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Risk and Resilience: The Moderating Role of Social Coping for Maternal Mental Health in a Setting of Political Conflict

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Abstract

Violence can threaten individual well-being and tear at the social fabric of communities. At the same time, suffering can mobilize social coping and mutual support. Thus, the backdrop of political violence increases risk factors and stimulates resilience. The current study examined the moderating role of social coping as reflective of risk and resiliency in Northern Ireland, a setting of protracted conflict. Specifically, structural equation modeling was used to investigate whether social coping protects from or exacerbates the negative impact of sectarian crime and nonsectarian crime on maternal mental health (N=631). Nonsectarian crime predicted greater psychological distress for mothers in Belfast. Mixed support was found for the buffering and depletion moderation hypotheses; social coping functioned differently for nonsectarian crime and sectarian crime. Greater social coping buffered mothers' psychological distress from the negative effects of nonsectarian crime, but exacerbated maternal mental health problems when facing sectarian crime. Results suggest that social coping is a complex phenomenon, particularly in settings of protracted political violence. Implications for interventions aimed at alleviating psychological distress by enhancing mothers' social coping in contexts of intergroup conflict are discussed.

Keywords

social coping; maternal mental health; risk and resilience; protracted conflict; political violence

One third of all nations have experienced civil conflict since 1991 (Harbom & Wallensteen, 2007). Violent conflict tears at the social fabric of communities (Kimhi & Shamai, 2004), and at the same time, suffering can mobilize social coping, mutual support, and posttraumatic growth (Staub & Vollhardt, 2008). A substantial body of research has shown that individuals and families are at greater risk for maladjustment when facing incidents of

traumatic stress or prolonged periods of violence (Kimhi & Shamai, 2004). In addition to physical violence, intergroup tension and threat can influence individual adjustment (Punamäki, 1986). Women and mothers are particularly vulnerable to certain classes of mental health problems, such as, depression, post-traumatic stress (PTS) symptoms, anxiety, and decreased well-being in contexts of on-going political and community violence (Bryce, Walker, & Peterson, 1989; Somer, Maguen, Or-Chen, & Litz, 2009; Zeidner, 2006).

Yet, high levels of resilience are also found for individuals living in settings of community violence, chronic political conflict, and in the wake of war (Johnson et al., 2009; Leventhal & Brooks-Gunn, 2000). Although social coping has been identified as one factor in resilience processes (Thoits, 1986), it may be a particularly important variable in settings of intergroup conflict because individuals may mobilize around salient in/out group distinctions (Bar-Tal, 2007). Social coping, that is the use of emotional and instrumental resources provided by informal and formal networks, can be an important moderator of the impact of stressful environments on individual well-being (Rodrigo, Martin, Maiquez, & Rodriguez, 2007). The current study examined if social coping moderated the impact of concurrent risks, specifically sectarian crime and nonsectarian crime, on mothers' adjustment in Belfast, Northern Ireland, a setting of protracted political conflict (Shirlow & Murtagh, 2006).

Social Ecological Framework

Individuals are affected both directly and indirectly by political conflict. The social ecological framework provides a useful heuristic to conceptualize how different levels of the social environment affect mothers' well-being (Bronfenbrenner, 1979). Neighborhood effects, such as proximal crime in the exosystem, have been identified as important contextual factors for maternal psychological distress and family processes (Ceballo & McLoyd, 2002; Leventhal & Brooks-Gunn, 2000). In addition to heightened sectarian crime during political conflict, there is often an increase in nonsectarian crime after the signing of a peace agreement (Monaghan & McLaughlin, 2006). It is possible that these different elements of the exosystem (i.e. sectarian and nonsectarian crime) work within the larger macrosystem in different ways, interacting with individual level variables to predict mental health.). To understand how violence in the exosystem affects individuals and families it is necessary to test models that differentiate between types of crime, namely sectarian and nonsectarian, in the social ecology (Cummings, Goeke-Morey, Schermerhorn, Merrilees, & Cairns, 2009).

Mothers and Sectarian Violence

Compared to men, women may be at heightened risk for internalizing problems in contexts of sectarian violence (Johnson et al., 2009). Sectarian crime, that is political antisocial behavior, refers to acts occurring between conflicting groups which are directed at members or physical markers of the "other" group. Sectarian violence weakens psychosocial and economic resources (Johnson et al., 2009), making conflict more distressing, more threatening, and less manageable for women (Zeidner, 2006). Because women may be particularly reactive to sectarian violence (Punamäki, 1986; Somer et al., 2009), and maternal well-being and depression are important factors for family processes (Bryce et al., 1989), the current study focused on how sectarian crime affected these dimensions of mothers' mental health for families embedded in a context of sectarian violence and political conflict.

Mothers and Nonsectarian Violence

Sectarian, or political, violence does not occur in a vacuum (Bryce et al., 1989; Punamäki, 1986); oftentimes, as levels of sectarian violence subside, new forms of criminal and nonsectarian violence may emerge (Monaghan & McLaughlin, 2006). Nonsectarian violence is not politically-motivated and more likely to be conflict within rather than between groups. However, the majority of political violence literature largely ignores the impact of additional forms of community violence, such as nonsectarian crime, on individuals and families (for exceptions see Cummings et al., 2009; Cummings et al., 2010).

Independent of the co-occurrence with sectarian violence, nonsectarian or community violence has been linked to greater distress and elevated depression in mothers. Mothers may show increased distress because they cannot provide an environment of safety and security for their children, or protect them from community violence (Oravec, Koblinsky, & Randolph, 2008). Moreover, children's safety is the primary reason that parents decide to move away from dangerous neighborhoods (Leventhal & Brooks-Gunn, 2000). These findings suggest that living in contexts of both sectarian and nonsectarian violence may adversely affect maternal wellbeing. However, more research is needed to understand how different moderators, such as social coping, may help buffer or protect mothers' mental health from sectarian and nonsectarian crime.

Social Coping and Maternal Mental Health

Social coping can be defined as a resilience "process by which social resources provided by informal and formal networks allow for instrumental and expressive personal needs to be met in everyday situations as well as under crisis" (Rodrigo et al., 2007, p. 330). In stressful situations, social coping may be instrumental, providing relief from stressors in the environment, and/or emotional, helping individuals manage their expressive needs and affective reactions (Thoits, 1986). Social coping has been identified as an important factor in the face of individual and collective trauma (Norris & Kaniasty, 1992), sectarian or political violence (Bryce et al., 1989) and nonsectarian or community violence (Ceballo & McLoyd, 2002; Rodrigo et al., 2007). However, to be an effective buffer, social coping should "match the needs and values of the distressed individual" (Thoits, 1986, p. 421). In other words, social coping can function as a moderator in beneficial or harmful ways, depending on how it is experienced by an individual in a given context. In addition, there may be a reciprocal relationship; prior adjustment problems may influence an individuals' use of effective social coping strategies (Patten, Williams, Lavorato, & Bulloch, 2010). Therefore, the current study controlled for earlier adjustment to examine the efficacy of the stressor/coping "match"; does social coping protect mothers' mental health from the negative effects of different risk factors (e.g., sectarian crime and nonsectarian crime) in a setting of protracted conflict.

There are two alternative hypotheses about the moderating role of social coping within different social contexts. The first hypothesis is a buffering moderation model which predicts that social coping protects mental health from the negative impact of environmental stressors (Norris & Kaniasty, 1992; Rodrigo et al., 2007). More specifically, social coping improves mothers' ability to handle daily stressors, enhances psychological functioning (Ceballo & McLoyd, 2002; McLoyd, 1990), and bolsters mental health through positive interactions, affirmation, and assistance (Lee, Anderson, Horowitz, & August, 2009). In addition, through social coping, mothers can also acquire instrumental, or material, support such as child care, which may protect them from maladaptive parenting (McLoyd, 1990). Thus, social coping can be conceptualized as assets, relationships, and resources for mothers, protecting their mental health from dangerous threats in the social ecology.

Conversely, the second hypothesis is the depletion moderation model, which predicts that social coping may be detrimental to maternal well-being in contexts of severe or multiple risks. The depletion hypothesis suggests that social coping is compromised in high-risk environments because others are living under similarly stressful conditions (Rodrigo et al., 2007). That is, partners in coping, such as spouses, grandparents, kin ties, neighbors, or state institutions, may also be under similar strain and provide lower quality or insufficient emotional support (Ceballo & McLoyd, 2002). Moreover, informal social coping with peers in high-risk environments is often reciprocal (Rodrigo et al., 2007); the future obligation to return support may provide an additional mental burden for mothers (Ceballo & McLoyd, 2002). For example, accepting instrumental support may be particularly taxing for already low-resource families if mothers anticipate they will have to repay the favor (Leventhal & Brooks-Gunn, 2000). Thus, according to the depletion hypothesis, social coping in high-risk communities may have emotional and material costs (McLoyd, 1990).

Protracted Sectarian Conflict in Northern Ireland

Before presenting the specific research questions guiding the current study, it is helpful to put the conflict in Northern Ireland in perspective. In its essence, the conflict is a constitutional issue between two different groups: Catholics, or nationalists, who want to join the rest of the island of Ireland, and Protestants, or unionists, who wish to remain part of the United Kingdom (Cairns & Darby, 1998). During the most recent cycle of sectarian violence, known as the Troubles, approximately 3,600 people were killed. Sectarian-motivated death rates peaked in the early and mid-1970s and have subsided following the 1998 Belfast Agreement. However, sectarian hostilities did not fully subside with the signing of the peace accord. On the contrary, tensions between Catholics and Protestants remain a constant part of life in Northern Ireland (Shirlow & Murtagh, 2006).

Since the Belfast Agreement and decommissioning of paramilitaries, the lack of social control violence, or own-group “policing,” has opened the space for new forms of criminal violence (Monaghan & McLaughlin, 2006). As a result, there has been a steady increase in nonsectarian crime since 2000. Thus, although the underlying constitutional dispute has largely been resolved through a power-sharing government, Northern Ireland remains mired in low levels of violence and civil disturbances (Shirlow & Murtagh, 2006).

Current Study and Research Questions

Given the historic and present situation in Northern Ireland, the current study aimed to identify predictors of maternal mental health (e.g., sectarian and nonsectarian crime) as well as a moderator (e.g., social coping) that may protect mothers’ adjustment from the negative impact of environmental risks. By expanding the study of political conflict to include both sectarian and nonsectarian crime, the study offers a more comprehensive picture of the multiple risks facing mothers in Belfast.

To examine resilience processes to different environmental stressors, two research questions framed the current study. First, do environmental risks such as sectarian crime and nonsectarian crime affect maternal mental health? Based on previous research, it was predicted that higher levels of crime would be related to more negative maternal adjustment. Second, does social coping moderate (protect and/or exacerbate) the relationships between the risk factors and maternal adjustment in a setting of protracted conflict? This question aimed to tease out potential differences in the alternative conceptualizations of and competing hypotheses about the moderating role of social coping. Moderation tests recognize that psychosocial processes are not uniform across people and aim to identify for whom and in what settings the link between risks and outcomes is stronger. This statistical

approach is particularly relevant to the study of the cooccurrence of risk and resilience (Cummings, Davies, & Campbell, 2000). Current analyses tested the buffering hypothesis, which predicted greater social coping would protect mothers in high-risk environments, and the depletion hypothesis, which predicted greater social coping with peers who are also under similar distress would exacerbate mental health problems in high-risk environments.

Method

Participants

The mothers ($N=631$) in the current study were participants in Wave 4 of a longitudinal study on the impact of sectarian violence on families in Northern Ireland. The average age of mothers was 39.73 years ($SD=6.22$, range 23 to 63), and they had been living in the same ward in Belfast for an average of 15.03 years ($SD=10.98$, range 0 to 55). Mothers in this sample had an average of 2.44 children ($SD=1.29$). Single parents made up 63% of the sample ($n=259$ never been married; $n=64$, separated; $n=55$ divorced; $n=19$ widowed); the remaining 37% were married ($n=192$) or living as married ($n=42$). In Northern Ireland, single parent households are more prevalent in urban and social deprived areas (Center for Social Justice, 2010). For example, in 2008, 57% of births in Belfast were to unmarried mothers (NISRA, 2011). Consistent with the demographics of Northern Ireland, all participants were White.

Neighborhood and Family Selection

Potential neighborhoods were identified to capture variation on levels of sectarian violence, segregated/interfaced living patterns, and minimize socio-economic status (SES) differences. The first criterion reflects the temporal, spatial, and qualitative differences in violence during the time of the Troubles and more recent variation in sectarian crime. Second, in the current study the majority of participants lived in wards that were greater than 90% Catholic or Protestant (NISRA, 2011), reflecting the reality that almost three-quarters of the population in Belfast live in areas that are predominantly Catholic or Protestant (Shirlow & Murtagh, 2006). Many of these neighborhoods are interfaced, or bordered by a neighborhood in which the other group is the majority. However, even those not living in segregated housing live segregated lives.

Finally, the third criterion aimed to limit SES differences within the sample; all neighborhoods were working class. In Northern Ireland, all 582 wards are indexed based on a multiple deprivation measure. The ranking is determined by income, employment, health, education, proximity to services, crime, and the quality of the living environment. In the current study, all areas were in the lowest quartile of the most-deprived wards in Northern Ireland (NISRA, 2011).

Using these three criteria, a potential list of Belfast wards was generated. From this list a set of Catholic and Protestant neighborhoods were selected to approximate the representation of Northern Ireland (44% Catholic, 56% Protestant). Within each neighborhood, 35 to 40 families were identified using a stratified random sampling.

Procedure

The study was conducted under the approval and direction of the Institutional Review Board at all participating universities. Mothers provided consent before participating and all questionnaires were administered as interviews in the participant's home by professionals from an established market research firm in Northern Ireland. Interviews were conducted in separate rooms to ensure privacy and lasted approximately 60 minutes; families received £40 for their participation.

Measures

Sectarian Crime—The Police Service of Northern Ireland (PSNI) collects annual rates (from May 1 to April 30) of crime and antisocial behavior for every ward in Northern Ireland. The data used in the current analyses were from the PSNI year 2009–2010, which ran prior to and concurrent with Wave 4 data collection. The PSNI tracked the frequency of *sectarian crime*, or the number of violent attacks or antisocial acts that were perceived, by the victim or the PSNI, as being sectarian. According to the PSNI definition, the “term ‘sectarian’ is broadly understood to describe incidents based on a *person’s perceived religion or political opinion*” (PSNI, 2010, emphasis added). Each participant was assigned the sectarian crime score based the ward in which she lived in during Wave 4 of the study. For the current study, the average of 16 sectarian crimes per ward per year was reported ($SD=11$, range 1.5 to 45).

Nonsectarian Crime—The total number of crimes recorded for 2009–2010 includes both sectarian and nonsectarian antisocial behaviors (such as *drug use*, *burglary*, and *vehicle crime*) and violent crime (such as *offenses against the person*, *sexual offenses*, and *robbery*). Offenses also included the threat of violence, not only actual violence, and the severity or degree of violence may vary considerably. The frequency of *nonsectarian crime* for the current study was the total crime recorded minus the sectarian crime frequency for each ward in the study. As with sectarian crime, participants received the value of nonsectarian crime for the ward in which they lived. The average nonsectarian crime for each ward in the study was 207 offenses ($SD=282$, range 23 to 1,161). Similar to sectarian crime, there was diversity in the intensity of nonsectarian crime across the wards in the sample.

Maternal well-being (GHQ-12)—*Maternal well-being* was measured using the General Health Questionnaire (GHQ-12) (Goldberg & Williams, 1988). The 12-item scale assessed the severity of mental health problems such as *face up to your problems*, *felt constantly under strain*, and *capable of making decisions*. Participants responded to what degree they identified with each target item on a 4-point Likert scale from 0 = “*not at all*” to 3 = “*much more than usual*.” Responses were summed for a total score ranging from 0 to 36, with higher scores representing more mental health difficulties. The GHQ-12 has been widely used internationally in community samples to screen for psychological well-being as well with populations exposed to political violence. The internal consistency (Cronbach’s $\alpha = .71$) in this sample was adequate.

Depressive Symptoms (CES-D)—*Depressive symptoms* were measured using a 10-item version of the Center for Epidemiologic Studies Depression Scale (CES-D) (Radloff, 1977). The original full-length version is suitable for community and clinical samples, with good internal consistency (Cronbach’s $\alpha = .85$) and adequate test-retest reliability (.51 to .67). The shorter forms have comparable internal consistency, factor solutions, and test-retest reliability as the longer form. In the current study, participants responded to questions about how frequently they had experienced the target items. Participants responded on a 4-point Likert scale for how many days during the past week they had experienced the given question; responses ranged from 0 = “*less than 1 day*” to 3 = “*5–7 days*” during the past week (range 0 to 30). Sample items included *can’t shake off sad feelings even with the help from family or friends*, *afraid or fearful*, and *feel bothered by things that usually don’t bother you*. The internal consistency in this sample was good (Cronbach’s $\alpha = .86$).

Social Coping—The *social coping* measure was comprised of two subscales, emotional and instrumental coping, of a larger questionnaire designed to test multidimensional strategies in response to stress (Carver, Scheier, & Weintraub, 1989). In the original development of the questionnaire, internal consistency for the emotional and instrumental

subscales were .75 and .85, respectively. Test-retest reliability for both scales across two samples ranged from .64 to .76, and the two subscales were significantly correlated with each other ($r=.69$, $p<.01$). In the current study, mothers were asked to reflect on how they have been coping with stress in their lives. The four emotional coping questions included items such as *I discuss my feelings with someone* and *I get sympathy and understanding from someone else*. Examples of the four instrumental coping questions are *I try to get advice from someone about what to do* and *I talk to someone who could do something concrete about the problem*. Participants responded on a 4-point Likert scale ranging from 0 = “*I have not been doing this at all*” to 3 = “*I have been doing this a lot*,” with a total possible combined score across the eight questions ranging from 0 to 24. Cronbach’s α were good for both subscales ($\alpha = .94$ for both emotion and instrumental coping) in the current sample.

Controls—Three demographic factors that may influence maternal well-being were added as control variables: marital status (0=*single-parent household*, 1=*two-parent household*), total number of children living in the home, and maternal age. These variables aimed to control for the potential influence of being single, having more children, and being younger on individual wellbeing. To control for previous maternal adjustment problems, an autoregressive control for mothers’ mental health one year prior was also included and served as a covariate for later social coping to explore the possibility that women with more mental health problems may use less effective social coping mechanisms.

Data Analytic Plan

The current analyses were conducted using a structural equation model (SEM) framework in AMOS Graphics 18 (Arbuckle, 2009). The proposed model (Figure 1) was used to test the study’s two research questions: (1) Do environmental risks such as sectarian crime and nonsectarian crime affect maternal mental health? And (2) Does social coping moderate (protect and/or exacerbate) the relationships between the two risk factors and maternal adjustment in a setting of protracted conflict? Therefore, nonsectarian and sectarian crime were entered as exogenous variables, or main effects, in the model. Interaction terms of social coping and each of the two predictors were created to test the moderation effect on mothers’ mental health; social coping and the two interaction terms were entered as exogenous variables. Marital status, number of children living in the home, maternal age, and mental health one year prior were entered as a control variables for all model tests. Exogenous predictors were allowed to correlate with each other, and all control variables were allowed to correlate with each other. Mothers’ mental health was the sole outcome of interest and entered as the only endogenous variable in the model.

A number of analyses were conducted to determine the most appropriate model for the data. First, preliminary analyses were conducted to examine the descriptive statistics and total effects relationships for the manifest variables and indicators in the model. Second, a principal component analysis was conducted to determine how to model social coping. Third, the main effects of sectarian crime and nonsectarian crime on mothers’ mental health and the moderation effect of social coping on these stressors were tested simultaneously.

Results

Preliminary Analyses

The means, standard deviations, and bivariate correlations for all manifest variables and indicators are included in Table 1. The two predictors were significantly correlated, and nonsectarian crime was significantly and positively correlated with more concurrent mental health problems and more coping ($r=.10$ to $.14$, all $p<.05$). The frequency of sectarian crime was not significantly correlated with either mothers’ well-being or depressive symptoms,

and negatively correlated with the moderator, social coping ($r = -.14, p < .01$). Mothers' mental health indicators were positively correlated with concurrent social coping ($r = .13$ to $.18, p < .01$). Prior mental health indicators were not significantly correlated with later social coping, but did significantly correlate with later adjustment problems ($r = .42$ to $.58, p < .001$). Mother's age was positively correlated with more depressive symptoms ($r = .09$ to $.11, p < .05$), but not overall wellbeing, and older mothers had more children ($r = .08, p < .05$). Two-parent households had fewer mental health problems across both measures and time points ($r = -.09$ to $-.12, p < .05$), were more likely to be older ($r = .13, p < .01$), and have more children ($r = .14, p < .01$). Finally, the total number of children was negatively correlated with sectarian crime ($r = -.10, p < .05$) positively correlated with more social coping ($r = .10, p < .05$) well-being problems ($r = .10, p < .05$).

Creation of Manifest and Latent Variables

Prior to examining the proposed model, a principle component analysis (PCA) was conducted to examine the internal consistency of the social coping measure. Across eight items of the two subscales, emotional and instrumental coping, the PCA suggested a coherent scale for social coping. Consistent with previous research (Ceballos & McLoyd, 2002), all eight items were highly correlated ($r = .74$ to $.84$, all $p < .01$) which suggests that including a parameter for measurement error would not significantly improve the estimate of this construct (Perera & Maxwell, 2010). Therefore, a single composite score for social coping that summed all eight items was included in the model as a manifest variable.

To calculate the outcome of mothers' mental health, composite scores of maternal wellbeing (GHQ-12) and depressive symptoms (CES-D) were computed by adding all of the items for each scale, respectively. A latent variable of overall mental health was fit using mothers' well-being and depressive symptoms as manifest indicators. The factor loading for well-being was fixed to 1 ($\beta = .96$), and the path for depressive symptoms was estimated ($\beta = .74, p < .001$).

For the complete model test, manifest variables were used for sectarian and nonsectarian crime. The main predictor variables were centered and then multiplied by the centered moderator (social coping) to decrease the possible confound of multicollinearity. These moderated effects are represented in Figure 1 by the arrows from social coping to the direct effects of sectarian and nonsectarian crime.

Primary Analyses

For the SEM model of direct and moderation effects, estimates were derived using maximum likelihood estimation and overall model fit was assessed with the χ^2/df index, the normative fit index (NFI), comparative fit index (CFI), and the root mean square residual (RMSEA). Acceptable model fit indices are indicated by χ^2/df index < 3 , a NFI and CFI $> .90$, and a RMSEA $< .08$ (Hu & Bentler, 1999).

The fit for the overall model was good (Figure 1); $\chi^2 (35) = 38.22, p > .05, N = 631; \chi^2/df = 1.09$; NFI = .98; CFI = .99; RMSEA = .01 (CI: .00, .03)). The demographic control for marital status was significant ($\beta = -.08, p < .05$); mothers in two-parent households reported fewer mental health symptoms than single mothers. There was a positive trend for the total number of children and maternal maladjustment ($\beta = .06, p < .10$), but mothers' age was not significant predictor of mental health problems ($\beta = .04, ns$). Prior maternal well-being significantly predicted adjustment problems ($\beta = .61, p < .001$), but did not significantly covary with later social coping one year later ($\beta = .03, ns$).

Regarding the first research question, there was a significant, positive link between nonsectarian crime ($\beta = .11, p < .05$) and maternal adjustment; more nonsectarian crime in the

exosystem predicted greater mental health problems. Controlling for nonsectarian crime and the other demographic characteristics of the family, the direct effect of sectarian crime in the exosystem was not a significant predictor of maternal distress ($\beta = -.01$, *ns*) in this model.

There was mixed support for the predictions based on the second research question about the buffering and depletion hypotheses. The signs of the interaction terms of social coping with sectarian and nonsectarian crime were in opposite directions. Greater social coping *buffered* mothers from the negative effects of nonsectarian crime ($\beta = -.16$, $p < .001$), such as robberies and car theft, but *exacerbated* mental health problems when facing sectarian crime ($\beta = .12$, $p < .01$), such as politically-themed name calling or antisocial behavior. These results suggest that social coping functioned differently as a moderator of mothers' mental health with respect to different types of stressors.

The two interaction effects are shown in Figure 2; high social coping was graphed at one standard deviation above the mean and low social coping was one standard deviation below the mean. In Figure 2a, for mothers with higher social coping, the positive relationship between nonsectarian crime and mental health problems was attenuated. That is, the relationship between the predictor and the outcome was weaker at higher levels of the moderator. This finding supports the buffering hypothesis; social coping decreases psychological distress in a context of nonsectarian crime. Figure 2b, on the other hand, demonstrates the opposite effect for sectarian crime, which supports the depletion hypothesis. For mothers in contexts of high sectarian crime, more social coping was linked to more mental health problems. This moderation effect suggests that more social coping exacerbates mental health problems in the face of sectarian violence.

Discussion

The goal of the current study was to examine the role of social coping as a moderator in a setting of protracted conflict. Nonsectarian crime predicted more mental health problems, consistent with expectation that the increased risk of crime would be distressing to mothers; however, sectarian crime did not directly predict more mental health problems in this model. Regarding the stressor/coping match, findings indicated that social coping played distinct roles in response to sectarian and nonsectarian neighborhood crime. More social coping protected maternal mental health from nonsectarian crime. Yet, greater social coping exacerbated mental health problems when facing sectarian crime. The findings suggest that potential interventions to alleviate maternal distress should consider that the efficacy of social coping may vary in response to different types of stressors and risks, highlighting the importance of moderation tests in the study of the co-occurrence of risk and resilience processes.

Mothers in a Setting of Multiple Risks

Considering the first research question, consistent with the community violence literature, mothers who lived in areas with more nonsectarian crime reported greater psychological distress (Oravec et al., 2008). Mothers in this study may experience greater distress because of frequent nonsectarian crime in the exosystem, or the surrounding community. Past studies using self-report measures have found that sectarian violence negatively affects mothers and families (Cummings et al., 2010); however, the lower frequency of reported sectarian crime in the objective data may explain the nonsignificant main effect of sectarian crime on maternal mental health in the current analyses. To control for the individual risk factors, the level of prior maternal mental health problems was included as a direct effect and significantly predicted adjustment problems one year later. These main effects highlight the need to differentiate between types of violence (i.e., sectarian or nonsectarian) and the importance of measuring neighborhood factors to examine how different levels of the social

ecology affect individuals and families (Leventhal & Brooks-Gunn, 2000; Bronfenbrenner, 1979).

The Stressor/Coping Match

The findings also highlight the importance of a moderation test which can disentangle the influence of social coping in response to specific risk factors, controlling for earlier adjustment. In this study, social coping protected mothers from nonsectarian crime, but exacerbated mental health problems associated with sectarian crime. Two explanations may help understand the differential stressor/coping match: the relation to problem-focused or emotion-focused coping and the depletion of resources in response to different stressors in protracted conflict.

First, social coping may be a better match for nonsectarian crime because participants can “do” something about intragroup acts, tapping into problem-focused coping. Participants may believe that together with their neighbors, they can address neighborhood crime. For example, in focus group discussions in interfaced Belfast neighborhoods, mothers described the areas as close-knit (Taylor et al., 2011). Through this wider social network, mothers may feel more capable of monitoring children’s behavior to protect them from nonsectarian antisocial behavior within the community. A two-wave study found that child exposure to nonsectarian, but *not* sectarian, antisocial behavior predicted maternal behavioral control, such as needing parental permission to go out with friends (Merrilees et al., in press). This adaptive parenting strategy suggests that mothers may feel more efficacious in protecting their children the face of nonsectarian violence, which in turn may buffer them from greater mental health problems.

In the face of sectarian violence, on the other hand, there may not be much that individuals in these neighborhoods can “do” about the intergroup crime and threat (Cairns & Wilson, 1989). In this case, denial, distancing, acceptance, and/or avoidance may be more effective means of coping with sectarian crime than problem-focused approaches (Somer et al., 2009). The largely segregated living arrangements and historic patterns of violence in these areas are structural challenges that have become entrenched physically and socially in the protracted conflict in Northern Ireland. Although instrumental coping might advise the distressed person to move away from the interfaced neighborhood (Leventhal & Brooks-Gunn, 2000), many mothers living in these areas feel trapped (Taylor et al., 2011). The lack of mobility is caused, in part, because potential home buyers fear the on-going threat of sectarian crime. Therefore, the protracted nature of the conflict may limit the utility of problem-focused coping for sectarian stressors. Social coping, or talking with others in a similar situation, may heighten awareness about the inability to change the situation (i.e., sectarian crime), increasing frustration and psychological distress.

Second, lower quality support (Rodrigo et al., 2007) and depletion of social resources (Zeidner, 2006) may be particularly pertinent to sectarian crime. Because of the lack of social mobility, neighbors will have also lived under a prolonged period of sectarian stress. Thus, peers in interfaced neighborhoods may provide less adequate advice about emotional regulation in response to highly charged feelings of sectarian threat and insecurity. In a setting of chronic political conflict, sectarian crime may also exacerbate psychological distress because mothers anticipate that they will have future obligations to provide reciprocal instrumental or emotional support (Ceballo & McLoyd, 2002). Thus, social coping may exacerbate psychological distress in response to sectarian crime both because the quality of support has been eroded by historic violence during the Troubles and because mothers foresee having to support to others trapped in a similar setting. Yet, because of the relatively recent increase of nonsectarian crime (Monaghan & McLaughlin, 2006), the

quality of instrumental and emotional coping in response to this risk factor may not be compromised to the same degree as with sectarian crime.

Limitations and Implications for Potential Interventions

There were a number of limitations to the current study. The research design of the current study included both objective and subjective measures, addressing a potential confound of mono-reporter bias. Although the crime data provide measurement of risk at the exosystem level of the social ecology, using the police data for electoral ward limits ability to investigate between-person variation within each ward. A second limitation was the latent variable of mental health was constructed using manifest indicators of well-being and depressive symptoms. Future research could investigate other forms of psychopathology, such as PTS symptoms or anxiety. A third constraint on the generalizability of the findings was the relationship between marital status and mothers' mental health. Although the current study statistically controlled for possible differences, future research should investigate whether the processes are the same for single and two-parent households (Cummings et al., 2010). A fourth limitation was two time points of data. Although earlier mental health *did not* relate to social coping one year later, lending support to the hypothesized direction of effects (Patten et al., 2010), future research may adopt more indepth methods, such as daily diaries, to examine the potential reciprocal relationship between social coping and mental health. Finally, the current study focused on social coping; future research should include other types of coping strategies such distancing or avoidance that may be more effective matches for sectarian violence (Cairns & Wilson, 1989; Somer et al., 2009), and other types of buffering factors that may help protect mothers' mental health.

Despite these limitations, the findings have implications for future interventions which target social coping (Lee et al., 2009). Consistent with the current study, previous research has cautioned against a blanket policy of interventions that aim to increase social coping through informal support (Lyons, Henly, & Schuerman, 2005). These findings also build of previous work which suggests that different types of coping may be effective for low-level distress, such as mental health and depressive symptoms, but ineffective or even harmful for more severe forms of maladjustment, such as PTS symptoms (Dillenburg, Fargas, & Akhonzada, 2008). Therefore, future interventions to protect maternal well-being should consider the type of informal support available (Patten et al., 2010), the severity and type of stressor, and the type of adjustment problems present for individuals living in environments of protracted conflict. The current study supports calls for more nuanced forms of planning, screening, and implementing social coping interventions, rather than a one-size-fits-all approach (Davidson & Leavey, 2010).

In summary, the study indicates the importance of using multiple sources of measurement, disaggregating types of violence to investigate the stressor/coping match, and the strength of the social ecological model as a framework for the study of resilience and individual well-being in conditions of protracted conflict. The specific findings suggest that there is a good "match" between nonsectarian violence and social coping; that is, the harmful effects of nonsectarian crime on maternal mental health can be effectively buffered by social coping (Lee et al., 2009; McLoyd, 1990). On the other hand, social coping exacerbates mothers' mental health problems in the face of sectarian crime; yet, there may be other types of coping (e.g., distancing, avoidance) that may protect maternal adjustment from sectarian violence (Cairns & Wilson, 1989; Somer et al., 2009). Overall, the findings from the current study suggest that interventions should differentiate between types of stressors and coping strategies to effectively protect mothers from multiple environmental risks and promote resiliency in a setting of protracted political conflict.

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Figure 1.

Structural equation model and path analysis of the risk factors for and moderation of mothers' mental health problems (N=631).

Note: Standardized path coefficients reported. Correlations between exogenous constructs, error variances, and control variables were omitted from the model for readability. $^\dagger p < .10$; $^* p < .05$; $^{**} p < .01$; $^{***} p < .001$. Model fit: $\chi^2(35) = 38.22$ $p > .05$, $N = 631$; $\chi^2/df = 1.09$; NFI = .98; CFI = .99; RMSEA = .01 (CI: .00, .03)

Figure 2.

Figure 2a. Social coping buffers mothers' mental health problems from nonsectarian crime.

Figure 2b. Social coping exacerbates mothers' mental health problems in the face of sectarian crime

TABLE 1

Means, standard deviations, and bivariate correlations for all manifest variables and indicators ($N=631$)

	M	SD	1	2	3	4	5	6	7	8	9
1. Sectarian crime	16.10	11.63	–								
2. Nonsectarian crime	208.44	284.46	.66***	–							
3. Mothers' social coping	10.10	8.86	-.14**	.14***	–						
4. Prior mothers' wellbeing (GHQ-12)	13.79	6.09	<.001	.02	.03	–					
5. Prior mothers' depressive symptoms (CES-D)	9.79	5.12	.03	.05	<.001	0.63***	–				
6. Mothers' wellbeing (GHQ-12)	12.43	6.08	<.001	.10*	.18***	.55***	.42***	–			
7. Mothers' depressive symptoms (CES-D)	8.46	5.63	.04	.13**	.13**	.44***	.58***	.72***	–		
8. Mothers' age	39.73	6.22	-.06	-.06	-.03	.06	.09*	.07	.11*	–	
9. Marital status (0 = single parent, 1 = two parents)	–	–	-.03	-.01	.080	-.12**	-.09*	-.12**	-.11*	.13**	–
10. Total number of children	2.44	1.29	-.10*	-.04	.10*	.04	.05	.10*	.08	.08*	.14**

* $p < .05$;** $p < .01$;*** $p < .001$.