



Published in final edited form as:

Child Dev. 2012 March ; 83(2): 461–468. doi:10.1111/j.1467-8624.2011.01720.x.

Political Violence and Child Adjustment: Longitudinal Tests of Sectarian Antisocial Behavior, Family Conflict and Insecurity as Explanatory Pathways

E. Mark Cummings,

Psychology Department, University of Notre Dame

Christine E. Merrilees,

Psychology Department, University of Notre Dame

Alice C. Schermerhorn,

Psychology Department, University of Notre Dame

Marcie C. Goeke-Morey,

Psychology Department, The Catholic University of America

Peter Shirlow, and

School of Law, Queen's University Belfast

Ed Cairns

School of Psychology, University of Ulster

Abstract

Understanding the impact of political violence on child maladjustment is a matter of international concern. Recent research has advanced a social ecological explanation for relations between political violence and child adjustment. However, conclusions are qualified by the lack of longitudinal tests. Towards examining pathways longitudinally, mothers and their adolescents ($M = 12.33$, $SD = 1.78$, at time 1) from two-parent families in Catholic and Protestant working class neighborhoods in Belfast, Northern Ireland, completed measures assessing multiple levels of a social ecological model. Utilizing autoregressive controls, a three-wave longitudinal model test (T1, $n = 299$; T2, $n = 248$; T3, $n = 197$) supported a specific pathway linking sectarian community violence, family conflict, children's insecurity about family relationships, and adjustment problems.

The negative effects of political violence on children's adjustment, including the implications for lasting peace processes, are matters of international concern. Research has repeatedly documented the negative effects of political violence on the children, including heightened aggression, depression, post-traumatic stress, poor school performance, and engagement in political violence (Cairns, 1996). However, the mechanisms through which political violence impacts children's well-being are little understood (Barber, 2009; Cairns & Dawes, 1996; Punamaki, Qouta, & El Saaraj, 1997). Few tests of explanatory processes have been undertaken and conclusions are qualified by the lack of longitudinal tests of possible explanatory models (Dubow et al., 2010; Feerick & Prinz, 2003).

Cummings, Goeke-Morey, Schermerhorn, Merrilees, and Cairns (2009) recently advanced a social ecological explanation for relations between political violence and children's adjustment, positing that community, family and child psychological processes relate to children's maladjustment in these contexts. Cross-sectional tests provided initial support for this model (Cummings, Merrilees et al., 2010; Cummings, Schermerhorn et al., 2010). However, cross-sectional studies are inconclusive regarding pathways of influence developmentally. This paper provides longitudinal tests of this social ecological perspective on relations between political violence and child adjustment.

A Social Ecological Model for Relations between Political Violence and Child Adjustment

Little is known about the bases for relations between political violence and children's adjustment, in Northern Ireland or elsewhere. Building on social ecological models (e.g., Bronfenbrenner, 1979; Cicchetti & Lynch, 1993; Sagi-Schwartz, 2008), we hypothesize that political violence affects children through multiple levels of individual and societal functioning. Figure 1 illustrates the social ecological model to be tested for pathways between political violence and child adjustment in Northern Ireland.

Historical political violence—The chain of influence of political violence on child maladjustment is posited to begin with historical political violence. Even though lethal events may occur before children were born, community awareness may remain high, continuing to influence children and adults. For example, in Belfast, murals, street markings and other symbols memorialize deaths and atrocities, further reinforcing sectarian identities and intergroup hostilities (Shirlow & Murtagh, 2006). In the current report, we use as an index of historical political violence deaths resulting from sectarian hostilities. Deaths and atrocities by one group against another may have long-lasting implications for tensions between groups, with memories, recollections and other residues of political violence contributing to hostilities long after the events have occurred (Ajdukovic & Biruski, 2008; Cairns & Roe, 2003).

Community and domestic conflict, antisocial behavior, and violence—Relations are reported between violence in the community and in the home, including marital and family conflict, in USA studies (Proctor, 2006). Violence in the community increases the stresses and threats faced by family members (Cooley, Turner, & Beidel, 1995) and child maladjustment, including externalizing (Margolin & Gordis, 2000) and internalizing problems (Gorman-Smith & Tolan, 1998).

Community violence takes multiple forms, including sectarian or nonsectarian antisocial behavior. Garbarino and Kostelny (1996) found that behavioral pathology among Palestinian children was greatest when children experienced marital violence and physical violence directed at the child, and exposure to ethnic-political violence (see also Catani, Jacob, Schauer, Kohila, & Neuner, 2008; Dubow, Huesmann, & Boxer, 2009; Joshi & O'Donnell, 2003). However, the extent to which sectarian, distinguished from non-sectarian, community violence, contributes to adjustment problems by elevating family conflict and insecurity about family relationships, is little understood.

In Northern Ireland, sectarian antisocial behavior (SAB) occurs at the community level between ethnic groups, specifically Catholics and Protestants. Despite peace accords, substantial rates of sectarian violence continue (e.g., Summary of Statistics Relating to the Security Situation, 2006/2007), between the highly-segregated Catholic and Protestant communities (MacGinty, Muldoon, & Ferguson, 2007; McGrellis, 2005). By contrast, nonsectarian community antisocial behavior (NAB) is "ordinary crime", which refers to

intra-group antisocial behavior that may be found in any community, regardless of political context.

Emotional insecurity—This report also further examines the role of children’s regulatory process of emotional insecurity in contexts of political violence (e.g. Cummings et al., 2009; Figure 1). SAB is expected to be linked more closely than NAB with children’s insecurity about the social environment (Cummings et al., 2009). Cairns (1996) and Punamäki et al. (1997) have both argued that political violence has a larger impact on children’s adjustment and well-being than other forms of violence because of its prolonged nature, unpredictability, and impacts on society by jeopardizing inter-community relations and the integrity of the political and social order. Cross-sectional studies have further implicated children’s insecurity about family relationships, in pathways between political violence and child adjustment (e.g., Cummings, Merrilees et al., 2010) Multiple responses (e.g., behavioral, emotional) are posited to be related to emotional insecurity in the face of marital conflict (Davies, Harold, Goeke-Morey & Cummings, 2002). Emotional insecurity about parent-child relationships is also expected to be related to family conflict and child adjustment in these contexts (Cummings, Schermerhorn et al., 2010), including risks for internalizing and externalizing problems (Cummings & Davies, 2010).

The Current Study

This study provides one of the first longitudinal tests of a conceptual model from a social ecological perspective for pathways between histories of political violence and child adjustment. Pathways hypothesized by Cummings et al. (2009) involving SAB and NAB, family conflict, emotional insecurity, and children’s internalizing and externalizing problems are examined. A unique contribution is the focus on longitudinally testing the role of family conflict and insecurity about family relationships in these pathways. These pathways are explored in a three-wave longitudinal test, based on multiple reporters and sources of data and rigorous model testing criteria (e.g., autoregressive controls).

METHOD

Participants

Participants included 299 mothers and their children (147 boys and 152 girls) drawn from a larger longitudinal study in Belfast, Northern Ireland. At time 2, 248 (83%) of these families participated and 197 families (66%) participated at time 3. In this study mothers were either married ($n=206$) or living as married ($n=93$) at time 1, with a child between the ages of 10 and 17 years at home. At time 1, the mean time in marital status was 13.13 years ($SD = 7.71$), mothers’ mean age was 38.17 years ($SD = 6.01$) and the mean age of children was 12.33 years ($SD = 1.78$, range 10-17). Chi-square tests indicated no relation between marital status at time 1, and participation in either times 2 ($\chi^2(1) = 1.89, p > .05$) or 3 ($\chi^2(1) = 1.93, p > .05$). Compared with families who did not continue, families who participated in time 2 reported more marital conflict, emotional insecurity about marital conflict, and emotion problems in children. Compared to families who did not continue after time 2, time 3 children reported lower emotion problems, and greater SAB and NAB and time 3 mothers reported less marital conflict and that children were less emotionally insecure about marital conflict.

Families were selected using stratified random sampling from 18 working class socially deprived Belfast neighborhoods, with sampling areas identified to (a) capture variation in historic sectarian violence, (b) create representative samples of Catholic and Protestant areas, and (c) minimize socioeconomic differences between neighborhoods. A proportional sample of families living in Catholic and Protestant areas (42% Catholic, 58% Protestant)

was achieved (Darby, 2001). Consistent with the demographics of Northern Ireland, all participants were White.

Professional interviewers from an established market research firm surveyed households with a child between the ages of 10 and 17 years. This age range was selected because children are aware of the social distinctions of interest by age 8 years (Cairns, 1987) and children age 10 years or older are more likely to be directly affected by sectarian-related violence, either as participants or as victims. When families had two or more children within the indicated age range, the youngest child interested participated.

Procedures

The study was conducted under the approval and direction of the Institutional Review Boards at all participating universities. Mothers and children provided consent and assent, respectively, before participating. Mother and child questionnaires were administered as interviews conducted in the participants' homes by professional interviewers annually for three years. Mother and child interviews lasted approximately 60 and 30 minutes, respectively. Mothers reported family demographic information. Families were compensated for their participation.

Measures

Historical political violence (HPV)—The number of politically motivated deaths recorded in these communities indexed historical political violence. Histories of politically motivated deaths are hypothesized as reflecting lasting influences of historical political violence on current community relations in Belfast (Cairns & Roe, 2003; Shirlow & Murtagh, 2006). This database was compiled via official police sources, community lists regarding politically motivated deaths and interviews with combatant groups, for politically motivated deaths occurring between 1969 and 2007. Politically motivated deaths included those committed by armed combatant groups (state army and police and paramilitary organizations) and in which the assailant was a civilian and the motivation had been proven to be sectarian. Individuals received the death frequency score for their community. The measure thus reflected historical suffering from political violence in the communities in which participants lived.

Sectarian and Nonsectarian Antisocial Behavior (SAB and NAB)—A multi-phase process of qualitative and quantitative examination was used to develop and establish the cultural relevance and psychometric properties of the measures of SAB and NAB (see Goeke-Morey et al., 2009, for report of instrument development). These scales assess the children's awareness of these behaviors within their communities. The 12-item sectarian antisocial behavior scale (SAB) includes items such as *stones or objects thrown over walls*, and *deaths or serious injury caused by the other community*. The 7-item nonsectarian antisocial behavior scale (NAB) includes *home break-ins* (see Cummings, Merrilees et al., 2010, for all scale items). Acceptable internal consistencies and other psychometric supports are reported (Goeke-Morey et al., 2009) for each scale. Exploratory factor analysis of the pilot data (Goeke-Morey et al., 2009), and confirmatory factor analysis of the data in the current study supported that SAB and NAB reflect two distinct factors. Cronbach's α were .86 for SAB and .71 for the NAB in this study (time 1).

Family Conflict—Marital conflict was assessed using mothers' reports on the nine-item O'Leary Porter Scale (OPS; Porter & O'Leary, 1980). Porter and O'Leary reported good internal consistency (Cronbach's $\alpha = .86$), test-retest reliability ($r = .96$), and convergent validity. Cronbach's α was .72 in this study (time 2). Mothers also completed the 9-item Family Conflict scale of the Family Environment Scale (Moos & Moos, 1986), a widely

used instrument, with established psychometric properties. Cronbach's alphas in this study was .53 (time 2). These measures were used as indicators of a latent family conflict variable.

Emotional Insecurity—Mothers completed the Security in the Marital Subsystem Scale (SIMS; Davies, Forman, Rasi, & Stevens, 2002), including subscales of Behavior Dysregulation (5 items), Emotional Reactivity (10 items), and Involvement (9 items). Davies, Forman et al. (2002) reported acceptable Cronbach's α s. Cronbach's α s for this study (time 2) were .66 (Behavior Dysregulation), .86 (Emotional Reactivity), and .87 (Involvement). Based on the Parental Attachment Security Scale (PASS; Davies et al., 2002), children also rated emotional security about the mother-child relationship (e.g., "When I'm upset, I go to my mother for comfort"). The 15-item PASS has good reliability and validity (Davies et al., 2002). Cronbach's alpha was .91 for this study (time 2). These scales were used as indicators of the latent variable of emotional insecurity about family relationships.

Child Maladjustment—Internalizing and externalizing problems were assessed based on mother and child reports on the subscales of the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997). Psychometric properties of the SDQ are well established (Goodman & Scott, 1999). Although relatively low internal consistencies for the subscales of the SDQ are typically reported (Palmieri & Smith, 2007), scale construction was designed to maximize clinical significance as well as statistical consistency. Goodman & Scott (1999) reported the SDQ subscales correlated more highly with interview-based ratings of clinical symptoms compared to the CBCL, and better discriminated between high risk and low risk samples, supporting criterion validity. In this study, the Emotional Problems subscales indicated internalizing problems and the Conduct Problems subscales externalizing problems. Cronbach's alphas ranged from .51 to .68 at time 1 and from .48 to .71 at time 3. Child report on the 11-item Aggression Scale (AS; Orpinas & Frankowski, 2001) was also used as another indicator of externalizing problems at time 3. Good internal consistency (.88-.90) has been reported. Cronbach's α for this study was .83.

Data Analytic Plan

Analyses were conducted within a structural equation modeling framework (SEM) using AMOS 18.0. Full information maximum likelihood estimation was used, which adequately estimates parameters with missing data under the assumption that the data is missing at random. Indices of model fit included: the relative χ^2 index (χ^2/df), the comparative fit index (CFI), and the root mean square error of approximation (RMSEA). Acceptable model fit is suggested by scores below three on the χ^2/df index, above .90 for the CFI, and RMSEA values below .08.

Confirmatory factor analyses tested the measurement model. The proposed indicators of the latent factors (internalizing problems, times 1 and 3; externalizing problems, times 1 and 3; family conflict, time 2; emotional insecurity, time 2) were modeled with no cross-loadings and all factors were allowed to correlate. Error terms for indicators with the same reporter and same subscale of the SDQ were also allowed to correlate. This model had adequate fit ($\chi^2(44) = 130.76$; $\chi^2/df = 2.30$; NFI = .87; CFI = .92; RMSEA = .066 (90% CI: .049 -.083)); all of the indicators loaded onto their respective factors, $p < .001$ level. We built on the measurement model by adding other key elements of the social ecological model as manifest variables, adding autoregressive controls, and including covariates for age and income. Including autoregressive controls provided a stringent test of change in the constructs of interest. Child age and gender were included as predictors of all variables a time 2 and time 3 and they were allowed to correlate with all time 1 variables. Mothers' report of take-home income, not assessed at time 1, was also included at times 2 and 3 to

control for variability due to differences in monetary resources. Given space limitations, a complete correlation table is not presented, but is available by request.

RESULTS

The results of the model test can be seen in Figure 2. All time 1 variables were allowed to correlate with each other, as were the two outcome variables at time 3. Error terms for the child outcome variables were allowed to correlate within reporter, within time point to control for reporter method variance for these variables. Correlations were removed from the figure presented for reasons of space. Neither income nor age predicted any of the variables at time 2 or time 3. Gender predicted time 3 externalizing problems with boys showing more externalizing symptoms ($\beta = -.22, p = .02$). At time 1, SAB and NAB were highly correlated ($r = .61, p < .001$). Externalizing and internalizing problems were correlated at time 1 ($r = .50, p = .001$). Age was correlated with NAB ($r = .14, p = .02$), and gender was correlated with externalizing at time 1 ($r = -.22, p = .003$), suggesting more externalizing symptoms for boys. At time 3, internalizing and externalizing problems were not correlated. The regression path from time 1 to time 3 internalizing problems suggested moderate stability ($\beta = .38, p = .002$); the variable representing time 1 externalizing problems was not significantly related to time 3 externalizing problems.

Histories of political violence related to SAB ($\beta = .22, p < .001$) and NAB ($\beta = .17, p = .002$). Results of longitudinal model tests are shown in Figure 2. The model estimation initially resulted in two negative error variances (child report of conduct problems at time 1 and time 3). Error variances for these two variables were set to 1. RMSEA and the χ^2/df suggest that the model fit the data well ($\chi^2(144) = 254.90, p < .001$; $\chi^2/df = 1.77$; RMSEA = .051 (90% CI: .040-.061)), and the CFI fell just below the cut-off for adequate model fit (.89).

Time 1 SAB, but not NAB, was related to family conflict at time 2 ($\beta = .29, p = .014$) (see Figure 2). Family conflict was associated with emotional insecurity ($\beta = .77, p < .001$). Time 2 insecurity, in turn, was related to externalizing ($\beta = .86, p = .020$) and internalizing ($\beta = .89, p = .01$) problems at time 3. Given the size of the sample and the number of estimated parameters in the model, additional autoregressive controls were only included in stages to test further for the relations of variables over time, controlling for earlier levels of family conflict and emotional insecurity. The relation between SAB and family conflict remained significant ($\beta = .25, p = .026$) even controlling for time 1 family conflict ($\beta = .33, p = .024$). The relation between family conflict and insecurity at time 2 ($\beta = .71, p < .001$) remained with insecurity at time 1 controlled in the model ($\beta = .14, p = .027$).

Sobel tests were conducted to test further the significance of indirect effects. All were significantly different from zero: 1) SAB to insecurity through family conflict ($z = 2.05, p = .04$), 2) family conflict to internalizing problems through insecurity ($z = 2.03, p = .04$), and 3) family conflict to externalizing problems through insecurity ($z = 2.18, p = .03$).

The chi-square difference test was used to further examine the argument for the full model by exploring alternative possibilities. Model comparisons were made between the full model seen in figure 1 with all paths free to vary and alternative models that constrained separate paths to zero. The three paths tested were the path from marital conflict to emotional security, and the paths from emotional security to emotion problems and conduct problems. In all cases tests, the full model was the better fitting model (conflict to security: diff $\chi^2(1) = 82.0$; security to emotion problems: $\chi^2(1) = 9.1$; and security to conduct problems: $\chi^2(1) = 8.6$).

Discussion

This study advances a social ecological model for how and why political violence relates to child maladjustment. Specifically, support emerged for family conflict and children's insecurity about family relationships as mechanisms underlying associations between historical political violence and SAB, on the one hand, and internalizing and externalizing problems, on the other. Building upon previous cross-sectional work, this study yielded evidence for this perspective in the context of a three-wave longitudinal model test, meeting rigorous methodological and statistical criteria (i.e., multi-method and reporter assessment; autoregressive controls).

Concerns have been raised about the negative effects of children's exposure to intergroup violence on their adjustment and the intergenerational transmission of political violence (Barber, 2009; Cairns & Roe, 2003; Sagi-Schwartz, 2008). The results suggest the effects of contexts of political violence on children's adjustment may be explained, in part, by elements of community, family and children's internal psychological processes (i.e., emotional insecurity about family relationships) (Cummings et al. 2009). Interestingly, both SAB and NAB were associated with historical political violence, consistent with observations that contexts of political violence may be related to elevations in both sectarian and "ordinary crime" (Darby, 2006; Shirlow & Murtagh, 2006).

Moreover, emotional insecurity about family relationships was indicated as an explanatory mechanism for adjustment problems associated with family conflict. Research on marital conflict and emotional insecurity supports links with both internalizing and externalizing problems (Cummings & Davies, 2010). An indirect "chain of events" was indicated by mediational tests, that is, SAB was longitudinally linked with pathways related to children's adjustment via conflict and insecurity. Notably, a direct path between SAB and child adjustment is neither a necessary nor sufficient condition for supporting a process-oriented model which posits that SAB ultimately affects child well-being by setting in motion pathogenic reactions within the family and child (Emery, Fincham, & Cummings, 1992).

The results build upon past research in the US implicating family conflict as an indirect pathway for the effects of community violence on children's adjustment (Margolin & Gordis, 2000; Proctor, 2006). The indication is that children's feelings of safety and security about their families are undermined by family conflict, and indirectly by community conflict and violence, with implications for their adjustment.

Limitations merit consideration. Most children ranged between 10 and 17 years of age, reflecting the interest in studying age groups at risk for becoming participants as well as observers of sectarian conflict. Future research should further examine age as a factor in contexts of sectarian violence. Attrition rates were higher than are ideally obtained in longitudinal research. Locating and identifying families in these relatively transient and socially deprived areas of Belfast contributed to attrition rates. Low alphas for some of the assessments are a potential limitation. This report tests one possible pathway for associations between political violence and child adjustment, focusing on conflict and violence at multiple levels of the social ecology of political violence. Future research should consider additional possible processes for what may underlie effects of political violence on children's development. Alternative models should also be considered, including other possible influences mediated through the family and child.

The implications for more effective interventions merit consideration. Agreements between political leaders are only a start towards sustained peace processes because, as MacGinty et al. (2007) have pointed out, "reaching a peace deal is not the same as reaching peace". Therefore, it is critical to understand and effectively address the effects of political strife on

communities, families and children for any high likelihood of sustained peace. Although policy makers have long recognized children should be afforded protection and assistance (United Nations, 1997), without data to support specific models, such statements have too often translated into weak recommendations, such as “blandly accepting the truism that mothers can act as buffers for children exposed to political violence” (Cairns & Dawes, 1996, p. 131). The present research for the first time provides the much needed empirical evidence (Aisenberg & Herrenkohl, 2008) to begin to support specific policy recommendations, so that intervention strategies can move beyond simply targeting services to individual victims towards more holistic preventative approaches for communities (Muldoon & Downes, 2007). For example, community interventions to ameliorate family conflict and children’s insecurity are an empirically-supported direction consistent with these findings (Cummings & Davies, 2010), although adaptations for specific contexts of political violence would be an essential next step before any implementation (Cummings et al., 2009). Given the many gaps, more advances are urgently needed.

Acknowledgments

This research was supported by NICHD grant 046933-05 to the first author.

We would like to thank the many families in Northern Ireland who have participated in the project. We would also like to express our appreciation to project staff, graduate students, and undergraduate students at the University of Notre Dame, and the University of Ulster.

References

- Achenbach, T. Integrative guide for the 1991 CBCL/4-18, YSR and TRF profiles. Burlington: University of Vermont, Department of Psychiatry; 1991.
- Aisenberg E, Herrenkohl T. Community violence in context: Risk and resilience in children and families. *Journal of Interpersonal Violence*. 2008; 23:296–315. [PubMed: 18245570]
- Ajdkovic D, Biruski DC. Caught between the ethnic sides: Children growing up in a divided post-war community. *International Journal of Behavioral Development*. 2008; 32:337–347.
- Barber, BK. Adolescents and war: How youth deal with political violence. Oxford, England: Oxford University Press; 2009.
- Bronfenbrenner, U. *The Ecology of Human Development: Experiments by Nature and Design*. Cambridge, MA: Harvard University Press; 1979.
- Cairns, E. *Caught in Crossfire: Children in Northern Ireland*. Appletree Press: Belfast, and Syracuse University Press; Syracuse, NY: 1987.
- Cairns, E. *Children and Political Violence*. Oxford, UK: Blackwell; 1996.
- Cairns E, Dawes A. Children: ethnic and political violence – a commentary. *Child Development*. 1996; 67:129–139.
- Cairns, E.; Roe, M., editors. *The role of memory in ethnic conflict*. London, New York: Palgrave Macmillan; 2003.
- Catani C, Jacob N, Schauer E, Kohila M, Neuner F. Family violence, war, and natural disasters: A study of the effect of extreme stress on children’s mental health in Sri Lanka. *BMC Psychiatry*. 2008; 8:33–43. [PubMed: 18454851]
- Cicchetti D, Lynch M. Toward an ecological/transactional model of community violence and child maltreatment: Consequences for children’s development. *Psychiatry: Interpersonal and Biological Processes*. 1993; 56:96–118.
- Cooley MR, Turner SM, Beidel DC. Assessing community violence: The children’s report of exposure to violence. *Journal of the American Academy of Child & Adolescent Psychiatry*. 1995; 34:201–208. [PubMed: 7896653]
- Cummings, EM.; Davies, PT. *Marital conflict and children: An emotional security perspective*. New York and London: The Guilford Press; 2010.

- Cummings EM, Goeke-Morey MC, Schermerhorn AC, Merrilees CE, Cairns E. Children and political violence from a social ecological perspective: Implications for research on children and families in Northern Ireland. *Clinical Child and Family Psychology Review*. 2009; 12:16–38. [PubMed: 19229611]
- Cummings EM, Merrilees CM, Schermerhorn AC, Goeke-Morey MC, Shirlow P, Cairns E. Testing a social ecological model for relations between political violence and child adjustment in Northern Ireland. *Development and Psychopathology*. 2010; 22:405–418. [PubMed: 20423550]
- Cummings EM, Schermerhorn AC, Merrilees CM, Goeke-Morey MC, Shirlow P, Cairns E. Political violence and child adjustment in Northern Ireland: Testing pathways in a social ecological model including single- and two-parent families. *Developmental Psychology*. 2010; 46:827–841. [PubMed: 20604605]
- Darby, J. *The effects of violence on peace processes*. Washington, DC: United States Peace Press; 2001.
- Darby, J. *Violence and reconstruction*. Notre Dame, IN: University of Notre Dame Press; 2006.
- Davies PT, Forman EM, Rasi JA, Stevens KL. Assessing children's emotional security in the interparental relationship: The Security in the Interparental Subsystem Scales. *Child Development*. 2002; 73:544–562. [PubMed: 11949908]
- Davies PT, Harold GT, Goeke-Morey MC, Cummings EM. Children's emotional security and interparental conflict. *Monographs of the Society for Research on Child Development*. 2002; 67(3; Serial No. 270):131.
- Dubow EF, Huesmann LR, Boxer P. A social-cognitive-ecological framework for understanding the impact of exposure to persistent ethnic-political violence on children's psychosocial adjustment. *Clinical Child and Family Psychology Review*. 2009; 12:113–126. [PubMed: 19430904]
- Dubow EF, Boxer P, Huesmann LR, Shikaki K, Landau S, et al. Exposure to conflict and violence across contexts: Relations to adjustment among Palestinian children. *Journal of Clinical Child & Adolescent Psychology*. 2010; 39:103–116. [PubMed: 20390802]
- Emery RE, Funcham FD, Cummings EM. Parenting in context: Systemic thinking about parental conflict and its influence on children. *Journal of Consulting and Clinical Psychology*. 1992; 60:909–912. [PubMed: 1460152]
- Feerick MM, Prinz RJ. Next steps in research on children exposed to community violence or war/terrorism. *Clinical Child and Family Psychology Review*. 2003; 6:303–305. [PubMed: 14719641]
- Garbarino J, Kostelny K. The effects of political violence on Palestinian children's behavior problems: A risk accumulation model. *Child Development*. 1996; 67:33–45. [PubMed: 8605832]
- Goeke-Morey MC, Cummings EM, Ellis K, Merrilees CE, Schermerhorn AC, Shirlow P, Cairns E. The differential impact on children of inter- and intra-community violence in Northern Ireland. *Peace and Conflict: Journal of Peace Psychology*. 2009; 15:367–383.
- Goodman R. The Strengths and Difficulties Questionnaire: A research note. *Journal of Child Psychology and Psychiatry*. 1997; 38:581–586. [PubMed: 9255702]
- Goodman R, Scott S. Comparing the Strengths and Difficulties Questionnaire and the Child Behavior Checklist: Is small beautiful? *Journal of Abnormal Psychology*. 1999; 27:17–24.
- Gorman-Smith D, Tolan P. The role of exposure to community violence and developmental problems among inner-city youth. *Development and Psychopathology*. 1998; 10:101–116. [PubMed: 9524810]
- Joshi PT, O'Donnell DA. Consequences of child exposure to war and terrorism. *Clinical Child and Family Psychology Review*. 2003; 6:275–292. [PubMed: 14719639]
- MacGinty R, Muldoon OT, Ferguson N. No war, no peace: Northern Ireland after the agreement. *Political Psychology*. 2007; 28:1–11.
- Margolin G, Gordis EB. The effects of family and community violence on children. *Annual Review of Psychology*. 2000; 51:445–479.
- McGrellis S. Pushing the boundaries in Northern Ireland: young people, violence and sectarianism. *Contemporary Politics*. 2005; 11:53–71.
- Moos, RH.; Moos, BS. *Family Environment Scale manual*. 2. Palo Alto, CA: Consulting Psychologists Press; 1986.

- Muldoon O, Downes C. Social identification and post-traumatic stress symptoms in post-conflict Northern Ireland. *The British Journal of Psychiatry*. 2007; 191:146–149. [PubMed: 17666499]
- Orpinas P, Frankowski R. The Aggression Scale: A self-report measure of aggressive behavior for young adolescents. *The Journal of Early Adolescence*. 2001; 21:50–67.
- Palmieri P, Smith G. Examining the structural validity of the Strengths and Difficulties Questionnaire (SDQ) in a U.S. sample of custodial grandmothers. *Psychological Assessment*. 2007; 19:189–198. [PubMed: 17563200]
- Porter B, O’Leary D. Marital discord and childhood behavior problems. *Journal of Abnormal Child Psychology*. 1980; 8:287–295. [PubMed: 7410730]
- Proctor LJ. Children growing up in a violent community: The role of the family. *Aggression and Violent Behavior*. 2006; 11:558–576.
- Punamäki R-L, Qouta S, El Saaraj E. Models of traumatic experiences and children’s adjustment: The roles of perceived parenting and the children’s own resources and activity. *Child Development*. 1997; 64:718–728.
- Sagi-Schwartz A. The well being of children living in chronic war zones: The Palestinian-Israeli case. *International Journal of Behavioral Development*. 2008; 32:322–336.
- Shirlow, P.; Murtagh, B. *Belfast: Segregation, violence and the city*. London: Pluto Press; 2006.
- Statistics on the Security Situation: 1st April 2006- 31st March, 2007. Retrieved from http://www.psni.police.uk/6_statistics_relating_to_the_security_situation.pdf
- United Nations. *United Nations Convention on the Rights of the Child*. Geneva: Office of the United Nations High Commissioner for Human Rights; 1997.

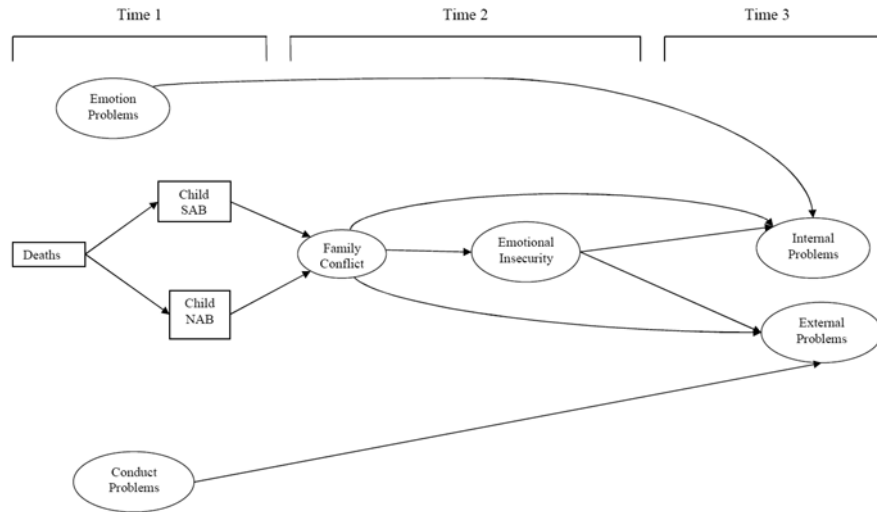


Figure 1. Conceptual model for the social ecology of the effects of community violence on children.

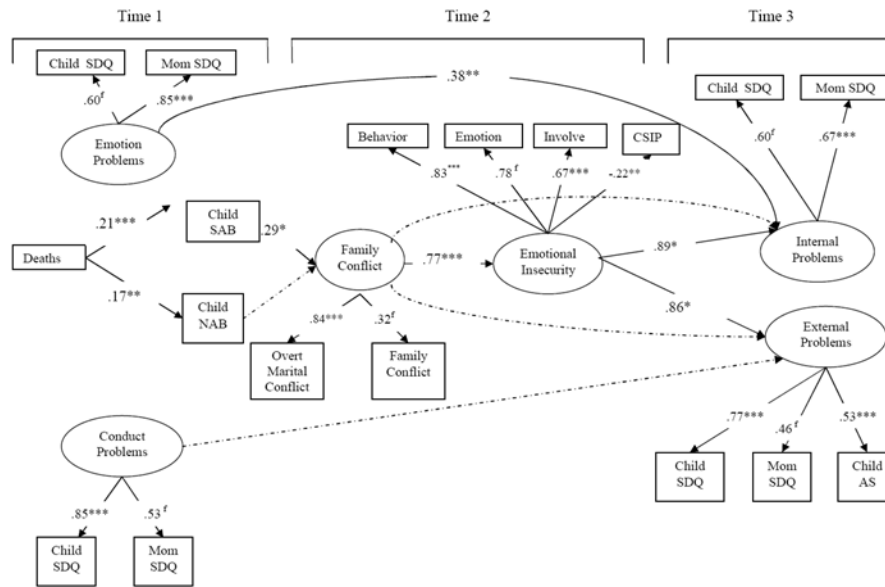


Figure 2. Testing a social ecological model of relations between political violence and child outcomes. SAB = Sectarian Antisocial Behavior; NAB = Nonsectarian Antisocial Behavior; SDQ = Strengths and Difficulties Questionnaire. Standardized path coefficients reported. f superscripts denote fixed factor loadings. Solid lines denote significant paths; dashed lines indicate nonsignificant paths. * $p < .05$; ** $p < .01$; *** $p < .001$. Model fit: $\chi^2(144) = 254.90, p < .001; \chi^2/df = 1.77; NFI = .79; CFI = .89; RMSEA = .051$ (90% CI: .040-.061).