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Intimate Partner Violence Perpetrators in a Forensic Psychiatric Outpatient Setting: Criminal History, Psychopathology, and Victimization

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Abstract

This study investigated criminological, psychopathological, and victimological profiles of intimate partner violence (IPV) perpetrators in a sample of 119 Dutch female and male forensic psychiatric outpatients aged 18 to 58 years. In addition, differences in criminological, psychopathological, and victimological factors between IPV perpetrators ($n = 61$, 51.3%) and non-intimate violence (NIV) perpetrators ($n = 58$, 48.7%) were examined. All data, including information on demographics, criminal history, history of psychological, sexual, and physical victimization during childhood or adolescence, family history of psychopathology, history of psychopathology in childhood and adolescence, and mental disorders, were derived from archival electronic medical records. Mental disorders were measured using structured psychiatric interviews and final consensus diagnoses

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were established during weekly case consultations. Both IPV and NIV perpetrators displayed high rates of criminal history, psychopathology, and previous victimization, but the two groups did not differ in these factors with two exceptions. IPV perpetrators were significantly more likely to have higher rates of previous physical victimization and intermittent explosive disorder than NIV perpetrators. The current study suggests that a history of physical victimization and intermittent explosive disorder are specific characteristics of IPV perpetrators in a forensic psychiatric outpatient setting. Future research should focus on mechanisms explaining the association of childhood victimization and IPV and increase our understanding of the role of intermittent explosive disorder in IPV.

Keywords

intimate partner violence, forensic psychiatric outpatients, victimization, criminal history, psychopathology

Intimate partner violence (IPV) is a major public health problem as it can lead to serious physical injury, long-term mental health problems, increased health services use, considerable health care costs, and even death among its victims (Devries et al., 2013; Trevillion, Oram, Feder, & Howard, 2012). According to Saltzman, Fanslow, McMahon, and Shelley (2002), IPV includes acts of physical and sexual violence and psychological aggression by a current or former intimate partner or spouse. IPV is mainly committed by men, but, also women, although to a lesser degree than men, perpetrate IPV (Devries et al., 2013; van Dijk, Veen, & Cox, 2010). Globally, the life-time prevalence of IPV is 30% and a recent online nationwide survey among adults in the Netherlands revealed that 6% of the participants were victims of IPV in the past 5 years (Devries et al., 2013; van Dijk et al., 2010). These figures are problematic and have resulted in a great interest among researchers to study characteristics of perpetrators of IPV (e.g., history of victimization, criminal history, and psychopathology). Such information is crucial for the development and improvement of intervention programs focusing on the reduction of (re-)perpetration of IPV.

One possible factor underlying the perpetration of IPV constitutes the so-called intergenerational transmission of violence. This transmission concerns the frequently observed association of childhood victimization in the domestic setting and/or witnessing of IPV in childhood with perpetration of IPV in adulthood (Capaldi, Knoble, Shortt, & Kim, 2012; Falb et al., 2011; Lohman, Neppi, Senia, & Schofield, 2013; Murrell, Christoff, & Henning, 2007;

Renner & Slack, 2006; Roberts, Gilman, Fitzmaurice, Decker, & Koenen, 2010). Social cognitive learning theory proposed that such intergenerational transmission can be accounted for by learning from experiencing how others treat them, and by observing others or, in other words, by learning from modeling (Bandura, 1977; Grych & Fincham, 1990). This theory thus implies that children growing up in violent home environments are more likely to favor violent attitudes and develop aggressive behavioral styles. Direct experiences of violence in the home environment during childhood, such as child maltreatment and witnessing IPV, may lead to accepting violence in partner relationships in general and imitation of IPV later in life (Corvo & Johnson, 2013). Research examining the social learning theory indeed suggests that IPV is learned, in particular through modeling (Murrell et al., 2007; Roberts et al., 2010). In fact, experiences of childhood victimization are associated with both perpetration of IPV and non-intimate violence (NIV) later in life (Capaldi et al., 2012; Millet, Kohl, Jonson-Reid, Drake, & Petra, 2013). Yet, little evidence exists indicating whether patterns of previous victimization differ between perpetrators of IPV and perpetrators of NIV (i.e., acts of [interpersonal] violence perpetrated by a person not intimately related to the victim [e.g., physical assault]). A large amount of IPV perpetrators have not been exposed to child abuse and the association of childhood victimization with IPV perpetration later in life is only small-to-moderate (Capaldi et al., 2012; Murrell et al., 2007). This suggests that additional factors may play a role in the etiology of IPV.

One such factor concerns criminal history. A history of IPV perpetration is related to a higher risk of IPV re-offending (Sartin, Hansen, & Huss, 2006). IPV perpetrators also had a history of juvenile (violent and non-violent) delinquency, arrests for substance abuse charges, and NIV and non-violent offenses (Capaldi et al., 2012; Echeburua, Fernandez-Montalvo, & Amor, 2003; Falb et al., 2011; Henning & Feder, 2004; Uekert et al., 2006). Thus, IPV perpetrators can have a history of committing both IPV and NIV (Capaldi et al., 2012; Murrell et al., 2007; Renner & Slack, 2006). A study among incarcerated men ($n = 520$), revealed that the vast majority of the incarcerated men (57.3%) perpetrated general violence (i.e., perpetration of both IPV and NIV) and NIV only (31.5%) and that a small minority of them committed IPV only (2.1%; Logan, Walker, & Leukefeld, 2001).

Another crucial factor for IPV perpetration is psychopathology. IPV perpetrators often display depressive symptoms, conduct problems, and/or anti-social behavior (e.g., bullying), in childhood or adolescence and personality disorders in adulthood, including antisocial, borderline, and narcissistic personality disorder (Capaldi et al., 2012; Corvo & Johnson, 2013; Falb et al., 2011). They often have intermittent explosive disorder (George, Phillips,

Doty, Umhau, & Rawlings, 2006). Intermittent explosive disorder is an impulse control disorder characterized by reoccurring episodes of acts of extreme impulsive aggression directed at persons and property, wherein the level of aggression is grossly disproportionate to the exposure to precipitating psychosocial stressors (American Psychiatric Association [APA], 2000). Impulsive aggressive outbursts by patients with intermittent explosive disorder cannot be explained by another mental or somatic disorder (e.g., antisocial and borderline personality disorder and dementia; APA, 2000).

IPV perpetrators typically also display numerous psychological problems, including anger, cognitive biases, hostility, distorted perceptions of the partner and children, anxiety, social and communication difficulties, deficits in impulse control and executive functioning, irritability, and other deficits, such as drug and alcohol abuse (Becerra-Garcia, 2014; Capaldi et al., 2012; Corvo & Johnson, 2013; Lohman et al., 2013).

Previous research also studied different types of IPV perpetrators, but mainly among non-psychiatric populations. Based on this influential research, important typologies of IPV perpetrators have been revealed (e.g., Gottman et al., 1995; Holtzworth-Munroe & Stuart, 1994; Tweed & Dutton, 1998). Previous literature often described two or three types of IPV perpetrators. Gottman et al. (1995) identified "Type I batterers," who perpetrate violence against their partner and others, and "Type II batterers," who only perpetrate violence against their partner. Type I batterers are characterized by an antisocial profile and a lack of empathy and display lower levels of anger but more violence than Type II batterers, who are characterized by a borderline profile and difficulties with assertiveness (Edwards, Scott, Yarvis, Paizis, & Panizzon, 2003; Gottman et al., 1995; Tweed & Dutton, 1998). In a review article on IPV perpetrator heterogeneity, considerable convergence across typologies was noted by Cavanaugh and Gelles (2005). According to this review, three groups of IPV perpetrators, as identified by Holtzworth-Munroe and Stuart (1994), have often been studied: (a) "family only perpetrators," displaying low levels of IPV and psychopathology; (b) "borderline/dysphoric perpetrators," displaying negative affect and borderline traits; and (c) "generally violent/antisocial perpetrators," displaying antisociality and severe violence. A study by Walsh et al. (2010) among 567 civil psychiatric inpatients in the United States suggests that this typology derived from non-psychiatric samples of IPV perpetrators may also be generalizable to psychiatric populations.

Notably, the earlier described typologies of perpetrators of IPV do not represent the distinction between perpetrators of IPV and perpetrators of NIV/general violence as depicted elsewhere in the literature. For example, according to Polaschek (2006), perpetrators of NIV represent persons who

have been sentenced for NIV offenses. In the Netherlands, judiciary or police forced IPV perpetrators and NIV perpetrators generally follow forensic psychiatric outpatient care programs. However, treatment programs used in the Dutch forensic psychiatric sector are usually derived from therapeutic protocols based on international research. Therefore, to be able to improve, fine-tune, and develop tailored forensic psychiatric treatment protocols for IPV perpetrators, it is important to elucidate differences between perpetrators of IPV and perpetrators of NIV.

So far, a limited number of previous studies have examined differences between perpetrators of IPV and NIV. Men perpetrating IPV show less frequent and less severe violent behaviors, less anger disposition, and less property crimes, are less anxious about criticism, have a higher occupational status, and used less illegal drugs than non-intimate violent men (Hornsveld, Bezuijen, Leenaars, & Kraaimaat, 2008; Kandel-Englander, 1992; Shields, McCall, & Hanneke, 1988). Yet, compared with non-intimate violent men, men perpetrating IPV have more experiences of childhood victimization in the domestic setting and higher levels of castration anxiety, which is indicative of a sense of being powerless and hurt in the intimacy of sexual relationships (Cogan, Porcerelli, & Dromgoole, 2001; Shields et al., 1988), but do not differ in levels of psychopathy (Hornsveld et al., 2008). Previous research on differences in characteristics of IPV perpetrators and NIV perpetrators has rarely been based on forensic psychiatric samples. Moreover, little is known about differences in patterns of (family) psychopathology, psychiatric history in childhood and adolescence, and criminal history between perpetrators of IPV and NIV treated in the forensic setting.

In the current study, we used data obtained from medical registries in a sample of adult male and female perpetrators of IPV and NIV treated at a forensic outpatient psychiatric center in the Netherlands. We addressed two aims: (a) to provide new insights into characteristics of perpetrators of IPV treated in the forensic setting concerning their criminological, psychopathological, and victimological profile and (b) to examine whether there are differences in types of psychopathology, criminal history, and victimization during childhood or adolescence between perpetrators of IPV and NIV.

Method

The current study was based on archival clinical data derived from 119 forensic psychiatric outpatients treated in the forensic psychiatric policlinic "Het Dok" with four treatment centers in the West and South-West of the Netherlands. Data collection was carried out between January 2010 and February 2011 and was embedded in a larger Routine Outcome Monitoring

project conducted at the forensic psychiatric policlinic “Het Dok” (Schuringa, Spreen, & Bogaerts, 2014). All data were retrieved from already existing narrative electronic patient records or patient files archived in USER, a digital medical registry system used to obtain and store patient information in the Netherlands. On average, data were extracted 2 years ($SD = 1.6$) after the intake of the forensic psychiatric outpatients. Data were anonymized and reported at group level, and cannot be traced back to the individual patients. The data collection was conducted in accordance with the policy of the National Dutch Community Mental Health Services for Routine Outcome Monitoring. Within the Dutch forensic psychiatric sector, Routine Outcome Monitoring is used to monitor treatment progress and effectiveness to estimate and prevent the risk of recidivism among forensic psychiatric patients. The current study was approved by the Scientific Research Committee of the forensic psychiatric center “De Kijvelanden” in Rotterdam, the Netherlands.

During the data extraction period for the current study, (electronic) patient records of 189 adult forensic psychiatric outpatients were available, but for 49 outpatients no data on IPV or NIV perpetration were available. Moreover, 21 outpatients who perpetrated both IPV and child abuse were excluded to establish a homogeneous group of IPV perpetrators. Hence, 119 (74% of the eligible subjects) forensic psychiatric outpatients aged 18 to 58 years were included in the current study. We divided the participating forensic outpatients into two groups (i.e., IPV perpetrators versus NIV perpetrators). IPV perpetrators ($n = 61$, 51.3%) were defined as outpatients receiving court-ordered or voluntary IPV perpetrator treatment programs and/or as having a criminal history of IPV perpetration. NIV perpetrators ($n = 58$, 48.7%) included outpatients receiving court-ordered or voluntary treatment programs focusing on the reduction of NIV perpetration and concern perpetrators without a criminal history of IPV. Whether the forensic psychiatric outpatients followed treatment programs for IPV perpetrators or NIV perpetrators was ultimately determined by the index offense at intake and/or in-depth analysis of the individual patient at intake by the treating clinical psychologist and senior psychiatrist. The individual violence perpetration profile and psychopathological profile were taken into account during these intakes.

To examine whether missing data on IPV and NIV perpetration were selective, we compared core demographic data of the outpatients included in this study with eligible outpatients without data on violence perpetration. Analysis of missing data showed no differences in age, education, ethnicity, and psychosocial and occupational functioning between the two groups. However, a chi-square test showed that outpatients included in this study were more likely to have a criminal history compared with excluded outpatients, 95.7% versus 63.0%, $\chi^2(1, N = 162) = 29.9, p < .001$.

Measures

All data on demographics and criminological, psychopathological, and victimological factors were derived from electronic patient records (USER) and were, in part, originally based on information obtained from narrative patient files filled out by the treating clinical psychologist and psychiatrist or from the National Dutch Re-Socialization Agency. Nygren, Wyatt, and Wright (1998) identified numerous uses of electronic patient records by clinicians (i.e., obtaining insights into clinical and social backgrounds of new patients and crucial information for diagnostic and treatment purposes, accessing clinical data, and conducting Routine Outcome Monitoring).

Criminological factors. Data on criminological factors, including criminal history, type of perpetrated violence offenses, and legal status were retrieved from the National Dutch Re-Socialization Agency. This agency acts on behalf of the Dutch Ministry of Security and Justice and regulates the re-entry of offenders into society by providing care and supervision in the domains of housing, financial budgeting, and occupation. When monitoring offenders with forensic psychiatric problems, the agency collaborates with Dutch forensic psychiatric in- and outpatient clinics to which these offenders had been referred.

Psychopathological and victimological factors. When entering treatment at the forensic outpatient clinic, outpatients were assessed for mental disorders by a senior psychiatrist and a clinical psychologist trained in conducting a structured psychiatric interview based on the guidelines of the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text rev.; *DSM-IV-TR*; APA, 2000). A consensus diagnosis of *DSM-IV-TR* Axis I and/or Axis II mental disorders for each patient in the sample was finally established during weekly case consultations. Information on final consensus diagnoses of mental disorders of outpatients was also retrieved from USER filled out by the treating clinical psychologist or psychiatrist. Information on the presence or absence of drug and alcohol abuse and a history of psychological, physical, and/or sexual victimization in the family of origin, family psychiatric history, and psychiatric problems during childhood and adolescence was obtained retrospectively from (hetero-) anamnesis at intake. Using a Dutch translation of the Global Assessment of Functioning (GAF) Scale (APA, 2000), the GAF score, an indicator of psychosocial and occupational functioning, was assessed by the treating clinical psychologist with consultation of the treating psychiatrist. The GAF score ranges from 0 to 100, with higher scores indicating better functioning.

Variable coding. Except for two continuous variables (i.e., the outpatients' age and GAF scores), all other variables presented in this article were categorical. Most categorical variables were dichotomous (coded as 0 [non-present] and 1 [present]). If categorical variables had more than two groups, the definition of the various categories is provided in the article.

Results

Sample Characteristics

On average, the 119 study participants were aged 36 years ($SD = 9.8$). Males ($n = 101$, 84.9%) were strongly overrepresented in the current study sample. Of the 61 perpetrators of IPV, 52 (85.2%) were male and 9 (14.8%) were female. Moreover, of the 58 perpetrators of NIV, 84.5% ($n = 49$) were male and 15.5% ($n = 9$) were female. The current sample was diverse in ethnic background: 58.5% of the outpatients were Dutch, 12.2% were Antillean, 10.2% Turkish, 13.6% Moroccan, and 10.2% miscellaneous. Following the definitions of Statistics Netherlands (2004), we divided education into three categories: *low* education (no education, primary school or <3 years secondary school, typically ≤ 12 years of education); *medium* education (>3 years secondary school, intermediate vocational training); *high* education (higher vocational training, university degree). Of the included participants, 82.8% received low education, 13.8% medium education, and 3.4% high education. Almost 32% of the participants were married or cohabiting and the remaining participants were unmarried or divorced.

Moreover, 59.0% of the participants were voluntary outpatients. However, 29.5% of the outpatients were treated at the forensic policlinics under conditional regulations (e. g., outpatients or former forensic psychiatric inpatients following court-ordered treatment), and the remaining patients (11.4%) were in miscellaneous legal status categories. Furthermore, 95.7% of the participants committed criminal offenses in the past and 4.3% had no criminal history. Participants had an average GAF score of 49.9 ($SD = 7.6$) indicating that the participating forensic psychiatric outpatients concern a group of patients with serious symptomatology and impairments in psychosocial and occupational functioning. Independent t tests for continuous variables (i.e., age and GAF score) and chi-square tests for categorical variables (i.e., all remaining demographic or legal/criminal factors) revealed no differences in demographics, legal status, criminal history, and psychosocial and occupational functioning between perpetrators of IPV and NIV (all $ps > .05$).

Table 1 presents the psychopathological morbidity and comorbidity of the sample indicating high rates of psychopathology among the forensic psychiatric

Table 1. Psychopathological Characteristics and Comorbidity of the Sample (N = 119).

	Child psychiatric problems	Adolescent psychiatric problems	Family psychiatric problems	Borderline personality disorder	Antisocial personality disorder	Mood disorder	Psychotic disorder	Impulse control disorder	Intermittent explosive disorder	Drug abuse	Alcohol abuse
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Child psychiatric problems	73 (77.7)										
Adolescent psychiatric problems	43 (60.6)	52 (69.3)									
Family psychiatric problems	31 (42.5)	18 (31.0)	39 (44.8)								
Borderline personality disorder	3 (7.3)	3 (8.1)	3 (7.0)	6 (9.5)							
Antisocial personality disorder	18 (36.0)	11 (29.7)	10 (23.3)	1 (1.6)	27 (42.9)						
Mood disorder	18 (20.2)	12 (16.9)	15 (17.9)	1 (1.7)	9 (15.3)	35 (31.5)					
Psychotic disorder	2 (2.2)	1 (1.4)	1 (1.1)	0 (0.0)	0 (0.0)	2 (1.8)	3 (2.6)				
Impulse control disorder	11 (12.0)	8 (16.0)	9 (10.5)	2 (3.3)	4 (6.7)	6 (5.5)	1 (0.9)	20 (17.4)			
Intermittent explosive disorder	12 (13.0)	11 (15.1)	5 (5.8)	0 (0.0)	0 (0.0)	4 (3.6)	0 (0.0)	7 (6.1)	19 (16.4)		
Drug abuse	51 (56.7)	37 (50.7)	24 (28.9)	4 (6.9)	15 (25.9)	16 (15.2)	3 (2.8)	10 (9.3)	12 (11.1)	71 (65.1)	
Alcohol abuse	34 (58.6)	28 (63.6)	17 (33.3)	4 (10.5)	10 (26.3)	8 (11.8)	1 (1.4)	8 (11.4)	8 (11.4)	49 (70.0)	49 (70.0)

Note. Percentages are based on absolute numbers that differ due to missing values. Numbers and percentages indicate the amount/proportion of cases with a certain psychopathological disorder/problem or with the respective comorbidities based on the available data. n.a. = not applicable due to missing values.

outpatients, in particular with regard to history of child, adolescent, and family psychiatric problems; antisocial personality disorder; impulse control disorder; and intermittent explosive disorder. For a comparison with all forensic psychiatric outpatients ($n = 1,116$) treated at the forensic psychiatric policlinic "Het Dok" in 2013, one should note that overall 13% of the outpatients had intermittent explosive disorder at intake and 20.1% had a Cluster B personality disorder (i.e., antisocial, borderline, or narcissistic personality disorder), compared with 16.4% of the outpatients with intermittent explosive disorder and 43% with an antisocial personality disorder in the present sample.

Criminological History of IPV and NIV Perpetrators

When taking the criminal history of incidental and repeated NIV perpetration into account, it was found that only about 38% of the IPV perpetrators exclusively committed IPV, whereas the majority committed general violence offenses in the past. To investigate differences in the different types of criminal history between IPV and NIV perpetrators, we conducted chi-square tests (or Fisher's exact test in case of empty cells or [expected] cell counts < 5 in more than 25% of the cells in line with the recommendations by Field, 2009). As can be seen in Table 2, most IPV perpetrators did not solely commit IPV offenses in the past and did not significantly differ from NIV perpetrators in terms of any type of criminal history.

Psychopathological Characteristics of IPV and NIV Perpetrators

Table 3 shows psychopathological characteristics of both IPV and NIV perpetrators. To examine whether IPV perpetrators differed from NIV perpetrators in terms of psychopathology, chi-square tests (or Fisher's exact test) were conducted. Both groups had relatively high but similar rates of family psychopathology, history of psychopathology in childhood and adolescence, and several mental disorders (i.e., antisocial personality disorder, impulse control disorder, and mood disorder). Yet, we did not observe any significant differences between the two groups in all psychopathological factors with one exception: IPV perpetrators displayed significantly higher rates of intermittent explosive disorder than NIV perpetrators, 23.3% versus 8.9%, $\chi^2(1, N = 116) = 4.39, p = .036$. To illustrate the strength of the association of intermittent explosive disorder with IPV perpetration, a univariate logistic regression analysis was conducted. The logistic regression analysis revealed that intermittent explosive disorder was related to an approximately 3 times higher risk of IPV perpetration, odds ratio (OR) = 3.10, 95% confidence interval (CI) = [1.04, 9.29], $p = .043$.

Table 2. Different Types of Criminal History by Type of Violence Perpetration (N = 119).

Type of Criminal History	Intimate Partner Violence (n = 61)		Non-Intimate Violence (n = 58)		Significance Testing
	n (%)	n (%)	n (%)	n (%)	
Criminal history	54 (93.1)	57 (98.3)	Fisher's exact test (N = 116), p = .36		
Minor property crimes	21 (39.6)	23 (39.7)	$\chi^2(1, N = 111) = 0.00, p = .99$		
Serious property crimes	9 (17.0)	14 (24.1)	$\chi^2(1, N = 111) = 0.86, p = .35$		
Threat without violence	12 (22.6)	8 (14.0)	$\chi^2(1, N = 110) = 1.37, p = .24$		
Incidental non-intimate violence	13 (24.5)	11 (19.3)	$\chi^2(1, N = 110) = 0.44, p = .51$		
Repeated non-intimate violence	21 (39.6)	23 (39.7)	$\chi^2(1, N = 111) = 0.00, p = .99$		
Serious maltreatment	12 (22.6)	9 (15.5)	$\chi^2(1, N = 111) = 0.92, p = .34$		
Attempt to murder/manslaughter	7 (13.5)	6 (10.3)	$\chi^2(1, N = 110) = 0.26, p = .61$		
Manslaughter/murder	0 (0.0)	2 (3.4)	Fisher's exact test (N = 111), p = .50		
Rape	1 (1.9)	0 (0.0)	Fisher's exact test (N = 111), p = .48		
Sexual abuse	3 (5.6)	0 (0.0)	Fisher's exact test (N = 112), p = 0.11		

Note. Data were incomplete for the following variables: Criminal history (2.5%), minor property crimes (6.7%), serious property crimes (6.7%), threat without violence (7.6%), incidental non-intimate violence (7.6%), repeated non-intimate violence (6.7%), serious maltreatment (6.7%), attempt to manslaughter/murder (7.6%), manslaughter/murder (6.7%), rape (8.6%), and sexual abuse (5.9%).

Table 3. (History of) Psychopathology by Type of Violence Perpetration ($N = 119$).

Type of Psychopathology	Intimate Partner Violence ($n = 61$)	Non-Intimate Violence ($n = 58$)	Significance Testing
	n (%)	n (%)	
Child psychiatric problems	37 (78.7)	36 (76.6)	$\chi^2(1, N = 94) = 0.06, p = .80$
Adolescent psychiatric problems	28 (77.8)	24 (61.5)	$\chi^2(1, N = 75) = 2.32, p = .13$
Family psychiatric history	18 (45.0)	21 (44.7)	$\chi^2(1, N = 87) = 0.00, p = .98$
Borderline personality disorder	3 (10.7)	3 (8.6)	Fisher's exact test ($N = 63$), $p = 1.0$
Antisocial personality disorder	10 (35.7)	17 (48.6)	$\chi^2(1, N = 63) = 1.05, p = .31$
Mood disorder	14 (25.0)	21 (38.2)	$\chi^2(1, N = 111) = 2.23, p = .14$
Psychotic disorder	2 (3.4)	1 (1.8)	Fisher's exact test ($N = 116$), $p = .58$
Impulse control disorder	12 (20.3)	8 (14.3)	$\chi^2(1, N = 115) = 0.73, p = .39$
Intermittent explosive disorder	14 (23.3)	5 (8.9)	$\chi^2(1, N = 116) = 4.39, p = .036$
Drug abuse	38 (69.1)	33 (61.1)	$\chi^2(1, N = 109) = 0.76, p = .38$
Alcohol abuse	27 (67.5)	22 (73.3)	$\chi^2(1, N = 79) = 0.27, p = .60$

Note. Data were incomplete in the following variables: Child psychiatric problems (21.0%), adolescent psychiatric problems (37.0%), family psychiatric history (26.9%), borderline personality disorder (47.1%), antisocial personality disorder (47.1%), mood disorder (6.7%), psychotic disorder (2.5%), impulse control disorder (3.4%), intermittent explosive disorder (2.5%), drug abuse (8.4%), and alcohol abuse (41.2%).

History of Victimization and the Risk of Perpetration of IPV

To test whether rates of different types of previous psychological, physical, and sexual victimization in the family of origin differed between IPV perpetrators and NIV perpetrators, chi-square tests (or Fisher's exact tests) were performed. IPV and NIV perpetrators did not differ in rates of previous psychological and sexual victimization, 86.8% versus 79.4%, $\chi^2(1, N = 72) = 0.71, p = .40$, and 47.2% versus 38.2%, $\chi^2(1, N = 70) = 0.60, p = .45$, respectively. Yet, IPV perpetrators were significantly more likely to have been victims of previous physical violence than NIV perpetrators, 90.7% versus 71.8%, $\chi^2(1, N = 67) = 4.89, p = .027$. A univariate logistic regression indicated that previous physical victimization was associated with an almost 4 times higher risk of IPV perpetration, $OR = 3.83, 95\% CI = [1.11, 13.28], p = .034$.

Discussion

This study examined numerous factors possibly characterizing IPV perpetrators treated at a forensic outpatient psychiatric center in the Netherlands (e.g., criminal history, psychiatric history, mental disorders, and type of previous victimization). We also examined whether these factors differentiated between perpetrators of IPV and NIV. IPV perpetrators had significantly higher rates of previous physical victimization and intermittent explosive disorder than NIV perpetrators. Yet, in general, the perpetrators of IPV and NIV displayed similar rates regarding most criminological, psychopathological, and victimological characteristics examined in this study.

Important criminological characteristics of IPV perpetrators were revealed in this study. Consistent with previous studies, we found that the majority of IPV perpetrators had a criminal history and a significant number of them had also committed non-IPV and non-violent offenses (e.g., property crimes; Echeburua et al., 2003; Henning & Feder, 2004; Uekert et al., 2006). Concerning these latter offenses, we did not observe significant differences between perpetrators of IPV and NIV. In line with work by Logan et al. (2001), our results suggest that most IPV perpetrators in the forensic setting are generalists who exhibit versatility in offending, including the perpetration of general violence, and thus form a dual threat for safety in and outside the domestic setting.

Our study provided insights into the psychopathological profile of IPV perpetrators. In line with previous research, we found that IPV perpetrators evidenced antisocial and borderline personality disorders (Capaldi et al., 2012; Corvo & Johnson, 2013). More than two thirds of these perpetrators

had a history of psychiatric problems in childhood and adolescence and about 45% of them had a family history of psychopathology. Numerous IPV perpetrators suffered from psychopathological disorders, including depression, impulse control disorders, and most of them displayed alcohol and drug abuse. Therefore, it is tempting to speculate that family psychiatric history, psychiatric problems in childhood and adolescence, and concurrent mental disorders may represent etiological and/or maintaining factors involved in the perpetration of both IPV and NIV with one exception. To our knowledge, our study is the first to observe that intermittent explosive disorder differentiated significantly between IPV perpetrators and NIV perpetrators as this disorder was associated with an almost 4 times higher risk of IPV violence perpetration. In a study by George et al. (2006), all perpetrators of IPV ($n = 71$) evidenced diagnostic criteria of intermittent explosive disorder but after taking differential diagnostic criteria into account, only 9.9% of the sample fulfilled criteria of this disorder. However, in contrast to our study, the study by George et al. (2006) did not include a control group. These findings by George et al. (2006) and our results suggest that the recurrent failure to inhibit impulses of aggression due to this disorder may represent an important maintaining factor involved in the (re-)perpetration of IPV. Adult patients with intermittent explosive disorder experience their acts of impulsive aggression as defensive, as an "adrenaline rush," and as accompanied by highly emotional arousal (McElroy, Soutullo, Beckman, Taylor, & Keck, 1998). Moreover, recent research on impulsive aggression and perpetration of IPV suggests that deficits in executive functioning may partly explain the association between explosive intermittent disorder and IPV perpetration (Becerra-Garcia, 2014; Walling, Meehan, Marshall, Holtzworth-Munroe, & Taft, 2012). Based on this, one might speculate that (forensic psychiatric) treatment programs targeting the reduction of violence (re-)perpetration among IPV perpetrators with intermittent explosive disorder should not only include adequate psychopharmacological interventions known to decrease aggression and impulsivity but should also develop and use multidisciplinary treatment modules, including anger regulation training, aggression reduction, executive functioning training, and enhancement of social (cognitive) skills (Olvera, 2002). Future longitudinal research should evaluate the effectiveness of such interventions and identify antecedents and mechanisms involved in the association between intermittent explosive disorder and IPV perpetration.

The findings of our study regarding a history of victimization are in line with the results from previous studies indicating an intergenerational pattern of IPV perpetration (Lohman et al., 2013; Murrell et al., 2007; Roberts et al., 2010). In accordance with the social cognitive learning theory (Bandura,

1977; Grych & Fincham, 1990), our results suggest that physical victimization in the family of origin can increase the risk of IPV perpetration later in life possibly via direct exposure, observational learning, and/or imitation. Consistent with previous research, our study also suggests that previous victimization in the domestic setting also exerts more general modeling effects as it may lead to committing both IPV and NIV (Millet et al., 2013; Murrell et al., 2007; Renner & Slack, 2006). Yet, in addition to experiencing early victimization, the IPV perpetrators in our study had high rates of developmental psychopathological problems, family history of psychopathology, mental disorders, and alcohol and substance abuse. This may suggest that early experience of victimization and its possible consequences (e.g., traumatization) are part of a developmental cascade of cumulative risk factors that may lead to IPV perpetration later in life (Capaldi et al., 2012; Corvo & Johnson, 2013). From a (developmental) psychopathological cumulative risk perspective, IPV may therefore be understood as a maladaptive and destructive coping strategy rather than as a socially learned deviant behavior due to early experiences of victimization alone. Yet, caution is warranted when generalizing our findings to other (clinical) populations. That is, our study was limited to forensic psychiatric outpatients, of whom a large number followed involuntary treatment, and had a relatively small sample size and a large amount of missing values regarding history of victimization in childhood or adolescence. The relative small sample size may imply a lack of statistical power and did not allow testing a cumulative risk model. Data on history of victimization were obtained retrospectively making it difficult to determine causal relations. Large-scale longitudinal (forensic) studies are needed that make it possible to confirm the observed association of previous victimization in the family of origin with IPV perpetration and to test a developmental psychopathological cumulative risk model to predict IPV.

In addition to the aforementioned limitations, the relative small sample size did not allow comparing characteristics of subcategories of IPV perpetrators (i.e., perpetrators of general violence and perpetrators of IPV only) with NIV perpetrators. Moreover, no data on inter-rater reliability of the structured psychiatric interviews were available. Nevertheless, consensus diagnoses were determined by clinical judgments of trained clinicians. Furthermore, data on history of victimization, psychiatric (family) history, and alcohol and drug abuse were reported retrospectively based on (hetero-) anamneses. Unfortunately, we do not know when previous victimization in the family of origin occurred exactly (i.e., in childhood or youth). Information based on (hetero-) anamneses could therefore be distorted due to recall bias. A prospective longitudinal design could prevent this shortcoming. In addition, the design of our study did not allow addressing the directionality of the

association of psychopathology with IPV perpetration. Longitudinal research is needed to address this matter. The generalizability of our study to other (forensic/clinical) populations may be limited, as the study participants had higher rates of antisocial personality disorder and intermittent explosive disorder than the complete forensic psychiatric outpatient population treated at the study site. Yet, even non-psychiatric sample based research studying perpetrators of IPV and general violence in particular suggests that these perpetrators are characterized by high levels of externalizing and conduct problems, aggression, and antisociality (e.g., Capaldi et al., 2012; Cavanaugh & Gelles, 2005). Finally, missing data may have affected our results, as for some variables, data were incomplete. Several reasons might explain these missing data. During the intake, practitioners possibly did not thoroughly and carefully question the forensic psychiatric outpatients about delicate topics (e.g., childhood victimization and history of [family] psychopathology). Outpatients may also have the tendency not to mention such matters out of shame. In addition, in the Dutch forensic psychiatric sector, standardized instruments are not generally used to assess victimization and history of (family) psychopathology. Nevertheless, missing data analyses showed that outpatients without data on NIV and IPV perpetration did not differ in demographics, such as ethnicity and education, but were less likely to have a criminal history compared with included outpatients. This suggests that missing data could have influenced the strength of the associations of the different correlates with IPV but possibly did not lead to spurious associations.

Conclusions and Implications for Practice and Future Research

The findings of our study provided important insights into the criminological, psychopathological, and victimological profile of IPV perpetrators treated at a forensic outpatient psychiatric center in the Netherlands. Both IPV and NIV perpetrators displayed similar but high rates of psychopathological disorders and psychological problems (e.g., antisocial personality disorder, and alcohol and substance abuse) that are known to be related to aggressive behavior (Corvo & Johnson, 2013). However, perpetrators of IPV displayed significant higher rates of previous physical victimization than perpetrators of NIV. Moreover, intermittent explosive disorder was related to a higher risk of IPV perpetration.

These findings suggest that intervention programs focusing on the reduction of IPV perpetration and recidivism should incorporate early life trauma processing, anger regulation, training of executive functioning, enhancement of social (cognitive) skills, and aggression reduction training. Future large-scale

longitudinal studies should shed more light on mechanisms underlying and/or modulating the associations of a history of physical victimization and intermittent explosive disorder with IPV perpetration. To improve future prevention and intervention efforts, more negative childhood experiences (e.g., witnessing IPV in childhood), neuropsychological factors (e.g., executive functioning), and (developmental) psychopathological factors should be investigated to identify developmental trajectories, risk factors, and unique characteristics of various types of perpetrators of IPV and NIV.

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References

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.
- Becerra-Garcia, J. A. (2014). Neuropsychology of domestic violence: A comparative preliminary study of executive functioning. *Medicine, Science, and the Law*. Advance online publication. doi:10.1177/0025802414525148
- Capaldi, D. M., Knoble, N. B., Shortt, J. W., & Kim, H. K. (2012). A systematic review of risk factors for intimate partner violence. *Partner Abuse, 3*(2), 231-280. doi:10.1891/1946-6560.3.2.231
- Cavanaugh, M. M., & Gelles, R. J. (2005). The utility of male domestic violence offender typologies: New directions for research, policy, and practice. *Journal of Interpersonal Violence, 20*, 155-166. doi:10.1177/0886260504268763
- Cogan, R., Porcerelli, J. H., & Dromgoole, K. (2001). Psychodynamics of partner, stranger, and generally violent male college students. *Psychoanalytic Psychology, 18*, 515-533.
- Corvo, K., & Johnson, P. (2013). Sharpening Ockham's razor: The role of psychopathology and neuropsychopathology in the preparation of domestic violence. *Aggression and Violent Behavior, 18*, 175-182. doi:10.1016/j.avb.2012.11.017

- Devries, K. M., Mak, J. Y., Garcia-Moreno, C., Petzold, M., Child, J. C., Falder, G., & Watts, C. H. (2013). Global health. The global prevalence of intimate partner violence against women. *Science, 340*, 1527-1528. doi:10.1126/science.1240937
- Echeburua, E., Fernandez-Montalvo, J., & Amor, P. J. (2003). Psychopathological profile of men convicted of gender violence: A study in the prisons of Spain. *Journal of Interpersonal Violence, 18*, 1-15. doi:10.1177/0886260503253300
- Edwards, D. W., Scott, C. L., Yarvis, R. M., Paizis, C. L., & Panizzon, M. S. (2003). Impulsiveness, impulsive aggression, personality disorder, and spousal violence. *Violence and Victims, 18*, 3-14.
- Falb, K. L., McCauley, H. L., Decker, M. R., Gupta, J., Raj, A., & Silverman, J. G. (2011). School bullying perpetration and other childhood risk factors as predictors of adult intimate partner violence perpetration. *Archives of Pediatric & Adolescent Medicine, 165*, 890-894. doi:10.1001/archpediatrics.2011.91
- Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). Thousand Oaks, CA: Sage.
- George, D. T., Phillips, M. J., Doty, L., Umhau, J. C., & Rawlings, R. R. (2006). A model linking biology, behavior, and psychiatric diagnoses in perpetrators of domestic violence. *Medical Hypothesis, 67*, 345-353. doi:10.1016/j.mehy.2006.01.049
- Gottman, J. M., Jacobson, N. S., Rushe, R. H., Shortt, J. W., Babcock, J., Lataillade, J. J., & Waltz, J. (1995). The relationship between heart-rate reactivity, emotionally aggressive behavior, and general violence in batterers. *Journal of Family Psychology, 9*, 227-248. doi:10.1037//0893-3200.9.3.227
- Grych, J. H., & Fincham, F. D. (1990). Marital conflict and children's adjustment: A cognitive-contextual framework. *Psychological Bulletin, 108*, 267-290. doi:10.1037//0033-2909.108.2.267
- Henning, K., & Feder, L. (2004). A comparison of men and women arrested for domestic violence: Who presents the greater threat? *Journal of Family Violence, 19*, 69-80. doi:10.1023/B:JOFV.0000019838.01126.7c
- Holtzworth-Munroe, A., & Stuart, G. L. (1994). Typologies of male batterers—3 subtypes and the differences among them. *Psychological Bulletin, 116*, 476-497. doi:10.1037/0033-2909.116.3.476
- Hornsveld, R. H., Bezuijen, S., Leenaars, E. E., & Kraaimaat, F. W. (2008). Domestically and generally violent forensic psychiatric outpatients: Personality traits and behavior. *Journal of Interpersonal Violence, 23*, 1380-1393. doi:10.1177/0886260508314303
- Kandel-Englander, E. (1992). Wife battering and violence outside the family. *Journal of Interpersonal Violence, 7*, 462-470.
- Logan, T. K., Walker, R., & Leukefeld, C. G. (2001). Intimate partner and non-intimate violence history among drug-using, incarcerated men. *International Journal of Offender Therapy and Comparative Criminology, 45*, 228-243. doi:10.1177/0306624X01452008
- Lohman, B. J., Neppl, T. K., Senia, J. M., & Schofield, T. J. (2013). Understanding adolescent and family influences on intimate partner psychological violence during

- emerging adulthood and adulthood. *Journal of Youth and Adolescence*, 42, 500-517. doi:10.1007/s10964-013-9923-7
- McElroy, S. L., Soutullo, C. A., Beckman, D. A., Taylor, P., Jr., & Keck, P. E., Jr. (1998). DSM-IV intermittent explosive disorder: A report of 27 cases. *Journal of Clinical Psychiatry*, 59(4), 203-210; quiz 211.
- Millet, L. S., Kohl, P. L., Jonson-Reid, M., Drake, B., & Petra, M. (2013). Child maltreatment and subsequent perpetration of young intimate partner violence: An exploration of mediating factors. *Child Maltreatment*, 18, 71-84. doi:10.1177/1077559513484821
- Murrell, A. R., Christoff, K. A., & Henning, K. R. (2007). Characteristics of domestic violence offenders: Associations with childhood exposure to violence. *Journal of Family Violence*, 22, 523-532. doi:10.1007/s10896-007-9100-4
- Nygren, E., Wyatt, J. C., & Wright, P. (1998). Helping clinicians to find data and avoid delays. *The Lancet*, 352, 1462-1466. doi:10.1016/S0140-6736(97)08307-4
- Olvera, R. L. (2002). Intermittent explosive disorder: Epidemiology, diagnosis, and management. *CNS Drugs*, 16, 517-526.
- Polaschek, D. L. L. (2006). Violent offender programmes: Concept, theory, and practice. In C. R. Hollin & E. J. Palmer (Eds.), *Offending behavior programmes: Development, application, and controversies* (pp. 114-154). Chichester, UK: John Wiley.
- Renner, L. M., & Slack, K. S. (2006). Intimate partner violence and child maltreatment: Understanding intra- and intergenerational connections. *Child Abuse & Neglect*, 30, 599-617. doi:S0145-2134(06)00119-0
- Roberts, A. L., Gilman, S. E., Fitzmaurice, G., Decker, M. R., & Koenen, K. C. (2010). Witness of intimate partner violence in childhood and perpetration of intimate partner violence in adulthood. *Epidemiology*, 21, 809-818. doi:10.1097/EDE.0b013e3181f39f03
- Saltzman, L. E., Fanslow, J. L., McMahon, P. M., & Shelley, G. A. (2002). *Intimate partner violence surveillance: Uniform definitions and recommended data elements, version 1.0*. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control.
- Sartin, R. M., Hansen, D. J., & Huss, M. T. (2006). Domestic violence treatment response and recidivism: A review and implications for the study of family violence. *Aggression and Violent Behavior*, 11, 425-440. doi:10.1016/j.avb.2005.12.002
- Schuringa, E., Sprenen, M., & Bogaerts, S. (2014). Inter-rater and test-retest reliability, internal consistency, and factorial structure of the instrument for forensic treatment evaluation. *Journal of Forensic Psychology Practice*, 14, 127-144. doi:10.1080/15228932.2014.897536
- Shields, N. M., McCall, G. J., & Hanneke, C. R. (1988). Patterns of family and nonfamily violence: Violent husbands and violent men. *Violence and Victims*, 3, 83-97.
- Statistics Netherlands. (2004). *Standaard Onderwijsindeling 2003* [Categorization of the Dutch educational system 2003]. Voorburg, The Netherlands: Author.

- Trevillion, K., Oram, S., Feder, G., & Howard, L. M. (2012). Experiences of domestic violence and mental disorders: A systematic review and meta-analysis. *PLoS ONE*, 7(12), e51740. doi:10.1371/journal.pone.0051740
- Tweed, R. G., & Dutton, D. G. (1998). A comparison of impulsive and instrumental subgroups of batterers. *Violence and Victims*, 13, 217-230.
- Uekert, B., Sagatun-Edwards, I., Crowe, A., Peters, T., Cheesman, F., & Kameeda, D. (2006). *Juvenile domestic and family violence: The effects of court-based intervention programs on recidivism*. Washington, DC: U.S. Department of Justice. Retrieved from <https://www.ncjrs.gov/pdffiles1/nij/grants/216614.pdf>
- van Dijk, T., Veen, M., & Cox, E. (2010). *Slachtofferschap van huiselijk geweld: aard, omvang, omstandigheden en hulpzoekgedrag* [Victimization due to domestic violence: Patterns, prevalence, circumstances, and help-seeking behavior]. Hilversum, The Netherlands: Intomart. Retrieved from <http://www.huiselijk-geweld.nl/feiten/feiten/landelijk/slachtofferschap-van-huiselijk-geweld>
- Walling, S. M., Meehan, J. C., Marshall, A. D., Holtzworth-Munroe, A., & Taft, C. T. (2012). The relationship of intimate partner aggression to head injury, executive functioning, and intelligence. *Journal of Marital Family Therapy*, 38, 471-485. doi:10.1111/j.1752-0606.2011.00226.x
- Walsh, Z., Swogger, M. T., O'Connor, B. P., Chatav Schonbrun, Y., Shea, M. T., & Stuart, G. L. (2010). Subtypes of partner violence perpetrators among male and female psychiatric patients. *Journal of Abnormal Psychology*, 119, 563-574. doi:10.1037/a0019858

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