A longitudinal analysis of the criminal careers of IPV offender subtypes: Results from a prospective survey of males

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Introduction

There is little denying the academic, policy, and public interest in the problem of intimate partner violence (IPV), which includes a wide range of acts such as: threatened/actual physical or sexual violence, and/or emotional or psychological abuse perpetrated by a current or former intimate partner. Several disciplines spanning the social and medical fields have contributed important theoretical and empirical knowledge regarding IPV and several national and international governments and agencies, such as the World Health Organization (Butchart, Garcia-Moreno, & Mikton, 2010), the National Research Council (National Research Council, 1996, 1998), and the Centers for Disease Control and Prevention (Black, Basile, et al., 2011), have produced research overviews and outlined prevention and policy recommendations. As well, IPV is of major interest to various public constituencies and policy-makers alike, such that the problem of IPV occupies a virtual daily presence in lay discussions and the popular media.

At the same time there is considerable variation in prevalence, meaning, and acceptability of IPV across countries and cultures (Archer, 2006), which impacts the way in which this type of violence is treated both legally and clinically. From a theoretical perspective, it may be that IPV should be considered within the context of violence generally (including violence outside the home) which may suggest little need for a violence- or IPV-specific theory and instead suggests that a focus should be placed on general theories that combine all forms of violence and offending under a common explanation (Dutton, 2010; Felson, 2002, 2006). Also, from a research perspective, there has been considerable attention devoted to the identification of men who commit violent crime and indeed much effort has been focused on the extent to which these types of offenders require specialized treatment (Lynam, Piquero, & Moffitt, 2004; Piquero et al., 2006; Swogger, Walsh, & Kosson, 2007).

In contrast, there has been much less attention paid to the differences between those individuals who commit different types of violence, such as IPV, and the possible implications that this may have for treatment (Huss & Ralston, 2008; Langhinrichsen-Rohling, Huss, & Ramsey, 2000; Taft et al., 2003). It may be that IPV offenders are a distinct group of offenders who concentrate their offending behavior in the domestic realm but IPV may also be an expression of a more general violent tendency (Felson, 2002; Richards et al. 2014). The identification of different 'types' of male perpetrators of IPV may allow treatment to be moulded to the specific needs of the individual.

To date, one of the most influential IPV typologies put forward that might further theoretical understanding and help guide treatment has been that of Holtzworth-Munroe and Stuart (1994). Their work presented a hypothesis about a likely typology which suggests that males who perpetrate IPV can be differentiated using the descriptive features of severity of IPV, the generality of the violence, and psychopathology. The three subtypes proffered were: (1) the generally violent male who commits violent acts both within the family and outside the family, and constitutes the most prolific type of offender; (2) a borderline/dysphoric perpetrator who exhibits personality disorder features; and (3) the family-only perpetrator who exhibits very little psychopathology and whose violence takes place only within the context of the family.[1] In their original paper, these authors (1994, p.481) predicted that these resulting theoretical subtypes would inter-relate to some extent. For example, those in the 'family only' group should engage in the least severe marital violence, including psychological and sexual violence. The violence of this group is generally restricted to family members as these men are the least likely to engage in

[1] In a more recent paper based on a community sample, and testing the original typology proffered in 1994, Holtzworth-Munroe et al. (2000) identified a further cluster of low level antisocial men who fell between the family-only men and the generally violent men.

violence outside the home or to have related legal problems and little or no psychopathology would be evident. The borderline/dysphoric personality disordered group was, according to Holtzworth-Munroe and Stuart, more likely to exhibit the most violence in the family, primarily confined to the partner, but some extra-familial violence might be evident. The generally violent men would be those men who engaged in moderate to severe marital abuse, with the highest levels of extra-familial aggression and criminal behavior.

Research on the extent to which those who commit IPV are generally violent men with an underlying hostility, those with personality pathology, or 'family only' perpetrators has been a question widely investigated in clinical and community samples (Holtzworth-Munroe et al., 2000; Lawson et al., 2003; Tweed & Dutton, 1998; Weinstein et al., 2012). Findings have been generally supportive, with some research finding evidence of these three groups (Langhinrichsen-Rohling et al., 2000; Lawson et al., 2003). For example, using data gleaned from several sources (e.g., wife reports, number of assaults by the man outside the family, and personality scales from the Millon Clinical Multiaxial Inventory), Waltz, Babcock, Jacobson, and Gottman (2000) found three subgroups. Other scholars find support for two groups. Tweed and Dutton (1998) studied a court-referred group of severely violent men and found one group with psychopathology, similar to the borderline/dysphoric group, and another generally violent/antisocial group as suggested by Holtzworth-Munroe and colleagues. These studies show inconsistencies in the number of groups found and this may be due to the type of sample, sample size, and the measures used to evaluate psychopathology and general criminality.

With this in mind, our aim was to investigate whether descriptive subtypes could be identified in a population from the United Kingdom who were primarily recruited to study the development of delinquent behavior at ages 8 to 10 and have been followed prospectively for

over 40 years. Before moving on to our key questions, we first highlight some of the proximal and distal correlates of IPV that might differ across these subtypes as originally suggested by Holtzworth-Munroe and Stuart (1994) and have emerged generally in the literature on aggressive and violent behavior.

Individual Factors

Research has shown that there may be a general violent tendency in the individual which manifests from difficult temperament and behavioral problems in childhood (Lussier, Farrington, & Moffitt, 2009; Magdol et al., 1998; Moffitt, 1993: Moffitt & Caspi, 2003). This antisocial behavior and aggressiveness can continue into adulthood and be expressed in generally age-appropriate violent behaviors, including IPV. This capacity for violence may develop from childhood experiences in the family of origin such as witnessing violent conflict between parents and/or experiencing psychological and physical maltreatment (Ehrenshaft et al., 2003; Jennings et al., 2013; Raine, 2002; Widom, 1989, 2000). Even though dysfunctional family environments may account for some of the observed variance in the likelihood of antisocial behavior both directly and indirectly, genetic predispositions such as a difficult temperament may also play a part (Raine, 2002, 2008). Children who have difficult temperaments and behavioral problems are often aggressive and antisocial at home and at school, and are likely to continue to be aggressive into their teenage years and beyond (Eron & Huesmann, 1990; Moffitt et al., 1998). For example, Eron and Huesmann (1990) found that aggression measured at age 8 predicted later male violence towards a partner at age 30. Clearly, individuals with underlying antisocial propensity, poor problem-solving skills, a dysfunctional family of origin, where there was poor communication and inappropriate role models, may be ill-equipped to deal with the inevitable

frustrations that arise in intimate relationships (Moffitt & Caspi, 2003; Simons, Lin, & Gordon, 1998).

Another feature common to antisocial behavior and offending in general, which may also influence IPV, is impulsivity. Moffitt et al. (2000) investigated impulsivity in the Dunedin Study in New Zealand and found that lack of constraint was only associated with those individuals who were generally violent and was not associated with those individuals who were only ever involved in IPV. This finding supports the idea that impulsivity is a robust predictor of general criminal offending, including acts of violence. Therefore, a differentiation which might be more appropriate is whether IPV offenders are only violent within the home or whether they are generally violent (outside the home as well), which does to some extent support two subtypes of Holtzworth-Munroe and Stuart's typology. Generally violent men, for example, 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; Johnson & Leone, 2005).

A much earlier study found that men who were generally violent (inside and outside the home and in different relationships) were more violent at home than those men who only directed violence towards their partner (see Shields, McCall, & Hanneke, 1988). In a re-analysis of data from the Spouse Assault Replication Program in the United States, Piquero and his colleagues (2006) found that few domestic violence offenders specialized in violence, having been involved in non-violent crimes as well, and they further uncovered evidence of distinct escalation and de-escalation patterns over short follow-up periods. Importantly, these authors

(p.409, emphasis added) called for "*a longitudinal analysis of the criminal careers of domestic violence offender subtypes*" in order to investigate theoretically-based typologies. The analyses in this paper adopt this suggestion.

Psychopathology associated with IPV

Although survey data suggest that men and women are equally likely to be involved in IPV (Magdol et al., 1998a), it is also likely that the most serious acts of physical violence are more often perpetrated by men against their female partners, and that women are more often injured in these events even if they were the initiators. In their study of male batterers, Holtzworth-Munroe and Stuart (1994, p.476, emphasis added) suggest that "… *when one is trying to understand husband-wife violence, studies examining the husband may be the most productive line of inquiry*". They suggest that there are some men who have severe psychopathology such as borderline and antisocial personality disorders often co-morbid with mood instability and substance abuse and are more often the men seen in clinical samples of male abusers. However, the majority of men who are involved in IPV may have psychological problems, which might include anger, jealousy, over-control, dependency, poor self-esteem, poor coping skills, poor tolerance for stress and behavioral impulsivity, but not necessarily at clinical levels (Holtzworth-Munroe, Bates, Reingle et al., 2014a; Smutzler, & Sandin, 1997).

In the Dunedin Study, Moffitt, Krueger, Caspi, and Fagan (2000) investigated whether general offenders were similar to those involved in IPV with regard to 'negative emotionality', a stable personality trait associated with lowered thresholds for negative emotions such as anger, anxiety, and irritability. They suggested that high levels of this trait predispose individuals to hostile attribution biases to both the acts of others and to their environments. Moffitt et al.

(p.222) likened negative emotionality to the traits associated with Holtzworth-Munroe and Stuart's dysphoric/borderline typology (e.g., dysphoria, excessive jealousy, emotional volatility and anger), and concluded that negative emotionality was a trait shared by those who engaged in general crime and IPV. These offenders may have symptoms associated with Cluster B (dramatic, emotional or erratic) traits categorized in the Diagnostic and Statistical Manual of the American Psychiatric Association, 4th Edition (DSM-IV), as histrionic, narcissistic, borderline, and antisocial personality disorders. Some authors have suggested that those with borderline symptoms for example may perpetrate IPV due to insecure attachments, having suffered parental abuse and rejection, with subsequent difficulties in forming stable relationships (Dutton et al., 1997), whereas those with antisocial symptoms may perpetrate IPV as a consequence of generalized hostility (Holtzworth-Munroe et al., 2000). It may be the case that men who are generally violent have underlying psychopathology such as antisocial personality and/or borderline personality disorders (Holtzworth-Munroe & Stuart, 1994; Mauricio, Tein, & Lopez, 2007).

IPV can also be moderated by age, alcohol consumption, and lower educational attainment. There seems to be a higher frequency of IPV in lower socio-economic groups, often based on income, educational level and unemployment (Ono, 1998; Riggs, Caulfield, & Street, 2000; Straus, Gelles, & Steinmetz, 1980). Alcohol is frequently associated with the perpetration of violence and IPV is no exception, however it is difficult to establish whether the association is causal or has a facilitating function (Klostermann & Fals-Stewart, 2006; Reingle et al., 2014). With regard to age, research shows that offending and violent offending in particular declines with age from a peak in young adulthood (Blumstein et al., 1986; Hirschi & Gottfredson, 1983; Piquero et al., 2003; Sweeten et al., 2013) and that certain types of personality disorder traits

decline with age as well, with Cluster B traits decreasing substantially after the third decade (Roberts & DelVecchio, 2000; Ullrich & Coid, 2009). It may be that IPV also declines with age (see Archer, 2013) and might be partially explained because the personality pathology and other confounding factors such as alcohol consumption and drug use also decline (Ullrich & Coid, 2009).[2] However, Vickerman and Margolin (2008) examined middle aged couples in a prospective longitudinal study at three time points and found only a small decrease in physical aggression and no change with regard to psychological aggression. On the other hand, a study of approximately twelve thousand males did not distinguish between mild and moderate aggression in intimate relationships (Pan, Neidig, & O'Leary, 1994). A more recent study based on a community sample of late middle-aged men and women found that personality pathology was associated with partner aggression, although truly violent physical acts were rare (Weinstein, Gleason, & Oltmanns, 2012). And while it is important how IPV is categorized when considering the results of these studies, it is still the case that regardless of whether violent behavior, personal psychopathology, and substance misuse decline with age, these behaviors continue to produce impairments later in life (Piquero et al., 2010; Ullrich, Farrington, & Coid, 2007).

Current Focus

The accumulated evidence suggests that men who are involved in IPV appear to be a heterogeneous group especially in the area of personality functioning (Ehrensaft, Moffitt, &

[2] Some readers may note that IPV (which necessitates some sort of relationship, marriage or cohabitation) would actually increase into the 20s and 30s (much like tax evasion) because one needs the opportunity to commit the act. Perhaps, then the age-crime curve for IPV would be much different than the commonly observed aggregate age-crime curve, with a different peak (in the 30s and 40s). Yet, there is evidence that IPV perpetration is increasing in dating couples (O'Leary & Smith, 2003; Foshee et al., 2007), which might suggest that violent tendencies are evidenced at much younger ages and possibly include intimate conflict and/or other violent behaviors.

Caspi, 2004; Holtzworth-Munroe et al., 2003)—whether they are studied in high risk samples or community surveys (Holtzworth-Munroe & Stuart, 1994; Holtzworth-Munroe et al., 2000; Weinstein, Gleason, & Oltmanns, 2012). Some research suggests that it is important to consider the typology hypothesis in order to increase the effectiveness of treatment interventions, but they acknowledge that the extent to which this distinction applies to males in community samples is limited (Holtzworth-Munroe et al., 2000; Weinstein et al., 2012). Since most studies are based on clinical samples of males recruited from treatment centres, the samples do not represent the full range of male perpetrators and thus have limited generalizability to other males involved in IPV. Only a few studies have investigated these issues in representative samples, particularly in longitudinal studies where few have information on IPV based on both the male and female reports at different ages (Piquero, Theobald, & Farrington, 2013; Theobald & Farrington, 2012). Also, with the exception of antisocial personality traits, many studies use different measures of personality pathology and there may be differential effects dependent on the personality classification used. The DSM-IV approach of clustering the personality disorders may offer a more reliable framework for considering the association between personality and partner violence (Ehrensaft, Cohen, & Johnson, 2006, p.474).

Accordingly, this study uses information gathered from the Cambridge Study in Delinquent Development (CSDD), a prospective longitudinal survey of over 400 boys born in the 1950s in South London and followed into late middle adulthood, to investigate the extent to which males who perpetrate IPV in their intimate relationships are generally violent men with or without an underlying psychopathology. Two key questions are addressed:

(1) What is the relationship between violent men, IPV, and Cluster B traits?

(2) To what extent can we predict offending sub-groups from early childhood, adolescent, and adult risk factors?

Method

Sample

The CSDD is a prospective longitudinal survey of 411 inner city boys recruited at age 8 and followed for over 40 years. These boys formed a complete population of this age cohort attending six primary schools in a deprived area in South London. The majority of the boys were white and working class, their father's employment being mainly unskilled and semi-skilled manual work in 93.7% of cases which was higher than the national average at that time of 78.3%. Detailed descriptions of the CSDD as well as key findings to date may be found elsewhere (see Farrington, 2003; Farrington, Piquero, & Jennings, 2013; Piquero, Farrington, & Blumstein, 2007). The last two interviews of the men were carried out at age 32 and 48 when information about their relationships was gathered. At the age 32 interviews, 378 (93.8%) of the 403 men still alive were interviewed. One question in this interview involved asking the men if they had ever been involved in physical violence with their partner and whether it was instigated by them or their partner or whether they were both involved. Of the 378 men interviewed, 289 (76.5%) were in a relationship on which they could report any incidence of IPV.

At the age 48 interviews, 365 (92.6%) of the 394 men who were still alive were interviewed. The men were asked if their partner, 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 with the partner included questions about any conflict within the relationship in the last 5 years, measured by questions from the

Conflict Tactics Scale (CTS; Straus, 1979). There were 254 partner interviews. Of these, 20 interviewees were not the man's female partners 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 did not complete the CTS section of the interview because they were interviewed by telephone. This left a sample of 212 female partner reports which were included in subsequent analyses.

As part of the social interview at age 48, 304 (83%) of the men completed a psychiatric interview including the Structured Clinical Interview (SCID-II) for DSM IV Axis II Personality Disorders, American Psychiatric Association (APA,1994; First, Gibbon, Spitzer, & Williams, 1997). A more complete description appears in the Measures section below.

Ethical Approval

The CSDD was approved by the Ethical Committee of the Institute of Psychiatry, London, UK. Informed consent was obtained from all participants.

Measures

The Conflict Tactics Scale (CTS; Straus, 1979) is a measure of IPV and was used to interview the female partner nominated by the man at the age 48 interview. Its format 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 (see O'Leary, 1999). Since we were interested in a measure of physical violence which was concordant with actual physical assault or threat, we included more serious acts, namely 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 in the analyses. Although the CTS has limitations (Archer, 1999), it is considered to be a reliable and valid instrument to measure intimate violence across different populations (Straus, 1990).

The SCID-II (First et al., 1997) is a clinician-administered semi-structured interview for diagnosing the 11 Axis II personality disorders of the DSM IV (APA, 1994). The SCID-II was designed with the aim of providing a rapid clinical assessment of personality disorders without sacrificing reliability or validity. It can be used in conjunction with a self-report personality questionnaire, which allows the interview to focus only on the items corresponding to positively endorsed questions on the questionnaire, thus shortening the administration time of the interview. In the CSDD, this assessment was carried out by an experienced psychiatrist who was supervised throughout the study by one of the authors (JWC).

At the age 48 interview, a comprehensive breakdown of the types of violence in relationships was gathered using the CTS. As the men had been asked about violence perpetration towards their spouse at age 32 and the women were asked at the age 48 interview, we combined these reports and tested whether there was stability across the 16 years between the male report and the female report. Of the men perpetrating violence towards their partner at age 32, 32% were still violent at age 48, compared with 16% of those who did not perpetrate IPV at age 32. The odds ratio (OR) was rather strong (2.41), but not significant, likely due to small numbers. This combination resulted in 208 of the 319 cases (65.2%) reporting no violence at

either age. This left 111 (34.8%) reports of IPV; 39 women (12.2%) hit without retaliation, compared with 32 men (10%) and 40 (12.6%) were both involved. Therefore, 72 men (22.6%) perpetrated IPV at either age 32 or 48.

Criminal Convictions

Repeated searches in the Criminal Record Office from 1964 until 1994 and from the Police National Computer thereafter were carried out to obtain information on the number of convictions of the men, their parents, and their siblings. This information included the age of onset and the frequency and duration of offending and dates of incarcerations (which were few). Excluding seven boys who emigrated before age 21 and were not searched in criminal records yielded a sample size of 404 at risk, of whom 41% were convicted of an offense between the ages of 10 and 50. By age 50, there were 146 crimes of violence carried out by 71 men; these convictions included acts of robbery, assault, threats, and offensive weapons (at the time of the interview, partner violence was usually prosecuted as common assault, which was not an indictable offense).

Results

What is the Relationship between Violent Men, IPV, and Cluster B traits?

As discussed previously, Holtzworth-Munroe and Stuart (1994) have attempted to categorize those men who are violent in intimate relationships and identify three types: the generally violent man, the dysphoric/borderline man, and the family-only violent man. Based on this typology, we examined the characteristics of the 72 men who were involved in IPV at age 32 or 48 (Theobald & Farrington, 2012). Recall that in the CSDD, 167 (41%) men were convicted of an indictable offense by age 50. Also, as stated previously, there were 146 crimes of violence and 71 out of 167 (42.5%) men were convicted of a violent offense (Farrington et al., 2006). Of

those 72 men who committed IPV at age 32 or 48 (i.e. combined), 40 (55.6%) had a conviction(s) and of these 40 convicted men, 22 (55.0%) had a violent conviction, so generally violent men accounted for 30.6% of the IPV men. This suggests that 50 (69.4%) were only violent within the home.

Scores on the SCID-II measuring Cluster B traits were not normally distributed; the histrionic score, median =1 (Inter Quartile Range [IQR] =0-2), the narcissistic score, median = 3 (IQR=2-5), borderline score, median = 1(IQR=2-5) and the antisocial score, median = 6 (IQR=4-9). The summed score (across all four traits) had a median = 12 (IQR=7.25-18.00). In order to calculate a Cluster B composite score, we standardized the scores and averaged the scores on the histrionic, narcissistic, borderline, and antisocial elements in order to accommodate any differences in scoring metrics. We then categorized those individuals scoring in the 90th percentile[3] as those with Cluster B traits compared with the remainder. This categorization resulted in 32 men versus 272 men (10.5%). We also calculated a similar score based on only three elements, histrionic, narcissistic, and borderline as a comparison to take into account the antisocial nature of both violent offending and IPV. This resulted in 30 men with Cluster B-ant.

Table 1 shows that those individuals scoring in the 90th percentile on the composite Cluster B score were significantly more likely to be convicted (OR= 2.42, 95% CI 1.15-5.11), to have a violent conviction (OR=4.46, 95% CI 1.68-11.87), and to be a perpetrator of IPV (OR= 2.78, 95% CI 1.29-6.01). However, when we removed the antisocial element (shown in Table 1 as Cluster B-ant), the results show a slightly different picture. For example, these men are not significantly more likely to have a conviction for any indictable offense but are more likely

[3] In previous research on personality disorders such as psychopathy in the CSDD, the 90th percentile was used as a conservative cut-off point, as 97% of those within this top 10% with the highest scores on psychopathic traits were convicted (see Farrington, 2006; Piquero et al., 2012; Ullrich, Farrington, & Coid, 2008).

(p<.10) to have a violent conviction only (OR=2.83, 95% CI 0.97-8.28), and for IPV the OR is also borderline significant (OR=2.21, 95% CI 0.97-5.04). In short, these results might suggest that other elements of Cluster B are more important aspects of these associations.

Table 1 about here

Figure 1 about here

We then examined the overlap between those men with a violent conviction, those perpetrators of IPV, and those with firstly (a) Cluster B traits and then (b) Cluster B-ant traits. Figure 1(a) shows the overlap between men convicted of violent acts as detailed above, IPV, and Cluster B traits. Of these men, 14 (9.4%) were generally violent men (they had both violent conviction(s) and perpetrated IPV); 39 (26.2%) were 'family-only' men (they perpetrated IPV in their homes but were not violent outside the home), and 11(7.4%) men scored highly on the composite Cluster B score. Only 8 men exhibited overlap in all three outcomes. We then examined men who had violent convictions, IPV, and were categorized as Cluster B-ant. Figure 1(b) shows that of these men, 17 (11.6%) were generally violent, 39 (26.5%) were only violent within the family context, and 14 (9.5%) scored highly on the Cluster B-ant composite score. Although these findings suggest some support for Holtzworth-Munroe and Stuart's typology, Figure 1 still shows that there were overlaps between all three subtypes.

We then examined whether high scores on Cluster B without the antisocial element (i.e., Cluster B-ant) predicted the violent offending sub-groups using logistic regression analyses.[4] The findings, shown in Table 2 suggest that Cluster B-ant does not significantly predict the family only group (OR= 1.40, CI 0.53-3.69), nor the no conviction group (OR = 0.64, CI 0.30-

[4] OR lower than 1.0 indicates a negative relationship while OR greater than 1.0 indicates a positive relationship.

1.35) and the relationship with the no violence group is negative and significant (OR= 0.401, CI 0.19-0.89). This finding supports the suggestion above that other elements of the Cluster B are more important factors.

Table 2 about here

To what extent can we predict these violent sub-groups from early childhood risk factors?

We then considered the risk factors at different ages and their relationship with each offending sub-group. Table 3 shows the distribution of men across each offending group who have a particular risk factor. For example, 16 (32%) of the family only group had a criminal father compared with 14 (63.6%) of those in the generally violent group. In fact, lower proportions of the family violence only men evidenced lower risk on the majority of the age 8-10 factors except for impulsivity – 19 (38.0%) for the family only compared with 6 (27.3%) of the generally violent males. There was a similar trend for the age 18 and 32 risk factors, with the exception that at age 18 the family only group had similar proportions with neuroticism as the generally violent group, 26% versus 27%. For many of the variables across the different ages, there was a tendency for the family only group to show similar risk to those in the non-violent group/not convicted group, except for academic achievement, having an unskilled manual job, periods of unemployment, and impulsivity—all factors associated with IPV (Moffitt et al., 2000; Theobald & Farrington, 2012; Straus, Gelles, & Steinmetz, 1980).

Table 3 about here

Logistic regression analyses were then used to investigate the relationship between certain risk factors across offending groups in multivariate models, using forward stepwise entry to avoid any potential multicollinearity. Table 4 shows the independent risk factor for each

offending group. For example, at age 8-10 harsh erratic parenting is significantly negatively associated with family violence (OR = 0.27, CI 0.10-0.73) while impulsivity is positively associated with family violence (OR =2.82, CI 1.32–6.00). For the generally violent group, harsh erratic parenting is significantly associated (OR = 3.99, CI 1.39-11.47), low income family is borderline significant (OR= 2.58, CI 0.88-7.53), and low non-verbal IQ is also a significant independent predictor (OR =3.82, CI 1.32-11.07). At age 18, men who only commit IPV within the home (family violence only) are less likely to use cannabis (OR=0.52, CI 0.24-1.12) whereas the generally violent men are significantly more likely to use cannabis (OR =3.25, CI 1.16-9.14) and to drink heavily (OR =2.49, CI 0.88-7.08). Among the more proximal factors measured at age 32, the family only violent men were less likely to go out 4 or more times per week (OR=0.40, CI 0.12-1.36) whereas the generally violent males had aggressive attitudes (OR=2.65, CI 0.98-7.12) and continued with their cannabis use (OR= 6.39, CI 2.37-17.27) and binge-drinking (OR= 3.50, CI 1.24-9.88).

Table 4 about here

Discussion

The purpose of this study was to investigate whether different subtypes of IPV offenders based on offending and psychopathology could be identified in a prospective, longitudinal survey of males followed into late middle adulthood. Three key findings emerge from our study.

First, our results showed that although there was some evidence of distinct subtypes, there was some non-trivial overlap between them. We did find a general offender who perpetrated violent acts both inside and outside of the home but who also had some personality disorder features. We also found a family only offender where violent acts were limited to the

partner within the home, but again there was some overlap. Although it could be argued that the prevalence of personality disorders may be higher in this sample than in a typical community sample, it should be remembered that the CSDD participants were originally recruited to study the development in delinquent behavior in a deprived area in South London. Coid et al. (2006) have previously suggested that the prevalence of personality disorders is higher among men, the lower classes, and urban locations. One unique characteristic of the CSDD is the homogeneity of the sample – all participants originated from a very similar social background and were the same age when personality disorder dimensions and IPV were assessed, which reduces confounding. Secondly, our analyses, with regard to Cluster B traits, suggest that other elements of this Cluster may be more important with regard to both general offending and violent offending. Other elements of the Cluster such as narcissism and borderline traits have been associated with offending and violence and are often co-morbid with antisocial personality traits; we found some evidence of this when considering the association of the Cluster B-ant group with the generally violent males compared with the significant and negative association of Cluster B-ant with the no violence group.

Thirdly, when we considered the risk factors for all offending groups, we found that the generally violent males had the highest levels of risk compared with the family only group. This was the overall trend with only a few factors, such as impulsivity (measured at age 8-10) more strongly associated with family only IPV. This might be due to the way in which impulsivity was measured or the small numbers.

More importantly, it appears that the difference between the offending groups is more a matter of degree than kind. For those individuals with cumulative disadvantage who develop antisocial and aggressive behaviors in childhood and adolescence there is a likelihood that they

may be at a higher risk of continuing this behavior into adulthood. Farrington (1994) and others have suggested that an aggressive, antisocial temperament can manifest itself in a variety of ways over the life course, with adult outcomes dependent on a constellation of factors. These factors could include continued delinquency, convictions, incarceration, alcohol and drug dependence, and psychopathology. In the CSDD, the family violence only men had offended the least as measured by official convictions and exhibited the least psychopathology and showed a similar risk on many factors for IPV as those men who were non-violent. Undoubtedly, many of the factors associated with offending/violence will have an impact on the ability of the individual to form a strong, stable bond with an intimate partner and may also place them at higher risk of becoming involved in IPV.

With this in mind it is important that agencies take a wider and more inclusive approach with other stakeholders and collaborate in the implementation of programmes that seek to intervene early in the life-course, with both children and parents. Programmes which focus on the development of trust, effective communication, conflict resolution, beliefs, and attitudes towards all types of violence should be introduced at earlier ages in a variety of settings. The earlier the intervention the more likely children will adopt prosocial skills that lead to positive interactions with their parents and peers. One area of intervention that has received particular attention is that of dating violence. Romantic relationships become important as children move into mid to late adolescence (Giordano et al., 2001; Giordano, 2003) and the way in which individuals deal with these early romantic relationships can influence the course of adult relationships and family formation. This can especially be the case if they have witnessed or been a victim of parental conflict in their family of origin (Collins & Van Dulmen, 2006; Furman & Shaffer, 2003; Giordano, Manning, & Longmore, 2006). This is the time when respect, trust,

and conflict resolution skills are especially important in order to circumnavigate the tensions that can often arise in early intimacy, particularly for those who have not experienced good role models. It is important that programs that show promise in terms of levels of effectiveness are introduced nationwide; for example the Relationship Smarts Plus (Pearson, 2007) is a program which after a 5-year federally funded evaluation is now listed on the National Registry of Evidence based Programmes and Practices, a service of the Substance Abuse and Mental Health Services Administration. Adolescents should be taught about the characteristics of good intimate relationships, not only focussing on such topics as conflict resolution but also on the types of behaviors that can have a detrimental effect on relationships, such as heavy drinking, drug use, spending too much time with friends rather than with a partner, and so on. These behaviors are not conducive to stable intimate relationships and successful life outcomes.

At the same time as our findings are an important contributor to the knowledge base, we must acknowledge some limitations to our research. There may have been differential reporting by the men and the women because of social desirability and/or differences in subcultural norms which would give an underestimation of the assaults. Official records have some limitations when compared with self-reports of offending (Farrington & Ttofi, 2014), largely because many offenses do not get reported much less processed in the justice system. Also, we used an earlier version of the CTS which did not give any information about contextual factors. Scores on the SCID-II were not in the range found in clinical samples and sample sizes in the groups were small. Finally, there have been recent expansions of the traditionally-held view that violence is physical. On this score, a recent Home Office Report (2013) in the United Kingdom, for example, now includes any incident or pattern of incidents of controlling or coercive violence or abuse but we were unable to account for this in the analyses of IPV as this was not measured in

the CSDD. Nevertheless, the findings from this study have a major strength in that a community sample was investigated longitudinally where personality traits were considered alongside convictions for violence outside the home and self-reports of IPV by both men and their female partners.

Conclusions

In most communities, there will be men who are highly violent towards their partners but their aggression is not detected by the authorities because there is no disclosure and IPV may be part of a repertoire of violent criminal acts. These men may be generally violent men with or without some personality pathology. It may be that it is the frequency of offending that is associated with the likelihood of criminal violence and IPV, which may suggest little need for a specific theory for IPV versus other types of violent acts. Perhaps the focus should be placed on general theories that combine all forms of violence and offending under a common explanation (Felson, 2002; Dutton, 2010; Piquero, 2000). As well, from a policy perspective, implications from our findings might suggest that there may be little need to develop violence or IPV-specific initiatives and instead focus should be placed on broader-based prevention and intervention strategies that strive to reduce all forms of criminal offending and may be more appropriate to the needs of these individuals (see Moffitt et al., 2000; Piquero et al., 2006). The perpetration of violence can lead to negative physical and mental health outcomes across the lifespan. Therefore, prevention interventions should start at an early age with the implementation of programs based on the development of healthy relationships, both in the home, and in the community.

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Table 1: Cluster B traits and offending

		Convicted			***Violent Conviction only***			***IPV***		
		No	**Yes**	**OR 95% CI**	**No**	**Yes**	**OR 95% CI**	**No**	**Yes**	**OR 95% CI**
Cluster B	Y	13(40.6)	19(54.9)		25(78.1)	7(21.9)		17(54.8)	14(45.2)	
n=32	N	169(62.4)	102(37.6)	**2.42(1.15-5.11)***	255(94.1)	16(5.9)	**4.46(1.68-11.87)***	179(77.2)	53(22.8)	**2.78(1.29-6.01)***
Cluster B-ant	Y	15(50.0)	15(50.0)		25(83.3)	5(16.7)		16(59.3)	11(40.7)	
n=30	N	167(61.2)	106(38.8)	**1.58(0.74-3.36)**	25(93.4)	18(6.6)	**2.83(0.97-8.28)+**	180(76.3)	56(23.7)	**2.21(0.97-5.04)+**
		Family only violence			***General Violence***			***No violence***		
		No	**Yes**	**OR 95% CI**	**No**	**Yes**	**OR 95% CI**	**No**	**Yes**	**OR 95% CI**
Cluster B	Y	23(79.3)	6(20.7)		23(74.2)	8(25.8)		22(68.8)	10(31.2)	
n=32	N	191(82.7)	40(17.3)	**1.25(0.48-3.26)**	219(94.4)	13(5.6)	**5.86(2.20-15.61)***	110(40.4)	162(59.6)	**0.31(0.14-0.68)***
Cluster B-ant	Y	20(76.9)	6(23.1)		22(81.5)	5(18.5)		19(63.3)	11(36.7)	
n=30	N	194(82.9)	40(17.1)	**1.46(0.55-3.85)**	220(93.2)	16(6.8)	**3.13(1.05-9.35)***	113(41.2)	161(58.8)	**0.41(0.19-0.89)***

Notes: OR=Odds Ratio; CI= Confidence Interval; *p<.05;+p<.10

Table 2: Cluster B-ant as an independent predictor of offending groups

Offending groups	B	SE	OR	95% CI
Family only	.336	.494	1.40	0.53 – 3.69
General violence	1.139	.559	3.13*	1.05 – 9.35
Violent conviction only	1.041	.547	2.83+	0.97 – 8.28
No violence	-.901	.398	0.41*	0.19 – 0.89
No conviction	-.455	.386	0.64	0.30 – 1.35
Notes: *p<.05; +p<.10; CI= Confidence Interval				

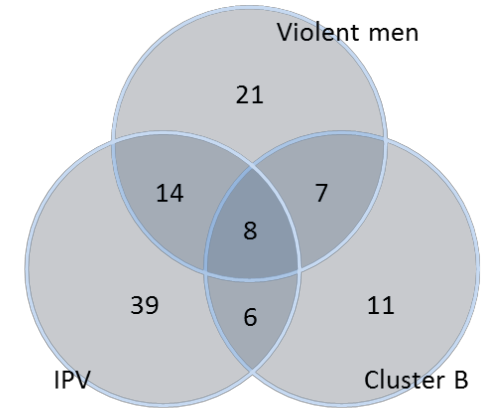
Table 3: Risk factors at ages 8-10, 18 and 32and association with offending groups.

Risk factor (n)	Family violence only	General violence	Violent conviction only	No violence	Not convicted
Age 8-10	n=50	n=22	n=35	n=207	n=237
Criminal Parent (106)	16(32.0)	14(63.6)	12(34.3)	44(21.3)	42(17.7)
Harsh Erratic Discipline (116)	6(12.0)	13(59.1)	12(34.3)	52(25.1)	57(24.1)
Parental Disagreement (118)	13(26.0)	12(52.2)	14(40.0)	49(23.7)	55(23.2)
Low Income Family (93)	16(32.0)	13(59.1)	10(28.6)	34(16.4)	43(18.1)
Low Non-verbal IQ (103)	11(22.0)	10(45.5)	16(45.7)	45(21.7)	43(18.1)
Nervous Father (81)	6(12.0)	7(31.8)	9(25.7)	37(17.9)	43(18.1)
Nervous Mother (125)	14(28.0)	9(40.9)	15(42.9)	64(30.9)	62(26.2)
Neuroticism (116)	13(26.0)	8(36.4)	12(34.3)	60(29.0)	60(25.3)
Impulsivity (104)	19(38.0)	6(27.3)	10(28.6)	40(19.3)	47(19.8)
Disrupted Family (90)	10(20.0)	10(45.5)	12(34.3)	38(18.4)	36(15.2)
Poor Supervision (74)	12(24.0)	10(45.5)	10(28.6)	27(13.0)	28(11.8)
Low Verbal IQ (103)	17(34.0)	13(59.1)	13(37.1)	37(17.9)	46(19.4)
Age 18					
Cannabis use (111)	10(20.0)	14(63.6)	14(41.2)	52(26.1)	48(21.2)
Sex no contraceptives (76)	7(14.0)	8(36.4)	12(36.4)	36(18.4)	27(12.1)
Neuroticism (106)	13(26.0)	6(27.3)	11(31.4)	54(26.9)	50(21.8)
Binge drinking (81)	9(18.0)	9(40.9)	10(29.4)	38(19.2)	32(14.2)
No exams passed (197)	29(58.0)	19(86.4)	24(70.6)	79(39.9)	87(38.7)
Unskilled manual job (62)	11(22.4)	12(54.5)	10(29.4)	19(9.5)	17(7.5)
Unemployed (83)	10(20.8)	11(50.0)	12(35.3)	29(15.7)	28(13.5)
Poor relationship with parents (86)	19(18.0)	12(54.5)	13(38.2)	33(16.6)	37(16.4)
Anti-police (92)	9(18.0)	9(42.9)	19(54.3)	37(18.4)	31(13.5)
Impulsive (105)	16(32.0)	7(31.8)	11(32.4)	49(25.0)	48(21.4)
Self-reported violence (79)	7(14.0)	13(59.1)	14(41.2)	34(17.1)	23(10.2)
Group violence/vandalism (65)	10(20.0)	7(31.8)	14(41.2)	29(14.6)	22(9.7)
Age 32					
Cannabis use (69)	8(16.0)	13(59.1)	14(41.2)	19(9.4)	22(10.0)
Binge drinking (128)	16(32.7)	16(72.7)	20(58.8)	54(26.6)	49(22.2)
GHQ (90)	12(24.0)	7(31.8)	10(28.6)	35(17.2)	44(19.8)
Goes out 4+ evenings per week (63)	3(6.0)	9(40.9)	6(18.2)	22(11.1)	30(13.7)
Impulsive (82)	8(16.0)	10(45.5)	10(28.6)	37(18.2)	38(17.1)
Aggressive attitude (82)	12(24.0)	12(54.5)	13(37.1)	32(1.8)	39(17.6)
Unstable job record (92)	11(22.4)	10(47.6)	9(27.3)	38(18.7)	42(19.0)
Notes: Risk factor 'n' is number in total sample; GHQ = General Health Questionnaire					

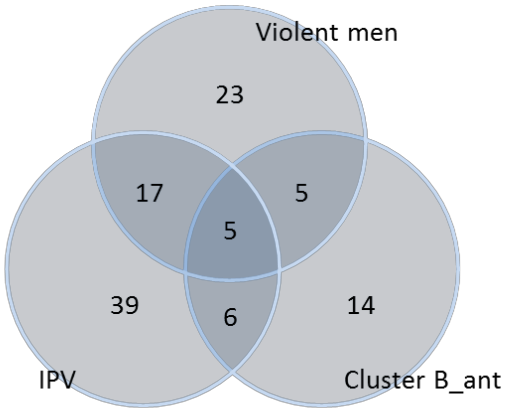
Table 4: Independent predictors of offending groups

Early risk factors (age 8-10)		B	SE	OR	95% CI
Family violence	Harsh erratic parenting	-1.310	.510	0.27*	0.10 - 0.73
	Impulsivity	1.035	.386	2.82**	1.32 - 6.00
General violence	Harsh erratic parenting	1.383	.539	3.99*	1.39 - 11.47
	Low income family	0.948	.547	2.58+	0.88 - 7.53
	Low non-verbal IQ	1.340	.543	3.82*	1.32 – 11.07
Violent conviction only	Parental disagreement	0.619	.395	1.86	0.86 – 4.03
	Low verbal IQ	1.047	.397	2.85**	1.31 – 6.20
No violence	Parental disagreement	-0.459	.245	.632+	0.39 – 1.02
	Impulsivity	-0.398	.273	0.67	0.35 – 1.15
	Low verbal IQ	-0.728	.273	0.48**	0.28 – 0.82
No conviction	Criminal parent	-0.749	.277	0.47**	0.28 – 0.81
	Disrupted family	-0.809	.297	0.45**	0.25 – 0.80
	Poor supervision	-0.618	.309	0.54*	0.29 – 0.99
	Low non-verbal IQ	-0.728	.282	0.48*	0.28 – 0.84
Adolescent risk factors (age 18)					
Family violence	Cannabis use	-0.662	.397	0.52+	0.24 – 1.12
General violence	Cannabis use	1.179	.528	3.25*	1.16 -9.14
	Binge drinking	0.913	.533	2.49+	0.88 – 7.08
	Unskilled manual job	1.598	.530	4.94**	1.75 – 13.96
	Poor relationship with parents	1.335	.523	3.80*	1.36 – 10.60
	Self-reported violence	1.148	.520	3.15*	1.14 – 8.73
Violent conviction only	Antipolice	1.305	.384	3.69**	1.74 -7.83
	Group violence/vandalism	1.355	.397	3.88**	1.78 – 8.44
No violence	No exams	-0.688	.228	0.50**	0.32 -0.79
	Unskilled manual job	-0.646	.31	0.52*	0.28 – 0.97
	Poor relationship with parents	-0.712	.270	0.49**	0.29 -0.83
No conviction	Cannabis use	-0.632	.267	0.53*	0.32 -0.90
	Unprotected sex	-0.708	.303	0.49*	0.27 -0.89
	No exams passed	-0.858	.240	0.42***	0.27 -0.68
	Unemployed	-0.671	.293	0.51*	0.29 – 0.91
	Self-reported violence	-0.951	.301	0.39**	0.21 – 0.70
Adult risk factors (age 32)					
Family only violence	4+ evenings out per week	-0.912	.623	0.40	0.12 – 1.36
General violence	Aggressive attitude	0.973	.505	2.65+	0.98 – 7.12
	Cannabis use	1.855	.507	6.39**	2.37 – 17.27
	Binge drinking	1.252	.530	3.50*	1.24 - 9.88
Violent conviction only	Aggressive attitude	0.667	.402	1.95+	0.89 -4.28
	Cannabis use	1.079	.399	2.94**	1.35 – 6.42
	Binge drinking	0.777	.388	2.18*	1.02 – 4.66
No violence	Aggressive attitude	-0.638	.282	0.53*	0.30 - 0.92
	Cannabis use	-1.035	.316	0.36**	0.19 - 0.66
	GHQ	-0.802	.269	0.45**	0.27 - 0.76
	Binge drinking	-0.452	.243	0.64+	0.40 – 1.02
	4+ evenings out per week	-0.635	.317	0.53*	0.29 – 0.99
	Unstable job record	-0.501	.268	0.61+	0.36 – 1.03
Not convicted	Cannabis use	-1.240	.307	0.29**	0.16 – 0.53
	Impulsive	-0.485	.281	0.62+	0.36 – 1.07
	Binge drinking	-1.168	.242	0.31**	0.19 – 0.50
	Unstable job record	-0.556	.269	0.57*	0.34 – 0.97
Notes: *p<.05;**p<.01;***p<.001; #p<.10; CI = Confidence Interval; GHQ = General Health Questionnaire					

Fig 1. – Relationship between three groups of men



(a)



(b)