.0%) having been psychiatrically hospitalized.

Trauma exposure—A large proportion of the sample ($n = 145$, 71.6%) reported experiencing interpersonal trauma during the course of their lifetime. Of these, 72 women (40.9%) reported childhood sexual abuse, 62 (35.2%) reported childhood physical abuse, and 30 (17.0%) reported witnessing violence as child. In terms of adulthood trauma, 45 women (31.9%) reported partner violence and 28 (15.9%) reported sexual assault.

Measures

Diagnostic measure—The SCID–SAC Version (SCID–SAC; Spitzer, Williams, Gibbon, & First, 1992) was used to assess Axis I diagnoses according to the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV*; American Psychiatric Association, 1994). The SCID is a widely used semi-structured clinician-administered interview. The SCID–SAC is a modified version of the SCID developed for detection of Axis I disorders among substance abusers based on life history. Field trials with the SCID–SAC version have shown good interrater and test–retest reliability (Nunes et al., 1993). In the current study, the following modules were administered: Alcohol Use Disorders, Psychoactive Substance Use Disorders, Affective Disorders, Posttraumatic Stress Disorder, and Psychotic Screen. Data on the presence or absence of each of these disorders and on current and lifetime occurrences were collected.

Trauma measures—The Life Events Checklist of the Clinician Administered PTSD Scale (Blake et al., 1990) was used to assess type, frequency, and ages of traumatic exposure. This list includes 19 traumatic events falling into both interpersonal (e.g., physical assault, sexual assault) and noninterpersonal (e.g., natural disaster, fire or explosion, transportation accident) categories. The Conflict Tactics Scale–2 (CTS-2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996) was used to assess partner violence using the Physical Assault subscale. The CTS-2 is an updated version of the CTS, a widely used scale with established validity, reliability, and factor structure (Straus, 1990).

A trauma composite was created following the method described by Banyard et al. (2003). We chose to use this index as it includes five main types of lifetime interpersonal trauma exposure and because its use allowed direct comparison to previous results in this area. The first three components of the score are childhood traumas, events occurring prior to age 18, including sexual abuse (defined as rape, attempted rape, or made to perform any type of sexual act through force, coercion, or threat of harm), physical abuse (defined as being attacked, hit, slapped, beaten up, or kicked), and witnessing violence (defined as witnessing sexual and/or physical abuse). The fourth and fifth components are adult experiences after age 18, including partner violence (defined as being pushed, grabbed, slapped, the recipient of a thrown object, punched, hit, choked, beaten up, slammed against a wall, burned, or kicked by a partner), and sexual assault (defined as rape, attempted rape, or made to perform any type of sexual act through force, coercion, or threat of harm). These five types of interpersonal trauma were coded as present or absent, and then the number of trauma types experienced was summed, resulting in a trauma composite score with a possible range of 0 to 5.

Parenting measures—The Child Abuse Potential Inventory Form VI (CAP; Milner, 1994) is a widely used, well-validated, 160-item self-report questionnaire that assesses risk for child physical abuse. It has a third grade readability level and is answered in an agree–disagree forced-choice format. The CAP has a variety of subscales. For this study, the overall score was used. Elevated CAP scores have been consistently associated with problems in parent–child interactions and are risk factors of both concurrent and future physical abuse (Milner, 1994).

The Parental Punitiveness Scale (PPS; Blane, Miller, & Leonard, 1988) is a 21-item self-report measure that assesses parental disciplinary style and potential for parental violence. The respondent is required to estimate his or her most frequent responses on a Likert-type scale given a number of hypothetical situations in which the child misbehaves or acts aggressively. The scale offers a description of seven discipline techniques ranging in degree of punitiveness from doing nothing to severe physical punishment. The scale is coded by a summed total severity score, with a lower score indicating more severe punishments. Previous studies have shown high punitiveness scores to be significantly correlated with more child welfare involvement and use of maladaptive coping (Hien & Honeyman, 2000). In the present sample, a principal components analysis with a rotated factor matrix revealed one main factor, and an alpha of .90 was found.

The Parent Child Conflict Tactics Scales (CTSPC; Straus, Hamby, Finkelhor, Moore, & Runyan, 1998) was used to measure parental discipline practices using the Psychological Aggression and Physical Assault subscales. The very severe physical assault questions were not administered for ethical considerations to protect confidentiality of research participants. Prevalence scores are derived by coding all responses with a 0 or 1 dichotomy to indicate whether a disciplinary tactic was ever used. Chronicity scores measure how often in the past year a tactic was used among those who used it at all. For the current study, a modified version of the chronicity score that includes participants who did not use the tactic during

the past year was used. Thus, our chronicity scores included all participants, and the lowest possible score was 0. Internal reliability of the CTSPC has been shown to be adequate, though alphas decline as the discipline tactics become more severe, as this is a reflection of the increased rarity of the events each scale measures.

RESULTS

Relationship Between Diagnosis and Trauma Exposure

As can be seen in Table 2, there was a significant association between the interpersonal trauma category and study group, ($\chi^2 = 42.44, p < .001$), with the comorbid group reporting significantly greater overall exposure to interpersonal trauma than the control group and with the SUD (adjusted residual = 1.0) and depressed (adjusted residual = 0.9) groups falling in between. Chi-square analyses were also conducted on specific types of trauma. Results show a significant association between childhood sexual abuse and group ($\chi^2 = 25.45, p < .001$), with significantly more being reported in the SUD, dep, and comorbid groups than in the control group. There was also significantly more childhood physical abuse reported in the comorbid as compared to the control group ($\chi^2 = 17.86, p < .001$) and more childhood witnessing in the comorbid group than in the control group ($\chi^2 = 8.30, p = .04$). There was significantly more adult partner violence reported in the SUD group than in the dep group ($\chi^2 = 15.76, p = .001$) and significantly more sexual assault in the comorbid group than in the control group ($\chi^2 = 12.10, p = .007$). In contrast, there was no association between study group and the noninterpersonal trauma category ($\chi^2 = 3.58, p = .31$). Most study participants experienced some noninterpersonal trauma, which was fairly evenly represented in the SUD, dep, comorbid, and control groups.

The trauma composite produced a range of scores, from 0 to 4 ($M = 1.35, SD = 1.21$). No participants in this sample reported having been exposed to all five trauma categories: 6.3% reported being exposed to four of the traumatic event categories, 11.9% reported being exposed to three, 23.3% reported being exposed to two, and 27.3% reported being exposed to one. Also, 55 participants (31.1%) reported exposure to none of the five categories.

A one-way ANOVA found significant differences among the four groups on trauma composite scores ($F = 11.89, p < .001$), with the SUD ($M = 1.68, SD = 1.25$), dep ($M = 1.40, SD = 1.28$), and comorbid ($M = 1.81, SD = 1.14$) groups showing significantly greater levels of trauma exposure than the control group ($M = 0.56, SD = 0.77$; Tukey honestly significant difference test, $p < .01$). Analyses were also run comparing SUD, dep, and comorbid groups on PTSD rates. There was no difference between groups on current PTSD diagnosis ($\chi^2 = 1.89, p < .19$), but the comorbid group had significantly more past PTSD than did the SUD and dep groups ($\chi^2 = 5.84, p = .05$).

Relationship Between Diagnosis and Parenting Variables

One-way ANOVAs were computed to determine if there were differences on parenting measures across the four study groups. Results show that there were significant differences on the CAP inventory, $F(3, 170) = 14.14, p < .001$, with the SUD, dep, and comorbid groups showing greater abuse potential than the control group (Dunnett T3 post hoc, $p < .01$, for all comparisons). There were, however, no significant differences among the four groups on any of the other three parenting measures.

Relationship Between Trauma Exposure and Parenting Variables

Pearson correlations were computed to assess the relationships between cumulative trauma exposure and specific types of trauma exposure and parenting measures. As can be seen in Table 3, overall, the trauma composite had the strongest associations and was significantly

correlated with all four parenting measures, indicating that as trauma exposure increases, negative parenting scores also increase (for the Punitive scale, low scores are indicative of greater punitiveness). In terms of specific types of trauma, childhood physical abuse was significantly associated with all four parenting outcomes, childhood sexual abuse was significantly associated with abuse potential and psychological aggression, childhood witnessing was significantly associated with abuse potential and punitiveness, adult partner violence was significantly associated with abuse potential and physical discipline, and adult sexual assault was not related to any of the parenting outcomes.

Hierarchical multiple regression models were used to assess the value of the trauma composite and PTSD diagnosis as predictors of parenting outcomes after controlling for demographic, SUD, and depression variables. Demographic variables included mother's IQ, socioeconomic status (SES), and age, and these were entered as a block in the first step. Substance use and depressive disorders were converted into two dummy variables: SUD diagnosis versus no SUD diagnosis and depression diagnosis versus no depression diagnosis. These were entered as a block in the second step. In the third step, PTSD diagnosis (PTSD diagnosis vs. no PTSD diagnosis) and the trauma composite were entered into the model.

Regression results are displayed in Table 4. For CAP scores, the final step explains 4% of the variability with the trauma composite being significant ($\beta = 2.59, p < .05$) and maternal IQ, SUD, and depression also being significant. For PPS scores, the final step explains 3% of the variability, with the trauma composite being the only significant predictor ($\beta = -.19, p < .05$) of the model. For CTS Psychological Aggression scores, the final step explains 6% of the variability with the trauma composite being significant ($\beta = .30, p < .01$) and maternal IQ also being significant. Finally, for CTS Physical Discipline scores, the final step explains 9% of the variability, with both the trauma composite ($\beta = .30, p < .001$) and PTSD diagnosis being significant ($\beta = -.16, p < .05$), in addition to maternal age.

It should be noted that separate regression analyses were also run looking at diagnosis for depression, SUD, and PTSD as current variables (current diagnosis vs. no current diagnosis). Overall, results showed no significant or meaningful differences between these analyses and those examining the impact of lifetime diagnosis, with one exception. On the CAP, a lifetime SUD diagnosis was significant, whereas a current SUD diagnosis was not. Given that results were generally identical except for this one finding, which indicated that lifetime diagnosis was a better predictor than current diagnosis, we chose to present only the analyses with lifetime diagnostic variables, as this is consistent with our lifespan model of psychiatric and substance use disorders.

DISCUSSION

The purpose of this investigation was to examine the relative contributions of maternal trauma history, posttraumatic stress, depression, and substance use diagnoses on parental behaviors in a sample of urban mothers. Findings support a significant relationship between exposure to interpersonal trauma and parenting difficulties. Specifically, cumulative maternal trauma was a significant predictor of abuse potential, punitiveness, psychological aggression, and physical discipline, even after controlling for demographic and diagnostic variables. These results are consistent with literature demonstrating that complex trauma (cumulative co-occurrence of different types of trauma typically beginning in childhood) is often associated with deficits across a range of life roles (van der Kolk, 1996). Current findings are also in line with those of Banyard and colleagues (2003), the only researchers to date who have systematically explored the impact of complex trauma on parenting behavior

and found it to directly affect outcomes of physical punishment, neglectful behaviors, and protective service reports.

Also as predicted, participants in the SUD, dep, and comorbid groups reported significantly higher levels of exposure to interpersonal trauma than did those in the control group. There were no differences, however, between the three diagnostic groups and the control group in terms of noninterpersonal trauma exposure. The rationale for separating out these two types of trauma exposure is based on studies that have shown that in comparison to accidents and natural disasters, a history of interpersonal trauma puts individuals at a significantly higher risk of developing subsequent psychiatric and interpersonal problems (e.g., van der Kolk et al., 1996). There are multiple potential reasons for the differential impact of interpersonal trauma, including that it is often at the hands of a known and trusted individual, tends to involve manipulation or force, and is more likely to engender feelings of betrayal, shame, and guilt. In contrast, events such as a natural disasters or accidents are more often single incidents, less likely to be experienced as personal, purposeful violations, and less associated with stigma and blame.

Results from the current study are less consistent with literature identifying maternal substance use and depressive disorders as significant risk factors for use of harsher punishment. As expected, a lifetime diagnosis of substance use and depressive disorders were significant predictors of child abuse potential but surprisingly were not significant predictors of punitiveness, psychological aggression, or physical discipline. Also unexpected was the finding that a lifetime PTSD diagnosis was not significantly related to abuse potential, punitiveness, or psychological aggression. PTSD was, however, significantly negatively correlated with physical discipline. Though this finding may seem paradoxical, given that certain PTSD symptoms are characterized by avoidance and emotional numbing, one might expect mothers who are high on these symptoms may be less engaged in discipline, particularly when it is of an aggressive or physical nature. One might speculate that dissociative processes could account for this counterintuitive finding. Future research should look more closely at the relationship between specific PTSD symptom clusters and various parenting behaviors.

There are a few ways to interpret findings that, for the most part, diagnostic status did not significantly predict harsher parenting strategies. First, substance use and psychiatric disorder diagnoses could be considered proxies that indicate some significant underlying common factor but by themselves may not be the best way to capture the range of problems and symptoms often associated with cumulative interpersonal trauma. For example, many clinicians and researchers have raised ways in which PTSD and other current *DSM-IV* diagnoses do not adequately delineate adaptations to complex trauma (Herman, 1992; van der Kolk, 1996). Extremely high rates of comorbidity between PTSD and other disorders such as depression, anxiety, substance abuse, somatization, and a variety of Axis II disorders have led to further reconsideration of relying on established diagnoses for this population. As a result a syndrome referred to as complex PTSD or disorders of extreme stress not otherwise specified (DESNOS) has been proposed as an alternative and more representative way of assessing individuals with cumulative interpersonal victimization (van der Kolk, Roth, Pelcovitz, & Mandel, 1993). The DESNOS diagnosis includes symptoms of chronic emotion dysregulation, aggression against self and others, dissociative symptoms, somatization, and character pathology. (Pelcovitz et al., 1997). Given the link that has been established between cumulative interpersonal trauma and DESNOS symptoms and their negative impact on adult interpersonal functioning (Roth et al., 1997), future research on parenting behavior should also incorporate measures of this syndrome.

Research in the area of parenting has already begun to consider the role of emotion regulation and its impact on parental stress, functioning, and behavior. In their literature review on parenting difficulties and maternal depression, Lovejoy and colleagues (2000) propose a model that conceptualizes parenting problems in terms of disturbances in emotion that are not specific to depression. In this framework, aggressive and coercive behaviors mothers display might be accounted for by negative affect states rather than by depression or other specific disorders per se. Emotion regulation deficits have been consistently demonstrated in substance abusing populations, including mothers (Hien & Honeyman, 2000; Hien & Miele, 2003; van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005). Our own research provides strong evidence for emotion regulation deficits as the most salient predictors of adverse outcomes such as female aggressive behavior with children (e.g., Hien & Honeyman, 2000) and partners (e.g., Hien & Miele, 2003) exceeding other variables, including psychiatric and substance use disorders. Clearly, more empirical exploration in this area is warranted to explore the degree to which emotion regulation deficits explain the robust link between trauma exposure and child abuse potential reported in the present study.

Another way to understand the lack of relationship between diagnosis and three of the parenting outcomes is to consider assessment issues. For example, looking at severity or number of symptoms of a disorder as opposed to dichotomous diagnostic variables may have yielded different findings. The lack of a continuous measure of symptom severity was a limitation of the current study. Relatedly, parents with subthreshold diagnoses may also be a risk for parenting difficulties and should also be included in future studies. Separately examining the impact of current and past diagnostic status is also important to further elucidate the relationship between diagnostic status and parenting. Differences in parenting measures used may also have led to discrepant outcomes. For example, the CAP is a continuous measure that includes hypothetical questions and is not limited to a specific time frame, whereas the CTS asks about actual behaviors and their frequency in the past year. As a result, participants may be more guarded in answering CTS questions for fear of negative consequences. Also, the CAP includes Distress and Unhappiness subscales, which contribute to the total score. The overlap between items on these two subscales and measures of depression could also help explain why the CAP was significantly related to depressive and substance use disorder diagnoses, in contrast to the other parenting measures, which do not include such items.

Study Limitations and Strengths

There are several limitations to the current study. First, the study sample is composed of urban and predominantly African American women. Although it is important to gather more information on this high-risk group, generalizability of findings may be limited. Also affecting generalizability is the inclusion criterion of having a child in the 9 to 15 age range. A third limitation is the reliance on self-report measures to assess trauma history and parenting. Validity of retrospective reports by adults of their own adverse experiences in childhood can be of concern, and information from collateral sources and independent records is preferable. Nonetheless, findings from several studies have indicated accuracy in retrospective reports of childhood victimization and good discriminant validity with the main limitation being underreporting (Widom, 1997). There are also many potential biases that may arise when mothers report on their own parenting practices, for example, some women may feel inclined to give more socially desirable accounts, whereas others, especially depressed women, are more likely to describe their parenting in a more negative light. Future studies should also include observational measures of parent-child interactions to minimize these potential concerns. Finally, the cross-sectional nature of the study design needs to be taken into account. Although current findings exhibit evidence for the

association between cumulative trauma and parenting deficits, a causal link between the two cannot be assumed without prospective studies.

This study also has several strengths. For example, specific demographic variables (maternal IQ, SES, and age) that have been shown in some studies to be associated with parenting behavior were controlled for in the analyses. We also employed a variety of established and psychometrically sound measures of parenting behaviors and had a sample size that is fairly large in comparison to the majority of studies in this area. These analyses add to an important growing literature examining the impact of complex trauma on interpersonal functioning and the link between parental victimization experiences and parenting behaviors.

Future Directions and Clinical Implications

A broader, more nuanced understanding of problematic parenting cycles is needed. In addition to further examining how trauma history can lead to parenting deficits, it is also critical to examine factors associated with resiliency. Future research should identify combinations of psychosocial factors that may increase the risk for maladaptive parenting and protective factors that can diminish the potential for intergenerational transmission of trauma and violence.

Though more research is necessary, evidence suggests that parental trauma history is significantly associated with serious parenting problems and a range of adverse child outcomes. Yet there has been little systematic development of interventions addressing these issues. Empirically based parenting skills curricula targeting specific trauma-related difficulties, such as regulating negative emotion and managing interpersonal conflict and power dynamics, are currently not available. More development and incorporation of trauma-specific interventions are needed to help parents understand how their traumatic experiences can negatively affect attitudes and behaviors and to build a repertoire of alternative parenting strategies.

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TABLE 1

Sample Demographics

<i>Variable</i>	<i>%</i>	<i>n</i>
Ethnicity		
African American	70.8	124
Hispanic	20.0	35
Caucasian	4.6	8
Asian	0.6	1
Other	4.0	7
Marital status		
Single	54.0	95
Married	15.3	27
Divorced or separated	19.3	34
Widowed	1.7	3
Living with partner	5.7	10
Not living with partner	4.0	7
Education		
Less than high school	33.0	58
High school degree	21.5	38
Some college	39.2	69
College degree or more	6.3	11
Employment		
Full-time	46.0	81
Part-time	27.0	44
Unemployed	11.4	20
Homemaker	9.7	17
Student	2.8	5
Retired or disability	5.1	9

NOTE: *N* = 176.

TABLE 2

Percentage and Frequency of Exposure to Types of Trauma Across Study Groups

Type of Trauma	SUD		Dep		Comorbid		Control		Sig.
	%	Frequency	%	Frequency	%	Frequency	%	Frequency	
Non-interpersonal trauma	75.6	31	67.5	27	83.0	39	68.8	33	<i>ns</i>
Interpersonal trauma	78.0	32	77.5	31	95.7	45	37.5	18	*** <i>a</i>
Childhood sexual abuse	53.7	22	52.5	21	51.1	24	10.4	5	*** <i>b</i>
Childhood physical abuse	39.0	16	37.5	15	53.2	25	12.5	6	*** <i>a</i>
Childhood witnessing	9.8	4	25.0	10	25.5	12	8.3	4	* <i>a</i>
Adult partner violence	58.8	20	17.2	5	27.8	10	23.8	10	*** <i>c</i>
Adult sexual assault	17.1	7	12.5	5	29.8	14	4.2	2	** <i>a</i>
<i>N</i>		41		40		47		48	

NOTE: SUD = Substance use disorder group; dep = Depressive disorder group.

^aControl < comorbid.^bControl < dep, sud, comorbid.^cDep < sud.* *p* .05.** *p* .01.*** *p* < .001.

TABLE 3

Correlations Between Trauma Exposure Variables and Parenting Outcomes

Trauma Exposure	Child Abuse Potential ^a	Parental Punitiveness ^b	Psychological Aggression ^a	Physical Discipline ^a
Trauma composite score	.35 **	-.17 *	.26 **	.23 **
Childhood sexual abuse	.27 **	-.06	.19 **	.11
Childhood physical abuse	.17 *	-.19 *	.24 **	.21 **
Childhood witnessing	.21 **	-.17 *	.12	.05
Adult partner violence	.28 **	-.03	.07	.20 *
Adult sexual assault	.14	-.13	.14	.13

*
 $p < .05$.**
 $p < .01$.^aHigher score denotes more severity.^bLower score denotes more severity.

TABLE 4
 Hierarchical Regressions Predicting Parenting From Demographics, Diagnosis, and Trauma Variables

Parenting Outcomes	Predictor Variables	R ² Change	R	Adj. R ²	F Value	df	β
Child Abuse Potential (CAP)	Step 1	.07**	.26	.05	4.02**	3,161	
	IQ						-2.09*
	SES						-1.90
	Age						-0.28
	Step 2	.19***	.51	.24	11.37***	5,159	
	SUD						2.14*
	Depression						3.91***
	Step 3	.04**	.55	.31	9.92***	7,157	
	PTSD						1.53
	Trauma composite						2.59*
Parental Punitiveness (PPS)	Step 1	.04	.21	.03	2.38	3,159	
	IQ						-0.08
	SES						0.13
	Age						0.10
	Step 2	.01	.24	.03	1.82	5,157	
	SUD						0.10
	Depression						-0.09
	Step 3	.03	.29	.04	2.01	7,155	
	PTSD						0.03
	Trauma composite						-0.19*
Psychological aggression (CTS-PAG)	Step 1	.05*	.23	.04	3.04*	3,159	
	IQ						0.20*
	SES						0.02
	Age						0.03
	Step 2	.02	.27	.04	2.39*	5,157	
	SUD						0.02
	Depression						0.00

Parenting Outcomes	Predictor Variables	R ² Change	R	Adj. R ²	F Value	df	β
Physical discipline (CTS-PAS)	Step 3	.06**	.36	.09	3.31**	7,155	
	PTSD						0.01
	Trauma composite						0.27**
	Step 1	.05*	.23	.03	2.91*	3,159	
	IQ						0.10
	SES						0.11
	Age						-0.17*
	Step 2	.00	.23	.02	1.81	5,157	
	SUD						-0.03
	Depression						-0.05
	Step 3	.09**	.37	.10	3.59**	7,155	
	PTSD						-0.16*
	Trauma composite						0.30***

NOTE: CAP = Child Abuse Potential Inventory Form VI; SES = socioeconomic status; SUD = substance use disorder group; PTSD = post-traumatic stress disorder; PPS = Parental Punitiveness Scale; CTS-PAS = Conflict Tactics Scale Psychological Aggression; CTS-PAS = Conflict Tactics Scale Physical Discipline.

*
p .05.
**
p .01.

p .001.