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The Overlap Between Offending Trajectories, Criminal Violence, and Intimate Partner Violence

Alex R. Piquero¹, Delphine Theobald², and David P. Farrington³

Abstract
This article investigates the overlap between offending trajectories, criminal violence, and intimate partner violence (IPV) and the factors associated with these behaviors. Knowledge on these questions is relevant to theory and policy. For the former, this article considers the extent to which specific theories are needed for understanding crime, criminal violence, and/or IPV, whereas for the latter, it may suggest specific offense- and offender-based policies. We use data from the Cambridge Study in Delinquent Development that traces the offending, criminal violence, and IPV of males to age 50. Findings show that there is significant overlap between criminal violence and IPV, high-rate offending trajectories have increased odds of criminal violence and IPV, and early childhood risk factors have no additional effect on criminal violence and IPV in adulthood over and above the offending trajectories.

Keywords
offending trajectories, intimate partner violence, violence, longitudinal

Introduction
There is no shortage of theoretical, empirical, and policy-relevant research on intimate partner violence (IPV; Archer, 2000; Capaldi, Shortt, & Kim, 2005; Fritz & O’Leary, 2004; Holtzworth-Munro & Stuart, 1994; Kaukinen, 2004; Kruttschnitt, 1994;
Kruttschnitt, Gartner, & Ferraro, 2002; Magdol et al., 1997; Moffitt, Krueger, Caspi, & Fagan, 2000; Sherman, 1992; Shortt et al., 2012; Straus, 2011; Tjaden & Thoennes, 1998; Winstok & Eisikovits, 2011). There is also a large amount of research on the nature and course of criminal careers in general (Piquero, Farrington, & Blumstein, 2003, 2007) as well as on violence in criminal careers in particular (Piquero, Jennings, & Barnes, 2012). Yet, there is much less research about the intersection of these two strands of research—specifically the criminal careers of persons who engage in IPV over the life course (Fagan, 1989; Holtzworth-Munroe & Stuart, 1994). This is primarily due to the assumption that partner/domestic offenders concentrate their antisocial behavior in the domestic realm (Pagelow, 1984) and the lack of attention to IPV in more general longitudinal criminal career studies. Thus, the extent to which offenders specialize in IPV over the course of their criminal career or the extent to which such forms of violence are simply manifestations of a more general violent tendency remains underexplored. Very few studies have examined longitudinal patterns of crime, criminal violence, and IPV from childhood to middle adulthood.

The issue of the uniqueness of IPV, as a style of offending and as a function of predictors and correlates different from those that relate to other general or violent offenses, is critical for theory and policy (Hanson, Cadsky, Harris, & Lalonde, 1997; Hilton & Harris, 2005). For example, the extent to which IPV is one of several forms of criminal violence contained within and throughout an offender’s criminal career would suggest not only a more general theory of crime and criminal violence but also a non-crime-specific set of prevention/intervention strategies (see Hanson et al., 1997). On the other hand, if offenders are involved in IPV to the exclusion of other forms of crime and criminal violence, then this would indicate the need for IPV-specific theories of crime as well as or a tailored set of prevention/intervention strategies aimed at the factors underlying IPV perpetration. In sum, addressing the longitudinal overlap between crime, criminal violence, and IPV is important because such analyses continue to be the exception in the field of IPV.

Prior Research

Moffitt and colleagues (2000) used longitudinal data from the Dunedin Multidisciplinary Health and Human Development Study, a birth cohort study of 1,037 New Zealand men and women born in the early 1970s and tracked through age 21, to study issues related to partner violence. Although these authors did not assess criminal and IPV offending within a criminal career framework, they focused their attention on the experiences with—and predictors of—partner violence reported at the age-21 interview using the Conflict Tactics Scale (CTS). Findings regarding past-year partner violence showed that (a) there was a strong degree of agreement between partners about whether physical violence took place; (b) partner violence was linked to cohabitation at a young age, several mental illnesses, and additional individual (school drop out, juvenile aggression, early parenthood) and family (poverty, family adversity) risk factors—with a history of physically aggressive delinquent offending prior to age 15 being the strongest risk factor
for male and female perpetrators and victims; (c) both men and women reported being victims and perpetrators of partner violence, with women self-reporting a lower percentage of physical abuse by their partner than men as well as self-reporting a higher percentage of violence perpetration than men; and (d) persons who had victimized a partner tended also to have histories of violence against other persons as well as histories of criminal offending more generally (see Moffitt & Caspi, 1999).

Piquero, Brame, Fagan, and Moffitt (2006) integrated the family violence and criminal career literatures by analyzing the brief offending careers of spouse assault suspects participating in the Spouse Assault Replication Program (SARP), a multisite study of the effect of criminal justice sanctions on repeat domestic violence. These authors examined the extent to which offenders specialized in violence and whether attack severity escalated, de-escalated, or stayed about the same over time. The results showed little specialization as the majority of individuals also committed nonviolent offenses as well. With the exception of one site, most results regarding escalation/de-escalation indicated that there was a mix of offenders who escalated or de-escalated the severity of their attacks in the very short follow-up periods (12 months with victim–interview data).

Using data spanning a 12-year period (early 20s—early 30s) for 184 men at risk of delinquency in the Oregon Youth Study (OYS), Shortt et al. (2012) examined changes in IPV (physical and psychological aggression) among the males and their female partners, with a particular focus on whether and how IPV changed across relationship transitions. Their results showed that (a) men’s IPV decreased with age, (b) men’s physical aggression in their early 20s predicted their physical aggression in their late 20s, (c) men’s psychological aggression in their early 20s predicted their psychological aggression in their early 30s, (d) there was higher stability of IPV among the men who stayed with the same female partners, and (e) preliminary analyses among the women showed that, like the men, they displayed stability in physical and psychological aggression toward a partner over time within a romantic relationship, but there was more instability in women’s aggression toward a partner across different romantic relationships.

Three analyses of IPV-related issues have been undertaken using data from the Cambridge Study in Delinquent Development (CSDD), a longitudinal study of the offending careers of South London males followed into middle adulthood (see later). In the first study, Farrington (1994) reported on the predictors and correlates of soccer hooliganism at age 18, aggressive frequent group fighters at age 18, spouse assaulters at age 32, and males convicted for violence by age 32. There was a significant overlap between spouse assaulters and criminally violent males: 26.2% of 42 spouse assaulters were convicted for violence, compared with 9.7% of the remaining 247 males who were living with a female partner (odds ratio [OR] = 3.30, confidence intervals = [1.47, 7.39]). The most important (independently predictive) childhood risk factors for spouse assault were a convicted parent at age 10, daring disposition at age 8 to 10, unpopularity at age 8 to 10, and a disrupted family at age 10.

Using path analyses, Lussier, Farrington, and Moffitt (2009) concluded that a criminogenic environment (poor child rearing, parental conflict, low family income) increased the risk of IPV indirectly through an association with antisocial behavior in adolescence.
but that neuropsychological deficits (low verbal IQ at age 10) played more of a direct role. In a follow-up study, Theobald and Farrington (2012) also analyzed data on IPV from interviews at ages 32 and 48 and focused on the predictive accuracy of several explanatory factors. Their findings showed that several family factors (i.e., a criminal father, a disrupted family, poor supervision and relationship problems with parents) and individual factors (i.e., unpopularity, daring, impulsivity, aggressiveness and low verbal IQ) predicted later IPV, and that there was some evidence of cumulative risk for later violence in intimate partnerships. However, these CSDD studies did not consider how distinct offending trajectory groups may have mediated the effects of childhood risk or may have differentiated across types of violence (i.e., general criminal violence vs. IPV).

The Current Study

The present research improves upon the limitations of prior research (e.g., 1-year recall periods, 1-year follow-ups, lack of follow-up into middle adulthood, small sample sizes) by considering the interrelatedness of criminal violence and IPV, the extent to which violence of all forms should be considered a function of offending frequency (as shown in Farrington, 1991; Piquero et al., 2007) and/or distinct offending trajectories, and the extent to which similar risk factors relate to all forms of violence. In this regard, this study follows the key recommendation from Piquero et al.’s (2006) analysis of the SARP data that researchers should undertake a longitudinal analysis of the criminal careers of IPV offenders.

The key questions are as follows: (a) Do offending trajectories relate to IPV at ages 32 and 48? (b) Do offending trajectories relate to criminal violence up to age-50? (c) What is the concordance between IPV at ages 32 and 48 and criminal violence up to age 50? and (d) Do early childhood risk factors relate to age 32/48 IPV and age 50 criminal violence independently and then after controlling for offending trajectories? As will be seen below, the data not only track offending into middle adulthood but also contain information on offending and IPV from official records and self-/other reports.

Data

The CSDD is a prospective longitudinal survey of the development of offending and antisocial behavior in a cohort of 411 boys born in 1953 (on average) in South London. The males and informants (i.e., parents and teachers) have been interviewed at intervals since the males were at age 8. The boys constituted a complete population of boys of that age attending six primary schools in a deprived area. The majority (97%) were White, predominantly working class (95% of fathers had manual jobs in 1961-1962 compared with 78% of the population at that time), from two parent households and of British origin (Farrington, 1995; West & Farrington, 1973). As far as convictions for “standard list” (most serious) offenses are concerned, the cumulative prevalence of convictions was 41% up to age 50, which is somewhat higher than for males born in England and Wales in 1953 (33% up to age 45; see Prime, White, Liriano, & Patel,
2001). Findings from the CSDD have been well documented in the literature (Farrington, 2003; Farrington, Coid, & West, 2009; Farrington et al., 2006; Piquero et al., 2007).

The last two interviews of the men were carried out at ages 32 and 48 when information about their relationships was gathered. At age 32, 378 (93.8%) of the 403 men still alive were interviewed; one question in this interview asked the men whether they had ever been involved in physical violence with their female partner and whether it was instigated by themselves or their partner or whether they were both violent. Of the 378 men interviewed at age 32, 289 (76.5%) were in a relationship about which they could report any incidence of IPV.

At age 48, 365 (92.6%) of the 394 men who were still alive were interviewed. The men were asked whether their partner or wife or (in the event of having no partner) another person who knew them well could be interviewed. Where permission was given, psychology graduates conducted structured interviews, containing questions on education, health, marriage, children, and neighborhoods. The interview included questions about any conflict within the relationship, which was measured by the CTS (Straus, 1990). There were 254 interviews, and of these, 20 interviewees were not female partners of the man but were mothers or fathers (n = 10), sisters (n = 5), daughters (n = 2), male friends (n = 2), or male partners (n = 1), and these were excluded. The remaining 234 female interviewees were (according to their report) in a casual relationship (n = 2), a serious relationship (n = 27), engaged (n = 14), married (n = 189), or separated (n = 2). Twenty-two female partners (mainly those who were abroad and who completed mail or telephone interviews) did not complete the CTS section of the interview, leaving a sample of 212 female partner reports at age 48, which were analyzed.

**Measures**

**IPV.** The CTS is a measure of IPV and was used in interviewing the female partner nominated by the man at the age-48 interview. The format of the CTS allows the interviewer to ask questions about the occurrence of IPV in the last 5 years. It includes reciprocal questions on verbal abuse (e.g., Have you cursed or sworn at him? Has he cursed or sworn at you?), minor acts of violence (e.g., Have you pushed or grabbed him? Has he pushed or grabbed you?), and serious acts of violence (e.g., Have you kicked or bitten or punched him? Has he kicked or bitten or punched you?). Although actions such as pushing or grabbing could be considered as aggressive, they are not necessarily violent (Fritz & O’Leary, 2004). Because we were interested in a measure of physical violence that was concordant with actual physical assault or serious threat, we only included more serious acts in our definition of violence such as slapping, shaking, throwing an object at, kicking/biting or hitting with a fist, hitting with an object, twisting arms, throwing bodily, beating up (multiple blows), choking or strangling, and threatening with a knife or gun. Although the CTS is limited in some respects (Archer, 1999), it is a reliable and valid instrument to measure IPV across different populations (Straus, 1990).

The prevalence of the man’s IPV (as described above) at age 32 as reported by the man and at age 48 as reported by the woman was investigated. Of the 289 men with a
female partner who were interviewed at age 32, 234 (81%) reported that there had never been any physical violence in their relationship, leaving 55 (19%) men who reported that there had been violence. Of the 289 male reports, 21 (7.3%) reported that they had hit their partner with no retaliation, 13 (4.5%) reported that their female partner had hit them with no retaliation, and 21 (7.3%) reported that both partners had been violent. Thus, 42 men (14.5%) perpetrated violent act(s) within their relationship at age 32.

A more comprehensive breakdown of the types of violence in relationships was gathered using the CTS at the age-48 interview (Straus, 1990). Of the 212 females, 140 (66.0%) reported that there was no physical violence perpetrated by the man or the woman in the relationship. This left 72 (44.0%) cases where there was violence in the relationship: 35 (16.5%) females reported that they had hit their partner without retaliation, 16 (7.6%) reported that the man had hit them without retaliation, and 21 (9.9%) reported that they had both perpetrated violent acts. Thus, 37 men (17.5%) perpetrated violent act(s) within their relationship at age 48.

We then combined the age-32 and age-48 reports (i.e., IPV occurred at either ages 32 or 48), and 208 of the 319 men known at one or both ages (65.2%) reported no violence. This left 111 (34.8%) reports of IPV; 39 (12.2%) females hit without retaliation compared with 32 (10.0%) males; and 40 (12.6%) were both involved. Thus, 72 males (22.6%) perpetrated IPV at either age 32 or age 48.

**Offending Trajectories.** We use official conviction records for the following offense types: burglary, theft of a motor vehicle, theft from a motor vehicle, shoplifting, theft from machine, theft from work, other theft, receiving, suspicious behavior (e.g., going equipped to steal), robbery, assault, threats, offensive weapon, vandalism, fraud, drugs, and sex offenses. Searches of conviction records were carried out in the summer of 1994, when most males were aged 40, and were conducted in the central Criminal Record Office (National Identification Bureau) in London to try to locate findings of guilt (i.e., convictions). Convictions were counted for offenses committed up to the end of 1993, when most males were at age 40. Between ages 10 and 16 inclusive (the years of juvenile delinquency in England at that time), 85 males were convicted. Up to age 40, 164 males were convicted. The recorded age of offending is the age at which an offense was committed, not the age on conviction.

The offending to age-40 data forms the basis of the offending trajectories, as described in Piquero et al. (2007). Briefly, a semiparametric mixed Poisson model was used to identify distinct offending trajectories. This method assesses the possibility of individual variation underlying longitudinal crime patterns and can identify meaningful subgroups within a population that follow distinct developmental trajectories that are not identifiable in advance (Nagin, 2005). A five-trajectory solution provided the best fit: (a) nonoffenders (62.3%), (b) low-adolescence peaked (18.6%), (c) very-low-rate chronics (11.3%), (d) high-adolescence peaked (5.4%), and (e) high-rate chronics (2.5%). We use the age-40 trajectories to establish a sort of temporal order when predicting to age-48 IPV and age-50 criminal violence.

**Criminal Violence.** The latest searches of criminal records took place in the Police National Computer (PNC) in July 2002 and December 2004, at which time the youngest
man was aged 50 (Farrington et al., 2006). There were 146 crimes of violence, which included acts of robbery, assault, threats and possession of offensive weapons, and 71 out of 404 men (17.6%) were convicted of a violent offense up to age 50.

**Childhood Risk Factors.** A key feature of our study is to investigate the extent to which childhood risk factors predict IPV and criminal violence in general and over and above the offending trajectories, and we do this in two different ways. First, we use two summed indexes (individual and environmental) that have been previously used to predict offending trajectories. Second, we examine specific individual and familial risk factors measured at ages 8 to 10, 12 to 14, and 18 as candidate predictors of IPV; these risk factors have been described in detail elsewhere (West & Farrington, 1973, 1977).

The two summed indexes are from Piquero et al. (2007), who used data from age 8-10 interviews with the boy, his parent(s), his teacher(s), and other records. Twenty-seven risk factors in total were measured prior to criminal involvement, including individual (12 items, α = .57) and environmental (15 items, α = .77) domains. Individual risk factors included (a) low junior school attainment, (b) daring disposition, (c) small height, (d) low nonverbal intelligence, (e) nervous/withdrawn boy, (f) high extraversion of boy, (g) high neuroticism of boy, (h) psychomotor impulsivity, (i) dishonesty, (j) unpopularity, (k) troublesomeness, and (l) lacks concentration/restless. Environmental risk factors included (a) harsh attitude/discipline of parents, (b) teen mother at birth of her first child, (c) behavior problems of siblings, (d) criminal record of a parent, (e) delinquent older sibling, (f) large family size, (g) poor housing, (h) low family income, (i) parental disharmony, (j) neurotic/depressed father, (k) neurotic/depressed mother, (l) low socioeconomic status, (m) separated parents, (n) poor supervision, and (o) high-delinquency-rate school. Coding for all risk factors was dichotomous (1 = “ok,” 2 = “bad”), with higher scores indicating presence of the risk factor (see Farrington & Loeber, 2000, for discussion regarding dichotomization of risk factors).

We also use eight single risk factors obtained during the ages 8 to 10, 12 to 14, and 18 interviews, including neuroticism-10, impulsivity-10, neuroticism-14, anxiousness-12-14, nervousness-14, neuroticism-16, impulsivity-18, and binge-drinking-18 (13+ units of alcohol in one evening). These factors were coded dichotomously as stated previously, where higher score indicated presence of the risk (see West & Farrington, 1977).

All analyses were carried out in the STATA software package.

**Results**

**Do Offending Trajectories Relate to IPV at Ages 32 and 48?**

Table 1 displays the prevalence of IPV at ages 32 and 48, and a combined age 32/48 measure for the five offending trajectories. The overarching conclusion here is that the worst offending groups (high-rate chronic, high-adolescence peak, very-low-rate chronic) have the highest prevalence of IPV. In fact, for the age-48 IPV measure (n = 212), all the high-rate chronics were involved in IPV, whereas in the combined age-
Do Offending Trajectories Relate to Criminal Violence Up to Age 50?

Next, we examine the extent to which the age-40 offending trajectories distinguish between those men who had (or did not have) a violent conviction by age 50. Table 2 shows a pattern of results that are similar to those reported earlier for IPV: The prevalence of a violent conviction is highest among those males who have the worst offending patterns (high-rate chronic, very-low-rate chronic, high-adolescence peak). Importantly, seven of the eight high-rate chronics had a violent conviction by age 50. Thus, with respect to our second research question, the offending trajectories distinguish between males with and without a conviction for violence. Violence is strongly linked to frequent offending (Farrington, 1991; Piquero, 2000; Piquero et al., 2007).

What Is the Concordance Between IPV at Ages 32/48 and Criminal Violence Up to Age 50?

There are conflicting views about the possible overlap between persons who offend violently and persons who desist their violence toward their intimate partners. To investigate this issue, we examine the concordance between criminal violence (whether convicted of a violent act by age 50) and the combined age-32/48 measure of IPV. Note that most convictions for criminal violence resulted from physical fights in public places, often after drinking alcohol (see Farrington, Berkowitz, & West, 1982). Based on our first research question, it is clear that involvement in IPV varies according to the offending trajectories.

Table 1. Prevalence of IPV by Offender Trajectories (ANOVA).

<table>
<thead>
<tr>
<th>Trajectory</th>
<th>Age-32 IPV (male report)</th>
<th>Age-48 IPV (partner report)</th>
<th>Age-32/48 combined</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Nonoffender</td>
<td>10.2%</td>
<td>15.5%</td>
<td>18.1%</td>
</tr>
<tr>
<td>2. Low-adolescence peak</td>
<td>10.4%</td>
<td>15.0%</td>
<td>18.1%</td>
</tr>
<tr>
<td>3. Very-low-rate chronic</td>
<td>34.7%</td>
<td>16.0%</td>
<td>38.7%</td>
</tr>
<tr>
<td>4. High-adolescence peak</td>
<td>29.4%</td>
<td>33.3%</td>
<td>35.2%</td>
</tr>
<tr>
<td>5. High-rate chronic</td>
<td>80.0%</td>
<td>100.0%</td>
<td>85.7%</td>
</tr>
<tr>
<td>F value</td>
<td>8.68*</td>
<td>4.31*</td>
<td>6.70*</td>
</tr>
</tbody>
</table>

Note: IPV = intimate partner violence. For the age-32 IPV analysis, Bonferroni post hoc multiple comparison tests indicated significant differences for the comparisons between 1/3, 1/5, 2/3, 2/5, 4/5 (p < .05), and 3/5 (p < .10). For the age-48 IPV analysis, Bonferroni post hoc multiple comparison tests indicated significant differences for the comparisons between 1/5, 2/5, 3/5 (p < .05), and 4/5 (p < .10). For the age-32/48 combined IPV analysis, Bonferroni post hoc multiple comparison tests indicated significant differences for the comparisons between 1/5, 2/5 (p < .05), and 1/3, 3/5, 4/5 (p < .10). *p < .05.
on 319 participants who completed the necessary interviews for this analysis (discussed earlier), a significant relationship was observed between the two outcomes, $\chi^2(1) = 9.672$, $p < .05$. Not surprisingly, the vast majority of men were not involved in either IPV or criminal violence ($n = 207, 66\%$); yet, 22 men ($7\%$) were convicted for criminal violence and also committed IPV. These 22 men represented 38.6\% of those men who were convicted for violence ($n = 57$) and 30.6\% of those who committed IPV ($n = 72$).

**Do Early Childhood Risk Factors Relate to Age-32/48 IPV and Age-50 Criminal Violence Independently and Then After Controlling for Offending Trajectories?**

Our final analysis uses logistic regression to examine how childhood risk factors (singly and as indexes) relate to IPV and criminal violence with and without controlling for offending trajectories. Tables 3 and 4 consider these results using the summed individual and environmental risk indexes and offending trajectories, while Table 5 presents the results of the individual risk factors and offending trajectories for criminal violence at age 50 and the combined age-32/48 IPV measure. Note that Tables 3 and 4 are strictly predictive analyses but Table 5 is not, because some of the risk factors were measured after the minimum age of criminal responsibility of 10. Because of the (a) exploratory nature of our study, (b) directional expectation of the relationships examined, and (c) relatively small sample size, we present results using significance levels of $p < .05$ and $p < .10$.

Looking at the models containing the individual and environmental risk indexes for the age-32, -48, and combined ages-32/48 IPV measures in Table 3, it can be seen that, with one exception (environmental risk for age-32 IPV), all of the partial ORs are significant and positively related to IPV, indicating that a higher number of risk factors predicts a higher likelihood of IPV. Yet, when the four offender trajectories are included along with the two childhood risk indexes (the nonoffender trajectory serves
as the reference group), neither of the childhood risk indexes are significant predictors of IPV and two of the offender trajectories (very-low-rate chronic and high-rate chronic) are significantly associated with IPV at age 32 and the combined 32/48 IPV measure. For the age-48 IPV measure, the high-rate chronic coefficient was not estimated because all three high-rate chronic offenders had an affirmative response for the age-48 IPV measure (i.e., being a member of the high-rate chronic trajectory perfectly predicted age-48 IPV). Thus, although childhood risk factors predict adult involvement in IPV, the effects are not very important after controlling for distinct offending trajectories.

Table 4 presents the same set of analyses but instead replaces the IPV outcome with whether the male was convicted for a violent offense by age 50. A virtually identical set of findings emerges as those reported above. In the first analysis, both childhood risk

### Table 3. Logistic Regression Predicting IPV Using Childhood Risk Indexes (Partial Odds Ratio).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Age-32 IPV (male report)</th>
<th>Age-48 IPV (partner report)</th>
<th>Age-32/48 combined</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Analysis 1</td>
<td>Analysis 2</td>
<td>Analysis 1</td>
</tr>
<tr>
<td>Individual risk index</td>
<td>1.174*</td>
<td>1.061</td>
<td>1.189*</td>
</tr>
<tr>
<td>Environmental risk index</td>
<td>1.075</td>
<td>1.036</td>
<td>1.124*</td>
</tr>
<tr>
<td>Low-adolescence peak</td>
<td>0.915</td>
<td>0.617</td>
<td>0.836</td>
</tr>
<tr>
<td>Very-low-rate chronic</td>
<td>3.866*</td>
<td>0.489</td>
<td>2.082*</td>
</tr>
<tr>
<td>High-adolescence peak</td>
<td>2.503</td>
<td>0.720</td>
<td>1.319</td>
</tr>
<tr>
<td>High-rate chronic</td>
<td>26.240*</td>
<td>NA</td>
<td>17.445*</td>
</tr>
</tbody>
</table>

Note: IPV = intimate partner violence. In models with offender trajectories, the nonoffender group is the reference category.
*p < .05. +p < .10.

### Table 4. Logistic Regression Predicting Criminal Violence by Age 50 Using Childhood Risk Indexes (Partial Odds Ratio).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Violent offender (age 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Analysis 1</td>
</tr>
<tr>
<td>Individual risk</td>
<td>1.240*</td>
</tr>
<tr>
<td>Environmental risk</td>
<td>1.153*</td>
</tr>
<tr>
<td>Low-adolescence peak</td>
<td></td>
</tr>
<tr>
<td>Very-low-rate chronic</td>
<td>49.434*</td>
</tr>
<tr>
<td>High-adolescence peak</td>
<td>35.866*</td>
</tr>
<tr>
<td>High-rate chronic</td>
<td>153.824*</td>
</tr>
</tbody>
</table>

Note: In models with offender trajectories, the nonoffender group is the reference category.
*p < .05.
factors are positive and significant predictors of the likelihood of a violent conviction, but once we control for the four offender trajectories—each of which is positively and significantly associated with a higher likelihood of a violent conviction compared with the nonoffender trajectory—the childhood risk factors have no additional effect on criminal violence over and above the trajectories.9

Finally, Table 5 examines how the eight single childhood and adolescent risk factors relate to a combined age-32/48 IPV measure as well as whether the male was convicted for a violent offense by age 50. In models without the offender trajectories included, two of the risk factors, impulsivity-10 and anxious-12-14, were positively and significantly related to a higher risk of IPV, whereas three of the risk factors (neuroticism-14, anxious-12-14, binge drinking-18) were associated with a significantly higher probability of being convicted for a violent offense. Once we controlled for the offending trajectories, however, none of the childhood/adolescent risk factors remained as significant predictors of either the combined IPV measure or being a violent offender.

For IPV, two trajectories, very-low-rate chronic and high-rate chronic, had a significantly higher risk of IPV compared with the nonoffender trajectory, while for criminal violence, all four trajectories, relative to the nonoffender group, had a higher likelihood of being convicted for a violent offense. Thus, with respect to our final question, results show that although some specific childhood/adolescent risk factors were significant predictors of the combined IPV measure and criminal violence, they had no additional effect over and above the offending trajectories. This leads to the conclusion that early

### Table 5. Logistic Regression Predicting Combined Age-32/48 IPV and Criminal Violence Using Single Childhood Risk Factors (Partial Odds Ratio).

<table>
<thead>
<tr>
<th></th>
<th>Combined-32/48</th>
<th></th>
<th>Criminal violence (age 50)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Analysis 1</td>
<td>Analysis 2</td>
<td>Analysis 1</td>
<td>Analysis 2</td>
</tr>
<tr>
<td>Neuroticism-10</td>
<td>0.983</td>
<td>0.957</td>
<td>1.446</td>
<td>1.484</td>
</tr>
<tr>
<td>Impulsive-10</td>
<td>1.681+</td>
<td>1.579</td>
<td>1.047</td>
<td>0.643</td>
</tr>
<tr>
<td>Neuroticism-14</td>
<td>1.355</td>
<td>1.291</td>
<td>1.706*</td>
<td>1.562</td>
</tr>
<tr>
<td>Anxious-12-14</td>
<td>2.695*</td>
<td>1.789</td>
<td>4.277*</td>
<td>2.260</td>
</tr>
<tr>
<td>Nervousness-14</td>
<td>0.760</td>
<td>0.798</td>
<td>0.647</td>
<td>0.562</td>
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<tr>
<td>Neuroticism-16</td>
<td>0.837</td>
<td>0.922</td>
<td>0.740</td>
<td>0.696</td>
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<tr>
<td>Impulsive-18</td>
<td>1.268</td>
<td>1.113</td>
<td>1.383</td>
<td>0.816</td>
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<tr>
<td>Binge drinking-18</td>
<td>1.073</td>
<td>0.831</td>
<td>2.090*</td>
<td>0.720</td>
</tr>
<tr>
<td>Low-adolescence peak</td>
<td>0.919</td>
<td></td>
<td>9.932*</td>
<td></td>
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<tr>
<td>Very-low-rate chronic</td>
<td>2.314*</td>
<td></td>
<td>82.991*</td>
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<tr>
<td>High-adolescence peak</td>
<td>2.387</td>
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<td>117.961*</td>
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<tr>
<td>High-rate chronic</td>
<td>19.911*</td>
<td></td>
<td>323.408*</td>
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</table>

Note: In models with offender trajectories, the nonoffender group is the reference category. *p < .05. +p < .10.
childhood and adolescent risk factors do little to predict IPV or criminal violence after considering a person’s longitudinal offending style but leaves open the possibility that these early risk factors predict offending trajectories (Piquero et al., 2007).

Conclusion

Following recommendations from Fagan (1989) and Piquero et al. (2006), this study sought to contribute to the small base of research that has integrated the criminal career and IPV literatures to examine the overlap between criminal violence and IPV and the extent to which risk factors relate in similar ways to criminal violence and IPV. Using the most complete longitudinal data set available to study these issues, analyses of the offending careers of several hundred South London males followed to age 50 indicated that (a) offending trajectories distinguished between IPV involvement at ages 32, 48, and a combined age-32/48 measure, with high-rate chronics exhibiting the highest prevalence of IPV; (b) offending trajectories distinguished between males with and without a conviction for criminal violence, with high-rate chronics exhibiting the highest prevalence of criminal violence; (c) there was significant overlap between persons who had been convicted for criminal violence and who also had been involved in IPV; and (d) childhood risk factors related to adult IPV as well as criminal violence, but they did not contribute to the explanation of either IPV or criminal violence after controlling for the offending trajectories.

These results bear on the limited knowledge that has accumulated on criminal violence and IPV over a criminal career. Theoretically, findings suggest that various risk factors appear related in similar ways to criminal violence and IPV, both of which are also strongly predicted by chronic offending. It seems that offense frequency drives the likelihood of criminal violence and IPV, which may suggest little need for a violence- or IPV-specific theory and instead suggests that focus should be placed on general theories that combine all forms of violence and offending under a common explanation. Policy-wise, the implication of the totality of our findings is that there may be little need to develop violence- or IPV-specific initiatives and instead broader-based prevention/intervention strategies should be used to try to reduce all forms of criminal offending.

That said, with regard to those men who perpetrate IPV within clinical and community samples, their past behaviors should still be investigated for other forms of violence so that interventions may be tailored to the individual concerned—but only to the extent that the needs of IPV perpetrators might be different (see Holtzworth-Munroe & Stuart, 1994). Generally violent men may constitute a larger proportion of clinical samples but undoubtedly community samples will contain some. These men can be very different from the men who are only violent within the family context where altercations that may or may not result in violent acts are often situational and are often perpetrated by females (Archer, 2000). This form of family violence often has a lower frequency (though it may still be more common than serious violence involving injury), does not usually escalate over time, and is unlikely to involve severe violence (Johnson & Ferraro, 2000). Although the CSDD findings support a more
general view of offending, and hence more global policy considerations, replication with other samples is warranted.

Some study limitations should be noted. First, the high-rate chronic trajectory was composed of very few men, and although this is not atypical of chronic offender groups in other studies, caution should be exercised in interpreting findings of this group. Second, we did not examine how changes in relationship partners may have altered IPV (see Shortt et al., 2012), nor did we have detailed information about the nature of the actual IPV events and their outcomes (i.e., injuries, criminal justice system involvement). Data on these issues would be useful to better understand the IPV events. Third, as our focus was on the extent to which childhood/adolescent risk factors predicted later criminal violence and IPV, we did not consider adult risk factors. These would be important as it may be that more proximal adult stressors, such as lost employment, drinking alcohol, or poor relationship quality, could lead to IPV. Finally, it would be useful to consider more repeated measures of IPV involvement over time and to also collect data on vicarious IPV experiences, including those observed by children. All of these recommendations regarding data are identified as a way to better study the patterns of different types of IPV and to consider how IPV involvement may wax and wane over the criminal career in relation to changes in offending and changes in risk factors over the life course.

Declaration of Conflicting Interests

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Notes

1. Lussier, Farrington, and Moffitt (2009) previously studied nonresponse bias by comparing the included men with those who were not included on all the independent variables and no significant differences were found.
2. Although men and women perpetrated intimate partner violence (IPV), we focus on males’ perpetration, especially because we do not have substantial information on the earlier years of the females. With regard to the stability of male IPV between age 32 (male self-report) and age 48 (female report), we report an odds ratio = 2.4 ($p = .38)$. There is a prior literature on interpartner reliability. Most reports suggest poor to moderate reliability, varying depending on the age, type of abuse, duration of the relationship and whether the union is continuing or new (Fritz & Slep, 2009; Moffitt et al., 1997).
3. Up to 1979, paper records were consulted in Scotland Yard. Between 1979 and 1994, microfiche records were consulted in Scotland Yard. From 1995, the microfiche collection was discontinued and all convictions (and cautions) were recorded on the Police National Computer (PNC). There was only limited copying of old records to the PNC, generally when a person received a new conviction.
4. Many records of old convictions were not found in the PNC, and several convictions before 2002 were not found until the 2004 search, which covered the National Identification Service (NIS) as well as PNC. The earliest date listed in the PNC was counted as the date on which an offense was committed. It was decided to count officially recorded cautions as well as convictions in the PNC because cautions were routinely recorded on a national basis from 1995. In this study, then, convictions after age 40 include cautions. In addition, the definition of what is a “standard list” offense changed over time. In particular, drunk driving offenses were added to the standard list from 1996 and 12 convictions for this offense was recorded. Due to changes in categorization over time, motoring offenses were excluded from analyses.

5. Hardly any of the violent offenses were recorded as being committed against a female partner. The paper and microfiche records up to age 40 specified the victim, but this was a female partner in only two cases. This is probably because most offenses against female partners were classified as common assaults, which were nonindictable offenses that were not included in the criminal records. From 1995, “common assault and battery” became an indictable offense and was listed in the PNC records, but unfortunately these records (obtained from the Home Office) did not specify the name of the victim.

6. In the United Kingdom, 1 unit equals 10 milliliters of alcohol, equivalent to a half pint of beer, or glass of wine, or a single measure of spirits.

7. We recognize that the age-32 IPV measure is obtained prior to the final 8 years of offending information that went into the trajectory classifications. We use this as a robustness check on the pattern of relationships between the offending trajectories and the age-48 and age-32/48 combined IPV measures—especially because the age-32 and age-48 IPV measures are from two distinct reporting sources. As will be seen, the substantive conclusions remain the same whether we examine the age-32, age-48, or age-32/48 combined IPV measures. Still, because of the time-ordering issue, we conducted a supplemental analysis where we used the age-32 conviction trajectory groups that were previously identified by Nagin, Farrington, and Moffitt (1995) to predict age-32 IPV, and obtained similar results, that is, the most chronic groups (which were the low-chronic and high-chronic groups) had the most perpetration for the age-32 IPV measure—and this was especially true for the high-chronic group.

8. We also estimated these models using the total number of convictions between ages 10 and 40 rather than separate offender trajectories. For all three IPV outcomes, we found that the frequency of convictions was a positive and significant predictor of IPV and that neither individual nor environmental risk was significantly related to the three IPV outcomes once we controlled for conviction frequency.

9. Again, we replaced the offender trajectories with a measure of conviction frequency, the results of which indicated that conviction frequency was a positive and significant predictor of criminal violence and that neither of the childhood risk factors remained significant once we controlled for conviction frequency.

10. Supplemental analysis replacing the trajectory groups with conviction frequency yielded similar results: A higher number of convictions was positively and significantly related to combined IPV and criminal violence, but none of the childhood risk factors were significant...
predictors. We believe that for these (and previous) analyses, there is a preference to use the trajectory groups rather than conviction frequency because there is a heightened risk of both IPV and criminal violence across the spectrum of offenders. The heterogeneity is important to look at because although a continuous conviction frequency measure is significant, there is differential risk in the offending continuum and that is seen as the groups have different risks of IPV especially (and to a lesser degree for criminal violence).

References


and de-escalation evidence from the Spouse Assault Replication Program. *Public Health Reports, 121*, 409-418.


