Significance of gender and age in African American children's response to parental victimization.

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The United States is a violent country (Trickett & Schellenbach, 1998), and our children's exposure to this violence is a national public health issue (Glodich, 1998). Violence exposure, as either a witness or victim, is rampant among inner-city youths (Hien & Bukkszpan, 1999). Although violence has decreased in recent years, youths in poor urban areas continue to be disproportionately exposed (Gorman-Smith & Tolan, 1998; Gorman-Smith, Tolan, & Henry, 1999). Children exposed to violence (either directly or indirectly) are vulnerable to serious long-term consequences, such as posttraumatic stress (Kilpatrick & Williams, 1997; McCloskey & Walker, 2000), delinquency (Farrell & Bruce, 1997; Gorman-Smith & Tolan; Miller, Wasserman, Neugebauer, Gorman-Smith, & Kamboukos, 1999), depression (Gorman-Smith et al.; Kliewer, Lepore, Oskin, & Johnson, 1998), and impaired attention (Ford, Racusin, Ellis, & Daviss, 2000).

Trauma and post-trauma reactions have far-reaching effects beyond the individual victim. Trauma can touch the victim's entire system (for example, partner, professional helper, family members, friends) (Figley, 1995a). In fact, the greater the degree of crisis (type of trauma event and length of stress reaction), the greater the system stress (Peebles-Kleiger & Kleiger, 1994). Concern must be extended beyond the direct victims of violence to include those indirectly affected. Indirect victims include those children who have heard about violence occurring to members of their immediate and extended family or acquaintances, Indirect victims are also those children who fear for their safety and that of their family and friends (Figley, 1995b).

Simply being in the presence of violence is harmful to children (Osofsky, 1995). Safety is an important concept in childhood (Cicchetti & Aber, 1998). Learning to trust others, exploring the environment, developing confidence in oneself, and expanding social contacts outside of the family are important childhood challenges (Cicchetti & Aber; Dahlberg & Potter, 2001). In a predictable, safe, and secure environment, children are more likely to explore their surroundings to learn about themselves, their relationships with others, and the world (Cicchetti & Aber; Garbarino, 1995a). Violence exposure undermines feelings of safety and restricts the range of experiences necessary for healthy development (Calvert, 1999).
Exposure to community violence affects children of all ages (Berman, Kurtines, Silverman, & Serafini, 1996; Ensink, Robertson, Zissis, & Leger, 1997; Glodich & Allen, 1998; Gorman-Smith & Tolan, 1998). The response to a perceived violent event may actually overwhelm very young children. For example, they may become obsessed with the details of the event. They may re-enact violent themes in play and unconsciously in dreams (Eth, 2001). Younger children are also more likely to engage in bedwetting, thumb sucking, somatic complaints, social withdrawal, and high anxiety during caregiver separation (Eth).

School-age children exposed to violence display externalizing and internalizing behaviors and show declines in concentration, school performance, and overall functioning (Eth, 2001; Garbarino, 1993; Ososky, 1999). These children have difficulty regulating their emotions, showing empathy, and integrating cognitions (Cicchetti & Kogosch, 1997). Such behaviors can interfere with the developmental challenges of adapting to the school environment and establishing positive peer relations. For example, traumatized children are often hypervigilant of their environment as a protective mechanism against additional traumatic events. This behavior can lead to environmental misinterpretations of hostile intent by others, thus, interfering with constructive social interactions (Dodge, Lochman, Harnish, Bates, & Pettit, 1997).

The effects of exposure to violence may differ from child to child. Following a similar exposure, children who internalize behave differently from those who externalize (Keane & Kaloupek, 1997; Keane, Taylor, & Penk, 1997). Moreover, there is an indication that gender influences traumatic response (Berton & Stabb, 1996; Miller et al., 1999; Singer, Anglin, Song, & Lunghofer, 1995). A study that examined the rates of depression and anxiety among bereaved children found that boys reported fewer depressive symptoms than girls did up to 18 months after the death of a parent (Ravels, Siegel, & Karus, 1999). Leadbeater, Kuperminc, Blatt, and Hertzog (1999) reported gender differences in the internalizing and externalizing of problems relative to stressful life events: Boys were at risk of externalizing their problems and girls tended to internalize (Dulmus, Ely, & Wodarski, 2003). This study examined the effects of age and gender independently and conjointly on reactions to trauma.

THEORETICAL MODEL

The adverse effects of trauma on people other than the direct victim have been observed and documented (Terr, 1979, 1981). The actual manner of symptom transfer is not definitively established by empirical research. However, one explanation for externalizing behavior trauma response is the social interactional model of development in which children come to view what they are exposed to as normative and model these behaviors (Lorion & Saltzman, 1993). The cognitive processing theory attempts to explain internalizing response to trauma, suggesting that making sense of community violence can be distressing as it may conflict with the child's beliefs that home and neighborhood are safe (Finkelhor, 1997; Garbarino, 1995a; Marans & Adelman, 1997). The idea that the environment is not safe can challenge the child's basic need to trust and be part of a secure attachment, which is a fundamental developmental process for future
health (Cicchetti & Rogosch, 1997; Pynoos et al., 1993). The struggle to cognitively assimilate violent events may lead to unwanted and uncontrolled thoughts resulting in anxiety and depressive symptomatology (Cicchetti & Toth, 1998). Violation of essential developmental processes can lead to internal dissonance and defensive behavioral and cognitive responses that are reminiscent of posttraumatic symptoms (Pynoos et al.; Pynoos, Nader, Frederick, Gonda, & Stuber, 1987). Clinical observations and developmental research indicate that children's distress responses to trauma may manifest as a range of impaired symptomatology (Garbarino, 1995b).

From a developmental perspective, age-relevant achievements in cognition, social relationships, and emotional development provide children with specific vulnerabilities and unique strengths to interpret traumatic events and master violence-related stress and arousal (Apfel, 1996). Internal and external factors, therefore, interact to establish resiliency or risk. Trauma exposure may lead to traumatization or distress when fear, anger, or stress overwhelms the child's internal attributes and protective mechanisms (Finkelhor & Asdigian, 1996). A particular concern is that traumatic stress reactions may prevent young children from resolving stage-salient developmental challenges, which may then present as psychopathology (Cicchetti & Toth, 1998).

In sum, the primary victims of violence are not the only sufferers. Having a personal relationship with someone who has been a victim of violence can have long-term negative consequences. An understanding of the developmental circumstance (that is, age) and gender-related response of children residing in a family where a parent has been victimized is vital to prevention and treatment efforts. Only by understanding the developmental effects of such exposure can we advance our remedial efforts.

**CURRENT STUDY**

Internal Review Board (IRB) approval was obtained from the State University of New York at Buffalo before study implementation. Initial analysis of the data set used in this study reported that children in the exposure group were experiencing symptoms in the borderline clinical range (total score of 67-70) as indicated by scores on the Child Behavior Checklist (CBCL) (Achenbach, 1991), and children in the control group fell below this range (Dulmus & Wodarski, 2000). Direct and indirect exposure to community violence can negatively affect children (Dulmus & Wodarski), often resulting in children showing their distress by engaging in internalizing or externalizing behavior. However, research is unclear regarding the age-related influences of the trauma response, as only a few studies have examined the link between community violence exposure and negative outcomes in children younger than age 10. One study suggested that younger children engage in internalizing behavior more than older children (Schwab-Stone et al., 1999). Fitzpatrick and Boldizar (1993) suggested that younger children indirectly exposed to violence are less likely to engage in internalizing behavior. Hence, there is no real understanding of how age may influence community violence exposure for young children.

Another factor that requires consideration is gender. Research has suggested that gender
influences the behavioral outcome of violence exposure (Schwab-Stone et al., 1999; Song, Singer, & Anglin, 1998). Our research question, thus was: do children behaviorally respond to perceived trauma differently according to age and gender?

METHOD

Sample and Procedures

A convenience sample of 30 children (exposure group), ages six to 12 years, whose parents had been admitted to Erie County Medical Center (ECMC) trauma unit (December 1997 through May 1998) in Buffalo, New York, for treatment of injuries sustained as a result of community violence, were recruited for this study. The principal investigator daily reviewed the surgery list for those individuals who had surgery because of a gunshot or stabbing wound. Such individuals were then approached to determine whether injuries had been sustained as a result of community violence. If so, they were asked whether they had a child between the ages of six and 12 who could participate in this study. One hundred percent of parents approached who met the criteria for the study and who had a child between the ages of six and 12 provided contact information on how to access their child's primary caregiver for study recruitment purposes. All primary caregivers contacted agreed to allow themselves and their child to participate in this study. Mothers, who were the dominant primary caregivers, in the exposure group offered names of other parents in their neighborhood with a child of the same gender, race, and age as their own child, but who had not had a parent who was a victim of community violence, to compose the control group. An exposure group (n = 30) and control group (n = 30) were matched on age, race, gender, and neighborhood. The sample size was adequate for a large effect size, a .80 level of power, and an alpha of .05 (Cohen, 1992). Inclusion criteria for the exposure group was: (1) The child participant had to be the biological child of the victimized person admitted to the Buffalo trauma unit; (2) The victimized person had to be a victim of community violence (thus, victims of domestic violence and self-inflicted wounds were excluded); (3) The victimized person had to be admitted to a medical floor for at least one night; (4) The child was not a witness to the parent's victimization; (5) The child was not receiving mental health services; (6) The child had no documented history of mental retardation; and (7) Only one child per family could participate.

The exposure and control group's female caregivers voluntarily provided, through interview and self-administered instruments, demographic and behavioral descriptions of their child during a one-hour appointment with the principal investigator two to eight weeks following the parent's hospitalization. Confidentiality was discussed and ensured. Each parent received $20, and each child $5, in addition to transportation if needed.

Measures

A form was developed requesting social and demographic data. In addition, the parent with whom the child resided completed the CBCL. The CBCL can be self-administered or administered by an interviewer and is designed to record in standardized format
children's (ages four to 18) competencies and problems as reported by their parents or caregiver. The 118-item checklist allows parents to evaluate the behavior of their children and provides a total score, as well as scores for internalizing and externalizing behaviors. It asks questions regarding a wide variety of symptoms and behaviors that children may have experienced in the past six months and asks parents to respond to each question with three possible answers: "not true," "somewhat true or sometimes true," or "very or often true." The CBCL is widely used and accepted with good reliability (r = .87) and validity (Achenbach, 1991).

RESULTS

Sample Characteristics

All children were African American, with 47 percent being females, and a mean age of nine years. Half of the sample was age six through eight. One child lived with an aunt and the remaining children lived with their mother. The mean number of siblings in the home was three, and the mean family gross income per month was $985. More than three-quarters of the victimized parents were men. Of those, 77 percent were shot and 23 percent had been stabbed. The average hospital stay was nine days, with a range of one to 24 nights. More than half of the youths had visited their parent in the hospital. Sixty-one percent of the youths were in daily contact with their parent before the victimizing event. The remaining youths had a minimum of monthly contact.

Statistical Analysis of CBCL Internalizing and Externalizing Scores

Internalizing Scores. A 2 (gender-male and female) x 2 (group-control or exposure) x 2 (agecode 1 = six to eight years and 2 = nine to 12 years) analysis of variance (ANOVA) was conducted on internalizing CBCL scores. There was a significant main effect for group, F(1, 52) = 9.27, p = .004 and agecode, F(1.52) = 5.6, p = .022. The control group had lower internalizing CBCL scores (Mr = 9.24, SE = 1.17) than the exposure group (M = 14.24, SE = 1.16). The youths age nine to 12 had higher internalizing CBCL scores (M = 13.68, SE = 1.16) than the six to eight-year-olds (M = 9.8, SE = 1.16).

Externalizing Scores. A 2 (gender-male and female) x 2 (group-control or exposure) x 2 (agecode) ANOVA was conducted on externalizing CBCL scores. There was a significant main effect for group, F(1, 52) = 12.73, p = .001 and gender, F(1.52) = 12.75, p = .001. The control group had lower externalizing CBCL scores (M = 6.27, SE = 1.31) than the exposure group (M = 12.86, SE = 1.30). Males had higher externalizing CBCL scores (M = 12.87, SE = 1.31) than females (M = 6.27, SE = 1.31).

Younger Age Group. Male and female youths ages six to eight years in the exposure group did not differ on their internalizing t(13) = 1.550, p = .145 and externalizing t(13) = -0.186, p = .855 CBCL scores according to independent t tests. Similarly, the independent t test was not significant for those six- to eight-year-old male and female youths not exposed to parental victimization on internalizing t(13) = .856, p = .408 and externalizing t(13) = 1.12, p = .284 CBCL scores (see Table 1).
Older Age Group. The independent t test was significant for males and females ages nine to 12 years in the exposure group on externalizing t(13) = -2.57, p = .023 and internalizing t(13) = 5.09, p = .000 CBCL scores. Youths ages nine to 12 years in the control group showed no difference between male and female internalizing t(13) = -.688, p = .503 and externalizing t(13) = .012, p = .990 scores (see Table 1).

Table 1: Mean CBCL Internalizing and Externalizing Scores for Control and Exposure Groups, by Age and Gender

<table>
<thead>
<tr>
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<th>6-8 year-olds Mean Scores</th>
<th>9-12 year-olds Mean Scores</th>
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</thead>
<tbody>
<tr>
<td><strong>Control</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>8.25/5.75</td>
<td>10.50/7.83</td>
</tr>
<tr>
<td>Female</td>
<td>6.00/3.71</td>
<td>12.22/7.78</td>
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<tr>
<td><strong>Exposure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>12.13/14.88</td>
<td>11.13/23.00</td>
</tr>
<tr>
<td>Female</td>
<td>12.86/8.00</td>
<td>20.86/5.57</td>
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Note: CBCL = Child Behavior Checklist.

**DISCUSSION AND IMPLICATIONS FOR PRACTICE**

Initial analysis of these data reported that children in the exposure group were experiencing symptoms in the borderline clinical range, and children in the control group fell below this range (Dulmus & Wodarski, 2000). The current analysis reports additional supportive findings in regard to gender and age-specific differences. No significant difference in male and female youths' internalizing and externalizing behavior at ages six to eight in either the control or the exposure groups was found. In other words, male and female youths in early childhood engage in both internalizing and externalizing behavior. However, youths exposed to parental victimization internalized and externalized to a greater degree, according to caregiver report, than those children who were not exposed. At age nine, there was a significant difference in behavior. In the exposure group, males externalized more than females, and females internalized more than males. In the control group, there was no significant difference in the internalizing and externalizing behavior of the male and female youths. Thus, the perceived trauma response may vary as a function of the child's gender and developmental level or age.

Research is beginning to suggest that internalizing and externalizing behavior is reciprocal (Hodges & Perry, 1999). For example, youths who engage in externalizing behaviors tend to be socially rejected, which can lead to internalizing behaviors (for example, withdrawal). Conversely, youths who internalize can be perceived by parents and teachers as passive aggressive and non-cooperative (for example, externalizing) (Shaw et al., 1998). This internalizing and externalizing behavior is the child's defensive coping and is influenced by gender (Carter & Levy, 1991; Dubowitz et al., 2001). Indeed,
females can be more reflective or passive, and males more antagonistic (Cramer, 1979; Erikson, 1964; Freud, 1933; Levit, 1991). Support for this premise was found in this study as well. However, the significance here is that both males and females internalize similarly in response to trauma according to age. This is pertinent information regarding assessment of an externalizing male. He may be externalizing because of internalizing a trauma exposure.

Young children respond to trauma by attempting to explain it. The cognitive level or age of the child influences the explanation. For example, a child in the preoperational stage of cognitive development (two to seven years) (Piaget, 1973) is said to view the world egocentrically. Thus, the self is at the root of the explanation for the trauma event. A child in the concrete operations stage of cognitive development (seven to 11 years) is able to produce several explanations for the trauma event, such as, blaming others, the self, or both. These distorted or dysfunctional schemas are born from stages of development not equipped to integrate traumatic circumstances. Moreover, the beliefs and attitudes formed during these stages are relatively stable and are the foundations for internalizing and externalizing behavior (Finkelhor, 1995) depending on gender (Levit, 1991). The traumagenic dynamic cites powerlessness as the fundamental dysfunctional cognition stemming from a trauma exposure (Finkelhor, 1997). Helplessness is a core belief for such disorders as anxiety, the need for control, and identification of self as either aggressor or victim, and is linked to depressive and aggressive behavior (Finkelhor, 1997).

Such knowledge has implications for practice as gender-specific assessment and intervention approaches must be used at younger ages than previously presumed. Moreover, feeling unsafe because of trauma exposure can lead to cognitive perceptions of chronic threat and feelings of powerlessness, which is associated with symptoms of psychological distress and maladaptive means of coping, including internalizing or externalizing behavior depending on gender. Failure to identify and intervene with children exposed to violence may result in a lifetime of social, emotional, and vocational difficulties. There is now a beginning understanding that gender and age are important influencing variables regarding a youth's behavioral response to trauma.

Limitations

This descriptive study of CBCL scores in a group of children recently exposed to parental trauma versus a similar group of children not recently exposed to parental trauma had a number of limitations. First, the design lacked random assignment and the small sample limits the findings. Second, all participants in the study lived in the same area, which increased the risk of confounding variables and decreased generalizability. Third, all findings were based on self-reported data from primary caregivers (mothers); it is therefore possible that certain events and experiences were overestimated, underestimated or otherwise distorted through recall or gender influences. Also, the study did not take into account the amount of contact the child had with their parent before the victimization, which may have affected study results. Another limitation is that the sociodemographics of the sample limit the generalizability of the findings because all
children in this sample were African American. Finally, there is no historical information regarding the child's primary trauma exposure.

**Future Research**

Additional research needs to be conducted in other locales, with a larger sample size, greater age range, and other racial backgrounds for results to be more conclusive. Studies need to be developed to examine the long-term effects of this type of perceived trauma and children. Although this study did control for the specific trauma of parental victimization, future research may want to focus on children's responses in relation to the gender of the parent who is victimized, as well as the type of the parents' victimizations (that is, beating, gunshot, stabbing) and circumstances surrounding the incidents as to the impact on children. Last, the development of empirically based gender-sensitive assessment instruments and interventions that respond to individual gender differences in the expression of symptoms related to trauma are essential (Feiring, Taska 1999).

**REFERENCES**


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