



 Editorial

Examining the Role of Safe, Stable, and Nurturing Relationships in the Intergenerational Continuity of Child Maltreatment—Introduction to the Special Issue

This special issue is the result of a successful collaboration between the Centers for Disease Control and Prevention (CDC) and researchers leading four important longitudinal studies on intergenerational patterns of violence: The Environmental Risk Longitudinal Twin Study (E-Risk) [1]; the Family Transitions Project (FTP) [2]; the Lehigh Longitudinal Study [3]; and the Rochester Youth Development Study [4]. The papers that follow investigate the role of safe, stable, and nurturing relationships and social contexts in the lives of children and their caregivers, provide insight into complex relationship factors that influence the intergenerational continuity of child maltreatment, and point to a number of important avenues to improve the lives of children and families by preventing violence and promoting health and well-being.

Child maltreatment is a significant public health problem that requires a multifaceted approach to prevention. It is estimated that one out of every ten children in the United States experiences one or more forms of physical, sexual, or emotional abuse or neglect by a parent or other caregiver at some point during their lifetime [5–7]. In 2011, social service workers identified 681,000 children¹ in the United States as substantiated victims of maltreatment. This equates to an overall victimization rate of 9.1 per 1,000 children in the U.S. population [8]. It is well-established that experiencing child maltreatment is associated with a variety of negative physical, emotional, and psychological outcomes, including subsequent harsh and/or neglectful parenting in adulthood [9–13]. Yet, it is also clear that not all maltreated children grow up to become maltreating parents [14,15]. Thus, identifying factors that distinguish families in which the cycle of violence is maintained from families in which it is interrupted is critical for violence prevention and optimal child development.

The CDC has identified the promotion of safe, stable, nurturing relationships (SSNRs) as a key strategy for the public health approach to child maltreatment prevention [16]. The three dimensions of SSNRs (i.e., safety, stability, and nurturance) each represent significant aspects of the social and physical environments that

protect children and promote development. Each can be thought of as being on a relational and environmental continuum. In extreme cases, SSNRs may be regarded as being on the positive end of the continuum while the opposing negative end represents risk. In as much, one can think of safety being transposed with neglect and violence, while stability counters chaos and unpredictability, and nurturing opposes hostility and rejection. In less extreme cases, SSNRs may buffer the impact of negative relational and environmental contexts. These dimensions overlap, but each represents central and distinct aspects of a child's relationships and environments that are crucial to their healthy development.

From a public health perspective, the promotion of SSNRs is strategic, in that it can have synergistic effects on a broad range of health outcomes as well as contribute to the development of skills that will enhance the attainment of healthy habits and lifestyles. Because young children experience their world through their relationships with parents and caregivers [17], these relationships are fundamental to the healthy development of the brain and, consequently, the development of physical, emotional, social, behavioral, and intellectual capacities [17–20].

SSNRs can also be found in social environments that children encounter outside of the home and, thus, can be extended to relationships between children and other caregivers, between children and peers, and also between caregivers and other adults. For example, studies of intergenerational transmission of child physical abuse have suggested that even the perception of support from significant adults may itself reduce the risk of subsequently maltreating one's child (for reviews see [9,21]). As such, it is critically important to empirically test whether different types of SSNRs (e.g., between children and caregivers, between caregivers and other adults) have the potential to interrupt the intergenerational continuity of maltreatment.

Panel Process and Participants

To support a research initiative documenting the magnitude of intergenerational continuities in maltreatment and identifying SSNR factors within the individual, family, or community that break the cycle of maltreatment, CDC identified research teams with data sets on families that included: assessment of multiple generations (e.g., grandparent, adult, and child); measure(s) of lifetime experiences of all types of maltreatment (i.e., physical abuse, sexual abuse, neglect, and emotional abuse) across generations; and

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¹ The National Child Abuse and Neglect Data System defines a "child" as any person in the U.S. population younger than 18 years of age (U.S. Department of Health and Human Services, 2010).

measures of caregiver SSNRs in multiple generations. In 2010, CDC convened a distinguished panel consisting of university investigators from four sites (associated with longitudinal studies fielded in the United States and the United Kingdom) to examine the transmission of maltreatment across generations.

The panel studies include: (1) the Environmental Risk Longitudinal Twin Study (E-Risk) [1]—comprising 1,116 families with twins born in England and Wales between the years 1994 and 1995, with child maltreatment reported prospectively by mothers when the children were age 5, 7, 10, and 12 years and caregiver history of maltreatment reported by mothers retrospectively at baseline; (2) the Family Transitions Project (FTP) [2]—a study of 558 target youth and their families, initiated in 1989 and focused on the transition to adulthood from 1994 to 2005. For the data used as part of the CDC panel, adolescent participants from rural Midwestern communities were interviewed either on an annual or biennial basis from as early as seventh grade until they were, on average, 29 years of age; (3) the Lehigh Longitudinal Study [3]—a prospective investigation of the causes and consequences of child maltreatment, fielded from the 1970s ($N = 457$) through 2010 ($N = 357$) in the Northeastern United States, comprised of children who either were involved with child welfare for maltreatment prior to the beginning of the study or were drawn from several group settings in the same area; and (4) the Rochester Youth Development Study [4]—a multigenerational longitudinal study of antisocial behavior fielded in Rochester, New York beginning in 1988. This study followed a sample of 1,000 adolescents (and one of their parents), until participants were 31 years of age. Substantiated cases of maltreatment victimization and maltreatment perpetration were collected from birth through age 18 years, and from age 21 years to age 30 years. Details regarding each study are presented in the individual papers contained in this issue. The four studies offer diverse samples and rich data sets that allow for the investigation of whether a variety of SSNR constructs (e.g., spousal behaviors, relationship and parenting satisfaction, and quality of parent and sibling relationships) moderate the relationship between experiencing maltreatment as a child and perpetrating maltreatment as an adult.

Since its inception, the panel has collaborated with CDC investigators whose work focuses on the etiology of child maltreatment, violence prevention, and healthy child development to discuss the current state of science; refine analysis plans that highlight common aspects across studies, as well as unique strengths of each data set; brainstorm and resolve methodological challenges; present preliminary and final results; and provide insight into the interpretation and implications of findings.

An important strength of this panel was the ability of the sites to triangulate findings across studies. Although all sites collected data on maltreatment history and SSNR constructs, the measures used in each study were different (e.g., two studies used official reports of maltreatment, one used self-report measures, and one employed observational data). Thus, rather than conducting common analyses by combining data across sites, the sites ran parallel analyses using their site specific measures and data. Analytic methods utilized by the panel included logistic regression, structural equation modeling, and survival analysis. This approach allowed each site to capitalize on its unique data and measures and provides a fuller picture of the complex relationship between risk and protective factors and the intergenerational continuity of maltreatment. To our knowledge, this collection of papers represents the most comprehensive examination of such

a broad range of relationship factors that may mitigate the intergenerational cycle of maltreatment.

Overall, all study sites identified intergenerational continuities in the cycle of maltreatment, with a childhood history of maltreatment increasing the odds of maltreating offspring by a factor of 1.3 to 5.3 depending on the sample and the severity of the parent's abuse history. Clearly, the risk for transmission of maltreatment behaviors is present in the lives of many of the study participants regardless of the method of data collection or analytic strategy used. The findings related to the impact of certain types of SSNRs on breaking the cycle of child maltreatment were a little more mixed, with three studies finding a significant association between protective constructs and attenuation in the continuity of maltreatment and one study finding no significant association.

The final paper in this series [22] used a meta-analytic approach to assess the cumulative effect size of the impact of SSNRs on the intergenerational transmission of abuse and neglect across five diverse studies (the four studies in this special issue [23–26] and one additional study from a systematic review of published studies [27]). Results indicate that the presence of SSNRs has a significant moderating effect on the intergenerational transmission of maltreatment, thus highlighting a critical point for prevention of the cycle of violence and promotion of health across the lifespan.

Child abuse and neglect are a costly public health burden. Recent estimates place the daily cost of child maltreatment in the United States at \$220 million [28], with the total lifetime burden of new cases of child maltreatment placing, at a minimum, a \$124 billion impact on society [29]. The studies contained in this special issue suggest that promoting supportive relationships and increasing relationship satisfaction among caregivers who have experienced childhood maltreatment may have the greatest benefits in fostering safe, stable, nurturing, and child maltreatment-free environments. As such, programs that may have the greatest likelihood of breaking the cycle of child maltreatment are those that are implemented prior to child-rearing and enhance relationship skills and promote healthy and safe dating and romantic relationships.

Significant work is still needed to fully understand the myriad factors that influence disruption of violence perpetration between generations; the studies presented herein provide an important first step toward achieving such understanding.

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Melissa T. Merrick, Ph.D.^a

Rebecca T. Leeb, Ph.D.^b

Rosalyn D. Lee, Ph.D.^a

^a Division of Violence Prevention
National Center for Injury Prevention and Control
Centers for Disease Control and Prevention
Atlanta, Georgia

^b Division of Health and Human Development
National Center on Birth Defects and Developmental Disabilities
Centers for Disease Control and Prevention
Atlanta, Georgia

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