Cumulative Risk as a Moderator of the Association between Intimate Partner Violence and Maternal Parenting Behaviors

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INTRODUCTION

According to the Spillover Hypothesis (Emery et al., 1984), parents experiencing distress in the partner relationship may show more problematic parenting due to a “spillover” of distress into the parent-child system. Additionally, stress from the discordant relationship may take precedence over childrearing, and parents may become less physically and emotionally available to their children. Finally, the cumulative risk model suggests the importance of accounting for a cumulative index of risk factors that may be associated with unfavorable developmental and family outcomes (Sameroff et al., 1993). Thus, an additive effect of contextual risks may increase the risk for the well-being of the family system.

Research Aims:

➢ To examine the association between self-reported intimate partner violence (IPV) and observed maternal parenting behaviors with 1-year-olds.
➢ Evaluate whether an accumulation of contextual risk factors (i.e., maternal psychopathology, maternal age, socioeconomic status, ethnic minority status, cohabitation, and number of children in the home) moderated this association.

METHOD

Participants

• 120 low-income women participating in a longitudinal study examining risk and protective factors across the transition to parenthood
• Only data from the third wave of data collection (1 year after birth) were used in this study
• Mothers’ average age was 26 (SD = 5.70)
• 47% were African American and 38% Caucasian
• 64% were single and 30% were first time mothers
• 44% had some college or trade school
• Median monthly income = $1500 (Range = $0 - $10,416)
• 88% receive services from WIC, 62% food stamps, 90% Medicaid, Mi-Child or Medicare, 20% receive public supplemental income.

Procedures

• A community sample of pregnant women were initially recruited via fliers from public locations and agencies serving low-income families.
• Data for the present study were drawn from a home interview conducted during the third wave of data collection when infants turned 1 year-old.
• Women received $50 in cash and a baby gift as compensation for their participation.
• Extensive tracking procedures were used to track women between waves of data collection.

Method Continued

Parenting Behaviors. A Mother-Infant Interaction Task was conducted when the child was 1 year-old. It included a 10-minute free play and 2-minute clean up segment where the mother was asked to play with her child as she normally would. Maternal parenting behavior was coded by trained research assistants using a 5-point anchored rating system: (1 = none, 2 = some, 3 = moderate, 4 = much, 5 = very much). The 10 maternal parenting behaviors included both behavioral (sensitivity, engagement, interference, covert hostility, frightening behaviors) and affective (warmth, anxiety, enthusiasm, overt hostility, flat affect) codes. Higher scores indicated more of the given construct. Inter-rater reliability was calculated using intra-class correlation coefficients, which ranged from .73 (Engagement) to .94 (Sensitivity).

Cumulative Risk. A demographic questionnaire assessing a variety of identifying characteristics and risk factors was administered at various waves of data collection. A total risk score was calculated by giving each participant one point for the presence of each of the following risk variables: (a) maternal age less than 20, (b) three or more children living in the home, (c) near poverty, or income-to-needs ratio below 2 (appropriate cut-off point for near poverty, based on the NICHD SECC (2005)), (d) racial minority status, (e) cohabitation, and (f) the presence of maternal psychopathology symptoms based on a score of 44 or above on the Posttraumatic Stress Disorder Checklist (PCL; Weathers et al., 1993). The risk score could range from 0 to 6, with higher scores indicating higher levels of risk.

RESULTS

Associations Among Study Variables

Pearson’s bivariate correlations were conducted to examine the relationship between various IPV experiences (psychological, physical, sexual, or injurious) and maternal parenting behaviors during the infant’s first year of life. Results indicated significant associations between severity of psychological IPV experiences and overt hostility (r = .26, p < .01) and frightening (r = .20, p < .01) maternal parenting behaviors. Physical injuries as a result of IPV experiences were significantly associated with maternal frightening parenting behaviors (r = .31, p < .01). Sexual IPV experiences were associated with covertly hostile (r = .21, p < .01), overtly hostile (r = .57, p < .01), and frightening (r = .55, p < .01) maternal parenting behaviors. The associations between IPV experiences and the remainder of the maternal parenting codes were non-significant. See Table 1.

Table 1. Associations Among Study Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Phys-Psy IPV</th>
<th>Phys-IPV</th>
<th>Sex-Psy IPV</th>
<th>Sex-IPV</th>
<th>Sensitivity</th>
<th>Engagement</th>
<th>Interference</th>
<th>Warmth</th>
<th>Anxiety</th>
<th>Enthusiasm</th>
<th>Flat Affect</th>
<th>Over-Tot</th>
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* p < .05; ** p < .001.

MODERATION ANALYSES

Hierarchical multiple regression analyses revealed that cumulative risk moderated the association between physical injuries resulting from IPV experiences during the infant’s first year of life and maternal covert hostility (β = -.50, p < .05) and frightening behaviors (β = -.38, p < .001). In sum, the association between physical injuries resulting from IPV experiences are more strongly associated with negative parenting behaviors under conditions of lower cumulative risk.

Post-hoc analyses revealed a significant positive slope for low cumulative risk (β = .89, p < .05), as well as for high cumulative risk (β = .18, p < .05) for maternal covert hostility. Post-hoc analyses also revealed a significant positive slope for low cumulative risk (β = .78, p < .001), as well as for high cumulative risk (β = .46, p < .001) for maternal frightening parenting behaviors. These findings indicate a positive association between injurious IPV experiences and maternal covert hostility and frightening behaviors under both conditions of cumulative risk, but especially for low cumulative risk.

DISCUSSION

• It is important to examine different forms of IPV in relation to maternal parenting with infants, as infancy is a critical time for social-emotional development.
• Results show an association between psychological, injurious, and sexual IPV experiences and several negative maternal parenting behaviors, including overt, covert, and frightening behaviors.
• Also, cumulative risk moderated the association between IPV experiences during the infant’s first year of life and maternal covertly hostile and frightening behaviors with infants.
• These results provide support for both the spillover hypothesis (Emery et al., 1984), and the cumulative risk model (Sameroff et al., 1993).
• The findings suggest that cumulative risk may have a detrimental impact on various aspects of the family system, and lead to negative parenting behaviors.
• IPV experiences may be particularly detrimental in homes with lower cumulative risk, as these families may be more sensitive to environmental stressors, which in turn, may have a greater impact on various outcomes in the family system (i.e., parenting behaviors).