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Mothers' Partnerships, Men in the Home, and Adolescents' Secondary Exposure to Violence

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Abstract

Family instability means that many U.S. youth spend time without biological fathers and with other men. This study extends the literature on the developmental implications of living with fathers and father figures by investigating the association between the presence of mothers' male romantic partners in the home and secondary exposure to violence with a focus on variability according to the identities of the men and the communities of the family. Fixed effects models of multilevel data from the Project on Human Development in Chicago Neighborhoods ($n = 2,201$) revealed that living with mothers' partners did not have a general protective or risky association with youths' secondary exposure to violence. This exposure, however, was lower when such men were youths' biological fathers (vs. social fathers) and when they were married to (vs. cohabiting with) youths' mothers. The link between men's marital status and exposure to violence appeared stronger in higher-crime neighborhoods.

Keywords

adolescent development; crime; family instability; fathers; neighborhoods; violence

In a 2008 speech in Chicago, President Obama called upon U.S. men to help mothers raise their children, arguing that children having a present father or father figure in the home to partner with their mothers is “what keeps the foundation of our country strong.” Yet, the value to young people of having a man partnered with their mothers depends on who that man is. For some youth, having a man in the home is a resource; for others, it is a risk (Crosnoe & Cavanagh, 2010; Jaffee et al., 2003). The truth is that all men are not equal in terms of what they bring to raising children, and the presence of even similar men (e.g., two biological fathers) may mean different things to young people depending on the larger contexts in which they live (Parke, 2013). How much such variability in links between men in the home and children's wellbeing extends to the specific developmental risk of youths' exposure to violence is unclear but important to unpack. After all, family instability and violent crime co-occur in many U.S. communities, and “strengthening” families is often highlighted by politicians and pundits with a wide array of ideologies as a way of helping hard-hit communities (Bosman, 2008; Bump, 2015).

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In this spirit, this study examines the link between living with a mother's male romantic partner and secondary exposure to violence from late childhood through adolescence. A key focus is on how this link varies according to who the man is (in terms of his relationships with mother and children, economic status, and criminal justice history) and where the family lives (in terms of levels of collective efficacy and crime in the community), controlling for intimate partner violence within the home. This examination will be conducted by applying fixed effects regression techniques to data on 2,201 young people, their parents, and their communities from the 1990s through the early 2000s as part of the Project on Human Development in Chicago Neighborhoods (PHDCN). Despite the growing time gap between the original PHDCN data collection and today, these data provide the only opportunity to track family changes and patterns of exposure to violence over the critical transition from childhood into adolescence while also incorporating data on the social—vs. only the socioeconomic or demographic—environment of neighborhoods within the same local policy and economic contexts. Moreover, the high levels of father absence and violent crime in Chicago during the era of data collection drew national attention and inspired the president's Father's Day speech. At the same time, the strong networks of social capital in Chicago neighborhoods point to potential avenues for promoting positive youth development (Sampson, 2012). Thus, the PHDCN is a window into a past setting of youth development characterized by complex dynamics of risk and protection that can inform efforts to serve the current and future youth growing up in similar environments.

Understanding when and how the presence of men in the home may help to protect young people from exposure to violence in diverse communities connects family science, criminology, and urban studies. In the process, these analyses extend the rich literature on family instability into a new domain of wellbeing among youth, leverage what is known about family structure to elucidate the risks of violent crime, and situate the intra- and extra-familial lives of young people within both the positive and negative processes of community ecologies.

Background

Is There a Man in the Home?

This study links two issues of concern to scientists, policymakers, and the public. This link captures transactions among family systems internal and external to the home.

First, the *presence of men* in the home here refers to a family structure in which a young person lives with a mother and either a biological father or a social father (i.e., a mother's romantic partner not biologically related to the children). The cycling of both fathers and social fathers in and out of the home is a common experience for U.S. youth. Indeed, because of rising divorce, cohabitation, and nonmarital and multipartner fertility, the majority of children experience a father transitioning out of the home and/or a social father transitioning into the home at some point during childhood (Brown, Stykes, & Manning, 2016; Bzostek, 2008; Cherlin, 2009). These transitions, regardless of type, are associated with an array of negative developmental outcomes (Cavanagh, 2008; Gibson-Davis & Gassman-Pines, 2010; McLanahan & Percheski, 2004). Furthermore, the kinds of emotional support, attachment, and economic investments that men—biological or social fathers,

husbands or cohabiting partners—can make to (and withdraw from) mothers and children are not always equivalent (Amato & Gilbreth, 1999; Cabrera et al., 2000; Parke, 2013). Thus, providing a more nuanced consideration of the men in children's lives can illuminate the implications of this rising source of instability.

Second, *secondary exposure to violence* occurs when residents of a community witness acts of violence in the broader neighborhood or in or around their own homes. In many communities, children and youth see others being beaten up, attacked, shot, or subjected to other forms of violence. The victims and perpetrators they see can be non-family and family members outside or in the home (Brennan, Molnar, & Earls 2007; Finkelhor et al., 2009). Although some youth recover from such experiences, others develop post-traumatic stress disorder, experience biological weathering, and/or cope in unhealthy ways, such as through aggression, delinquency, and drug use, all of which can undermine their futures (Buka, Stichick, Birdthistle, & Earls, 2001; Cerdá, Tracy, Sánchez, & Galea, 2011; Flannery, Wester, & Singer, 2004; Kirk & Hardy, 2014; Margolin & Gordis, 2000). As such, secondary exposure to violence is an example of an adverse experience early in life that can set the stage for problematic functioning in adulthood. Consequently, social processes and circumstances that increase young people's secondary exposure to violence can have a long-term impact (Macmillan, 2001; Shalev et al., 2013). Notably, youth from more marginalized populations (e.g., low-income families and/or historically disadvantaged racial/ethnic minority groups) are more likely to witness violence (Buka et al., 2001; Cavanagh, Stritzel, Smith, & Crosnoe, 2017; Crouch et al., 2000). This correlation, coupled with the negative consequences of exposure to violence, suggests persistent connections among inequality, violence, and vulnerability.

Having defined these terms, we can turn to the ecological transactions between them. In general, that transaction means that the presence of men in the home may set the stage for youth to be more or less exposed to violence directly through the behaviors of men and indirectly by shaping overall family functioning. This transaction is not absolute but probabilistic, and it is not straightforward but likely a combination of both risky and protective forces. The direct mechanism reflects that most violence in the U.S. is committed by men, men are more connected to social networks in which violence is common, and men's social ties are less likely to protect them from violence (Kirk, 2009; Rountree & Earls, 1999; Sampson, 2012). Consequently, youth may have more "opportunities" to witness violence when there is a man present—because he is the perpetrator or connected to perpetrators—than when they live alone with their mothers (Nofziger & Kurtz, 2005). The indirect mechanism is that a man can be the second parent with the mother, and two parents can partner to promote a more consistent and effective parenting ecology. To the extent that two parents may be better able to impose the social controls (e.g., monitoring, shared time) in the home that protect youth from harm outside the home, a young person may be less exposed to violence in the community when she or he lives with a mother and her partner (note: the partner could be male or female, although our focus is on the former here) (Crosnoe & Cavanagh, 2010; McLanahan & Percheski, 2008; Steinberg, 2001).

The first aim of this study, therefore, is to weigh competing hypotheses about the association of living in a home with a mother and her male partner and youth exposure to violence. One

is that the presence of such men will increase the odds of secondary exposure to violence through the direct behavioral mechanism discussed above. The other is that it will decrease such odds through the indirect family functioning mechanism. Adjudicating between these hypotheses will take into account socioeconomic and demographic factors linked to both family structure and secondary exposure to violence. Such hypothesis-testing will also control for mothers' reports of violence at the hands of their partners, a form of violence proximate to youths' daily lives (thereby contributing to their potential secondary exposure to violence) that they may not always witness (and therefore potentially distinct from the violence they report).

Who and Where is the Man in the Home?

Because "father" as a social category can be inhabited by different kinds of men in different settings, the degree to which the presence of a man in the home is related to the odds of youths' exposure to violence can depend on the identity, characteristics, and location of that man. The literature on links between father presence/absence and youth behavior suggests the potential for such variability. For example, the potential benefits of living with a father for youth behavior are reduced when fathers have a history of antisocial behavior (Jaffee et al., 2003). As another example, the risks of living without a father are reduced when families are situated in local environments with other kinds of social resources or absent other kinds of risks (Cavanagh & Fomby, 2012; Matsueda & Heimer, 1987). Again, these patterns may relate to fathers' own behaviors towards or around the young person or how they affect overall family functioning. Thus, any exploration of the links between the presence of men in the home and young people's secondary exposure to violence needs to ask who that man is and where the family lives.

Beginning with who a mother's male co-residential partner is, several aspects of men's identities and circumstances may increase his potential to protect youth from being exposed to violence. These protective elements include the relational ties of men to the family, such as being married to the mother and biologically related to the child, that can act as a form of social control against deviant behavior, enhance their investments in the wellbeing of family members, and increase their active participation in child-rearing. They also include men's socioeconomic prospects, such as their employment status, that may provide more support and stability to the family in ways that improve family functioning and disincentivize deviant behaviors and associations (Berger, Carlson, Bzostek, & Osborne, 2008; Bzostek, 2008; Heinrich, 2014; Ressler, Smith, Cavanagh, & Crosnoe, 2016). Finally, another potentially protective characteristic is men's lack of contact with the criminal justice system, which reflects their own diminished opportunities for engaging in violent behavior and greater degrees of separation between the family and violence (Jaffee et al., 2003; Lee, Fang, & Luo, 2013). Alternatively, the absence (or reversal) of these potential protective characteristics may weaken any inverse link between living with mothers' male co-residential partners and young people's secondary exposure to violence or even mean that his presence increases such exposure.

Turning to where the family lives, communities can be characterized by social factors that exacerbate or buffer family-based risks. On the negative side, the degree to which young

people can be exposed to violence—independent of their family structures—depends on whether their families are proximate to violence in the first place. In low-crime communities, the presence of men might not influence youths' odds of witnessing violence simply because there is little violence to witness outside the home. The presence of men in the home will matter most, therefore, when families are situated in communities where witnessing violence both inside and outside the home is possible (Browning & Jackson, 2013; Kirk & Hardy, 2014; Sampson, 2012). On the positive side, strong networks of support may develop among residents in even the most disadvantaged communities, providing social resources that protect young people from harm even when the risks of harm seem high. One such resource is collective efficacy, or the degree to which neighbors share values and can band together to regulate each other's behaviors and intervene when problems occur. Not only is growing up in communities with high levels of collective efficacy associated with more positive outcomes among young people, it appears to blunt the effects of risky familial situations on youth and reduce male engagement in violence overall (Browning, Dietz, & Feinberg, 2004; Morenoff, Sampson, & Raudenbush, 2001; Sampson, Raudenbush, & Earls, 1997). Thus, some community settings may moderate the importance of both positive and negative male figures in the home in complex ways.

The remaining aims of this study, therefore, concern the degree to which the association between living with a mother and her male partner and young people's exposure to violence varies as a function of men's characteristics (marital statuses, biological ties to children, employment statuses, criminal justice histories) in communities differing in social organization (crime, collective efficacy), above and beyond intimate partner violence in the home and other key confounds. These aims are to investigate whether support for the protective hypothesis is stronger for married and employed biological fathers who have no contact with the criminal justice system, especially in low-crime and collectively efficacious communities.

Method

Data

In the PHDCN, neighborhood-level data came from the Community Survey in 1994 and 1995, when respondents reported on the characteristics of their neighborhood as well as their relationships with their neighbors. Stratified sampling occurred in 343 Chicago neighborhood clusters that were geographically contiguous and racially/ethnically and socioeconomically homogenous, followed by sampling of city blocks and then households. This sample had 8,782 adults who reported on their neighborhoods. PHDCN Scientific Directors linked the Community Survey to Census data on neighborhood demography and crime data from the Chicago Police Department. The Longitudinal Cohort Study (LCS) collected data on children and their primary caregivers in 80 of the 343 neighborhood clusters. LCS respondents thus resided in the same neighborhoods as Community Survey respondents but were independent individuals. Households were sampled within blocks within clusters, leading to the selection of 6,228 focal children within households who were six months and 3, 6, 9, 12, 15, and 18 years old. Children and their primary caregivers were surveyed across three waves in 1994–1997, 1997–1999, and 2000–2001.

Out of the 6,228 total respondents, we limited the sample to Cohorts 6, 9, and 12 ($n=2,628$) because these cohorts could be observed across middle childhood and adolescence and, with the exception of Cohort 6, had consistent self-reports of exposure to violence across waves. Being so young at Wave 1, Cohort 6 youth were not asked about their exposure to violence, so we used mothers' reports for that wave. Cohort 15 had similar longitudinal data but, at 21 years old, were no longer adolescents by Wave 3. We then dropped 427 cases because the child's primary caregiver was not a biological mother at Wave 1, resulting in an analytical sample of 2,201 respondents over three waves for a total of 6,603 person-waves (note: Cohort 6 contributed 39% of the cases to this sample, Cohort 9 contributed 31%, and Cohort 12 contributed 30%). Youth were 6, 9, and 12 years old at Wave 1; 9, 12, and 15 years old at Wave 2; and 12, 15, and 18 years old at Wave 3. The sample was evenly split by gender, and half of the children were Latino/a, almost one third were Black, and 14% were White. On average, mothers were 35 years old at Wave 1, one third were not U.S. citizens, and 56% had graduated from high school. Table 1 further describes the analytical sample using the study variables.

Measures

Secondary exposure to violence—At Waves 1–3, all three cohorts reported whether they had heard gunfire or seen someone hit, attacked with a weapon, or shot. Simply summing up binary responses to each of these items would imply that all items should be weighted equally even though they varied widely in severity and frequency. Thus, we drew on item response theory (IRT) to more appropriately construct the outcome variable (Kindlon, Wright, Raudenbush, & Earls, 1996). Specifically, a 2-parameter logistic model, further described in the Plan of Analyses, incorporated the dichotomous responses to seeing each of the four types of violence in the past year (1 = yes; 0 = no) into a latent continuous factor.

Mothers' co-residential romantic partners—All variables for maternal partners were binary, time-varying, and based on maternal reports, including whether the mother had a male partner co-residing in the household. Three characteristics of mothers' partners were measured with conditionally relevant variables (see Plan of Analyses): whether the man was married to the child's mother, the focal child's biological father, currently working part- or full-time, and had involvement with the criminal justice system. For this last variable, mothers reported whether anyone in the family had such involvement and then their relation to the focal child (note: some men might not have been identified if the mothers did not view them as members of the family). As already discussed, maternal reports of intimate partner violence (IPV) had to be measured because they were related to youths' potential exposure to violence in the home but were not equivalent to the youth-reported outcome of exposure to violence. As such, we created a binary IPV measure—based on mothers' reports of whether their co-residential partners had ever perpetrated six types of violence (e.g., slapped, beat up) from the violence subscale of the Conflict Tactics Scale (Straus, 1979)—for use as a covariate.

Neighborhood moderators—Data from the PHDCN Community Survey allowed the measurement of collective efficacy (Sampson et al., 1997). This variable was based on two

five-item scales: the likelihood that informal social control would be employed (1 = very unlikely to 5 = very likely) in events such as neighborhood kids skipping school or making graffiti, and the level of social cohesion, measured as agreement (1 = strongly agree to 5 = strongly disagree) with statements about neighbors not getting along or not trusting one another. These two scales were summed, standardized, and divided into “low”, “average”, and “high” categories based on standard deviation units in the Z-scores. Neighborhood crime was measured with data from the Chicago Police Department on log homicide rates (per 100,000 residents). It was also divided into “low”, “average”, and “high” categories based on standard deviations of the general scale.

Maternal and household covariates—The fixed effects strategy described below was designed to account for variables that did not change over time. Consequently, no time-invariant covariates (e.g., race) were measured for these models, but several time-varying confounds tapping maternal mental health and economic resources were. Maternal depression was indicated with a binary variable if the mother felt depressed for two or more weeks in a row, based on a general report of all family members at Wave 1 and specific maternal self-reports at Waves 2 and 3. Maternal employment collapsed self-reported categories of current employment status into a binary indicator of labor force participation. The log household income per capita was based on total household earnings (in dollars normed to the year 2000) and family size at each wave.

Plan of Analyses

The first stage of analysis fit a 2-parameter logistic (2PL) model to four binary items measuring youths' secondary exposure to violence in the past year. An IRT framework conceptualizes youths' exposure to violence as a latent variable, with responses for each violent act governed by an underlying risk of exposure (Kindlon, et al., 1996; Raudenbush, Johnson, & Sampson, 2003). The 2PL model estimated a parameter for the strength of the association between each item and the latent factor, as well as a severity parameter describing how much of the latent construct (in this case, propensity to be exposed to violence) an individual must possess in order to be at least 50% likely to endorse that item (Wirth & Edwards, 2007). To illustrate, because hearing a gunshot was a relatively common experience (i.e., a less “difficult” item to endorse), an individual with a low propensity to be exposed to violence may still report hearing a gunshot in the past year. In contrast, because seeing someone shot was rarer, the severity parameter for this item would be larger, and only individuals with higher propensities to be exposed to violence would report this experience. In this way, the 2PL model offered a more sophisticated measure of secondary exposure to violence that accounted for the differing levels of severity across the four exposure to violence items. This process was repeated for each wave, thus allowing for youths' exposure to violence and the underlying parameters to change across waves as youth age and their propensity to be exposed to violence shifted.

Next, the multivariate analyses used the *xtreg* command in Stata with the fixed effects estimator specified. The fixed effects results represent a within-person difference-in-difference model (Allison, 2009) of increases or decreases in the odds of exposure to violence in association with changing aspects of household composition. These models also

accounted for the nested nature of data, in which individuals were clustered in neighborhoods, by adjusting the standard errors for intragroup correlation using the *vce* option. This specified option did not directly estimate coefficients at the neighborhood level but did produce robust standard errors. Because data were clustered both longitudinally over time and hierarchically within neighborhoods, the *xtset* command preceded analyses to specify that individual-level data were clustered across waves and within neighborhoods. Because individuals could move between neighborhoods across waves, the models allowed their neighborhoods to vary by wave, although the characteristics of the neighborhoods themselves were only measured once at Wave 1.

Following this approach, Model 1 regressed exposure to violence on the presence of the mother's partner. Model 2 added maternal resources. Models 3–5 included the partners' characteristics with conditionally relevant variables that depended on the presence of a co-residential man present. Informed by previous method-building studies (Cohen, 1968; Ross & Mirowsky, 1992), we used conditionally relevant variables for the maternal partner's characteristics that were conditional on there being a partner present, as illustrated by the following equations for union type. Equation (1) shows a simplified form of the model where $\hat{V}$ = youths' estimated exposure to violence, C = the set of maternal resources covariates, U = union type (0 = cohabiting, 1 = married), and P = the presence of the mother's co-residential partner (0 = no partner present, 1 = partner present).

$$\hat{V} = [b_0 + b_1C] + [b_2 + b_3U]P \quad (1)$$

The first set of brackets in Equation (1) represents an overall intercept and the set of covariates, and it is equivalent to estimated exposure to violence among children without a co-residential partner in the household. The second set of brackets represent changes in estimated exposure among children co-residing with their mother's partner, with changes in b_3 based on union type. Conceptually, b_3 is like an interaction in that it is multiplicative between P and U . In the case of conditionally relative variables, however, the main effects of each component of the interaction were not in the model (here, the main effect of P is represented as b_2). When youths' mothers did not have co-residential partners, they were assigned a placeholder value for U so that they would be included in the overall model estimation, but that value dropped out when multiplied by P equal to 0. Substituting values of P and U based on the mother's co-residential partnership, the equations below represent a child's estimated exposure to violence when there was no co-residential partner present (Equation 2), when the mother's cohabiting partner was present (Equation 3), and when the mother's married partner was present (Equation 4).

$$\hat{V}_{P=0} = [b_0 + b_1C] + [b_2 + b_3U](0) = b_0 + b_1C \quad (2)$$

$$\hat{V}_{P=1, U=0} = [b_0 + b_1C] + [b_2 + b_3(0)](1) = b_0 + b_1C + b_2 \quad (3)$$

$$\hat{V}_{P=1, U=1} = [b_0 + b_1C] + [b_2 + b_3(1)](1) = b_0 + b_1C + b_2 + b_3 \quad (4)$$

In the final phase, the full model was estimated separately by Wave 1 neighborhood collective efficacy and crime. Coefficients from those separate models (low vs. average vs. high levels) were compared using significance tests of between-group differences (Clogg, Petkova, & Haritou, 1995). In all multivariate analyses, the minimal amount of missing data were addressed using multiple imputation by chained equations to create 10 imputed datasets. Observations with missing values remaining after imputation ($n = 116$) or in the dependent variable ($n = 1,304$) were deleted list-wise, resulting in a final sample of 5,183 person-waves for model estimation.

Results

Descriptive Overview of Youths' Exposure to Violence and Mothers' Partners

Table 1 displays frequencies and means for all study variables at each wave adjusted for neighborhood clustering (and the appendix documents changes in key variables across waves). The variability in the likelihood of witnessing different types of violence justified our use of item response theory to measure the outcome. Hearing gunfire and seeing someone hit were the most common types of violence, but the former was stable across waves whereas the latter increased by W3. Seeing someone attacked with a weapon or shot were the least common types, each just below 5% at W1, but the latter was relatively stable across waves while the former increased by W3. Turning to contextual factors, 65–70% of youth co-resided with their mothers' romantic partners at each wave. Relationally, about 82% of mothers' partners were married at W1, a proportion that significantly increased to 86% by W3. The partners' employment (92% at W1) and involvement with criminal justice (8% at W1) declined significantly in subsequent waves. Because standardized categorical variables measured the neighborhood characteristics, youth were fairly evenly distributed across neighborhoods in similar ways across waves.

Table 2 displays person-wave frequencies of secondary exposure to violence and maternal partners' characteristics overall and by neighborhood. With the exception of seeing someone hit, a smaller proportion of youth saw each act in neighborhoods with more collective efficacy. Significantly more youth saw each act in neighborhoods with more crime. Men were present in households at significantly greater numbers in neighborhoods with high collective efficacy and low crime. There were also significant differences by those partners' characteristics across neighborhoods. Most co-residential partners were married (84%), the youths' biological fathers (82%), and employed (90%). Yet, these attributes were significantly more common in neighborhoods with high collective efficacy and low crime. Additionally, almost 6% of men had been involved with the criminal justice system, a

proportion that did not vary by the level neighborhood collective efficacy but was significantly smaller in low-crime neighborhoods.

In sum, these descriptive results offered initial evidence of changes over time in youths' secondary exposure to violence as well as in the presence and characteristics of men living in their households. Additionally, those aspects of their individual and family lives appeared to differ based on positive and negative characteristics of youths' neighborhoods.

Changes in Mothers' Co-Residential Partners and Youths' Exposure to Violence

For the first aim, fixed effects models estimated youths' secondary exposure to violence as a function of the presence of their mothers' co-residential partners. These unstandardized coefficients can be interpreted as ordinary least squares coefficients, but the latent outcome was not a substantively meaningful scale. Thus, we interpret these coefficients in terms of direction and significance. In Models 1 and 2 of Table 3, the presence of mothers' partners in the home was significantly associated with less exposure to violence, net of unmeasured, time-invariant characteristics of youth. Thus, the initial evidence supported the protective hypothesis.

The second aim was to take into account the characteristics of mothers' co-residential partners. Model 3 in Table 3 added relational characteristics of the mothers' partners using conditionally relevant measures. Marriage (vs. cohabitation) between mothers and their male partners and biological ties between man and child (vs. social fathers) were each significantly and negatively associated with youths' secondary exposure to violence. With the inclusion of these variables, the main effect of the presence of the mother's partner became positive, suggesting the observed association between mothers' co-residential partners and the odds of youths' exposure to violence was conditional on that man's marital status with the mother and biological tie to the child. Worth noting here is that ancillary analyses that broke down the outcome into its constituent items revealed that these patterns were stronger for hearing gunfire and seeing someone hit and weaker for seeing someone shot, the most severe item.

Turning to the remaining models in Table 3, exposure to violence was significantly and negatively associated with male partners' employment (Model 4), although marginally so in the full model (an association that ancillary analyses suggested was driven by the item for seeing someone attacked). In the full model (Model 5), youths' exposure to violence was marginally associated with male partners' criminal justice contact. The presence of a co-residential man remained positively and significantly associated with youths' exposure to violence. When that man was the biological father and/or married to the child's mother, however, their presence was associated with less exposure to violence than social fathers and cohabiting men, respectively.

In partial support of the hypothesized associations of maternal partners' relational, economic, and behavioral ties with youths' secondary exposure to violence, these results showed that partners' biological ties with the youth and marital status with her or his mother were associated with less exposure, net of IPV and other time-varying confounds. In other words, the presence of a man in the household was only significantly related to youths'

exposure to violence when that man was a cohabiting, social father. As a sensitivity check, results were similar when the youth's neighborhood was fixed at its Wave 1 value (results available upon request).

Exploring Neighborhood-Level Variation

The third aim of this study was to examine the degree to which the characteristics of mothers' co-residential partners mattered more or less across different kinds of neighborhoods defined by collective efficacy and crime. We estimated formal tests of differences in coefficients across neighborhoods to determine whether apparent differences were meaningful with z-tests (Clogg et al., 1995). Below, we discuss only apparent differences related to the focal characteristics of mothers' partners that passed the formal tests of difference. Because the significance of findings (e.g., for a single coefficient in one neighborhood category, for the comparison of coefficients across neighborhood categories) depends on cell coverage, refer to the appendix table for the number of young people who experienced a change in each maternal partner characteristic across the study period, both overall and within each category of both neighborhood variables. The numbers vary and, in some instances, warrant caution, especially for changes in biological ties between mothers' co-residential partners and young people.

The multi-group models by neighborhood collective efficacy did not reveal any significant differences in the associations between maternal partner characteristics and youths' secondary exposure to violence, although there were some observed differences in coefficients across neighborhood categories (see first panel in Table 4). The multi-group models for neighborhood crime (see second panel) revealed one instance in which a focal association differed significantly across neighborhood categories. Specifically, the coefficient for marital status of mothers and their co-residential partners was nonsignificant in low-crime and average-crime neighborhoods but negative and significant in high-crime neighborhoods, with the difference reaching conventional levels of significance for the contrast between low- and high-crime neighborhoods. Again, neighborhoods could vary by wave although the group (e.g., high or low crime) was based on the recorded neighborhood at Wave 1. Results were similar when the neighborhood ID was constrained to its Wave 1 value (results available upon request).

Given the use of conditionally relevant measures, this neighborhood-level difference in the marital ties coefficient needs to be referenced with the positive and significant coefficient for the presence of mothers' co-residential partner in the low-crime neighborhoods and the non-significant or marginally significant coefficient for this variable in the average- and high-crime neighborhoods, as well as the values on the biological ties coefficient. Thus, the coefficient for the general presence of mothers' co-residential partner refers to cohabiting stepfathers (i.e., a "0" for both union type and biological tie). The results showed that the marital status of mothers' partners only mattered in high-crime neighborhoods (which had a larger overall *n* than the average-crime neighborhood but encompassed a smaller number of changes in marital ties over the study period), where marriage was associated with less exposure to violence. In other words, as neighborhood crime rose, the presence of a

mother's partner was unrelated to exposure to violence if he was cohabiting and/or a stepfather but was protective if he was a married father.

Discussion and conclusion

Given the strong tendency for children to live with their mothers through multiple family structure changes, the literature on family instability primarily concerns the entrance and exits of mothers' romantic partners. In many ways, this gendered nature of family instability is problematic, as the absence of a father or father figure in the lives of a child or adolescent—especially boys—potentially represents missing financial, social, and emotional resources that mothers may have trouble replacing. Yet, given that men are more likely to engage in and be connected to violence, antisocial behavior, and the maltreatment of children than women, their absence might keep some young people from harm (Crosnoe & Cavanagh, 2010; Parke, 2013). Drawing on a transactional systems perspective, this study attempted to more explicitly explore this potentially complex role of mothers' romantic partners in children's and adolescents' wellbeing than is the norm in the family instability literature.

Specifically, we focused on a timely correlate of youth wellbeing that has not been sufficiently studied in this rich area of family research—secondary exposure to violence—and embedded the intra-family dynamics associated with women, their partners, and their children within the extra-familial neighborhood social system. The results—summarized and discussed in detail below—are interesting but also need to be interpreted with three key caveats in mind.

First, the PHDCN was a useful data source for this research, as it contains information on young people, family structure, violence, the social organization of neighborhoods, and neighborhood crime. Perhaps more importantly, it captures a key social ecology that mixes resources and risks in ways that speak to the not-so-distant past as well as right now (Gorner, 2016; Sampson, 2012). Of course, the sampling of the PHDCN occurred before today's youth were even born, so the results of this analysis should be viewed as a foundation for future research with equally rich data from a contemporary cohort. Comparisons of samples over more recent time could elucidate the influence of macro-level social changes on the links between family structure and youths' exposure to violence. Such comparisons could allow hypothesis testing about the moderating role of the gradual secular decline in violent crime in urban areas (and most recent uptick) over the last two decades, federal and state marriage promotion efforts in the years following welfare reform, the continued increase in mass incarceration into the twenty-first century, the cycle of economic boom and busts since the PHDCN ended, and the diversification of urban areas through contemporary immigration and differential fertility. As a specific example, research with a more recent sample could address if changes in union formation patterns during and after the Great Recession altered the documented associations between the presence of a mother's co-residential partner and a youth's exposure to violence.

Second, the findings reported here are inherently correlational. Although the fixed effects strategy we employed controlled for time-invariant unobserved confounds, it could not address another key set of unobserved confounds: those that vary over time. Consequently,

we could not address certain circumstances underlying family structure at any one time point or that trigger changes in family structure between time points—related to the distal or proximate settings in which families live, the personal qualities and experiences of individual family members, or interactional dynamics among family members—that also shape the odds of youth being exposed to violence. Thus, the findings reported here suggest but do not prove causal paths and need to be tested in the future with more causally informed methodology.

Third, although PHDCN had an adequate sample size for conventional statistical analyses, it was taxed by the analyses conducted here in ways that cannot be ignored. The fixed effects strategy that we employed leverages changes in independent and dependent variables across waves, so that estimates were modeled based on the subsample of youth who experienced such changes. Multiple-group modeling then split this effectively reduced sample into three categories. As a result, cell coverage was smaller than the 2,201 sample size of young people (and 5,183 person-waves) suggests. Consequently, the conclusions discussed below based on these results need to be read with some caution. For example, the number of changes in maternal partners' biological ties with young people was in the teens in some neighborhood categories, so we cannot be sure that the non-significant differences in this variable across neighborhood categories resulted from a lack of moderating role of neighborhood context or insufficient power to detect this moderation role. This issue further emphasizes the need for future research with new and larger samples designed to study these complex ecological issues.

With these caveats in mind, we turn to the summary of results. Fixed effects models revealed a generally inverse association between a young person's residence with a mother and her romantic partner and her or his secondary exposure to violence. Adding conditionally relevant variables to these models, however, indicated that this significant association was limited to certain types of men. Indeed, living with their biological fathers (relative to living with social fathers) completely explained the positive association between the presence of a co-residential partner and secondary exposure to violence. When the man in the home had a recent history of violence against mothers, the link between the presence of a co-residential man and secondary exposure to violence was actually reversed from negative to positive (perhaps because children witnessed that IPV). Multi-group modeling of these fixed effects analyses, in turn, revealed that the strength of the negative association between secondary exposure to violence and marital ties increased with the neighborhood crime rate to become significantly distinct in the high-crime neighborhoods. This pattern of results leads to a few avenues of discussion, interpretation, and future research.

One take-home message from these results is that, despite the gendered nature of family violence and of violence more generally, the presence of men as mothers' partners was not consistently associated with an elevated risk of young people being exposed to violence. At first glance, the association between mothers having a male co-residential partner and young people's exposure to violence was negative, and further analyses suggested that their presence was only associated with increased exposure in very limited circumstances. Part of this association likely reflected positive characteristics of men, women, and their social settings that promote stable unions while also protecting youth from violence, such as

personality characteristics or community norms. Drawing on the literature on family instability and child development, any portion of this association not driven by such spurious pathways could reflect some benefits of the presence of fathers—or at least a married partner for mothers—in the home (McLanahan, Tach, & Schneider, 2013). Going back to the focal mechanisms, such benefits could include men's potential contributions to overall family functioning (e.g., adding economic resources, helping with monitoring youth), which may be more common than the potential risks of men's own engagement in violence or connection to violent networks. Any causal component of this association, therefore, would suggest that many men have a protective presence in urban communities, or at least not a risky one.

A second point of discussion concerns the findings that the link between mothers' co-residential partners and young people's exposure to violence was qualified by the characteristics of the men in question. Specifically, this link applied to men who were biologically related to the young people in question, net of IPV. Again, the well-documented endogeneity of family structure is likely to apply here. Families in which specific types of men are present often differ from other families, and these differences may also influence the developmental experiences of young people (Crosnoe & Cavanagh, 2010). To the degree that the observed associations in this study are not solely a function of such endogeneity, the associations between men's characteristics and young people's exposure to violence would mean that men are bringing something to the home that buffers or exacerbates the kinds of harm that can arise in urban communities. For example, the significant association for men's biological ties with children could reflect that men are more invested in their biological children, which could increase their monitoring of young people and increase the time young people spend with the family relative to the neighborhood at large (Carlson & Berger, 2013; Ressler et al., 2016; Sweeney, 2010; Thomson, Mosley, Hanson, & McLanahan, 2001). If the presence of men matters, therefore, the question is which kind of man is present?

A third area for discussion is that, to some degree, whether the presence of a mother's male co-residential partner in the home was associated with young people's exposure to violence depended on where the family resided. Specifically, the association between co-residential partners' marital ties with mothers in the full sample appeared to emerge from high-crime neighborhoods, with a significant contrast between low- and high-crime neighborhoods. As already noted, cell coverage was taxed by the coupling of multiple group modeling with a fixed effects framework, which might explain the lack of evidence for other neighborhood-level differences (especially for the biological ties variable). In addition to the methodological questions about sample size and causal inference, this moderation pattern raises substantive questions of interpretation. For example, why was the key neighborhood-level moderator the crime rate rather than collective efficacy? The best explanation is that the crime rate is likely to more directly capture the opportunity structure for seeing violence in a neighborhood and, therefore, operates as a more concrete context in which family structure—including selection into family structure—and exposure to violence are connected.

Establishing whether these preliminary insights are replicable with newer data from larger samples and robust to more rigorous methods that account for the changing and often unobservable circumstances of families and family members are the key next steps in this line of research. If these preliminary insights hold, they can be built on in the future. For example, sample size issues disallowed a close examination of gender and racial differences in the links among mothers' co-residential partners, neighborhood contexts, and youths' secondary exposure to violence, yet research on the differential developmental significance of fathers and father figures (as well as vulnerability to violence) across diverse segments of the population suggests that such an examination is necessary. Another example is that this line of research needs to do a better accounting of all of the other men in children's and adolescents' lives beyond their mothers' co-residential partners. Nonresident fathers play an important role in the lives of young people, as do other men (e.g., grandfathers, uncles) who may or may not live with them. Notably, their roles may be positive or negative (King, 2006; Mollborn, Fomby, & Dennis, 2012).

What happens in the home can influence what happens outside the home, and vice versa, and who is in the home can shape what happens in the home. Focusing on the presence of men in the home and who they are, therefore, is a valuable part of the broad and deep literature on family structure and child/adolescent development, especially when such developmentally-relevant processes as violence are considered.

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Appendix 1. Cell Sizes for Changes in Key Variables across Waves, Overall and By Neighborhood Categories

	Overall	By Level of Collective Efficacy			By Crime Rate		
		Low	Average	High	Low	Average	High
Exposure to Violence (–1/+1 SD Change)	1256	369	537	350	442	364	450
Change in Mother's Co-Residential Partner Presence	478	144	200	134	145	133	200
Changes Mother's Partner's Characteristics							
Married to mother (ref: cohabiting)	140	34	70	36	60	42	38
Biological father of child (ref: stepfather)	52	10	20	22	17	16	19
Currently employed	212	55	91	66	75	63	74
Recent legal/criminal history	124	26	45	53	47	36	41
Recent IPV perpetration against mother	246	64	115	67	99	67	80

Table 1

Sample Description by Survey Wave

	Frequency or Mean (SD)		
	Wave 1	Wave 2	Wave 3
Secondary Exposure to Violence in Past Year			
Saw someone hit	47.82%	38.98% ^a	52.01% ^{a, b}
Saw someone attacked with weapon	4.76%	13.49% ^a	14.42% ^a
Saw someone shot	4.27%	7.5% ^a	6.13% ^a
Heard gunfire	49.86%	51.13%	52.74%
Mother's Co-Residential Partner Present	69.74%	69.40%	65.85% ^{a, b}
Characteristics of Present Partners			
Relationship to mother			
Cohabiting	17.67%	16.48%	13.98% ^a
Married	82.33%	83.52%	86.02% ^a
Relationship to child			
Social/stepfather	16.02%	19.36% ^a	19.08%
Biological father	83.98%	80.64% ^a	80.92%
Employment status			
Unemployed	7.83%	9.63%	13.96% ^{a, b}
Employed	92.17%	90.37%	86.04% ^{a, b}
Criminal justice system involvement			
None	91.69%	96.37% ^a	96.93% ^a
Any	8.31%	3.63% ^a	3.07% ^a
Intimate partner violence against mother			
No recent IPV perpetration	76.03%	88.39% ^a	90.45% ^a
Recent IPV perpetration against mother	23.97%	11.61% ^a	9.55% ^a
Maternal Resources			
Mother is depressed	12.62%	36.53% ^a	32.82% ^a
Mother is employed	50.83%	61.7% ^a	70.00% ^{a, b}
Logged household income per capita	8.36 (0.06)	8.46 (0.06) ^a	8.57 (0.05) ^{a, b}
Neighborhood Level Measures			
Collective efficacy			
Low	26.44%	32.72%	32.84%
Average	42.12%	38.33%	37.10%
High	31.44%	28.96%	30.06%
Log homicide rate	0.0003 (0.00)	0.0003 (0.00)	0.0003 (0.00)
Crime (based on homicide rates)			
Low	37.98%	40.24%	41.30%
Average	28.67%	28.62%	27.29%
High	33.35%	31.14%	31.42%
Observations (Person-Waves)	2,201	2,201	2,201

Note: Data are clustered by neighborhood ID. Pearson's chi-square or t-test significantly different ($p < .05$) from ^a Wave 1 or ^b Wave 2.

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Table 2

Frequencies of Youths' Exposure to Violence and Mothers' Partners Overall and by Neighborhood Resources and Crime

	Full Sample	Level of Collective Efficacy			Crime Rates		
		Low	Average	High	Low	Average	High
Exposure to Violence in Past Year							
Saw someone hit	46.08%	47.70%	46.23%	44.24%	43.42%	44.35%	50.89% ^{a, b}
Saw someone attacked with weapon	10.20%	12.44%	10.50%	7.54% ^{a, b}	7.22%	9.38%	14.6% ^{a, b}
Saw someone shot	5.83%	8.53%	5.42% ^a	3.62% ^a	4.22%	5.04%	8.5% ^{a, b}
Heard gunfire	51.03%	57.38%	56.51%	37.06% ^{a, b}	37.08%	52.99% ^a	66.37% ^{a, b}
Mother's Co-Residential Partner Present	68.57%	63.51%	67.10%	75.57% ^{a, b}	77.45%	70.48%	55.95% ^{a, b}
Partner's Characteristics							
Relationship to mother							
Cohabiting	16.32%	18.67%	19.82%	10.27% ^{a, b}	12.45%	17.05%	22.1% ^a
Married	83.68%	81.33%	80.18%	89.73% ^{a, b}	87.55%	82.95%	77.9% ^a
Relationship to child							
Social/stepfather	17.86%	19.71%	19.53%	14.37% ^a	13.12%	18.28% ^a	25.55% ^{a, b}
Biological father	82.14%	80.29%	80.47%	85.63% ^a	86.88%	81.72% ^a	74.45% ^{a, b}
Employment status							
Unemployed	9.97%	13.09%	10.62%	6.59% ^{a, b}	6.78%	10.98% ^a	14.35% ^a
Employed	90.03%	86.91%	89.38%	93.41% ^{a, b}	93.22%	89.02% ^a	85.65% ^a
Criminal/legal history							
No recent criminal/legal problems	94.38%	94.77%	94.78%	93.58%	95.52%	93.65% ^a	93.28% ^a
Recent criminal/legal problems	5.62%	5.23%	5.22%	6.42%	4.48%	6.35% ^a	6.72% ^a
Observations (Person-Waves)	6,603	1,650	2,158	1,652	2,163	1,544	1,753

Note: Data are clustered by neighborhood ID. Pearson's chi-square significantly different ($p < .05$) from neighborhoods with ^a low and ^b average levels. 1,143 person-waves had missing values for the neighborhood ID variable.

Table 3**Fixed Effects Models Predicting Secondary Exposure to Violence**

	Unstandardized Coefficients (Standard Error)				
	(1)	(2)	(3)	(4)	(5)
Mother's Co-Residential Partner Present	-0.090** (0.029)	-0.073* (0.030)	0.115** (0.043)	0.184** (0.058)	0.126* (0.062)
Maternal Resources					
Mother is depressed		0.094** (0.028)	0.083** (0.028)	0.082** (0.028)	0.070* (0.029)
Mother is employed		0.038 (0.024)	0.031 (0.024)	0.029 (0.024)	0.024 (0.023)
Log household income per capita		-0.015 (0.014)	-0.008 (0.014)	-0.005 (0.014)	0.000 (0.014)
Mother's Partner's Characteristics					
Married to mother (ref: cohabiting)			-0.107** (0.040)	-0.105** (0.040)	-0.093* (0.039)
Biological father of child (ref: stepfather)			-0.132*** (0.037)	-0.131*** (0.037)	-0.126** (0.036)
Currently employed				-0.083* (0.041)	-0.076 [†] (0.041)
Recent legal/criminal history					0.055 [†] (0.032)
Recent IPV perpetration against mother					0.100*** (0.027)
Constant	0.077*** (0.020)	0.144 (0.112)	0.101 (0.113)	0.077 (0.112)	0.046 (0.110)
Observations (Person-Waves)	5183	5183	5183	5183	5183
Number of groups (Neighborhood-Waves)	254	254	254	254	254

Note:

p < 0.001,

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Table 4
Fixed Effects Models Predicting Secondary Exposure to Violence, by Neighborhood Crime Rate

	Unstandardized Coefficients (Standard Error)					
	Level of Collective Efficacy			Crime Rate		
	Low	Average	High	Low	Average	High
Mother's Co-Residential Partner Present	0.070 (0.110)	0.202* (0.098)	0.143 (0.115)	0.184* (0.088)	0.147 (0.147)	0.181 [†] (0.097)
Maternal Resources						
Mother is depressed	0.018 (0.050)	0.095* (0.047)	0.080 (0.049)	0.036 (0.043)	0.075 (0.062)	0.098* (0.045)
Mother is employed	0.047 (0.031)	-0.026 (0.041)	0.069 (0.044)	0.017 (0.035)	0.034 (0.044)	0.023 (0.045)
Log household income per capita	0.005 (0.019)	0.023 (0.021)	-0.048 (0.034)	-0.014 (0.026)	-0.001 (0.025)	0.016 (0.023)
Mother's Partner's Characteristics						
Married to mother (ref: cohabiting)	-0.112 [†] (0.068)	-0.117 [†] (0.064)	0.008 (0.057)	0.009 (0.064)	-0.129 (0.081)	-0.187** _a (0.062)
Biological father of child (ref: stepfather)	-0.081 (0.064)	-0.115* (0.056)	-0.194** (0.066)	-0.199** (0.058)	-0.123 (0.074)	-0.095 (0.064)
Currently employed	-0.119 [†] (0.060)	-0.066 (0.068)	-0.099 (0.086)	-0.073 (0.065)	-0.125 (0.081)	-0.071 (0.068)
Recent legal/criminal history	0.059 (0.074)	0.023 (0.058)	0.058 (0.056)	0.081 (0.055)	0.023 (0.060)	0.017 (0.056)
Recent IPV perpetration against mother	0.010 [†] (0.049)	0.102* (0.041)	0.098 (0.058)	0.107* (0.049)	0.125* (0.048)	0.071 (0.050)
Constant	0.108 (0.149)	-0.126 (0.165)	0.301 (0.283)	-0.015 (0.215)	0.070 (0.192)	0.072 (0.178)
Observations (Person-Waves)	1661	2119	1403	1969	1481	1733
Number of groups (Neighborhood-Waves)	137	177	91	129	125	158

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Note:

**
*
p < 0.001,
p < 0.01,
p < 0.05,
p < 0.1

Coefficients differed significantly ($p < .05$) compared to a low and b average crime. No coefficients differed significantly across levels of collective efficacy.