Family processes in the midst of urban poverty: What does the trauma literature tell us?[☆]

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Abstract

Consistent with a family systems framework, this paper examines the clinical and research literatures to clarify the connection between chronic trauma exposure and family processes with a focus on the social ecology of low-income, urban neighborhoods. Strong empirical evidence demonstrates the impact of chronic trauma on individual family members and, in turn, on multiple family subsystems. Additionally, there is evidence that living under chronically harsh, traumatic circumstances slowly erodes family processes, specifically structure, relations, and coping. However, existing research reflects the problems inherent in sorting out relationships among multiple, often interrelated factors. Future research requires comprehensive theoretical models, such as systemic, transactional, or ecodevelopmental, along with sophisticated research designs, prospective, longitudinal or intervention, and multilevel analytic methods.
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Keywords: Emotional trauma; Family processes; Parenting skills; Urban environments; Violence

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As demonstrated in the risk factor research, a child's response to trauma is heavily influenced by family context (Banyard, Rozelle, & Englund, 2001; Cohen, Berliner, & Mannarino, 2000; Cohen & Mannarino, 1996; Deblinger, Steer, & Lippmann, 1999; Pynoos et al., 1993; Wyman et al., 1999). In fact, disruptions in family functioning following trauma predict development of symptoms better than event-related variables, such as duration or extent of loss (Pfefferbaum, 1997). Identification of specific family characteristics that effect trauma outcomes has received a great deal of attention; however, less consideration has been given to the impact of trauma exposure on family functioning.

This paper examines the clinical and research literatures to clarify the connection between chronic trauma exposure and family processes with a focus on the social ecology of low-income, urban neighborhoods. Consistent with a family systems framework, this critical review explores the strength of existing empirical knowledge regarding the impact of trauma at multiple levels within the family including data supporting a direct, casual link. To conduct this review a search of data bases including PsychINFO, Academic Search Premier, Journals @ OVID, MedLine, and PILOTS (maintained by the National Center for PTSD) was run using the following keywords: psychic trauma, chronic trauma, posttraumatic stress disorder (PTSD) and family functioning, family processes, parenting, couples, siblings, coping. Tables 1 and 2 summarize relevant studies related to parenting and family functioning following a

Table 1
Effects of stress and trauma on parenting and parent–child relations

Authors	Sample	Results	Comments
(Banyard, 1997)	518 low-income primarily AA mothers, 237 with CPS reports, 281 controls, 430 used. Trauma: abuse	History of child sexual abuse associated with negative views of self as parent, history of child sexual abuse and depression related to use of physical discipline/violence	Self-reports of abuse history and parenting, highly stressed sample, deficit model
(Bar-On et al., 1998)	Holocaust survivor families, 30 comparisons; 57 children of survivors. Trauma: political violence	Consistent findings of a relationship between maternal trauma and disorganized mother–infant attachment; creates fear on part of the parent which creates fright in infant; parents preoccupied with loss (unresponsive to children's needs, confusion of past and present), focused on keeping current family intact, conspiracy of silence, lack of control over emotions, overprotectiveness, parentification; survivor guilt; direct exposure to parental symptoms	Quantitative and qualitative studies
(Burchinal, Follmer, & Bryant, 1996)	62 AA mothers, low-income. Trauma: poverty	Support, as measured by network size, buffers impact of stress on parent, parenting	Correlational data, longitudinal study, interview, observation, and self-report data
(Ceballo & McLoyd, 2002)	262 parent–child dyads; single AA mothers, poverty, high crime neighborhoods. Trauma: community violence	Neighborhood conditions moderated beneficial of social support on nurturance and punitive parenting strategies	Convenience sample, cross-sectional, objective and neighbor measures, self-report measures of other variables
(Conger et al., 2002)	422 AA families with 10–11 years old. Trauma: maternal psychopathology/SA	Economic pressure significantly associated with depressed mood; caregiver distress significantly associated with conflict and withdrawal	Cross-sectional, multi-source assessment, no assessment of strengths or protective factors

Table 1 (*continued*)

Authors	Sample	Results	Comments
(Costello et al., 2003)	1420 children aged 9–13 years old; rural; AI and White. Trauma: poverty	Increased income related to fewer behavioral disorders; this relationship was mediated by parental monitoring and supervision	Longitudinal over 8 years
(Dickstein et al., 1998)	182 mothers, mostly white. Trauma: maternal psychopathology/SA	Mothers diagnosed with major depression had poorer quality of involvement when interacting with their children compared with non-ill mothers (on the order of approximately one-half of a standard deviation). Mothers diagnosed with other disorders were not found to have significantly different quality of interaction with their children compared with non-ill mothers	Longitudinal investigation of infants and toddlers at risk for psychopathology
(Hill & Herman-Stahl, 2002)	103 mothers, 54 AA, 49 E-A Trauma: maternal psychopathology/SA	Maternal social network involvement influenced involvement with children; neighborhood safety was negatively associated with maternal depression which was related to inconsistent discipline	Method variance concerns, single reporter bias, concurrent data
(Levendosky & Graham-Bermann, 2001)	120 school-age children, community or DV shelter, 7–12 years old, 50% white, 39% AA, 11% others. Trauma: family violence	Exposure variables related to DV related to mother's PTSD symptoms which in turn are related to decreases in parenting effectiveness including less warmth and control or ability to control arousal	Single reporter bias; focus on women's parenting
(Lewin & Bergin, 2001)	38 nonoffending mothers of sexual abuse victims, 27 mothers of nonabused children; 1–4 years old. Trauma: abuse	Maternal history of abuse did not affect maternal distress or attachment behavior; mothers of victims showed increased depression, anxiety, and decreased attachment behaviors when compared to mothers of nonabused children	Small sample size, correlational data, videotaped assessment of attachment behaviors

(Locke & Newcomb, 2004)	237 mothers and 81 fathers, community sample. Trauma: maternal psychopathology/SA	Maternal SA problems directly influence the quality of parenting by reducing effectiveness; no support for parentification; maltreatment as a child also had negative effects on parenting	Self-report retrospective data, 2 time points
(Mahoney, Boggio, & Jouriles, 1996)	26 intact families, mainly Caucasian. Trauma: conflict	Poor marital functioning associated with positives in parenting and parent–child interaction – sensitivity, facilitative behavior, strong parent–child coalitions	Laboratory study, child clinical sample, intact families; mother–son interactions only
(Magnus, Cowen, Wyman, Fagen, & Work, 1999)	261 2nd–6th graders. Trauma: stress	Studies consistently demonstrate that a warm, nurturing parent–child relationship buffers children from highly adverse circumstances for both AA and white families	Parent and teacher ratings, cross-sectional design
(Manion et al., 1996)	93 parents ESA, 136 non-clinical comparison parents. Trauma/stressor: abuse	ESA mothers reported greater distress, poorer family functioning, less parenting satisfaction; environmental support mediated mother's distress; acute and delayed reactions	Parental self-report
(Marcenko, Kemp, & Larson, 2000)	127 urban, low-income AA women with abuse histories. Trauma: poverty, abuse	High incidence of childhood abuse reported and related to heightened distress and heavy abuse, SA and parenting— daily parenting role, responsiveness, responsibility, protection compromised, parental capabilities may still be intact; women with abuse histories and SA still score high on parental attitudes, i.e., empathy and distinct parent–child roles, still love their children, feel guilty about family problems related to their SA	Deficits focus, maternal self-report measures of abuse history, substance use, parenting, etc.
(Murry et al., 2001)	383 AA families, 10–11 y/o. Trauma: poverty	Stressors, including racial discrimination, are linked to maternal psychological distress and parent-child relations	Cross-sectional design,

Table 1 (*continued*)

Authors	Sample	Results	Comments
(Newcomb & Locke, 2001)	383 parents, ethnically diverse community sample; intact families, employed full-time.	Linked child maltreatment to poor parenting, sexual abuse contributed to aggressive parenting; gender differences Trauma/stressor: abuse	Retrospective maltreatment self-reports; limited factors of intergenerational transmission
(Parappully, Rosenbaum, van den Daele, & Nzewi, 2002)	16 parents out of a sample of 65, son/daughter murdered. Trauma: community violence	Identified positive outcomes and processes that facilitated including acceptance, finding meaning, personal decision-making, and compassion shown to others	Interview data with qualitative analysis
(Pinderhughes, Nix, Foster, & Jones, 2001)	368 mothers, AA or E-A, urban or rural, low-income. Trauma: poverty	Significant findings indicating relationships between the neighborhood characteristics of poverty and danger with decreased parental warmth; danger to harsh interactions	Prospective, longitudinal
(Pinderhughes et al., 2000)	978 parents, kindergarten children, 16% AA. Trauma: stress	Stress predicted less positive perception of child, intense cognitive–emotional processes (attribution of intent, future implications) in turn predicted harsh discipline; SES and discipline relations—more stress leads to more reactive parenting and harsher discipline, AA highly susceptible	Single reporters response bias, cross-sectional design
(Repetti & Wood, 1997)	13 mother–child dyads, ethnic minority, single working, low income parent, day-care study. Trauma: poverty	Raters saw mothers as more withdrawn in that they spoke less and were less attentive during reunions and less loving in that they were less affectionate verbally and physically on stressful days; children responded by being better and trying to positively engage their parent but appeared more dysphoric	Videotapes of interactions, self-rating for 5 days

(Valiente et al., 2004)	174 children, 10 years old, 85% white. Trauma: stress	Mothers' negative emotional expression related to negative coping (nonconstructive) in children which was in turn related to child's stress level, dominant negative emotional expression may increase emotions during stressful events	Data collected at 2 time points, laboratory, diary methods
(van Ijzendoorn & Bakermans-Kranenburg, 1996)	33 studies on adult attachment. Trauma: poverty	Low SES related to dismissing attachment representations and unresolved childhood loss/trauma as compared to non-clinical mother samples, affect parent–child relationships	Meta-analysis
(Wicke & Marwit, 2000–2001)	76 parents of murdered children, 12 parents of children killed by sudden accidents; White, married. Trauma: community violence, acute trauma	Assumptive world views affect the grief experience, parents of murdered children associated with negative world views of benevolence	Cross-sectional, self-report questionnaire
(Wyman et al., 1999)	756 inner city, 2nd and 3rd grades, 55% AA, 27% White, 16% Hispanic. Trauma: urban contexts	Resilient vs. stress, affected children experienced more responsive parenting, nurturance, consistent discipline, authoritative discipline, beliefs in child's efficacy, optimism about child's future	Retrospective parent-report

Table 2
Effects of stress and trauma on family processes

Authors	Sample	Results	Comments
(Ackerman et al., 1999)	138 AA children and 38 White children, preschool. Trauma: instability	Instability defined by residential moves, number of adult/caregiver interpersonal relationships, number of families with which child has lived, serious childhood illness, and negative life events	Longitudinal data, caregiver and teacher reports, child outcomes
(Barbarin, 1999)	116 children (8–12 years old) and 66 adolescents (13–17 years old), sickle cell disease. Trauma: illness	Family functioning significantly related to child adjustment; parental anxiety and worry about the illness was particularly salient to maladjustment	Interviews with child and parent; cross-sectional data
(Barakat et al., 1997)	309 subjects, cancer survivors children and their parents, 209 healthy children and their parents. Trauma: illness	Parents of cancer survivors had more PTSD symptoms than controls, associated with perceived life threat, family and social support	Mailed questionnaires, controls reported moderate stressors
(Chaitin, 2003)	20 families Holocaust survivors. Trauma: war	Family coping typologies—victim families depression, worry, fear, mistrust, clinging; fighter families need to succeed; numb families silence and little emotional expression, resignation; families need success at all costs; "life goes on" families acknowledge trauma but no need for total success; split families	Interviews, qualitative methods
(Clark et al., 2000)	143 disadvantages families. Trauma: poverty	Moderate correlations between disadvantage and dysfunction	Cross-sectional, interviews and self-report
(Davidson & Mellor, 2001)	50 children of male VV, 33 civilian peers. Trauma: war	Veterans' PTSD status related to family dysfunction specifically in emotional expression and problem-solving	Snowballing recruitment; data on only one child per family, self-report, cross-sectional

(Davies, Myers, Cummings, & Heindel, 1999)	112 children across 3 age groups, middle class community sample. Trauma: family violence	Destructive conflict history related to sensitization, negativity, preoccupation, distress, vigilant re: interpersonal interactions with the family. Use escape and intervening to regulate exposure. Related to avoidance of conflict, less hope about future	Experimental manipulation, self-report data only, cross-sectional data
(Friedemann & Webb, 1995)	39 middle class couples. Trauma: instability	Initial distress correlated with stronger families, mental health negatively correlated with family stress	Repeated measures following unemployment and 6 years later
(Gaudin et al., 1996)	103 neglectful, 102 non-neglectful poor families, 64% AA. Trauma: neglect	Mothers of neglectful families reported more conflict and less emotional expression, coders rated neglectful families as less organized, more chaotic, less clear leadership, less cohesive, less verbally expressive, less positive and more negative affect expression, more unresolved conflict, more isolated than non-neglectful families	Self-report and observation, cross-sectional data
(Gomel et al., 1998)	Multi-ethnic sample, 97 AA, 110 Latinos, 78 E-A. Trauma: poverty	Significant differences between ethnic groups related to the effects of economic hardship on family functioning	Mixed-method design, convenience sampling, snowball recruitment, self-report, cross-sectional
(Greeff & Human, 2004)	39 families, South Africa, loss of a parent. Trauma: illness	Support, intrafamilial assistance and support from extended family and friends had greatest positive effect on coping. Collaboration and commitment to the family was also instrumental. Involvement in religious community and religious beliefs provided avenue to understanding and acceptance of the loss	Cross-sectional, survey methods, qualitative and quantitative analyses

Table 2 (*continued*)

Authors	Sample	Results	Comments
(Higgins & McCabe, 2003)	95 adults from community sample. Trauma: abuse	Family environment during child-hood–positive physical affection, cohesion, adaptability–related to child maltreatment	Small sample sizes, reporter bias, retrospective data
(Jordan, 1991)	24 families. Trauma: illness	Loss histories over 4 generations, women with + loss histories come to expect less involvement and connection with family	Standardized measures, FACES III
(Jordan et al., 1992)	1200 male Vietnam Vets. Trauma: war	Current PTSD related to severe family dysfunction, problems with parenting, and increased family violence	In-depth, face-to-face interviews
(Kazak et al., 1997)	130 leukemia survivors + parents, 8–19 years old and comparison group of 155 children without an illness, mostly Caucasian, more minorities in comparison group. Trauma: illness	Mothers and fathers of survivors had higher IES-avoidant symptoms, total IES symptoms, and PTSS than comparisons—these symptoms related to family satisfaction, communication, support network. Symptoms interfere with daily life; Family satisfaction and communi-cation closely linked to parent symptoms; cancer group of parents showed PTSD symptoms compared to controls; social support attenuated parental symptoms	Majority of families rated moderate–severe events, comparison families rated a significant event; concerns re: Type I error; single measures 1 year following treatment; child and parent ratings
(Kilic et al., 2003)	49 children, 7–14 years old, and their parents ran-domly chosen from 800 families living in survivor camps in Bolu, Turkey. Trauma: earthquake	Earthquake survivors, father showed irritability, detachment, and distress at reminders, mothers showed sleep disturbances (waking up screaming) and avoidance; PTSD fathers saw greater problems	Cross-sectional data, child and parent report

		in the family related to affective responsiveness, involvement, general functioning than non-PTSD fathers, no differences between PTSD and non-PTSD mothers; families scored higher than the norms on roles and behavior control	
(Kitzmann, 2000)	40 couples, 6–8 year-old sons, middle class, 1 AA family. Trauma: family conflict	Marital negativity related to less cohesion, less support and engagement with child, more negativity, less warmth, and more autocratic parenting	Observational ratings of experimental paradigm
(Kotchick, Forehand, Armistead, Klein, & Wierson 1996)	75 families with ill father. Trauma: illness	Avoidant coping associated with poorer adjustment of individual family members	Data from both parents and 1 child; self-report data, correlational, cross-sectional
(Leske, 2003)	127 families, auto accidents, gunshots, coronary incidents. Trauma: acute trauma	Demographic differences between groups, families of GSW victims experienced high stress overall and used fewer coping strategies	Convenience sample from intensive care setting, self-report data, cross-sectional
(Margolin, Christensen, & John, 1996)	72 distressed and non-distressed families, predominantly White. Trauma: family violence	Distressed families showed continuance and spillover of conflict more than non-distressed families; conflict in the marital relationships was linked to daily satisfaction as well; may create long-term changes in family dynamics	Self-report and daily telephone interviews
(Meyers et al., 2002)	205 families, neglectful and non-neglectful families. Trauma: neglect	Family health as reported by mothers related to level of maternal depression and stressful life events; maternal personal maturity related to family health as rated by case-workers and coders	Video-taped interactions; one of the few studies with family functioning as outcome

Table 2 (*continued*)

Authors	Sample	Results	Comments
(Navia & Ossa, 2003)	55 victims of kidnapping and 158 family members, Columbian, middle-upper class. Trauma: political violence	During captivity, general distress related to family roles, behavior control, cohesion, and general family functioning; post, distress was related to worse family functioning and more passive appraisals; family coping did not relate to adjustment	Family interviews and paper-and-pencil measures, cross-sectional data
(Northam, Anderson, Adler, Werther, & Warne, 1996)	Insulin-dependent diabetic children and families. Trauma: illness	Symptoms of distress found in family following diagnosis of illness resolved by 12 months follow-up, families became less flexible over the year, results varied according to informant, age of child, SES	Repeated measures following diagnosis and, 1 year later, standardized measures
(Reinemann et al., 2003)	57 adolescents, 20 histories of abuse. Trauma: abuse	Residential treatment; sexual abuse sample reported more harsh, punitive discipline, blurred boundaries	Small sample, K-SADS, self-report measures
(Rossman, 1999)	500 children, 4–13 years old, community and shelter samples. Trauma: family violence	SES linked to more PTSD symptoms, greater family stress predicted PTSD symptoms, parental violence linked to PTSD	Mothers, children, shelter counselors report, path analysis, concurrent data
(Weine, Vojvoda, Hartman, & Hyman, 1997)	Bosnia refugee family. Trauma: political violence	Recovery from the experience of genocide, looked at resilience and creativity in the children	Case study
(Witmer & Culver, 2001)	13 studies on Croatian/Bosnian refugees. Trauma: political violence	11 focused on individual responses, 2 on families; pathogenic vs. salutogenic responses; resiliency seen as related to strong family and cultural identities, maintaining traditions and rituals, supportive family environment, flexibility and adaptation	Review of the literature

wide variety of traumas. Studies were selected for inclusion based upon: 1) publication in the last 15 years), 2) samples exposed to a trauma or chronic, highly adverse circumstances, and 3) measures related to parenting or parent–child interactions and family unit functioning. Finally, complexities inherent in this research are discussed and directions for future research and intervention are presented.

1. Definition of terms

1.1. Chronic trauma within low-income, urban neighborhoods

Trauma begins with a stressor(s) defined as an event or situation that upsets the organism's (individual or family) equilibrium, requiring a righting response. This stressor must involve life-threat or threat to physical integrity and cause terror, helplessness, or disorganized behavior in children (APA, 1994). Families living in high-risk, low-income, urban neighborhoods risk exposure to multiple traumatic events within a context loaded with non-traumatic events that exacerbate the level of distress experienced (Kaysen, Resick, & Wise, 2003). "Episodes of actual danger are not the entire stressor. The chronic stressor at issue is the constant presence of the possibility of vulnerability to dangerous forces that cannot be controlled or avoided (Wheaton, 1997, p. 57)".

Living in poor urban neighborhoods creates disproportionate risk for experiencing community, family, and individual traumas such as crime, gang activity, family violence, and victimization/incarceration, chronic illness, and/or death of a family member (Black & Krishnakumar, 1998; Buckner, Bassuk, Weinreb, & Brooks, 1999; Coulton, Korbin, & Su, 1999; Dempsey, Overstreet, & Moely, 2000; Dubow, Edwards, & Ippolito, 1997; Elliott et al., 1996; Esposito, 1999; Fitzpatrick & Boldizar, 1993; Furstenberg & Hughes, 1987). It also significantly increases exposure to social and physical public incivilities, environmental hazards, residential instability and/or homelessness, social isolation, financial instability, lack of employment opportunities with long-term joblessness, and reliance on public assistance to provide only a partial listing of community level stressors (Allison et al., 1999; Buckner et al., 1999; Coulton et al., 1999; Dempsey et al., 2000; Dubow et al., 1997; Elliott et al., 1996; Esposito, 1999; Figueira-McDonough, 1998; Fitzpatrick & Boldizar, 1993; Furstenberg & Hughes, 1987; Marsella, 1998; Tigges, Browne, & al, 1998). Moreover, daily hassles related to poverty and urban life may be as or more potent than the experience of major negative life events (Hammack, Robinson, Crawford, & Li, 2004; Seidman et al., 1998).

1.2. Family processes

Family processes are the various ways that families structure their daily lives, interact, share experiences, and deal with problems. Family processes are multi-dimensional and typically represent behavioral continuums. Norms and adaptive significance of specific behaviors along these continuums are contextually and culturally dependent. For instance, a behavior that promotes safety in a dangerous environment may not be adaptive with respect

to normative development. Family processes include structure, relations, and coping and these are described in more detail.

1.2.1. Structure

Provision of structure, such as allocation of power, differentiation of roles, organization of daily life, division of labor, and norms or standards for behavior, etc., is a basic family management function. Families build adaptive structure through parental leadership with establishment of clear role definitions and boundaries, predictable routines, unambiguous rules and expectations for children's behavior, fair and consistent discipline, and adequate monitoring and supervision (Capaldi & Patterson, 1996; Hawkins, 1999; Hawkins, Arthur, & Catalano, 1995; Tolan, Gorman-Smith, Huesmann, & Zelli, 1997; Wasserman & Miller, 1996). Less adaptive family structure ranges along a continuum from missing, chaotic, laissez-faire to rigid, over-controlling, and militaristic. Structure is important but must be established within the context of cohesive, committed family relations (Hill, Fonagy, Safier, & Sargent, 2003; Stattin & Kerr, 2000).

1.2.2. Relations

Family relations involve a sense of belonging, connection, and pleasure being together. Families with adaptive relations are securely attached, cohesive, highly committed, and connected. Less adaptive family relations range along a continuum from enmeshed, overly dependent, clingy to disorganized or insecurely attached, highly conflicted, poorly bonded, and isolated. Within family relationships children learn to regulate their emotions, to seek comfort from and to give comfort to others, and to respond adaptively to change and trauma (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2002; Gagne & Bouchard, 2004; Hill, Fonagy, Safier and Sargent, 2003; Steinglass, 2001).

1.2.3. Coping

Family coping involves strategies used to contend with emotional, cognitive, and physiological responses to stress, to prepare for upcoming events, and to deal with the aftermath of past events. Examples of family coping include emotional regulation, support-seeking, problem-solving and resource management, and creation of a shared belief system and interpretive frame (Stevenson, 1998). Typically families use a variety of coping strategies matched to the specific challenge they are facing (Peacock & Wong, 1996). Families who successfully cope with chronic burdens 1) believe they have the necessary resources and skills to overcome trauma (Parker, 1999), 2) manage their resources by finding, creating, exchanging, and/or saving resources and using them in ways that fill the most critical demands (Dollahite, 1991), 3) choreograph family members' expressions of intense emotion to achieve emotional control (Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001; Cummings & Davies, 2002), and 4) arrive at a coherent and positive understanding of the stressor that is consistent with the family's shared worldview (McCubbin & McCubbin, 1993). Negative family coping ranges from passive, avoidant, constricted, inflexible, non-collaborative to reactive, automatic, indiscriminant, and dysregulated.

2. Impact of trauma on the family

As in any systems model, an event that impacts any member of the family influences every other family member as well as all other family relationships and also the family as a whole (Angell, Dennis, & Dumain, 1998; Dickstein et al., 1998; Figley, 1988; Kitzmann, 2000; Medalie, 1997) (refer to Fig. 1). Accordingly, sorting out the effects of chronic trauma on family processes requires extrapolation from research on relationships among individual family members, dyadic or subsystem processes, and the family unit.

2.1. Effects on individual family members

Exposure to traumatic events creates emotional distress which can promote both physical and mental illnesses (Scheier, Botvin, & Miller, 1999). However, exposure does not necessarily lead to problems. Individual responses to trauma span positive growth
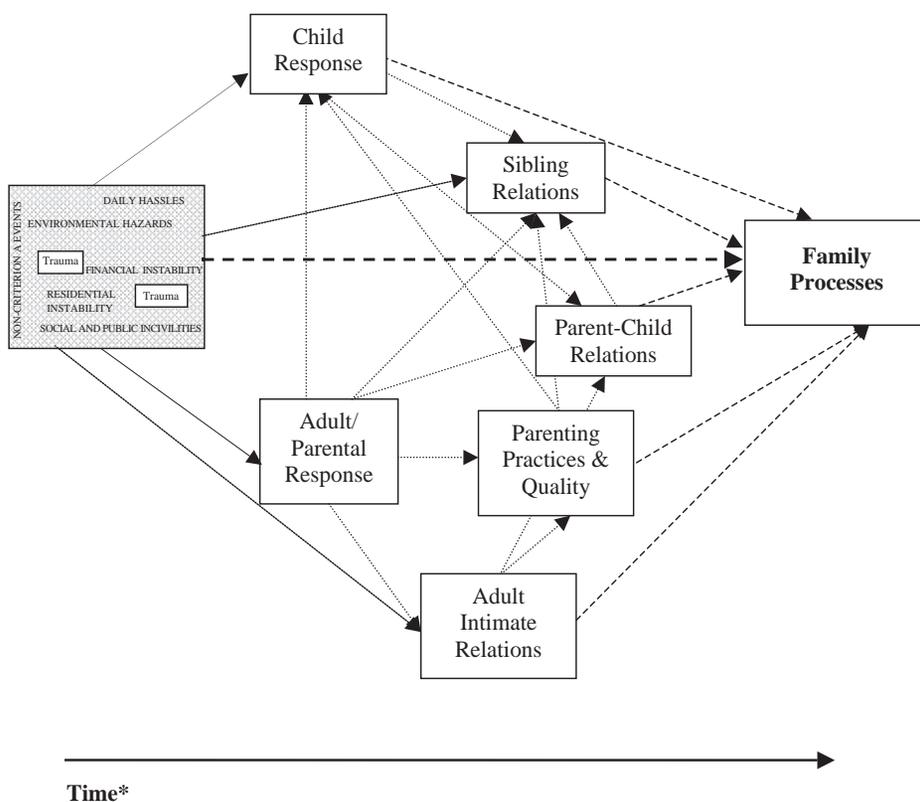
Fig. 1. Hypothesized pathways for the impact of chronic trauma on family processes.

experiences to chronic debilitating disorder. The solid lines in Fig. 1 represent the hypothesis that exposure to chronic trauma directly effects individual family members.

2.1.1. Child reactions

Investigations of poor, inner city children document extremely high rates of exposure to trauma (70–100%) (Dempsey et al., 2000; Fitzpatrick & Boldizar, 1993). Yet, the majority of children demonstrate remarkable resilience (Masten, 2001; Rousseau, Drapeau, & Platt, 1999). Nurturing, engaged parenting and family stability are clearly linked with such positive outcomes for children. Resilient children also play a significant role in reinforcing parental involvement and adaptive family coping.

Many children, even resilient ones, show distress following trauma exposure. Their reactions may include increased monitoring of their environment for potential dangers, anxiety when separated from trusted adults, or increased need for affection, support, and reassurance. Trauma re-enactments may occur in their play. Short-term, such reactions may signal appropriate upset and serve as strategies for successful adaptation.

Persistence of such reactions or interference with functioning may be labeled posttraumatic stress symptoms (PTSS) which progress to PTSD in 23–29%, up to 70% of children victimized by violence (Berton & Stabb, 1996; Carrion, Weems, Ray, & Reiss, 2002; Cooley-Quille, Turner, & Beidel, 1995; Fitzpatrick & Boldizar, 1993; McCloskey & Walker, 2000). PTSD is a psychiatric diagnostic classification requiring exposure to a trauma along with dysfunction related to symptoms in three clusters: re-experiencing the event, avoidance of stimuli associated with the trauma and numbing of responsiveness, and increased arousal. The five most common symptoms in children are avoidance of thoughts and feelings, distressing recollections, inability to recall specifics, distressing dreams, and difficulty concentrating; while the three most distressing symptoms are irritability/anger, distressing dreams, and detachment (Carrion et al., 2002). Childhood trauma responses may also include affective or behavior disorders (Dempsey, 2002; Pfefferbaum, 1997).

With prolonged exposure, children may display symptoms of complex traumatic stress disorder including affect dysregulation, disturbed relatedness, changes in consciousness and self-perception, cognitive distortions regarding trauma and perpetrator, and changes in systems of personal meaning (Briere, 2002; Cummings & Davies, 2002; Terr, 1985, 1991). Longer term, childhood victims of chronic trauma risk development of a lack of basic trust in the ability of others to protect them, a view of the world as threatening, a lack of confidence in their own ability to effectively handle challenges, and a dysregulated nervous system (Perry & Pollard, 1998; Pfefferbaum, 1997; Pynoos, Steinberg, & Goenjian, 1996; Warren, Emde, & Sroufe, 2000).

2.1.2. Adult reactions

Large epidemiological studies document lifetime prevalence rates of exposure and PTSD in general civilian populations (Ozer, Best, Lipsey, & Weiss, 2003). In these studies, over 50% of adults report exposure to a trauma with between 7.8% and 12.3% meeting criteria for PTSD during their lifetime. Women appear to suffer from the disorder at twice the rate of

men. This gender difference is significant to families within poor, inner city environments as they are increasingly headed by single women (Ceballo & McLoyd, 2002).

Initial reactions to trauma include heightened distress coupled with sleep disturbances, irritability, concentration problems, and somatic concerns. Social withdrawal is common and, in the short-term, may provide respite and a chance for recovery of baseline functioning (McEwen, 1998). Common PTSD symptoms are preoccupation with the trauma, avoidance of trauma-related people and memories, problems adjusting at work or in activities of daily living, fear/worry over safety of other family members, anger along with fantasies about retribution, and re-examination of life values and worldview (Falsetti, Resick, & Davis, 2003; Peebles-Kleiger & Kleiger, 1994). Previous victimizations, such as child physical or sexual abuse, are typically associated with more distress overall and increased PTSD (Deblinger et al., 1999; Hiebert-Murphy, 2000).

With chronic exposure, adults demonstrate preoccupation with the past, confusion about past and present, flashbacks, avoidance of intense emotions or lack of emotional control, depression, and psychotic breaks. Social withdrawal may lead to social isolation (Bar-On et al., 1998; Scheeringa, Peebles, Cook, & Zeanah, 2001; Scheeringa & Zeanah, 2001). Finally, a high incidence of stress-related physical illnesses (diabetes, heart disease, obesity, and sleep disturbances), psychopathology, and substance abuse take a toll on adult family members (Clements & Burgess, 2002; Graham-Bermann, 1996; Peebles-Kleiger & Kleiger, 1994).

2.2. Effects on dyadic processes

Individual family members form dyadic subsystems such as adult intimate partnerships, parent–child, and sibling relationships. The dotted lines in Fig. 1 represent the multiple hypothesized pathways among chronic trauma and dyadic family subsystems. They also correspond to hypothesized indirect or mediated relationships at two different levels, for example, the effect of adult trauma reactions on intimate partnerships and the effect of parent–child interactions on siblings' reactions.

2.2.1. Couples reactions

Studies on traumatized couples predictably include married samples who have dealt with military deployment, combat experiences/political violence, or chronic illness/death of a child. Mixed effects are reported in the literature; couples either become closer and more committed to each other or dysfunctional/dissatisfied/dissolve their relationships (Cohen, 1999). However, it is not clear how relevant this research is to the adult intimate relationships typical of persons coping with urban poverty.

Briefly then, adult relationships become stronger if partners can communicate effectively, reach matching appraisals of the stressors, and use each other as sources of support. Collaborative coping efforts may also improve so that dealing with future stressors becomes easier (Berg, Meegan, & Deviney, 1998).

More often, couples who have experienced trauma report less relationship satisfaction, fewer positive interactions, less intimacy, greater difficulty with role negotiations, more hostility, and conflict compared with couples who have no current trauma exposure (Cohen,

1999; Cook, Riggs, Thompson, Coyne, & Sheikh, 2004). With PTSD present in one or both partners, higher rates of interpersonal violence and separation/divorce have been found than in the overall population (Calhoun & Wampler, 2002). Emotional numbing may contribute uniquely to relationship distress above severity of PTSD and all other types of symptoms (Cook et al., 2004).

Numerous studies examine the effects of marital relations, especially domestic violence, on family relationships. These studies show that disturbances between intimate partners spill over and impact parenting, parent–child, and sibling relationships (Cummings & Davies, 2002).

2.2.2. Parenting and parent–child relationships

Understanding the potential positive or negative impact of trauma on parental functioning is important as parenting is a major determinant of family structure, relations, and coping. First, trauma's impact on parenting is related to how the parents' stress reaction influences their functioning (Appleyard & Osofsky, 2003). Some parents react to conditions of chronic trauma by focusing on their family. They respond with responsive, nurturing, involved, and consistent parenting. They maintain high expectations for their family's and children's futures (Barbarin, 1999; Levendosky, Huth-Bocks, Shapiro, & Semel, 2003; Wyman et al., 1999). This response occurs either because of parents' strong commitment to their children or as compensation for the hardships their children encounter (Wyman et al., 1999). Parents who were childhood trauma victims may have an increased awareness and understanding of their offspring's experiences and the need for sensitivity and support (Elliott & Carnes, 2001). Regardless of the reason, a parent's ability to handle stress helps family members anticipate danger and master anxiety (Green et al., 1991).

However, solid empirical evidence suggests that the trauma-related distress experienced by adults negatively impacts their functioning and, in many cases, undermines parenting behaviors and parent–child relationships (Erel & Burman, 1995; Evans & English, 2002; Levendosky & Graham-Bermann, 1998; Rutter, 1990). Numerous well-designed studies using large, diverse, multi-ethnic samples, multi-informants (i.e., parents, children, counselors, and teachers), and multi-methods (i.e., self-report, standardized questionnaire, interview, observation, video-taped interaction, and laboratory) support these findings (refer to Table 1). To summarize, parenting under conditions of high stress and trauma is consistently associated with negative parenting characteristics such as insensitivity, lack of responsiveness, withdrawal, low warmth, reactivity, irritability, negativity, harshness, and punitiveness (Ceballo & McLoyd, 2002; Cohen, 1999; Conger et al., 2002; Erel & Burman, 1995; Evans, Maxwell, & Hart, 1999; Grant et al., 2003; Levendosky et al., 2003; Murry, Brown, Brody, Cutrona, & Simons, 2001; Pinderhughes, Dodge, Bates, Pettit, & Zelli, 2000; Pinderhughes, Nix, Foster, & Jones, 2001; Repetti & Wood, 1997).

Maternal trauma history may also have detrimental effects on parenting. Findings demonstrate linkages between maternal traumas with negative views of self as parent (Banyard, 1997), low attachment behaviors (Bar-On et al., 1998; Newcomb & Locke, 2001), and increased physical discipline/violence (Banyard, 1997; Lyons-Ruth, 2003; Newcomb &

Locke, 2001). However, Lewin and Bergin (2001) found no parenting differences in a sample of nonoffending mothers of child sex abuse victims based on maternal history of abuse. This area of investigation is open to criticism as childhood trauma histories are typically obtained from retrospective, self-report data. Single reporter bias is another concern as parenting quality is primarily measured by maternal self-report.

Whether responding to childhood or current exposures, parents in poor, urban settings experience high rates of PTSD. Specific effects of PTSD on parenting are not well documented (Appleyard & Osofsky, 2003), however, symptoms in all three clusters (re-experiencing, avoidance, and arousal) may limit a parent's ability to deal effectively with their children. Rumination or preoccupation with the past decreases a parent's sensitivity and responsivity to children's present needs. Two forms of "relational PTSD" described by Scheeringa and Zeanah (2001), a reenacting/endangering/frightening pattern and an overprotective/constricting pattern, may be related to re-experiencing; a third pattern, withdrawn/unavailable, may be related to avoidance and numbing. A parent with avoidant symptoms finds it hard to provide children with appropriate levels of warmth, nurturance, and support (Laor, Wolmer, Mayes, & Gershon, 1997). Denial, a form of avoidance, can impair a parent's ability to respond effectively to children's play re-enactments, fears, or attempts to discuss negative emotions or events (Green et al., 1991). Interference with parent–child conversations about the past, critical to construction of narratives and autobiographical memories, may complicate recovery from trauma (Haden, 1998; Laible & Thompson, 2000). Finally, symptoms of arousal also impact parenting. Living in a dangerous community, a parent may be constantly on edge and hyper-reactive to any potential threats increasing irritability, difficulty tolerating children's symptoms, and negative parent–child interactions. Such hyperarousal contributes to increased rates of harsh, punitive discipline and physical abuse (Appleyard & Osofsky, 2003; Rossman, 1999).

Second, trauma's impact on parenting is sensitive to how parents react to their child's reaction (Appleyard & Osofsky, 2003). Nightmares, trauma-related fears and play, increased anger and aggression, developmental regression, dissociative episodes, and dysregulation are unsettling to parents and other family members and may disrupt normal interactions and activities. Some parents recognize that the best response to their children's distress is a calm, supportive presence.

Third, trauma's impact on parent–child interactions is affected by children's perceptions of their parent's response (Appleyard & Osofsky, 2003). Symptoms of re-experiencing (flashbacks or re-enactments) are unsettling for children to observe, creating anxiety and fear. Worry over personal safety of a parent or dealing with actual loss are frequent concerns for children living in low-income, urban environments. Parentification or the need to take care of their fragile or ineffectual parent may result (Locke & Newcomb, 2004). It is not uncommon to see children take on many parental roles and responsibilities when their parent is not able to do so, such as waking siblings up, feeding them breakfast, and dropping them off at school before going to their own classes. Research with children of Holocaust survivors identifies guilt as another reaction affecting parent–child relationships. Children feel guilty about having a "normal" or "happy" childhood after their parent has experienced severe

childhood trauma and they try to make-up for this by continually trying to please (Bar-On et al., 1998). It is not clear whether survivor guilt occurs in children whose parents grew up with severe childhood physical or sexual abuse, for example.

2.2.3. Sibling reactions

Trauma exposure influences siblings and sibling relationships both positively and negatively (Cummings & Davies, 2002; Williams, 1997; Williams, Hackworth, & Cradock, 2002). Siblings dealing with the chronic illness of a brother or sister, for example, may develop more empathy, a greater appreciation of their own health and well-being, and a more positive outlook than siblings with healthy brothers or sisters (Hayes, 1997; Lohan & Murphy, 2001; Mancuso, Bishop, Blakeney, Robert, & Gaa, 2003). They also worry about their ill sibling and get upset about disruptions in daily activities (Derouin & Jessee, 1996; Graham-Bermann, 1996). About a quarter of childhood cancer victims' siblings develop moderate to severe PTSS (Kazak et al., 2004).

Relationships among parental reactions, parental attitudes and practices, parent–child interactions with siblings' social and emotional behavior have been explored with relatively robust findings. For example, severity of the trauma and parental levels of trauma-related distress affect siblings (Cohen, 1999). Adult conflict/hostility and harsh, low-nurturing, intrusive parenting increase sibling aggression and self-protective behavior (Brody et al., 2003; Stocker & Youngblade, 1999). Sibling effects also relate to how the parent treats the primary victim in relation to other children in the family. A small number of studies, on the other hand, reflect the potential positive effects of negative parenting on siblings, such as increasing an older sibling's nurturance and prosocial behavior toward younger siblings (Brody, 1998).

2.3. Effects on the family unit

Strong empirical evidence demonstrates the impact of chronic trauma on individual family members and, in turn, on multiple family subsystems. Thus, it seems inevitable that family processes would be altered. In Fig. 1, the dashed lines represent the hypothesized pathways through which chronic trauma influences family processes and the bold, dashed line a direct causal relationship. Table 2 lists studies reporting data on family functioning following trauma. This section highlights the most consistent clinical and research findings on the impact of chronic trauma on family structure, relations, and coping.

2.3.1. Structure

Family structure is particularly vulnerable to the effects of chronic trauma. Changes in roles and organization may be intentional or unintentional. Some families make deliberate accommodations to deal with both the stressors and dangers of urban impoverished neighborhoods (Burton & Jarrett, 2000). They establish regular schedules for getting domestic and parenting tasks accomplished organized around 'safe' times and places in the community, establish routines for communicating when not together, and restrict interactions to familiar "desirable" neighbors.

Some families adjust to unpredictable, dangerous contexts by implementing highly structured, rigid daily schedules and demanding strict adherence to daily routine (Reinemann, Stark, & Swearer, 2003). Parents take on a dominant, autocratic family management style to feel in control and, although extreme, this style may promote positive adaptation by helping to ensure safety (Gaudin, Polansky, Kilpatrick, & Shilton, 1996).

In contrast, many families react to chronic stress, poverty, and violence with chaos, disorganization, and instability (Brody & Flor, 1997; Clark, Barrett, & Kolvin, 2000; Hill & Herman-Stahl, 2002). Living under harsh conditions is often associated with poor delineation of family roles, blurred boundaries, limited assumption of responsibility, and lack of leadership (Bal, De Bourdeaudhuij, Crombez, & Van Oost, 2004; Dickstein et al., 1998; Gaudin et al., 1996). Conceptual consistency with several factors supports the validity of these findings. First, uncontrollable situations make it difficult to sustain an organized, stable, and predictable daily schedule (Ackerman, Kogos, Youngstrom, Schoff, & Izard, 1999; Evans et al., 1999; Figley, 1988; Meyers, Varkey, & Aguirre, 2002; Wheaton, 1997). Second, high incidences of parental distress, psychopathology, and substance abuse mean that parents are often unavailable to organize family life. Third, avoidance of trauma reminders (places, people, and objects) may create disruptions in the family's daily routine. Fourth, when daily routines and caregiving are frequently disturbed, they stop serving their intended purpose and may be abandoned.

Chronic trauma exposure also compromises establishment of behavioral norms and limits resulting in high rates of behavior disorders (Costello, Compton, Keeler, & Angold, 2003; Florsheim & Tolan, 1996). Related to the heavy time demands of urban poverty, parents are often unavailable for extended periods to watch their children. Thus they may not be able to set and enforce behavioral limits (Costello et al., 2003). In addition, sympathy, empathy, and/or guilt for the victim frequently lead to lowered behavioral expectations and less harsh discipline. On the contrary, dealing with their own reactions to perceived dangerousness, parents in high-risk environments sometimes impose restrictive defensive measures and harsh discipline. Again, this may provide some protection from uncontrollable situations but may also support the belief that the world is threatening and dangerous (Colder, Mott, Levy, & Flay, 2000). Either response, uninvolved, chaotic or over-controlling, harsh structure, affects family relations.

2.3.2. Relations

In response to acute trauma, families frequently pull together and put aside unresolved conflicts to spend emotionally charged time with one another. For some families, hard times and shared pain support or even boost cohesion and open communication. Chronically adverse circumstances, though, decrease effort spent developing and maintaining family relationships (Coleman, 1987; Donovan & Spence, 2000; Piotrkowski, Collins, Knitzer, & Robinson, 1994). Specific effects include disengagement and isolation, heightened levels of negativity and conflict, and disruptions in attachment bonds.

Trauma-related symptoms strain the quality of family interactions in a number of ways (Meyers et al., 2002; Solomon et al., 1992). Avoidance and numbing can compromise family solidarity and effective communication channels (Hobfoll, Spielberger, Breznitz, & Figley, 1991). Families who try to hide or minimize their trauma histories by maintaining silence,

cutting off discussions about the trauma, or keeping family secrets experience detachment and distancing within family relations (Faulkner & Davey, 2002). Social withdrawal may eliminate calling on extended family and friends for help (Evans et al., 1999; Faulkner & Davey, 2002; Hobfoll et al., 1991; Miller, 1999). Further, "potential protective resources (e.g., familial and extrafamilial support networks) may themselves be compromised by chronically disadvantaged environments (D'Imperio, Dubow, & Ippolito, 2000, p. 140)".

Arousal symptoms and feelings of blame, fantasies of retribution, and scapegoating increase negative interactions and conflict (Cummings & Davies, 2002; Hobfoll et al., 1991). Negative feelings (anger/depression/worry) about the victim and the way the victim acts make it difficult to spend time with traumatized persons while at the same time irritability and heightened arousal decrease the victim's tolerance of others (Bal et al., 2004; Dickstein et al., 1998; Hobfoll et al., 1991; Johnson, Feldman, Lubin, & Southwick, 1995; Reinemann et al., 2003). High negative affect results in fewer conversations about feelings and less emotional understanding (Repetti, Taylor, and Seeman, 2002). Heightened conflict raises the potential for violence and aggression (Boss, Beaulieu, Wieling, Turner, & LaCruz, 2003; Cooley-Quille et al., 1995; Gaudin et al., 1996; Hobfoll et al., 1991; Kilic, Ozguven, & Sayil, 2003; Meyers et al., 2002). Within this context, family violence is usually not experienced as single events but as on-going patterns of family interaction that create vicious cycles with violent episodes serving as both another trauma and a symptom of multiple exposures (Kitzmann, 2000; Margolin & Gordis, 2000; Maughan & Cicchetti, 2002).

Finally, changes in family membership following a pile-up of negative life events are common. Frequent turnover in family membership, especially in adults who take on parental roles, creates feelings of loss and sadness and reduces the family's sense of emotional security (Ackerman et al., 1999). Perhaps the most pervasive influence is the negative representation of family relationships; consistent failure of significant adults to provide protection and control over the environment is internalized with working models characterized by inconsistency and mistrust. Ultimately, detachment, high negativity, violence, and instability alter the overall tone of family relations.

2.3.3. Coping

Families living in poor urban communities confronted with multiple, on-going traumas must make constant appraisals of potential threats, develop strategies for dealing with negative life events, and come to an understanding of or a way of thinking about their dangerous environment. Chronic burdens, family instability, and conflict make it harder for individual family members to reach consensus regarding their assessment of stressor characteristics and demands. Discordance among family members regarding the stressor event may cause problems for families when trying to communicate about the trauma and to organize the family's response (Trute & Hiebert-Murphy, 2002).

Congruence coping models suggest that strategies are selected to match stressor conditions (Peacock & Wong, 1996). Specifically, high burden, uncontrollable, unpredictable, recurring conditions dictate the choice of coping responses for these families. In the face of high burden, uncontrollable life events, many families find their coping resources depleted and planning, problem-solving, and follow through futile. They experience few opportunities for

successful, proactive problem-focused coping. The combination of depleted coping resources and reactive coping styles suggest that families repeatedly move through one crisis after another (Repetti et al., 2002).

When trauma is followed by uncertainty about recurrence, families must cope with feelings of fearfulness, suspiciousness, and threat. As uncertainty persists, families tend to react with vigilance and anxiety then shift to anger and increased aggression or to avoidance (Dempsey, 2002; Diehl & Prout, 2002; Shumow, Vandell, & Posner, 1998). Especially in families with negative family relations, uncontrollable, uncertain conditions engender intense feelings that can challenge emotional regulation capabilities (Valiente, Fabes, Eisenberg, & Spinrad, 2004). The inability to tolerate intense emotions, a trauma-related symptom, may further constrict the family's flexible use of coping strategies (Johnson et al., 1995).

Avoidant coping (escape, distraction or placating) might then become the dominant strategy to reduce tension. Minimizing and avoidance leads to internalizing of pessimism, futurelessness, lowered expectations, cynicism, hopelessness/helplessness, and a decreased sense of family efficacy (Diehl & Prout, 2002; Hobfoll et al., 1991). At the extreme, avoidant coping can mean no active problem-solving, inaction, and passivity and result in family paralysis, "cut-offs", or cessation of family processes (Boss et al., 2003). As in individual adaptation, adoption of such negative coping strategies may be healthy in the short term but have longer-term negative consequences for family functioning (Dempsey, 2002).

Finally, recurring, unpredictable conditions complicate efforts to make sense of the event(s), a critical aspect of coping with trauma. To deal with stressful events, families try to understand the bad things that happen by putting them in the context of their shared beliefs and worldview or by changing their shared worldview to be more consistent with their traumatic experiences (Patterson, 2002). A family's shared worldview and sense of coherence define their fundamental notion of life's purpose and their beliefs about whether it is "comprehensible, manageable, and meaningful (Bradley & Corwyn, 2000; Greeff & Human, 2004; Higgins & McCabe, 2003)." For many families living in urban poverty, their shared worldview is tied to their strong religious and spiritual beliefs and they rely on these powerful values especially in times of hardship (Benard, 1991). Their belief in a higher order helps to make sense of chronic adversity and randomness. Devoting themselves to doing "good acts" and living a life of virtue is another effective coping strategy. Unfortunately, multiple experiences of trauma sometimes shake their shared beliefs, threaten their worldview, and cause them to turn away from their faith.

3. Summary of findings

Families living in urban poverty face harsh conditions and multiple traumas. Repeated exposure to trauma creates a complex set of emotional, cognitive, behavioral, physiological, and spiritual reactions that occur before, during, and after traumatic events. Family functioning seems to be a powerful intermediary of these effects; however, there has been

Table 3
Summary of findings on the effects of stress and trauma on family processes

Overall effect	Specific findings
1) Living under chronically harsh, traumatic circumstances increases distress in children and their parents.	a. Common trauma symptoms in children and adults which interfere with family processes include irritability, detachment, and affect dysregulation. b. Women and those previously victimized demonstrate greater distress with re-exposure. c. Some children and their parents demonstrate post-traumatic growth.
2) Living under chronically harsh circumstance increases individual distress which, in turn, affects family subsystems.	a. Chronic traumatic circumstances create difficulties in marital, parent–child, and sibling relationships. PTSD in any family member may have specific effects on intimate partnerships, parent–child, and sibling relationships, and on family processes although the data are insufficient to delineate such effects. b. The role that trauma play in the types of adult intimate relationships most common to poor urban populations has not been examined. c. Parental distress contributes to a proportion of the response across multiple pathways. d. Some family subsystems demonstrate post-traumatic growth but this has not been studied systematically.
3) Living under chronically harsh, traumatic circumstances slowly erodes family processes, specifically structure, relations, and coping.	a. Few studies demonstrate a direct causal link between chronic trauma and changes in family functioning or processes. b. Family structure in poor, urban samples is typically associated with chaos, few routines, and little organization. c. Family relations in poor, urban samples are typically characterized as low in nurturance, high in negativity, and at-risk for violence. d. Coping strategies for families living in urban poverty are altered by a combination of contextual conditions and specific trauma characteristics but tend to be reactive or avoidant and display a sense of hopelessness. e. No studies of posttraumatic growth in families have been conducted using low-income urban samples.

insufficient consideration of changes that occur in the family as a result of living in this sociocultural context. Table 3 summarizes the findings from examining this issue using a family systems framework.

4. Complexities in research on chronic trauma and family effects

Fig. 1 and Table 3 highlight the complicated pathways connecting chronic trauma exposure with family processes. Clarifying these relationships is complex; chronic trauma exposure is likely to impact at multiple levels, adaptation occurs over time, and the impact may be either positive or negative. Existing research reflects the problems inherent in dealing adequately with these complexities.

4.1. Impact at multiple levels

A major determinant of trauma response is specific event characteristics. Tables 1 and 2 list studies with exposure to differing types of trauma including war or political violence, chronic illness or loss of a family member, acute trauma such as auto accident or gunshot, and family conflict, violence, and abuse/neglect. Other studies focused on the characteristics of families that live with economic or neighborhood disadvantage, although these families may or may not have been exposed to any specific traumatic event.

In addition to experiencing different types of traumas, clinical models suggest that a trauma could happen to any one member of the family sending ripples throughout the family system through vicarious or secondary or chiasmal effects (Clark et al., 2000; Conger et al., 2002; Figley, 1988; Gomel, Tinsley, Parke, & Clark, 1998; Meyers et al., 2002; Murry et al., 2001; Pinderhughes et al., 2001; Waysman, Mikulincer, Solomon, & Weisenberg, 1993). This is indirect trauma but through close proximity to danger or disruption created by the victim's distress, the trauma experienced by one family member creates a traumatic stress reaction in other family members. Individual characteristics, such as intelligence, temperament, or position in the family, explain one portion of the variance in reactions. From a systems perspective, the role of the victim in the family and the nature of his/her response to trauma transform family life in various ways (Kilic et al., 2003).

"Family trauma" or "simultaneous effects" occur when trauma is experienced directly by the whole family, for example the family who narrowly escapes a home invasion (Rousseau, Mekki-Berrada, & Moreau, 2001). A traumatized family reacts as a unit, develops symptoms that alter family processes. Family functioning, however, is sensitive to many factors (such as SES, household composition, stage in family life cycle, social or cultural values, parental characteristics, characteristics of the trauma(s), and family trauma history) and each of these factors could modify the impact of trauma on family processes. Pre-trauma family processes are a partial determinant of a family's response as well as potentially vulnerable to its impact. Additionally, trauma experienced directly by the whole family can be caused by external or internal forces. Intrafamilial trauma, such as domestic violence, physical and/or sexual abuse, carries different threats to the family's integrity than extrafamilial trauma.

Sorting out relationships among multiple, often interrelated factors requires comprehensive theoretical models and sophisticated research designs and analytic methods. Unfortunately, existing research does not capture this complexity. One concern is the need and ability to distinguish between these multiple types of family trauma.

Another concern is accurate and valid reporting of both objective and subjective experiences of trauma by all family members. In most studies, adaptation of the primary victim is the outcome of interest with family factors examined to explain variability in individual outcomes (Bennett, Hughes, & Luke, 2000). In studies that assess family trauma exposure and functioning, measures are typically self-report and completed by one or two individual family members only. Multi-source assessments inclusive of all family members are recommended.

The complexities inherent in family trauma research require use of systemic, transactional, or ecodevelopmental theoretical models along with newer multilevel analytic techniques

instead of linear, single-level models and methods. Multilevel analytic methods are capable of dealing with the interdependence of experience and reaction among individuals who are embedded within dyadic subsystems and families by assuming within group differences at each proposed level across a range of interrelated factors with potential explanatory power at each level. Intervention studies designed such that some of these potential intervening variables are controlled while others are manipulated provides one other means for testing some of these relationships (Brody et al., 2004).

4.2. Adaptation across time

Neither individual nor parental nor dyadic responses to trauma are static and initial reactions do not necessarily predict later responses (Elliott & Carnes, 2001). Family adaptation to trauma also occurs over time with different reactions characteristic of different stages. Thus, theories of family adaptation to stress typically use a stage model (Chaney & Peterson, 1989; McCubbin & McCubbin, 1993). The acute stage immediately follows the event or disclosure of the trauma and, in most families, is followed by a transitional phase characterized by change and flux. Families, as a unit, may develop trauma-related symptoms and these symptoms may last for a year or longer. The third phase signifies entry into more stable family patterns or longer-term adaptation. Even if the family adapts successfully, trauma-related symptoms may re-occur or be exacerbated during times of heightened family stress or during family life cycle transitions (Peebles-Kleiger & Kleiger, 1994).

The typical stage model can direct research relevant to a family's coping with sudden, discrete traumatic events; however, it is not consistent with adaptation to chronic stress. Families, who are dealing with multiple events or situations involving on-going trauma, cycle through these stages multiple times and may be at different stages simultaneously related to separate exposures. The nature of chronic stressors, "typically open-ended, using up resources in coping, but not promising resolution (Repetti & Wood, 1997, p. 53)" obscures the adaptation process. This complicates research on the effects of chronic stress; adaptation to on-going traumas may occur so gradually that it is not noticeable and finding significant change due to an insidious process is quite difficult (Repetti & Wood, 1997; Wheaton, 1997).

The reality that studying the effects of trauma requires, first, exposure to a significant stressor, and, second, adaptation across time supports the use of prospective, longitudinal research designs. However, the majority of the studies reviewed are retrospective and cross-sectional. This is not surprising as it is challenging to design feasible prospective studies. Such studies require samples about to experience significant acute trauma or clearly headed for, but not yet, living in highly adverse circumstances. Longitudinal studies of high-risk samples are one solution, although a costly and somewhat inefficient means of recruiting an appropriate sample. Another intriguing research design involves measuring change in family processes following cessation of chronic exposure. For example, Costello et al. (2003) use a representative population sample that experienced a casino opening resulting in income supplements to a proportion of study participants in their quasi-experimental study of poverty and youth psychopathology. Interventions that radically reduce neighborhood crime rates for

instance provide opportunities for examining how families react when they no longer feel unsafe or experience repeated trauma.

4.3. Nature of impact

As with individual adaptations to trauma, research has focused almost exclusively on the negative effects of trauma without considering the potential for positive change or growth. A deficit model has predominated — focused on increased risk for mental health and behavioral problems, disruptions in family routine, decreased attention from parents, sacrifices, increased expectations for caregiving, or assumption of additional responsibilities to help out with added stressor demands. The use of clinical samples, as seen in many of the studies in Tables 1 and 2, is consistent with a focus on deficit. Clinical samples are appropriate if one is only interested in studying pathology, however, they cannot be used to model positive coping or bonadaptation.

A solid literature exists demonstrating that some individuals and families survive chronic severe traumas without developing symptoms and this has been labeled resilience. It is also possible, though, for the reflective processes necessary for coping with trauma to enhance the value of interpersonal relationships, increase sense of personal hardiness, give new meaning to life, and deepen spiritual beliefs (Cadell, Regehr, & Hemsworth, 2003). Tedeschi, Park, and Calhoun (1998) define this as "posttraumatic growth" and identify three specific growth areas: perception of self, interpersonal relationships, and life philosophy. The adult trauma literature is beginning to document traumatic growth. Salter and Stallard (2004) are the first to report on posttraumatic growth in children.

No studies of potential benefit from trauma exposure in families have been conducted, although each of the growth areas could have a significant effect on family processes. Understanding which families benefit from exposure to trauma(s) or successfully adapt under harsh, adverse conditions and how they accomplish this is important. Wyman et al. (1999) provide an example of a sampling strategy that pulls from the general population instead of relying on clinical samples and includes enough subjects to allow examination of the potential positive and negative outcomes.

5. Implications for clinical practice

This critical examination has provided a solid theoretical model for further study and outlined current limitations in research design and methods with suggestions for improvement, thus indicating directions for future research. The findings presented also indicate directions for development of prevention and intervention strategies. For trauma victims, especially children, the immediate reaction and long-term response of their family are critical to their own adjustment. That being said, the potential of chronic trauma related to urban poverty to erode family processes becomes critical.

Consistent use of a theoretical framework and supporting data to address the complex relationships among chronic trauma, individual, couple, parental, sibling, and family processes

(such as described above) will facilitate development of an integrated and collaborative approach to intervention. Prevention and intervention strategies must tackle the problems of this social ecology by strengthening family processes. However, change in processes (contextual change) is difficult to achieve and process-oriented therapies have proven to be relatively ineffective. Family behavioral and skill-building interventions for distressed families have a strong empirical basis with numerous well-designed studies demonstrating increases in positive parenting behaviors in addition to significant improvements in parental self-efficacy and lower distress (Becker et al., 1995; Dishion & Andrews, 1995; Taylor & Biglan, 1998). One option, supported by the data, is to use family ritual and routine as a behavioral and skills-based framework for strengthening family structure, relations, and coping processes, for promoting change in day-to-day family interactions and environment, and for supporting development of strategies for managing and ameliorating trauma-related stress (Kumpfer & Alvarado, 1998).

References

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders (DSM_IV), Fourth Edition, Revised*. Washington, DC: American Psychiatric Association.

Ackerman, B. P., Kogos, J., Youngstrom, E., Schoff, K., & Izard, C. (1999). Family instability and the problem behaviors of children from economically disadvantaged families. *Developmental Psychology*, 35, 258–268.

Allison, K. W., Burton, L., Marshall, S., Perea-Febles, A., Yarrignton, J., Kirsh, L. B., et al. (1999). Life experiences among urban adolescents: Examining the role of context. *Child Development*, 70(4), 1017–1029.

Angell, G. B., Dennis, B. G., & Dumain, L. E. (1998). Spirituality, resilience, and narrative: Coping with parental death. *Families in Society*, 79(6), 615–630.

Appleyard, K., & Osofsky, J. D. (2003). Parenting after trauma: Supporting parents and caregivers in the treatment of children impacted by violence. *Infant Mental Health Journal*, 24(2), 111–125.

Bal, S., De Bourdeaudhuij, I., Crombez, G., & Van Oost, P. (2004). Differences in trauma symptoms and family functioning in intra- and extrafamilial sexually abused adolescents. *Journal of Interpersonal Violence*, 19(1), 108–123.

Banyard, V. L. (1997). The impact of childhood sexual abuse and family functioning on four dimensions of women's later parenting. *Child Abuse and Neglect*, 21(11), 1095–1107.

Banyard, V. L., Rozelle, D., & Englund, D. W. (2001). Parenting the traumatized child: Attending to the needs of nonoffending caregivers of traumatized children. *Psychotherapy*, 38(1), 74–87.

Barakat, L. P., Kazak, A. E., Meadows, A. T., Casey, R., Meeske, K., & Stuber, M. L. (1997). Families surviving childhood cancer: A comparison of posttraumatic stress symptoms with families of healthy children. *Journal of Pediatric Psychology*, 22(6), 843–859.

Barbarin, O. (1999). Do parental coping, involvement, religiosity, and racial identity mediate children's psychological adjustment to sickle cell disease? *Journal of Black Psychology*, 25(3), 391–426.

Bar-On, D., Eland, J., Kleber, R. J., Krell, R., Moore, Y., Sagi, A., et al. (1998). Multigenerational perspectives on coping with the Holocaust experience: An attachment perspective for understanding the developmental sequelae of trauma across generations. *International Journal of Behavioural Development*, 22(2), 315–338.

Becker, J. V., Alpert, J. L., BigFoot, D. S., Bonner, B. L., Geddie, L. F., Henggeler, S., et al. (1995). Empirical research on child abuse treatment: Report by the child abuse and neglect treatment working group, American Psychological Association. *Journal of Clinical Child Psychology*, 24(S), 23–46.

Benard, B. (1991). *Fostering resiliency in kids: Protective factors in the family, school, and community*. Portland, OR: Western Regional Center for Drug Free Schools and Communities.

Bennett, S. E., Hughes, H. M., & Luke, D. A. (2000). Heterogeneity in patterns of child sexual abuse, family functioning, and long-term adjustment. *Journal of Interpersonal Violence*, *15*(2), 134–157.

Berg, C. A., Meegan, S. P., & Deviney, F. P. (1998). A social–contextual model of coping with everyday problems across the lifespan. *International Journal of Behavioural Development*, *22*(2), 239–261.

Berton, M. W., & Stabb, S. D. (1996). Exposure to violence and post-traumatic stress disorder in urban adolescents. *Adolescence*, *31*(122), 489–494.

Black, M. M., & Krishnakumar, A. (1998). Children in low-income, urban settings: Interventions to promote mental health and well-being. *American Psychologist*, *53*(6), 635–646.

Boss, P., Beaulieu, L., Wieling, E., Turner, W., & LaCruz, S. (2003). Healing loss, ambiguity, and trauma: A community-based intervention with families of union workers missing after the 9/11 attack in New York City. *Journal of Marital and Family Therapy*, *29*(4), 455–467.

Bradley, R. H., & Corwyn, R. F. (2000). Moderating effect of perceived amount of family conflict on the relation between home environmental processes and the well-being of adolescents. *Journal of Family Psychology*, *14*(3), 349–364.

Briere, J. (2002). *Advances in treating complex psychological trauma and PTSD*. Baltimore, MD: Seminar.

Brody, G. H. (1998). Sibling relationship quality: Its causes and consequences. *Annual Review of Psychology*, *49*, 1–24.

Brody, G. H., & Flor, D. L. (1997). Maternal psychological functioning, family processes, and child adjustment in rural, single-parent, African American families. *Developmental Psychology*, *33*(6), 1000–1011.

Brody, G. H., Ge, X., Kim, S. Y., Murry, V. M., Simons, R. L., Gibbons, F. X., et al. (2003). Neighborhood disadvantage moderates associations of parenting and older sibling problem attitudes and behavior with conduct disorders in African American children. *Journal of Consulting and Clinical Psychology*, *71*(2), 211–222.

Brody, G. H., Murry, V. M., Gerrard, M., Gibbons, F. X., Molgaard, V., McNair, L., et al. (2004). The strong African American families program: Translating research into prevention programming. *Child Development*, *75*(3), 900–917.

Buckner, J. C., Bassuk, E. L., Weinreb, L. F., & Brooks, M. G. (1999). Homelessness and its relation to the mental health and behavior of low-income, school-age children. *Developmental Psychology*, *35*(1), 246–257.

Burchinal, M. R., Follmer, A., & Bryant, D. M. (1996). The relations of maternal social support and family structure with maternal responsiveness and child outcomes among African American families. *Developmental Psychology*, *32*(6), 1073–1083.

Burton, L. M., & Jarrett, R. L. (2000). In the mix, yet on the margins: The place of families in urban neighborhood and child development research. *Journal of Marriage and the Family*, *62*(4), 1114–1135.

Cadell, S., Regehr, C., & Hemsworth, D. (2003). Factors contributing to posttraumatic growth: A proposed structural equation model. *American Journal of Orthopsychiatry*, *73*(3), 279–287.

Calhoun, P. S. & Wampler, T. P. (2002). Reducing caregiver burden and psychological distress in partners of veterans with PTSD. *National Center for PTSD Clinical Quarterly*, *11*(2), 17, 19–22

Capaldi, D., & Patterson, G. (1996). Can violent offenders be distinguished from frequent offenders: Prediction from childhood to adolescence. *Journal of Research in Crime and Delinquency*, *33*, 206–231.

Carrion, V., Weems, C., Ray, R., & Reiss, A. (2002). Toward an empirical definition of pediatric PTSD: The phenomenology of PTSD symptoms in youth. *Journal of the American Academy of Child and Adolescent Psychiatry*, *41*(2), 166–173.

Catalano, R. F., Berglund, M. L., Ryan, J. A. M., Lonczak, H. S., & Hawkins, J. D. (2002). Positive youth development in the United States: Research findings on evaluations of positive youth development programs. *Prevention and Treatment*, *5*, Article 15.

Ceballo, R., & McLoyd, V. C. (2002). Social support and parenting in poor, dangerous neighborhoods. *Child Development*, *73*(4), 1310–1321.

Chaitin, J. (2003). "Living with" the past: Coping and patterns in families of Holocaust survivors. *Family Process*, *42*(2), 305–322.

Chaney, J., & Peterson, L. (1989). Family variables and disease management in juvenile rheumatoid arthritis. *Journal of Pediatric Psychology*, *14*, 389–403.

Clark, A. F., Barrett, L., & Kolvin, I. (2000). Inner city disadvantage and family functioning. *European Child and Adolescent Psychiatry*, *9*(2), 77–83.

Clements, P. T., & Burgess, A. W. (2002). Children's responses to family member homicide. *Family & Community Health*, *25*(1), 32–42.

Cohen, J. A., Berliner, L., & Mannarino, A. P. (2000). Treating traumatized children: A research review and synthesis. *Trauma, Violence, and Abuse*, *1*(1), 29–46.

Cohen, J. A., & Mannarino, A. P. (1996). A treatment outcome study for sexually abused preschool children: Initial findings. *Journal of the American Academy of Child and Adolescent Psychiatry*, *35*(1), 42–50.

Cohen, M. (1999). Families coping with childhood chronic illness: A research review. *Families, Systems, and Health*, *17*(2), 149–164.

Colder, C. R., Mott, J., Levy, S., & Flay, B. (2000). The relation of perceived neighborhood danger to childhood aggression: A test of mediating mechanisms. *American Journal of Community Psychology*, *28*(1), 83–103.

Coleman, J. (1987). Families and schools. *Educational Researcher 32–38*.

Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological Bulletin*, *127*(1), 87–127.

Conger, R. D., Wallace, L. E., Sun, Y., Simons, R. L., McLoyd, V. C., & Brody, G. H. (2002). Economic pressure in African American families: A replication and extension of the family stress model. *Developmental Psychology*, *38*(2), 179–193.

Cook, J. M., Riggs, D. S., Thompson, R., Coyne, J. C., & Sheikh, J. I. (2004). Posttraumatic stress disorder and current relationship functioning among World War II ex-prisoners of war. *Journal of Family Psychology*, *18*(1), 36–45.

Cooley-Quille, M. R., Turner, S. M., & Beidel, D. C. (1995). Emotional impact of children's exposure to community violence: A preliminary study. *Journal of the American Academy of Child and Adolescent Psychiatry*, *34*(10), 1362–1368.

Costello, E. J., Compton, S. N., Keeler, G., & Angold, A. (2003). Relationships between poverty and psychopathology. *Journal of the American Medical Association*, *290*(15), 2023–2029.

Coulton, C. J., Korbin, J. E., & Su, M. (1999). Neighborhoods and child maltreatment: A multi-level study. *Child Abuse and Neglect*, *23*(11), 1019–1040.

Cummings, E., & Davies, P. T. (2002). Effects of marital conflict on children: Recent advances and emerging themes in process-oriented research. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, *43*(1), 31–63.

Davidson, A. C., & Mellor, D. J. (2001). The adjustment of children of Australian Vietnam veterans: Is there evidence for the intergenerational transmission of the effects of war-related trauma? *Australian and New Zealand Journal of Psychiatry*, *35*, 345–351.

Davies, P. T., Myers, R. L., Cummings, E., & Heindel, S. (1999). Adult conflict history and children's subsequent responses to conflict: An experimental test. *Journal of Family Psychology*, *13*(4), 610–628.

Deblinger, E., Steer, R., & Lippmann, J. (1999). Maternal factors associated with sexually abused children's psychosocial adjustment. *Child Maltreatment: Journal of the American Professional Society on the Abuse of Children*, *4*(1), 13–20.

Dempsey, M. (2002). Negative coping as mediator in the relation between violence and outcomes: Inner-city African American youth. *American Journal of Orthopsychiatry*, *72*(1), 102–109.

Dempsey, M., Overstreet, S., & Moely, B. (2000). "Approach" and "avoidance" coping and PTSD symptoms in inner-city youth. *Current Psychology*, *19*(1), 28–46.

Derouin, D., & Jessee, P. O. (1996). Impact of a chronic illness in childhood: Siblings' perspectives. *Issues in Comprehensive Pediatric Nursing*, *19*, 135–147.

Dickstein, S., Seifer, R., Hayden, L. C., Schiller, M., Sameroff, A. J., Keitner, G., et al. (1998). Levels of family assessment: II. Impact of maternal psychopathology on family functioning. *Journal of Family Psychology*, *12*(1), 23–40.

Diehl, A. S., & Prout, M. F. (2002). Effects of posttraumatic stress disorder and child sexual abuse on self-efficacy development. *American Journal of Orthopsychiatry*, *27*(2), 262–265.

D′Imperio, R. L., Dubow, E. F., & Ippolito, M. F. (2000). Resilient and stress-affected adolescents in an urban setting. *Journal of Clinical Child Psychology, 29*(1), 129–142.

Dishion, T. J., & Andrews, D. W. (1995). Preventing escalation in problem behaviors with high-risk young adolescents: Immediate and 1-year outcomes. *Journal of Consulting and Clinical Psychology, 63*(4), 538–548.

Dollahite, D. C. (1991). Family resource management and family stress theories: Toward a conceptual integration. *Lifestyles: Family and Economic Issues, 12*(4), 361–377.

Donovan, C. L., & Spence, S. H. (2000). Prevention of childhood anxiety disorders. *Clinical Psychology Review, 20*(4), 509–531.

Dubow, E. F., Edwards, S., & Ippolito, M. F. (1997). Life stressors, neighborhood disadvantage, and resources: A focus on inner-city children's adjustment. *Journal of Clinical Child Psychology, 26*(2), 130–144.

Elliott, A. N., & Carnes, C. N. (2001). Reactions of nonoffending parents to the sexual abuse of their child: A review of the literature. *Child Maltreatment, 6*(4), 314–331.

Elliott, D. S., Wilson, W. J., Huizinga, D., Sampson, R. J., Elliott, A., & Rankin, B. (1996). The effects of neighborhood disadvantage on adolescent development. *Journal of Research in Crime and Delinquency, 33*, 389–426.

Erel, O., & Burman, B. (1995). Interrelatedness of marital relations and parent–child relations: A meta-analytic review. *Psychological Bulletin, 118*(1), 108–132.

Esposito, C. (1999). Learning in urban blight: School climate and its effect on the school performance of urban, minority, low-income children. *School Psychology Review, 28*(3), 365–377.

Evans, G. W., & English, K. (2002). The environment of poverty: Multiple stressor exposure, psychophysiological stress, and socioemotional adjustment. *Child Development, 73*(4), 1238–1248.

Evans, G. W., Maxwell, L. E., & Hart, B. (1999). Parental language and verbal responsiveness to children in crowded homes. *Developmental Psychology, 35*(4), 1020–1023.

Falsetti, S. A., Resick, P. A., & Davis, J. L. (2003). Changes in religious beliefs following trauma. *Journal of Traumatic Stress, 16*(4), 391–398.

Faulkner, R. A., & Davey, M. (2002). Children and adolescents of cancer patients: The impact of cancer on the family. *American Journal of Family Therapy, 30*(1), 63–72.

Figley, C. R. (1988). Post-traumatic family therapy. In M. Ochberg (Ed.), *Post-traumatic therapy and victims of violence* (pp. 83–109). New York: Bruner/Mazel.

Figueira-McDonough, J. (1998). Environment and interpretation: Voices of young people in poor inner-city neighborhoods. *Youth and Society, 30*(2), 123–163.

Fitzpatrick, K. M., & Boldizar, J. (1993). The prevalence and consequences of exposure to violence among African American youth. *Journal of the American Academy of Child and Adolescent Psychiatry, 32*(2), 424–430.

Florsheim, P., & Tolan, P. H. (1996). Family processes and risk for externalizing behavior problems among African American and Hispanic boys. *Journal of Consulting and Clinical Psychology, 64*(6), 1222–1230.

Friedemann, M. L., & Webb, A. A. (1995). Family health and mental health six years after economic stress and unemployment. *Issues in Mental Health Nursing, 16*(1), 51–66.

Furstenberg, F. F., & Hughes, M. E. (1987). The influence of neighborhoods on children's development: A theoretical perspective and a research agenda. In J. Brooks-Gunn, & J. L. Aber (Eds.), *Neighborhood Poverty: Policy Implications in Studying Neighborhoods, vol. II* (pp. 23–47) (1987). NY: Russell Sage Foundation.

Gagne, M. H., & Bouchard, C. (2004). Family dynamics associated with the use of psychologically violent parental practices. *Journal of Family Violence, 19*(2), 117–130.

Gaudin, J. M., Polansky, N. A., Kilpatrick, A. C., & Shilton, P. (1996). Family functioning in neglectful families. *Child Abuse and Neglect, 20*(4), 363–377.

Gomel, J. N., Tinsley, B. J., Parke, R. D., & Clark, K. M. (1998). The effects of economic hardship on family relationships among African American, Latino, and Euro-American families. *Journal of Family Issues, 19*(4), 436–467.

Graham-Bermann, S. A. (1996). Family worries: Assessment of interpersonal anxiety in children from violent and nonviolent families. *Journal of Clinical Child Psychology, 25*(3), 280–287.

Grant, K. E., Compas, B. E., Stuhlmacher, A. F., Thurm, A. E., McMahon, S. D., & Halpert, J. A. (2003). Stressors and child and adolescent psychopathology: Moving from markers to mechanisms of risk. *Psychological Bulletin, 129*(3), 447–466.

Greeff, A. P., & Human, B. (2004). Resilience in families in which a parent has died. *American Journal of Family Therapy, 32*(1), 27–42.

Green, B. L., Korol, M., Grace, M. C., Vary, M. C., Leonard, A. C., Gleser, G. C., et al. (1991). Children and disaster: Age, gender, and parental effects on PTSD symptoms. *Journal of the American Academy of Child and Adolescent Psychiatry, 30*(6), 945–951.

Haden, C. A. (1998). Reminiscing with different children: Relating maternal stylistic consistency and sibling similarity in talk about the past. *Developmental Psychology, 34*(1), 99–114.

Hammack, P. L., Robinson, W. L., Crawford, I., & Li, S. T. (2004). Poverty and depressed mood among urban African American adolescents: A family stress perspective. *Journal of Child and Family Studies, 13*(3), 309–323.

Hawkins, J. D. (1999). Preventing adolescent health risk behaviors by strengthening protection during childhood. *Archives of Pediatrics and Adolescent Medicine, 153*(3), 226–234.

Hawkins, J. D., Arthur, M. W., & Catalano, R. F. (1995). Preventing substance abuse. In M. Tonry, & D. P. Farrington (Eds.), *Building a safer society: Strategic approaches to crime prevention. Crime and Justice: A Review of Research, vol. 19* (pp. 343–427) (1995). Chicago: University of Chicago Press.

Hayes, V. (1997). Families and children's chronic conditions: Knowledge development and methodological considerations. *Scholarly Inquiry for Nursing Practice: An International Journal, 11*(4), 259–289.

Hiebert-Murphy, D. (2000). Factors related to mothers' perceptions of parenting following their children's disclosures of sexual abuse. *Child Maltreatment: Journal of the American Professional Society on the Abuse of Children, 5*(3), 251–260.

Higgins, D. J., & McCabe, M. P. (2003). Maltreatment and family dysfunction in childhood and the subsequent adjustment of children and adults. *Journal of Family Violence, 18*(2), 107–120.

Hill, J., Fonagy, P., Safier, E., & Sargent, J. (2003). The ecology of attachment in the family. *Family Process, 42*(2), 205–221.

Hill, N. E., & Herman-Stahl, M. A. (2002). Neighborhood safety and social involvement: Associations with parenting behaviors and depressive symptoms among African American and Euro-American mothers. *Journal of Family Psychology, 16*(2), 209–219.

Hobfoll, S. E., Spielberger, C. D., Breznitz, S., Figley, C., Folkman, S., Lepper-Green, B., et al. (1991). War-related stress: Addressing the stress of war and other traumatic events. *American Psychologist, 46*(8), 848–855.

Johnson, D. R., Feldman, S. C., Lubin, H., & Southwick, S. M. (1995). The therapeutic use of ritual and ceremony in the treatment of post-traumatic stress disorder. *Journal of Traumatic Stress, 8*(2), 283–298.

Jordan, B., Marmar, C. R., Fairbank, J. A., Schlenger, W. E., Kulka, R. A., Hough, R. L., et al. (1992). Problems in families of male Vietnam veterans with posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology, 60*(6), 916–926.

Jordan, J. R. (1991). Cumulative loss, current stress, and the family: A pilot investigation of individual and systemic effects. *Omega: Journal of Death and Dying, 24*(4), 309–332.

Kaysen, D., Resick, P. A., & Wise, D. (2003). Living in danger: The impact of chronic traumatization and the traumatic context on posttraumatic stress disorder. *Trauma, Violence and Abuse, 4*(3), 247–264.

Kazak, A. E., Alderfer, M. A., Streisand, R., Simms, S., Rourke, M., Barakat, L. P., et al. (2004). Treatment of posttraumatic stress symptoms in adolescent survivors of cancer and their families: A randomized clinical trial. *Journal of Family Psychology, 18*(3), 493–504.

Kazak, A. E., Barakat, L. P., Meeske, K., Christakis, D., Meadows, A. T., Casey, R., et al. (1997). Posttraumatic stress, family functioning, and social support in survivors of childhood leukemia and their mothers and fathers. *Journal of Consulting and Clinical Psychology, 65*(1), 120–129.

Kilic, E. Z., Ozguven, H. D., & Sayil, I. (2003). The psychological effects of parental mental health on children experiencing disaster: The experience of Bolu earthquake in Turkey. *Family Process, 42*(4), 485–495.

Kitzmann, K. M. (2000). Effects of marital conflict on subsequent triadic family interactions and parenting. *Developmental Psychology, 36*(1), 3–13.

Kotchick, B. A., Forehand, R., Armistead, L., Klein, K., & Wierson, M. (1996). Coping with illness: Interrelationships across family members and predictors of psychological adjustment. *Journal of Family Psychology*, *10*(3), 358–370.

Kumpfer, K. & Alvarado, R. (1998). *Effective family strengthening interventions* (pp. 1-16). Washington, DC: US Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.

Laible, D. J., & Thompson, R. A. (2000). Mother–child discourse, attachment security, shared positive affect, and early conscience development. *Child Development*, *71*(5), 1424–1440.

Laor, N., Wolmer, L., Mayes, L. C., & Gershon, A. (1997). Israeli preschool children under scuds: A 30-month follow-up. *Journal of the American Academy of Child and Adolescent Psychiatry*, *36*(3), 349–356.

Leske, J. S. (2003). Comparison of family stresses, strengths, and outcomes after trauma and surgery. *AACN Clinical Issues*, *14*(1), 33–41.

Levendosky, A. A., & Graham-Bermann, S. A. (1998). The moderating effects of parenting stress on children's adjustment in woman-abusing families. *Journal of Interpersonal Violence*, *13*(3), 363–397.

Levendosky, A. A., & Graham-Bermann, S. A. (2001). Parenting in battered women: The effects of domestic violence on women and their children. *Journal of Family Violence*, *16*(2), 171–192.

Levendosky, A. A., Huth-Bocks, A. C., Shapiro, D. L., & Semel, M. A. (2003). The impact of domestic violence on the maternal–child relationship and preschool-age children's functioning. *Journal of Family Psychology*, *17*(3), 275–287.

Lewin, L., & Bergin, C. (2001). Attachment behaviors, depression, and anxiety in nonoffending mothers of child sexual abuse victims. *Child Maltreatment*, *6*(4), 365–375.

Locke, T. F., & Newcomb, M. (2004). Child maltreatment, parent alcohol- and drug-related problems, polydrug problems, and parenting practices: A test of gender differences and four theoretical perspectives. *Journal of Family Psychology*, *18*(1), 120–134.

Lohan, J. A., & Murphy, S. A. (2001). Parents' perceptions of adolescent sibling grief responses after an adolescent or young adult child's sudden, violent death. *Omega: Journal of Death and Dying*, *44*(1), 77–95.

Lyons-Ruth, K. (2003). Dissociation and the parent–infant dialogue: A longitudinal perspective from attachment research. *Journal of the American Psychoanalytic Association*, *51*(3), 883–911.

Magnus, K. B., Cowen, E. L., Wyman, P. A., Fagen, D. B., & Work, W. C. (1999). Parent–child relationship qualities and child adjustment in highly stressed urban black and white families. *Journal of Community Psychology*, *27*(1), 55–71.

Mahoney, A., Boggio, R. M., & Jouriles, E. N. (1996). Effects of verbal marital conflict on subsequent mother–son interactions in a child clinical sample. *Journal of Clinical Child Psychology*, *25*(3), 262–271.

Mancuso, M. G., Bishop, S., Blakeney, P., Robert, R., & Gaa, J. (2003). Impact on the family: Psychosocial adjustment of siblings of children who survive serious burns. *Journal of Burn Care and Rehabilitation*, *24*(2), 110–118.

Manion, I. G., McIntyre, J., Firestone, P., Ligezinska, M., Ensom, R., & Wells, G. (1996). Secondary traumatization in parents following the disclosure of extrafamilial child sexual abuse: Initial effects. *Child Abuse and Neglect*, *20*(11), 1095–1109.

Marcenko, M. O., Kemp, S. P., & Larson, N. C. (2000). Childhood experiences of abuse, later substance use, and parenting outcomes among low-income mothers. *American Journal of Orthopsychiatry*, *70*(3), 316–326.

Margolin, G., Christensen, A., & John, R. S. (1996). The continuance and spillover of everyday tensions in distressed and nondistressed families. *Journal of Family Psychology*, *10*(3), 304–321.

Margolin, G., & Gordis, E. B. (2000). The effects of family and community violence on children. *Annual Review of Psychology*, *51*, 445–479.

Marsella, A. J. (1998). Urbanization, mental health, and social deviancy: A review of issues and research. *American Psychologist*, *53*(6), 624–634.

Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, *56*(3), 227–238.

Maughan, A., & Cicchetti, D. (2002). Impact of child maltreatment and interadult violence on children's emotion regulation abilities and socioemotional adjustment. *Child Development*, *73*(5), 1525–1542.

McCloskey, L. A., & Walker, M. (2000). Posttraumatic stress in children exposed to family violence and single-event trauma. *Journal of the American Academy of Child and Adolescent Psychiatry*, *39*(1), 108–115.

McCubbin, M. A., & McCubbin, H. I. (1993). *Families coping with illness: The resiliency model of family stress, adjustment, and adaptation* (pp. 21–63). St. Louis, MO: Mosby Year Book, Inc.

McEwen, B. S. (1998). Seminars in medicine of the Beth Israel Deaconess Medical Center: Protective and damaging effects of stress mediators. *New England Journal of Medicine*, *338*(3), 171–179.

Medalie, J. (1997). The patient and family adjustment to chronic disease in the home. *Journal of Disability and Rehabilitation*, *19*(4), 163–170.

Meyers, S. A., Varkey, S., & Aguirre, A. M. (2002). Ecological correlates of family functioning. *American Journal of Family Therapy*, *30*(3), 257–273.

Miller, L. (1999). Treating posttraumatic stress disorder in children and families: Basic principles and clinical considerations. *American Journal of Family Therapy*, *27*, 21–34.

Murry, V. M., Brown, P. A., Brody, G. H., Cutrona, C. E., & Simons, R. L. (2001). Racial discrimination as a moderator of the links among stress, maternal psychological functioning, and family relationships. *Journal of Marriage and the Family*, *63*(4), 911–914.

Navia, C. E., & Ossa, M. (2003). Family functioning, coping, and psychological adjustment in victims and their families following kidnapping. *Journal of Traumatic Stress*, *16*(1), 107–112.

Newcomb, M. D., & Locke, T. F. (2001). Intergenerational cycle of maltreatment: A popular concept obscured by methodological limitations. *Child Abuse and Neglect*, *25*(9), 1219–1240.

Northam, E., Anderson, P., Adler, R., Werther, G., & Warne, G. (1996). Psychosocial and family functioning in children with insulin-dependent diabetes at diagnosis and one year later. *Journal of Pediatric Psychology*, *21*(5), 699–717.

Ozer, E. J., Best, S. R., Lipsey, T. L., & Weiss, D. S. (2003). Predictors of posttraumatic stress disorder and symptoms in adults: A meta-analysis. *Psychological Bulletin*, *129*(1), 52–73.

Parappully, J., Rosenbaum, R., van den Daele, L., & Nzewi, E. (2002). Thriving after trauma: The experience of parents of murdered children. *Journal of Humanistic Psychology*, *42*(1), 33–70.

Parker, R. J. (1999). The art of blessing: Teaching parents to create rituals. *Professional School Counseling*, *2*(3), 218–226.

Patterson, J. M. (2002). Integrating family resilience and family stress theory. *Journal of Marriage and the Family*, *64*(2), 349–360.

Peacock, E. J., & Wong, P. T. (1996). Anticipatory stress: The relation of locus of control, optimism, and control appraisals to coping. *Journal of Research in Personality*, *30*(2), 204–222.

Peebles-Kleiger, M. J., & Kleiger, J. H. (1994). Re-integration stress for Desert Storm families: Wartime deployments and family trauma. *Journal of Traumatic Stress*, *7*(2), 173–194.

Perry, B. D., & Pollard, R. (1998). Homeostasis, stress, trauma, and adaptation: A neurodevelopmental view of childhood trauma. *Child and Adolescent Clinics of North America*, *7*(1), 33–51.

Pfefferbaum, B. (1997). Posttraumatic stress disorder in children: A review of the past 10 years. *Journal of the American Academy of Child and Adolescent Psychiatry*, *36*(11), 1503–1511.

Pinderhughes, E. E., Dodge, K. A., Bates, J. E., Pettit, G. S., & Zelli, A. (2000). Discipline responses: Influences of parents' socioeconomic status, ethnicity, beliefs about parenting, stress, and cognitive–emotional processes. *Journal of Family Psychology*, *14*(3), 380–400.

Pinderhughes, E. E., Nix, R., Foster, E. M., & Jones, D. (2001). Parenting in context: Impact of neighborhood poverty, residential stability, public services, social networks, and danger on parental behaviors. *Journal of Marriage and the Family*, *63*(4), 941–953.

Piotrkowski, C. S., Collins, R. C., Knitzer, J., & Robinson, R. (1994). Strengthening mental health services in Head Start: A challenge for the 1990s. *American Psychologist*, *49*(2), 133–139.

Pynoos, R. S., Goenjiian, A., Tashjian, M., Karakashian, M., Manjikian, R., Manoukian, G., et al. (1993). Post-traumatic stress reactions in children after the 1988 Armenian earthquake. *British Journal of Psychiatry*, *163*, 239–247.

Pynoos, R. S., Steinberg, A. M., & Goenjian, A. (1996). Traumatic stress in childhood and adolescence: Recent developments and current controversies. In B. A. van der Kolk, A. C. McFarlane, & L. Weisaeth (Eds.), *Traumatic stress: The effects of overwhelming experience on mind, body, and society* (pp. 331–358). New York: Guilford Press.

Reinemann, D. H. S., Stark, K. D., & Swearer, S. M. (2003). Family factors that differentiate sexually abused and nonabused adolescent psychiatric inpatients. *Journal of Interpersonal Violence*, *18*(5), 471–489.

Repetti, R. L., Taylor, S. E., & Seeman, T. E. (2002). Risky families: Family social environments and the mental and physical health of offspring. *Psychological Bulletin*, *128*(2), 330–366.

Repetti, R. L., & Wood, J. (1997). Families accommodating to chronic stress: Unintended and unnoticed processes. In B. H. Gottlieb (Ed.), *Coping with chronic stress: The Plenum Series on stress and coping* (pp. 191–220). New York, NY, US: Plenum Press.

Rossman, B. B. R. (1999). Multiple risks for children exposed to parental violence: Family factors, psychological maltreatment, and trauma. *Journal of Aggression, Maltreatment, and Trauma*, *2*(2), 207–237.

Rousseau, C., Drapeau, A., & Platt, R. (1999). Family trauma and its association with emotional and behavioral problems and social adjustment in adolescent Cambodian refugees. *Child Abuse and Neglect*, *23*(12), 1263–1273.

Rousseau, C., Mekki-Berrada, A., & Moreau, S. (2001). Trauma and extended separation from family among Latin American and African refugees in Montreal. *Psychiatry*, *64*(1), 40–59.

Rutter, M. (1990). The developmental psychopathology of depression. Issues and perspectives. In J. Rolf, A. S. Master, D. Cicchetti, K. N. Nuechterlein, & S. Weintraub (Eds.), *Risk and protective factors in the development of psychopathology.* Cambridge, UK: Cambridge University Press.

Salter, E., & Stallard, P. (2004). Posttraumatic growth in child survivors of a road traffic accident. *Journal of Traumatic Stress*, *17*(4), 335–340.

Scheeringa, M. S., Peebles, C. D., Cook, C. A., & Zeanah, C. H. (2001). Toward establishing procedural, criterion, and discriminant validity for PTSD in early childhood. *Journal of the American Academy of Child and Adolescent Psychiatry*, *40*(1), 52–60.

Scheeringa, M. S., & Zeanah, C. H. (2001). A relational perspective on PTSD in early childhood. *Journal of Traumatic Stress*, *14*(4), 799–815.

Scheier, L. M., Botvin, G. J., & Miller, N. L. (1999). Life events, neighborhood stress, psychosocial functioning, and alcohol use among urban minority youth. *Journal of Child and Adolescent Substance Abuse*, *9*(1), 19–50.

Seidman, E., Yoshikawa, H., Roberts, A., Chesir-Teran, D., Allen, L., Friedman, J. L., et al. (1998). Structural and experiential neighborhood contexts, developmental stage, and antisocial behavior among urban adolescents in poverty. *Development and Psychopathology*, *10*, 259–281.

Shumow, L., Vandell, D. L., & Posner, J. (1998). Perceptions of danger: A psychological mediator of neighborhood demographic characteristics. *American Journal of Orthopsychiatry*, *68*(3), 468–478.

Solomon, Z., Waysman, M., Levy, G., Fried, B., Mikulincer, M., Benbenishty, R., et al. (1992). From front line to home front: A study of secondary traumatization. *Family Process*, *31*(3), 289–302.

Stattin, H., & Kerr, M. (2000). Parental monitoring: A reinterpretation. *Child Development*, *71*(4), 1072–1085.

Steinglass, P. (2001). Commentary on "Trauma and extended separation from family among Latin American and African American families: Forced relocation": A family researcher/clinician's perspective. *Psychiatry*, *64*(1), 64–68.

Stevenson, H. C. (1998). Raising safe villages: Cultural–ecological factors that influence the emotional adjustment of adolescents. *Journal of Black Psychology*, *24*(1), 44–59.

Stocker, C. M., & Youngblade, L. (1999). Marital conflict and parental hostility: Links with children's sibling and peer relationships. *Journal of Family Psychology*, *13*(4), 598–609.

Taylor, T., & Biglan, A. (1998). Behavioral family interventions for improving child-rearing: A review of the literature for clinicians and policy makers. *Clinical Child and Family Psychology Review*, *1*(1), 41–60.

Tedeschi, R. G., Park, C. L., & Calhoun, L. G. (1998). Posttraumatic growth: Conceptual issues. In R. G. Tedeschi, C. L. Park, & L. G. Calhoun (Eds.), *Posttraumatic growth: Positive changes in the aftermath of crisis* (pp. 1–22). London: Erlbaum.

Terr, L. C. (1985). Psychic trauma in children and adolescents. *Psychiatric Clinics of North America*, 8, 815–835.

Terr, L. C. (1991). Childhood traumas: An outline and overview. *American Journal of Psychiatry*, *148*(1), 10–20.

Tigges, L. M., Browne, I., & Green, G. P. (1998). Social isolation of the urban poor: Race, class and neighborhood effects on social resources. *Sociological Quarterly*, *39*(1), 53–77.

Tolan, P. H., Gorman-Smith, D., Huesmann, L. R., & Zelli, A. (1997). Assessment of family relationship characteristics: A measure to explain risk for antisocial behavior and depression among urban youth. *Psychological Assessment*, *9*(3), 212–223.

Trute, B., & Hiebert-Murphy, D. (2002). Family adjustment to childhood developmental disability: A measure of parent appraisal of family impacts. *Journal of Pediatric Psychology*, *27*(3), 271–280.

Valiente, C., Fabes, R. A., Eisenberg, N., & Spinrad, T. L. (2004). The relations of parental expressivity and support to children's coping with daily stress. *Journal of Family Psychology*, *18*(1), 97–106.

van Ijzendoorn, M. H., & Bakermans-Kranenburg, M. J. (1996). Attachment representations in mothers, fathers, adolescents, and clinical groups: A meta-analytic search for normative data. *Journal of Consulting and Clinical Psychology*, *64*(1), 8–21.

Warren, S. L., Emde, R. N., & Sroufe, L. A. (2000). Internal representations: Predicting anxiety from children's play narratives. *Journal of the American Academy of Child and Adolescent Psychiatry*, *39*(1), 100–107.

Wasserman, G., & Miller, L. (1996). Parenting predictors of early conduct problems in urban, high-risk boys. *Journal of the American Academy of Child and Adolescent Psychiatry*, *35*(9), 1227–1236.

Waysman, M., Mikulincer, M., Solomon, Z., & Weisenberg, M. (1993). Secondary traumatization among wives of posttraumatic combat veterans: A family typology. *Journal of Family Psychology*, *7*(1), 104–118.

Weine, S., Vojvoda, D., Hartman, S., & Hyman, L. (1997). A family survives genocide. *Psychiatry, Interpersonal and Biological Processes*, *60*(1), 24–39.

Wheaton, B. (1997). The nature of chronic stress. In B. H. Gottlieb (Ed.), *Coping with chronic stress: The Plenum Series on stress and coping* (pp. 43–73). New York, NY, US: Plenum Press.

Wicke, S. K., & Marwit, S. J. (2000–2001). Assumptive world views and the grief reactions of parents of murdered children. *Omega: Journal of Death and Dying*, *42*(2), 101–113.

Williams, J., Hackworth, S. R., & Cradock, M. M. (2002). Medical crisis and loss clinic: Novel approach to family transitions. *Illness, Crises & Loss*, *10*(4), 356–366.

Williams, P. (1997). Siblings and pediatric chronic illness: A review of the literature. *International Journal of Nursing Studies*, *34*(4), 312–323.

Witmer, T. A. P., & Culver, S. M. (2001). Trauma and resilience among Bosnian refugee families: A critical review of the literature. *Journal of Social Work Research and Evaluation*, *2*(2), 173–187.

Wyman, P. A., Cowen, E. L., Work, W. C., Hoyt-Meyers, L., Magnus, K. B., & Fagen, D. B. (1999). Caregiving and developmental factors differentiating young at-risk urban children showing resilient versus stress-affected outcomes: A replication and extension. *Child Development*, *70*(3), 645–659.