Male Perpetrators of Intimate Partner Homicide: A Review and Proposed Typology

Aaron J. Kivisto, PhD

Nearly one in seven homicides worldwide involve killing of an intimate partner, and men are four times more likely to be the perpetrators of these offenses. This article is a review of the literature on male perpetrators of intimate partner homicide (IPH) with an emphasis on the demographic, psychiatric, situational, and motivational characteristics consistently identified across diverse posthomicide samples. The existing literature supports the heterogeneity among male perpetrators of IPH. Based on patterns that emerge in the literature, a preliminary typology is described that includes four generally distinct subtypes of male IPH perpetrators: the mentally ill, the undercontrolled/dysregulated, chronic batterer, and overcontrolled/catathymic subtypes. Forensic implications related to risk assessment, risk management, and criminal intent are considered, and suggestions for future targeted research aimed at validating the proposed typology are offered.

J Am Acad Psychiatry Law 43:300–12, 2015

Nearly one in seven homicides worldwide involve the killing of an intimate partner.[1] Early descriptions emphasized the commonalities of those who perpetrate these offenses, including a description of a singular spousal-homicide syndrome.[2] More recent efforts have focused on identifying general risk factors for intimate partner homicide[3–6] (IPH) and factors that distinguish fatal from nonfatal intimate partner violence (IPV).[7] With the exception of efforts to distinguish IPH perpetrators who subsequently commit suicide from those who do not,[8–10] however, the heterogeneity of IPH perpetrators has been minimized. Given the heterogeneity recognized among perpetrators of nonfatal IPV, this minimization is notable.[11]

The present article is a review of the literature on male perpetrators of IPH. Consistent with recommendations that contextual and situational factors be considered in identifying subgroups of violent men,[11,12] a range of historical, individual, and situational factors is integrated. Demographic features, psychopathology, and personality pathology in these individuals is synthesized across distinct posthomicide samples, and histories of general and domestic violence, as well as stalking, are considered. The precipitating influences of abandonment and jealousy are critically evaluated, and it is suggested that distinguishing envy from jealousy is essential. The literature appears to support the heterogeneity of male perpetrators of IPH and to suggest that there are distinct subtypes of male IPH perpetrators. A preliminary typology of four generally distinct subtypes of male IPH perpetrators is proposed, forensic implications are considered, and suggestions for future research are offered.

Dr. Kivisto is Assistant Professor of Clinical Psychology, School of Psychological Sciences, University of Indianapolis, Indianapolis, IN. Address correspondence to: Aaron J. Kivisto, PhD, 1400 East Hanna Avenue, Indianapolis, IN 46227. E-mail: kivistoa@uindy.edu.

Disclosures of financial or other potential conflicts of interest: None.

Definitions

IPH is the intentional killing of one's current or former intimate partner. This definition is consistent with that advanced by Carach and James, who defined IPH as a homicide involving "spouses, exspouses, those in current or former *de facto* relationships, boyfriends, girlfriends, or partners of same-sex relationships: in other words, all relationships where the underlying dynamics are similar" (Ref. 13, p 1). Recognizing the similar dynamics underlying violence across the varied forms of intimate partner relationships, this definition is intentionally broader than that of spousal homicide[3,14] and is consistent with the contemporary domestic violence literature.

Table 1 Intimate Partner Homicides as a Proportion of Total Homicides in the United States, 2008 through 2012

	2008	2009	2010	2011	2012	2008–2012 Mean (SD)
Overall homicides						
Total homicides	14.180	13,636	12,996	12,664	12,765	13,248 (646.63)
Total male victims	11,059	10,496	10,058	9,829	9,917	10,271 (509.32)
Total female victims	3,078	3,122	2,918	2,813	2,834	2,953 (140.69)
Male:female homicide						
Victim ratio	3.59: 1	3.36: 1	3.45: 1	3.49: 1	3.50: 1	3.48: 1
Intimate Partner homicides						
Male IPH victim	264	279	241	269	264	263.4 (13.94)
Husband	119	141	110	108	96	114.8 (16.78)
Boyfriend	145	138	131	161	168	148.6 (15.53)
Female IPH victim	1,069	1,081	1,095	1,026	992	1,052.6 (42.58)
Wife	577	609	603	552	498	567.8 (45.12)
Girlfriend	492	472	492	474	494	484.8 (10.83)
Total IPH victims	1,333	1,360	1,336	1,295	1,256	1,316 (40.82)
Female: Male IPH victim ratio	4.05: 1	3.87: 1	4.54: 1	3.81: 1	3.76: 1	4.01: 1
Total homicides in U.S.*	7,912	7,650	7,272	7,076	7,008	7,383.6 (386.76)
Percent IPH	9.4	10.0	10.3	10.2	9.8	9.9 (0.36)

Data from *Uniform Crime Reports,* by the Federal Bureau of Investigation, 2008–2012, Washington, DC: Department of Justice.
* Total homicides here are based only on homicides in which the victim–perpetrator relationship was known. This excludes the following "unknown" relationship homicides: 2012 (n = 5,757); 2011 (n = 5,588); 2010 (n = 5,724); 2009 (n = 5,986); and 2008 (n = 6,268).

Epidemiology

The FBI's *Uniform Crime Report* publishes data annually on the relationship between homicide victims and perpetrators.[15] Table 1 provides information on the rates of IPH and its prevalence relative to overall homicide rates from 2008 through 2012. There were more than 7,000 homicides annually in the United States, on average, in which the relationship between the victim and perpetrator was known. Approximately 1 in 10 of these homicides involved the killing of an intimate partner, and the proportion of IPHs relative to all homicides was highly stable from 2008 through 2012, ranging from a low of 9.4 percent of all homicides in 2008 to a high of 10.3 percent in 2010. These data also show that the relative risk of intimate versus nonintimate homicide victimization is reversed among men and women. Whereas men accounted for 78 percent of all homicide victims from 2008 through 2012, making them 3.48 times more likely to be a victim of homicide by any perpetrator, women were, on average, slightly more than four times more likely to be the victim of IPH, accounting for 80 percent of all IPH victims. Table 1 reveals a high degree of temporal consistency in these differential gender victimization rates across this five-year period.

The data presented in Table 1 are generally consistent with worldwide prevalence rates of IPH, with conservative estimates indicating that IPHs account for one in seven (13.54%) homicides worldwide.[1] Similar gender differences emerge in these worldwide estimates, with six times more women than men killed by their intimate partners.

Characteristics of Male Perpetrators of IPH

Demographics

Men who kill their intimate partners tend to be in their mid- to late-30s and, on average, older than those who perpetrate nonfatal IPV, those who kill other family members, and those who kill nonfamily members.[6–7,16–18] In a pretrial forensic sample of 213 male homicide perpetrators, Daniel and Holcomb[17] found that those charged with domestic homicide were almost a decade older than those charged with nonfamilial homicide (34.05 versus 26.89). Oram and colleagues,[6] in a large population-based study, compared those who perpetrated IPH to those who killed another adult family member and found that men who killed their partners were significantly older than those who killed other family members (39.6 versus 32.2). Campbell and colleagues[7] found that men who perpetrated fatal IPV were older than men who perpetrated nonfatal spousal abuse (34.2 versus 21.2), and Rosenbaum[19] found that IPH perpetrators who committed suicide were older than those who did not (33 versus 42).

Early Experiences

Approximately one-fourth of male IPH perpetrators were abused as children. In a sample of incarcerated IPH perpetrators, Stout[20] found that 17 and 9 percent endorsed experiences of childhood physical or sexual abuse, respectively. These childhood victimization rates are similar to those identified in an American sample of pretrial men charged with IPH (23%)[17] and a large sample of Dutch uxoricide suspects (25%).[21] Stout reported that a substantial minority (39%) of his sample witnessed parental domestic violence, generally perpetrated by the father against the mother. Nearly all of the sample of IPH perpetrators studied by Daniel and Holcomb[17] had significant behavioral problems beginning in childhood, whereas nondomestic homicide perpetrators, by comparison, evidenced less severe childhood behavior problems.[17] Nearly two-thirds (65%) of the small and relatively well-adjusted sample reported by Stout[20] grew up in an intact family. Daniel and Holcomb[17] found that 50 percent of those in their larger pretrial sample of men charged with IPH grew up without a father in the home and 12 percent without a mother.

Approximately half of all IPH perpetrators do not graduate from high school. Campbell *et al.*[7] found that 49 percent of their sample of IPH perpetrators did not graduate from high school, 33 percent earned their high school diploma, 12 percent completed some college or trade school, and 6 percent completed college or trade school. Koziol-McLain and colleagues[10] found that 55 percent of femicide perpetrators who did not commit suicide did not graduate from high school and that IPH-suicide perpetrators completed slightly higher levels of education. Whereas 65 percent of the sample of male IPH defendants studied by Barnard and colleagues[22] did not complete high school, only 39 percent of the sample reported by Goetting[23] did not.

Employment Status

Unemployment rates among IPH perpetrators vary widely across samples, with estimates ranging from 13 to 58 percent.[20,21] Two large-scale studies provided what may be the most reliable estimates of employment rates among male IPH perpetrators and suggested that IPH perpetrators are more likely to be employed than men who kill other family members, but are less likely to be employed than nonfatal IPV perpetrators. Oram and colleagues[6] found that 39 percent of IPH perpetrators were unemployed, compared with an unemployment rate of 55 percent among men who killed other adult family members. Campbell and colleagues,[7] in a comparison between fatal and nonfatal IPV perpetrators, found that nearly half (49%) of all male IPH perpetrators were unemployed, significantly more than nonfatal abusers (20%). Similarly, 45 percent of all IPH perpetrators in Massachusetts from 2005 through 2007 were unemployed at the time of the homicide.[18] At the extremes, Stout[20] reported that only 13 percent of a sample of 23 men convicted of IPH in Missouri were unemployed at the time of the offense, whereas fully 58 percent of the sample of 380 Dutch uxoricide suspects studied by Liem and Koenraadt[21] were unemployed.

Clinical Features

Research examining psychopathology and personality disturbance in IPH perpetrators tends to place them in the middle of the psychopathological continuum between killers of other family members, who tend to show more pathology, and general homicide perpetrators, who tend to show less.[6–7,21] Understanding the prevalence and nature of the psychopathology in IPH perpetrators requires both stable population-based prevalence rates and in-depth psychiatric data collection to account for methodological biases.[21,24,25] The role of completed suicide in the context of IPH also limits data derived from certain research designs, resulting in the omission of a distinct but not uncommon type of IPH perpetrator: the IPH-suicide perpetrator. Consistent with the observations of Liem and Koenraadt,[21] it is reasonable to conceptualize data generated by IPH perpetrators posthomicide as reflecting the specific population of perpetrators who survive the event.

Psychopathology

Population-Based Research. Population-based research converges to suggest that nearly 1 in 10 men who kill an intimate partner is psychotic, although data on the prevalence of mood disorders yields less stable estimates, ranging from 17 to 56 percent.[6,16] With rare exceptions,[21] rates of psychosis in IPH perpetrators rise sharply to nearly one in three in forensic psychiatric samples.[17,26]

Oram and colleagues,[6] in a population-based study of IPH perpetrators, found a 32 percent lifetime prevalence rate of mental illness, excluding drug and alcohol dependence, a lower prevalence of life-

time mental illness than those who kill other family members (45%). Regarding specific types of mental illness, they found that IPH perpetrators had significantly lower lifetime rates of schizophrenia and other delusional disorders (6% versus 28%), but higher lifetime rates of affective disorders (17% versus 8%) compared with killers of other family members. IPH perpetrators were also less likely to have received mental health services (23% versus 34%). Twenty percent of IPH perpetrators had symptoms of psychosis (7%) or depression (13%) at the time of the offense, compared with 34 percent of those who killed other family members.

Bourget and Gagné,[16] in a retrospective review of coroners' files for all spousal homicides in Quebec from 1991 through 2010 (n = 276; 85% male-perpetrated), found higher overall prevalence rates of mental illness in perpetrators of spousal homicide than did Oram and colleagues.[6] Only 10.6 percent had no mental condition: 56.7 percent had a major depressive disorder, 15.6 percent acute intoxication, 6.3 percent other psychoses, 3.5 percent schizophrenia, 3.5 percent other disorders, 2.1 percent adjustment disorder, 0.7 percent dissociation, and 0.7 percent drug addiction. Rosenbaum[19] reviewed all 36 cases of IPH in Albuquerque, New Mexico, from 1978 through 1987 and found that 75 percent of perpetrators who committed suicide were depressed, but none of those who perpetrated IPH without suicide had depression. These rates of depression in IPH-suicide perpetrators are identical with those documented in a Quebec sample of perpetrators over the age of 65.[8] Whereas there was no evidence of delusional disorder in the sample of IPH-suicide perpetrators studied by Rosenbaum,[19] 10 percent of the older IPH-suicide perpetrators studied by Bourget *et al.* [8] were psychotic.

Forensic Psychiatric Samples. Rates of severe mental illness among IPH perpetrators are generally higher in forensic psychiatric samples. Daniel and Holcomb[17] studied a pretrial forensic sample and reported higher prevalence rates among domestic than nondomestic homicide perpetrators for psychotic (34% versus 12%) and anxiety disorders (7% versus 2%), but lower rates of substance abuse disorders (25% versus 46%). Belfrage and Rying[26] studied 96 spousal homicide perpetrators in Sweden who had undergone forensic psychiatric evaluation and found that nearly all (95%) met criteria for at least one psychiatric diagnosis. Similar to the American sample reported by Daniel and Holcomb,[17] 36 percent of those in Belfrage and Rying were thought to be psychotic.[26] Regarding past psychiatric treatment, 26 percent of the sample of male pretrial IPH defendants studied by Barnard and colleagues[22] had a history of outpatient psychiatric treatment, and 17 percent had been hospitalized for psychiatric reasons. The sample of 380 pretrial Dutch forensic psychiatric patients in the study by Liem and Koenraadt[21] had notably lower rates of psychosis than those in other forensic samples.[17,26] They found that 12 percent had a psychotic disorder, 8 percent a mood disorder, 19 percent a substance abuse disorder, and 8 percent intellectual disability. Rates of psychosis in this forensic psychiatric sample more closely resembled population-based prevalence rates of male IPH perpetrators.[6,16]

Personality Pathology

Population-based research has shown a seven percent prevalence rate for personality disorder (PD) across IPH perpetrators in England and Wales who were adjudicated to prison sentences, hospital orders, and noncustodial sentences.[7] Research in forensic samples from The Netherlands, Sweden, and the United States, in contrast, has documented significantly higher rates of PD in this population, on the basis of comprehensive clinical evaluations.[17,19,21,26] The sample studied by Liem and Koenraadt[21] (380 Dutch forensic psychiatric patients with histories of uxoricide), for example, had a 33 percent prevalence rate of PD. Belfrage and Rying[26] found very similar rates in their sample of 164 Swedish forensic psychiatric patients. After Unspecified PD, Narcissistic, Antisocial, and Borderline Personality Disorder diagnoses were most common. Only approximately 5 percent of the sample of IPH perpetrators met diagnostic criteria for psychopathy, and average Psychopathy Checklist: Screening Version (PCL:SV) scores in this sample was 11.27, lower than in most criminal samples. Fully 20 percent of the pretrial sample of 213 domestic homicide perpetrators in Missouri studied by Daniel and Holcomb[17] had a specific diagnosis of antisocial personality disorder (ASPD). A majority (83%) of the sample of IPH-only perpetrators in Albuquerque were reported by Rosenbaum[19] to have a PD, generally ASPD, but only one third of IPH-suicide perpetrators had any PD diagnosis.

Other researchers have used self-report measures, including the Minnesota Multiphasic Personality Inventory (MMPI)[27] and the Millon Clinical Multiaxial Inventory (MCMI),[28] to examine personality pathology in both prison and psychiatrically hospitalized samples of IPH perpetrators. In an early study of a small sample of incarcerated IPH perpetrators, Kalichman[29] found moderate rates of personality pathology, consistent with those reported by other researchers[6,17,26]; 15 percent revealed no clinically significant scale elevations, and the most frequently elevated scale, Psychopathic Deviate, was clinically elevated in 35 percent of the sample.

Dutton and Kerry, in contrast to the moderate rates of PD in Kalichman's sample, found that "men who kill their wives and who complete valid MCMI reports are almost invariably personality disordered" (Ref. 30, p 294). Further, they found that the types of PDs differed among males who perpetrated fatal versus nonfatal IPV. Nonlethal batterers most frequently evidenced significant elevations on the sadistic, antisocial, and passive-aggressive scales (50, 44, and 53% of nonlethal batterers, respectively, scored >85). In contrast, convicted IPH perpetrators most frequently elevated the passive-aggressive (61%), self-defeating (51%), avoidant (49%), and schizoid (46%) scales. Many significant differences between groups emerged, with IPH perpetrators showing higher mean elevations on the following scales compared with nonlethal batterers: schizoid (76.5 versus 58.8), avoidant (80.1 versus 65.4), dependent (78.8 versus 38.8), passive-aggressive (88.6 versus 83.5), and self-defeating (81.0 versus 69.6). In contrast, nonlethal batterers showed higher mean elevations on the antisocial (73.1 versus 64.1) and sadistic (85.6 versus 59.2) scales. Highlighting the distinctively overcontrolled[31] nature of the IPH perpetrator compared with the more overtly antisocial personality characteristics of the nonlethal batterer, Dutton and Kerry concluded: "The 'risk prediction' notion that escalating violence combines with other factors to make homicide likely has no empirical support. Suppressed rage, rather than expressed violence, may be more indicative of subsequent spousal homicide." They further noted, ". . . if we consider personality disorder as a risk factor for spousal homicide, overcontrolled-dependent men appear to have been overlooked by prior risk assessments" (Ref. 30, p 298).

Chemical Abuse

Population-based research in England and Wales indicates that 1 in 10 IPH perpetrators has a lifetime primary diagnosis of substance dependence, with 80 percent of these individuals alcohol dependent and 20 percent drug dependent.[6] Campbell and colleagues[7] performed a multisite study examining substance use, not necessarily dependence, and found that 52 percent of male femicide perpetrators were "problem alcohol drinker[s]" and that 65 percent used illicit drugs. Twenty-two percent of the sample of incarcerated IPH perpetrators studied by Stout[20] reported that someone had told them that they had an alcohol problem, and 17 percent had been told they had a drug problem. Rosenbaum[19] found that IPH perpetrators who subsequently committed suicide were less likely to abuse substances than were those who did not commit suicide (17% versus 50%).

Chemical abuse has been temporally linked with nonfatal IPV[32] and is a risk factor for fatal partner violence.[7] However, with the exception of some small samples of IPH perpetrators (such as the pretrial sample referred for psychiatric evaluation that was studied by Barnard and colleagues,[22] who found that nearly 70 percent were under the influence of alcohol at the time of the offense), research suggests that most IPH perpetrators, despite generally high chemical abuse rates, were not under the influence of drugs or alcohol at the time of the homicide. Farooque *et al.*[33] examined 28 cases of IPH from the their case files and found that less than half (43%) of their sample was intoxicated at the time of the offense. These findings approximate those in the study by Stout[20] of a small sample of incarcerated IPH perpetrators, which showed that 48 percent had consumed alcohol around the time of the offense. Two studies have found that approximately one in three male IPH perpetrators were under the influence of chemicals at the time of the offense,[17,23] and Bourget and Gagné[16] reported this figure to be one in six. These findings are generally consistent with data examining the prevalence of intoxication across a variety of violent and nonviolent crimes. Kraanen and Scholing,[34] for example, found that approximately 30 percent of offenders were intoxicated at the time of their offense, with those perpetrating acts of general violence more likely to be intoxicated than those perpetrating IPV (49% versus 25%). Data compiled from all intimate homicides in Massachusetts from

2005 through 2007 provide the lowest estimates, which are inconsistent with the above findings, with only four percent of IPH perpetrators in this sample having been under the influence of alcohol and seven percent under the influence of drugs.[18]

Suicide

Research suggests that the degree of intimacy between homicide perpetrator and victim is positively associated with the perpetrator's risk for subsequent suicide.[35–39] Consistent with this, several well-designed studies have documented suicide rates in IPH perpetrators exceeding 30 percent, but, notably, these extreme rates appear specific to male perpetrators. Bourget *et al.*,[14] in a review of coroners' reports for all spousal homicides in Quebec from 1991 through 1998, found that 40 percent of all IPH perpetrators successfully committed suicide. Perpetrators who used firearms were disproportionately represented among men who committed suicide. In an updated review of Quebec's coroners' files from 1991 through 2010, Bourget and Gagné[16] found that 43 percent of male IPH perpetrators attempted suicide, compared with 14 percent of females. Suicide attempts were highly lethal, with 67 and 80 percent of women and men completing their attempts, respectively.

In his review of all domestic homicides in Albuquerque from 1978 through 1987, Rosenbaum[19] found a 20 percent suicide rate, with similar gender differences: whereas only 1 of 27 female IPH perpetrators committed suicide, 22 of 47 male perpetrators did. An overview of all cases of IPH in Massachusetts from 2005 through 2007 showed that 28 percent of all IPH perpetrators committed suicide within 24 hours of the offense and that all IPH-suicide perpetrators were male.[18] Similarly, in a multisite study, Campbell and colleagues[7] reported that 25 percent of IPH perpetrators attempted suicide. Suicide risk appears to increase when IPH perpetrators have threatened suicide and have been married to the victim at any point.[10]

Rates of unsuccessful suicides following the killing of an intimate partner vary across samples of psychiatric patients, pretrial defendants, and convicted IPH perpetrators. Liem and Koenraadt[21] found in their Dutch forensic psychiatric sample that only 10 percent of the uxoricide suspects attempted suicide, which the authors partially attributed to the high rates of narcissistic pathology in this sample. In their pretrial sample of 213 men charged with domestic homicide, Daniel and Holcomb[17] found that nearly 17 percent attempted suicide, significantly higher than the rate in those charged with nondomestic homicide (10%). Dutton and Kerry[30] found that 33 percent of their sample of incarcerated male IPH perpetrators had attempted suicide following the offense and that this rate increased to 50 percent among men who were estranged from their partners.

History of Domestic Violence

Two distinct conceptualizations of IPH permeate the literature in both explicit and implicit ways. One perspective views IPH as the extreme end of a continuum of domestic violence, generally with the implication that the homicide is the end point of a period of escalating partner violence.[39] Efforts to apply nonfatal IPV typologies to IPH perpetrators reflect this perspective.[40] An alternative view suggests that IPH may best be conceptualized as a qualitatively distinct behavior. Gelles has been a proponent of this perspective, writing: ". . . homicide is not simply an 'extreme form of interpersonal violence' or a form of behavior that, because of its seriousness, provides a valid 'assay' of interpersonal conflict. . . . Rather, homicide is a distinct form of behavior that requires a distinct explanation" (Ref. 41, p 69).

Research examining the role of domestic violence in IPH suggests that neither perspective, independently, is tenable across all cases. Rather, the wide range in prevalence rates of previous partner violence across samples of IPH perpetrators highlights the necessity of a case-by-case analysis to determine its relative fit within each of these models. Estimates of previous domestic violence by male IPH perpetrators vary widely, from approximately 22 to 77 percent (Table 2).[22,43] There are several probable reasons for this range. First, it is likely that IPH perpetrators with a history of domestic violence would be overrepresented in certain settings. For example, Dutton and Kerry[30] reported that two-thirds of the sample of generally personality-disordered incarcerated men convicted of IPH in their study either admitted to prior domestic violence or there was evidence of such incidents in their institutional record. In contrast, Belfrage and Rying[26] found that only 36 percent of the forensic psychiatric patients in their Swedish sample had evidence of prior domestic violence. Even within correctional settings, pretrial defendants may be more likely to minimize previous domestic

Table 2 Histories of Domestic Violence in IPH Perpetrators

Study	Sample	Database	Domestic Violence (%)
Barnard *et al.*[22]	Pretrial defendants charged with IPH *N* = 23	Psychiatric evaluation; perpetrator self-report and records when available	21.7
Stout[20]	Incarcerated IPH perpetrators; *N* = 23	Perpetrator self-report	25
Campbell *et al.*[7]	Female IPH victims *N* = 220	Proxy informants for victim reporting perpetrator arrest	25.6
Bourget *et al.*[8]	Older adult (65+) victims in IPH - suicides *N* = 27	Coroner files	29
Belfrage and Rying[26]	Forensic psychiatric *N* = 164	All materials from police investigation	36
Liem and Koenraadt[21]	Forensic psychiatric *N* = 380	Archival forensic psychiatric evaluations	48
Bourget and Gagné[16]	Female IPH victims *N* = 116*	Coroner files	52.6
McFarlane *et al.*[5]	IPH victims *N* = 141	Proxy informants for victim	67
Dutton and Kerry[30]	Incarcerated and convicted IPH perpetrators *N* = 90	Interview and institutional records	66.7
Campbell[42]	IPH victims *N* = 28	Archival records	68
Moracco *et al.*[43]	Femicide victims *N* = 586	Medical examiner records & law enforcement interviews	76.5

* Of the 234 male perpetrators of IPH, determinations regarding history of domestic violence were available for only 116. Data reported here are based only on cases in which status of prior domestic violence was known.

violence than those already sentenced. This may partially account for the relatively low rates of self-reported domestic violence in the pretrial sample in Barnard *et al.*[22] as opposed, for example, to the convicted sample in Dutton and Kerry.[30] The operationalization of domestic violence is also a likely influence of the observed rates of previous domestic violence. For example, the relatively stringent criteria established by Campbell *et al.*,[7] who asked proxy informants specifically about prior arrests for domestic violence, showed that only 26 percent of IPH perpetrators met the threshold. In contrast, if proxy informants are simply asked about previous domestic violence, not necessarily resulting in arrests, the number rises to 67 percent.[5]

Despite identifying relatively high rates of domestic violence in their sample of incarcerated male IPH perpetrators, Dutton and Kerry[30] highlighted an essential implication of this line of research, in concluding that there appeared to be a distinct type of IPH perpetrator, differentiated in part by the absence of partner violence before the homicide. For these individuals, the homicide appeared to be out of character and is anything but an extension and escalation of an ongoing pattern of partner abuse. Instead, it is an aberration with distinctive psychodynamic features, what Dutton and Kerry[30] describe as a "catathymic crisis" characterized by the three stages of incubation, violent outburst, and relief.[44,45] That multiple samples have consistently identified a subset of IPH perpetrators whose homicide was not preceded by prior domestic violence supports the understanding that this represents a distinct group rather than a methodological artifact.

Separation and Abandonment

Researchers over the past 35 years have consistently found a robust association between separation and IPH.[20,22,30,46–51] Barnard and colleagues,[22] for example, found that 57 percent of male IPH defendants in their small sample had been separated from their partners on the day of the homicide. Further, research suggests that roughly 20 to 30 percent of IPHs are precipitated by separation. Crawford and Gartner[46] concluded that 32 percent of the 896 male-perpetrated IPHs in their Ontario sample were estrangement killings; 26 percent of the Dutch forensic sample of IPH suspects studied by Liem and Koenraadt[21] were deemed to be motivated by fears of abandonment; 20 percent of all partner homicides in Massachusetts from 2005 through 2007 were determined to have been motivated by the termination of the relationship.[18]

Notably, abandonment as a robust risk factor for killing one's partner appears to be relatively unique to male-perpetrated IPH, with consistent gender differences emerging in samples from the United States, Australia, and Canada.[30,51,52] Regarding the temporal association between separation and intimate homicide, approximately 50 percent of male-perpetrated IPHs that occur in the context of estrangement occur within two months of separation,

and approximately 90 percent occur within the first year after separation.[20,50,51,53]

Dutton[47] implicates early attachment traumas in the etiology of abandonment rage in affectively motivated male IPH perpetrators. Drawing from the literature on the neurobiological effects of early trauma—including compromised development of the orbitofrontal cortex, low levels of serotonin, and high levels of norepinephrine—he observed that these consequences of early trauma have also been found to be risk factors for violent behavior. He concluded that early attachment traumas leave an enduring neurobiological mark that establishes "neural networks containing malignant memories [that] may be the neural mechanism by which perceived abandonment generates such symbolic terror and rage" (Ref. 47, p 407).

Stalking

Various typologies of stalkers have been proposed, most of which include a category of those with a previous intimate relationship with the victim.[54–56] Research on the relative risk of these subtypes suggests that ex-intimate stalkers present the highest risk of engaging in fatal and nonfatal violence.[57–61] Although the association between stalking and nonfatal IPV has received considerable attention,[62–66] the role of stalking in fatal partner violence has been relatively under-researched. Preliminary evidence, however, reveals high rates of stalking preceding the killing of an intimate partner. In a large sample of female IPH victims in North Carolina, Moracco and colleagues[43] found that 23 percent had been stalked before the homicide. McFarlane *et al.*,[5] in a 10-city multisite study of female victims of IPH ($n = 141$) and attempted IPH ($n = 65$), found even higher rates; more than three-fourths of the women who were killed or whose partner had attempted to kill them had been stalked by their partners in the past year. However, these authors' definition of stalking did not require multiple instances of stalking behavior, possibly overestimating the true prevalence. The 11-city multisite study by Campbell and colleagues,[7] comparing 220 female IPH victims to 343 female victims of nonfatal IPV, found that stalking emerged as a significant predictor of fatal abuse. McFarlane *et al.*[67] found that women who had been "followed or spied on" in the past 12 months were more than twice as likely to be victims of actual or attempted IPH than were women without these stalking experiences.

History of General Violence

Approximately one-fourth to one-half of all IPH perpetrators have been arrested for a previous violent crime. Campbell and colleagues[7] found that 22 percent of IPH perpetrators had a previous arrest for a violent crime, a rate twice that in perpetrators of nonfatal partner violence. More than one in four (27%) uxoricide suspects in the Dutch forensic psychiatric sample in Liem and Koenraadt[21] had been convicted of a violent offense. In a multisite study of IPH perpetrators, Koziol-McLain and colleagues[10] found that, among those who did not commit suicide, 23 percent had been arrested for a violent crime. This figure decreased slightly (17%) among IPH-suicide perpetrators. Forty-one percent of the pretrial sample of accused IPH perpetrators reported by Daniel and Holcomb[17] had been charged with a crime against a person, and fully 45 percent of all IPH perpetrators in Massachusetts from 2005 through 2007 had been charged with a violent crime.[18]

Associated Deaths

There is at least one additional associated death in nearly 40 percent of male-perpetrated IPHs. Bourget and Gagné[16] found that 61 percent of such incidents in Quebec resulted in a single death, 32 percent included one additional death (usually suicide; less frequently, the homicide of a biological child; but in one instance, a stepchild), 4 percent resulted in three associated deaths, and 3 percent in four associated deaths; in one case, there were 7 associated deaths. Ten percent of a sample of incarcerated male IPH perpetrators studied by Dutton and Kerry[30] had killed at least one other person in addition to their partners. In contrast to the data in Bourget and Gagné,[16] suggesting that biological children are the most common third-party victims, Dutton and Kerry found that the female victim's current partner was the most common associated death.[30] Liem and Koenraadt,[21] in their Dutch sample comparing perpetrators of uxoricide, filicide, and familicide distinguished those who engaged in IPH only versus those who killed multiple family members and found that those who killed multiple family members were more likely than single-victim IPH perpetrators to be married, to have a personality disorder, and to attempt

suicide after the killings. In contrast, single-victim IPH perpetrators were more likely to have committed a previous violent offense.

Jealousy and Envy

Jealousy is a frequently cited motive for IPH.[3,7,10,23,26] Belfrage and Rying,[26] for example, reported that 20 percent of police files specified jealousy as a motive. Campbell and colleagues[7] found jealousy to be an even more common motive in their population-based study, concluding that 39 percent of IPH perpetrators were triggered by jealousy. These studies, like many in the IPH literature, are limited by a lack of definitional clarity and leave open the possibility that both jealousy and related affects are common in IPH.

Despite the frequency with which jealousy appears in the literature, the related construct of envy has received minimal attention. It is likely that both jealousy and envy are present in many cases of IPH, probably to varying degrees, and that these dynamically distinct motivations are frequently confounded. A sound conceptual model would allow for a better understanding of these mental states as they relate to acts of partner homicide. In a description by Richards[68] of the "anatomy of envy," for example, he distinguishes envy and jealousy along the three dimensions of possession, possibility, and rivalry. Whereas jealousy is based on a fear of losing the good object to a real or imagined other who threatens to take it away, envy is distinct as a feeling toward others who already possess the good object. Further, jealousy entails the possibility of retaining the good object that the individual currently possesses, whereas envy reflects recognition of the impossibility of obtaining it. The conceptualization of envy set forth by Klein[69] shifts the focus of the envious person from the other who possesses the good object to a destructive impulse directed toward the good object itself.[70] That is, the impossibility of obtaining the good object characteristic of envy results in the urge to destroy the good object itself. Elaborating on Klein's distinction between envy and greed, Mitchell and Black wrote:

> The infant's greed is not destructive in its intentions toward the breast, but deeply resentful of receiving its precious bounty only in drips and drops. . . . Envy is a different response to the same situation. The envious infant no longer wants to gain access to and possess the good, but now becomes intent on spoiling it. . . . The infant would rather destroy the good than remain helplessly dependent on it. The very existence of goodness arouses intolerable envy, the only escape from which is the fantasied destruction of the goodness itself. . . . Thus, envy undoes splitting, crosses the divide separating good from bad, and contaminates the purest sources of love and refuge. Envy destroys hope [Ref. 71, p 100].

Efforts to better understand the motivations of male IPH perpetrators would benefit from conceptual clarification, such as that provided by the differentiation drawn by Richards[68] between envy and jealousy along the dimensions of possession, possibility, and rivalry, along with the emphasis by Klein[69] on envy as distinct in its destruction of the good, as opposed to a bad or devalued object. The common sentiment of male IPH perpetrators that "if I can't have you, no one can,"[42] reflects the absence of possession and possibility along with the destructive desire to spoil the good object pathognomonic of envy. Further, the recognition by Stout[20] that "the perpetrators of intimate femicide need to seek help to more fully understand the lethal violence they used against a partner they almost unanimously claimed to still love" (Ref. 20, p 93) captures the destruction of the good object unique to envy.

Proposed Typology of Male IPH Perpetrators

Research on male IPH perpetrators over the past four decades, drawn from multiple settings and derived from diverse methodologies, highlights the heterogeneity among these violent perpetrators. For example, throughout the IPH literature, previous domestic violence has been found to be relatively common[43] or rare,[22] severe psychopathology has been found to be normative[16] or minimal,[6] and male IPH perpetrators have been found to be generally antisocial and predatory[19] or overcontrolled and reactive.[30] That these findings all provide likely accurate descriptions of certain perpetrators in certain contexts highlights the need for intentional integration of these findings in developing a typology that can assist with the recognition and categorization of distinct types of men who kill their partners.

Table 3 outlines a proposed typology of four subtypes of male IPH perpetrators suggested by the literature, including the mentally ill, the undercontrolled/dysregulated, the chronic batterer, and the overcontrolled/catathymic subtypes. Mentally ill perpetrators tend to share the fewest features in common with the other subtypes. They carry diagnoses of severe mood or psychotic disorders, often exhibit

Table 3 Proposed Typology of Male IPH Perpetrators

	Mentally Ill	Undercontrolled/Dysregulated	Chronic Batterer	Overcontrolled/Catathymic
Demographics	Older than most IPH perpetrators	Mid to late 30s	Younger than most IPH perpetrators	Mid to late 30s
Preoffense functioning	Functioning declines as chronicity of mental illness increases	Variable	Variable	High level of outward functioning
Psychopathology	History of mental illness; psychotic or depressed at time of offense	Mood and anxiety diagnoses possible	Minimal Axis I psychopathology	Minimal Axis I psychopathology
Personality disorder	No Axis II diagnoses likely	Borderline personality	Antisocial, sadistic, and narcissistic personality	Dependent and schizoid personality
Previous intimate partner violence	Unlikely	Affective and episodic	Instrumental, persistent, and severe	Unlikely; catathymic when present
Previous general violence	Moderately likely	Moderately likely	Highly likely	Less likely
Substance abuse	Less likely	Highly likely	Highly likely	Unlikely
Suicide	Less likely with psychosis than depression	Moderately likely	Less likely; risk increases when abandonment present	Moderately likely
Associated deaths	Additional family members	Less likely; family or victim's current partner when occurs	Unlikely to kill additional family members Victim's new partner most likely victim	Unlikely Other family members when occurs
Abandonment	Less likely	Likely	Likely	Less likely; engulfment possible
Jealousy/envy	Unlikely	Jealousy	Envy or jealousy	Envy

symptoms of severe mental illness at the time of the offense, tend to be older than typical male IPH perpetrators, and often have minimal histories of general or IPV or histories of substance abuse preceding the homicide. The relational and motivational features of abandonment, jealousy, and envy, frequently observed among the other subtypes, are less prominent, if present at all, in the severely mentally ill perpetrator. Associated deaths in the IPHs perpetrated by these individuals often involve additional family members. Whereas the undercontrolled/dysregulated subtype of male IPH perpetrators may also carry a diagnosis of a mood or anxiety disorder, they tend to exhibit less acute psychopathology. Instead, the concomitants of severe borderline personality disorder are most prominent in these individuals, including severe mood dysregulation, episodic and affective violence directed toward both intimate partners and others, and prominent fears of abandonment and jealousy. Previous substance abuse is likely, and these individuals pose a moderate risk of suicide attempts after the homicide.

Chronic batterers, in contrast, evidence less affective dysregulation, often carrying diagnoses of antisocial, sadistic, or narcissistic personality disorder in the absence of severe Axis I psychopathology. In contrast to the affective and episodic violence of the undercontrolled/dysregulated subtype, chronic batterers tend to use violence persistently, against both their intimate partners and others, in a severe and instrumental fashion. Abandonment is a common precipitant of IPH in these individuals, and when abandonment is present, their risk for suicide increases. When there are associated deaths, chronic batterers are most likely to kill the victim's current partner. Finally, overcontrolled/catathymic male IPH perpetrators are likely to evidence the highest level of overt prehomicide functioning. They are likely to be employed, they tend to have minimal Axis I psychopathology, and they carry diagnoses of dependent or schizoid personality disorder. Their violence histories are minimal, and previous violence that has occurred tends to have been triggered by catathymic crises. In contrast to abandonment as a trigger, overcontrolled/catathymic IPH perpetrators are more likely to experience fears of engulfment.[72] Envy, as opposed to jealousy, is likely to be present in these individuals.

Forensic Implications

The proposed typology has potential forensic implications related to risk assessment, risk management, and adjudicative outcomes. First, regarding risk assessment, the heterogeneity observed across male IPH perpetrators poses a challenge in identifying these individuals before they commit their offenses. The available literature does not support the existence of a unitary profile, but has begun to identify salient risk factors across multiple samples and has led to the preliminary development of measures to evaluate the risk of IPH.[73] However, the lack of prospective research, coupled with a lack of psychometric support, limits the clinical utility of these measures at this point. Further, the observation by Dutton and Kerry[30] that schizoid, dependent, and passive-aggressive male IPH perpetrators are frequently overlooked should alert us to the need to expand our heuristics as risk assessment tools are developed and refined.

Second, related to risk management, Meloy[74] provided a relevant description of the forensic implications of differentiating affective from predatory modes of violence. In brief, he suggested that individuals who appear identical on actuarial risk assessment measures are likely to pose varying levels of risk for future violence, depending on whether their violence is predominantly affective or predatory. He suggests that because of the greater likelihood of treatment nonresponse and noncompliance in those who perpetrate predatory violence and who are often psychopathic personalities, these individuals present a greater risk of future violence and require distinct risk management strategies. In the proposed typology of male IPH perpetrators, chronic batterers who have antisocial, sadistic, and narcissistic personalities are most likely to perpetrate predatory violence and to show less positive responses to treatment, whereas psychiatric stabilization in the severely mentally ill subtype would be expected to reduce the risk of IPH.

Finally, given that male IPH perpetrators are, as a group, more psychiatrically impaired than those who kill nonintimate partners, it would be expected that state of mind at the time of the offense would be a salient legal consideration in some IPH cases. Although questions regarding criminal responsibility would most likely be expected to arise among those in the mentally ill subtype, severe catathymic crises may also pose impairment of some male IPH perpetrators' culpability. Although the available literature cannot directly address the legal consequences typically faced by different types of male IPH perpetrators, there appears to be significant variation in the planning and mental state at the time of the offense, as well as the charges these individuals face. For example, there was evidence of premeditation and planning in 13 percent of the sample of convicted male IPH perpetrators in the study by Dutton and Kerry,[30] whereas 87 percent of these cases were described as reactive and unplanned. Bourget and Gagné[16] were able to determine intent for nearly half of their sample and found that 61.8 percent had intent to commit spousal homicide, 8.2 percent had psychotic intent, and 21.8 percent had no intent. Psychiatric evaluations of the alleged male IPH perpetrators in the sample studied by Barnard and colleagues[22] determined that nearly all (96%) of the defendants were competent to stand trial, and 17 percent were not criminally responsible. However, fewer than 10% were eventually adjudicated not guilty by reason of insanity (NGRI). Only 1 of 47 IPH perpetrators in Massachusetts from 2005 through 2007 was committed to the state hospital for "one day to life" (Ref. 18, p 14), presumably having been found not responsible. Although tentative at this point, the extent to which male IPH perpetrators fit the prototypical descriptions found in the proposed typology would be expected to be associated with the perpetrator's perceived culpability and legal disposition.

Summary and Conclusion

The present paper is a review of the existing literature on male perpetrators of IPH. In synthesizing a range of historical, individual, and situational factors with demographic features, psychopathology, personality pathology, and general and IPV histories, two conclusions can be drawn: there is substantial support for heterogeneity in male IPH perpetrators, and there appear to be several relatively distinct subtypes of male IPH perpetrators. A proposed typology is offered that describes four subtypes of male IPH perpetrators: mentally ill, undercontrolled/dysregulated, chronic batterer, and overcontrolled/catathymic subtypes. These subtypes have potential implications for risk assessment and risk management and are potentially relevant to mental state at the time of the offense. Future research involving large groups derived from population-based and clinical forensic

samples are needed to examine the four-factor structure proposed. Research is also warranted to examine the relative risk and treatment response presented by members of these groups to provide an empirical foundation that can support the clinical utility of this model. It is expected that the identification of relatively distinct types of men who perpetrate IPH will advance efforts to identify, classify, and optimally manage the risk presented by these individuals.

References

1. Stockl H, Devries K, Rotstein A, *et al*: The global prevalence of intimate partner homicide: a systematic review. Lancet 382:859–65, 2013
2. Showalter CR, Bonnie RJ, Roddy V: The spousal-homicide syndrome. Int'l J L & Psychiatry 3:117–41, 1980
3. Aldridge ML, Browne KD: Perpetrators of spousal homicide: a review. Trauma Violence Abuse 4:265–76, 2003
4. Grann M, Wedin I: Risk factors for recidivism among spousal assault and spousal homicide offenders. Psychol Crime Law 8:5–23, 2002
5. McFarlane JM, Campbell JC, *et al*: Stalking and intimate partner femicide. Homicide Stud 3:300–16, 1999
6. Oram S, Flynn SM, Shaw J, *et al*: Mental illness and domestic homicide: a population-based descriptive study. Psychiatr Serv 64:1006–11, 2013
7. Campbell JC, Webster D, Koziol-McLain J, *et al*: Risk factors for femicide in abusive relationships: results from a multisite case control study. Am J Public Health 93:1089–97, 2003
8. Bourget D, Gagné P, Whitehurst L: Domestic homicide and homicide-suicide: the older offender. J Am Acad Psychiatry Law 38:305–11, 2010
9. Cohen D, Llorente M, Eisdorfer, C: Homicide-suicide in older persons. Am J Psychiatry 155:390–6, 1998
10. Koziol-McLain J, Webster D, McFarlane J, *et al*: Risk factors for femicide-suicide in abusive relationships: results from a multisite case control study. Violence Vict 21:3–21, 2006
11. Dixon L, Browne K: The heterogeneity of spouse abuse: a review. Aggress Violent Behav 8:107–30, 2003
12. Holtzworth-Munroe A, Stuart GL: Typologies of male batterers: three subtypes and the differences among them. Psychol Bull 116: 476–97, 1994
13. Carcach C, James M: Homicide between intimate partners in Australia. Trends Issues Crime Crim Just 90:1–6, 1998
14. Bourget D, Gagné P, Moamai J: Spousal homicide and suicide in Quebec. J Am Acad Psychiatry Law 28:179–82, 2000
15. Federal Bureau of Investigation: Uniform crime reports. Washington, DC: Department of Justice; 2008–2012
16. Bourget D, Gagné P: Women who kill their mates. Behav Sci & L 30:598–614, 2012
17. Daniel AE, Holcomb WR: A comparison between men charged with domestic and nondomestic homicide. Bull Am Acad Psychiatry Law 13:233–41, 1985
18. Massachusetts Executive Office of Public Safety and Security: Massachusetts intimate partner homicide review: an overview of district attorney cases between 2005–2007. Boston, MA: Office of Public Safety and Security; 2009
19. Rosenbaum M: The role of depression in couples involved in murder-suicide and homicide. Am J Psychiatty 147:1036–9, 1990
20. Stout K: Intimate femicide: a study of men who have killed their mates. J Offender Rehabil 19:81–94, 1993
21. Liem M, Koenraadt F: Familicide: A comparison with spousal and child homicide by mentally disordered perpetrators. Crim Behav & Mental Health 18:306–18, 2008
22. Barnard GW, Vera H, Vera MI, *et al*: Till death do us part: a study of spouse murder. Bull Am Acad Psychiatry Law 10:271–80, 1982
23. Goetting A: Patterns of marital homicide: a comparison of husbands and wives. J Comp Fam Stud 20:341–54, 1989
24. Haapasalo J, Petäjä S: Mothers who killed or attempted to kill their child: life circumstances, childhood abuse and types of killing. Violence Vict 14:219–39, 1999
25. McGrath P: Maternal filicide in Broadmoor hospital 1919–1969. J Forensic Psychiatr 2:271–97, 1992
26. Belfrage H, Rying M: Characteristics of spousal homicide perpetrators: study of all cases of spousal homicide in Sweden 1990–1999. Crim Behav & Mental Health 14:121–33, 2004
27. Hathaway SR, McKinley JC: The Minnesota Multiphasic Personality Inventory. Minneapolis, MN: University of Minnesota Press, 1943
28. Millon T: Manual for the MCMI. 2nd ed. Minneapolis, MN: National Computer Systems, 1987
29. Kalichman SC: MMPI profiles of women and men convicted of domestic homicide. J Clin Psychol 44:847–53, 1988
30. Dutton DG, Kerry G: Modus operandi and personality disorder in incarcerated spousal killers. Int'l J L & Psychiatry 22:287–99, 1999
31. Megargee EI: Undercontrolled and overcontrolled personality types in extreme anti-social aggression. Psychol Monogr 80:611–17, 1966
32. Moore TM, Elkins SR, McNulty J, *et al*: Alcohol use and intimate partner violence perpetration among college students: assessing the temporal association using electronic diary technology. Psychol Viol 1:315–28, 2011
33. Farooque RS, Stout RG, Ernst FA: Heterosexual intimate partner homicide: review of ten years of clinical experience. J Forensic Sci 50:648–51, 2005
34. Kraanen FL, Scholing A: Substance use disorders in forensic psychiatry: differences among different types of offenders. Int'l J Offender Ther & Comp Criminology 56:1201–19, 2012
35. Aderibigbe YA: Violence in America: a survey of suicide linked to homicides. J Forensic Sci 42:662–5, 1997
36. Barraclough B, Harris EC: Suicide preceded by murder: The epidemiology of homicide-suicide in England and Wales 1988–92. Psychol Med 32:577–84, 2002
37. Buteau J, Lesage AD, Kiely MC: Homicide followed by suicide: a Quebec case series, 1988–1990. Can J Psychiat 38:552–6, 1993
38. Gillespie M, Hearn V, Silverman RA: Suicide following homicide in Canada. Homicide Stud 2:46–63, 1998
39. Daly M, Wilson M: Homicide. New York: Aldine de Gruyter, 1988
40. Dixon L, Hamilton-Giachritsis C, Browne K: Classifying partner femicide. J Interpers Violence 23:74–93, 2008
41. Gelles RJ: Physical violence, child abuse, and child homicide: a continuum of violence, or distinct behaviors? Hum Nat 2:59–72, 1991
42. Campbell JC: "If I can't have you, no one can": power and control in homicides of female partners, in Femicide: The Politics of Woman Killing. Edited by Radford J, Russel DEH. New York: Twayne Publishers; 1992, pp 99–113
43. Moracco K, Runyan CW, Butts JD: Femicide in North Carolina, 1991–1993: a statewide study of patterns and precursors. Homicide Stud 2:422–46, 1998
44. Revitch E, Schlesinger LB: The Psychopathology of Homicide. Springfield, IL: Charles C. Thomas, 1981

45. Wertham F: The catathymic crisis. Arch Neurol Psychiatry 37: 974–8, 1937
46. Crawford M, Gartner R: Woman killing: intimate femicide in Ontario 1974–1990. Ontario: Woman's Directorate: Ministry of Community and Social Services; 1992
47. Dutton DG: The neurobiology of abandonment homicide. Aggress Violent Behav 7:407–21, 2002
48. Johnson H, Hotton T: Losing control: Homicide risk in estranged and intact intimate relationships. Homicide Stud 7:58–84, 2003
49. Simon RI: Type A, AB, B murders: their relationship to the victims and the criminal justice system. Bull Am Acad Psychiatry Law 5:344–362, 1978
50. Wallace A: Homicide: The Social Reality. Sydney, Australia: New South Wales Bureau of Crime and Statistics; 1986
51. Wilson M, Daly M: Spousal homicide risk and estrangement. Violence Vict 8:3–16, 1993
52. Brown A, Williams KR, Dutton DG: Homicide between intimate partners: a 20-year review, in Homicide: A Sourcebook of Social Research. Edited by Smith MD, Zahn MA. Thousand Oaks, CA: Sage; 1999: 149–64
53. Serran G, Firestone P: Intimate partner homicide: a review of the male proprietariness and the self-defense theories. Aggress Violent Behav 9:1–15, 2004
54. Mohandie K, Meloy JR, McGowan MG,: The RECON typology of stalking: reliability and validity based upon a large sample of North American stalkers. J Forensic Sci 51:147–55, 2006
55. Mullen PE, Pathe M, Purcell R, Stuart GW: Study of stalkers. Am J Psychiat 156:1244–9, 1999
56. Zona MA, Sharma K, Lane JC: A comparative study of erotomanic and obsessional subjects in a forensic sample. J Forensic Sci 38:894–903, 1993
57. McEwan TE, Mullen PE, MacKenzie RD: Violence in stalking situations. Psychol Med 39:1469–78, 2009
58. Palarea RE, Zona MA, Lane JC, *et al*: The dangerous nature of intimate relationship stalking: threats, violence, and associated risk factors. Behav Sci & L 17:269–83, 1999
59. Meloy JR: Stalking (obsessional following): a review of some preliminary studies. Aggress Violent Behav 1:147–62, 1996
60. Meloy JR: The Psychology of Stalking: Clinical and Forensic Perspectives. San Diego, CA: Academic Press 1998
61. Rosenfeld B, Harmon R: Factors associated with violence in stalking and obsessional harassment cases. Crim Just & Behav 29:671–91, 2002
62. Douglas KS, Dutton DG: Assessing the link between stalking and domestic violence. Aggress Violent Behav 6:519–46, 2001
63. Hotton T: Spousal violence after separation. Juristat 21:1–19, 2001
64. Mechanic MB, Weaver TL, Resnick PA: Intimate partner violence and stalking behavior: exploration of patterns and correlates in a sample of acutely battered women. Violence Vict 15:55–72, 2000
65. Mechanic MB, Uhlmansiek MH, Weaver TL, *et al*: The impact of severe stalking experienced by acutely battered women. Violence Vict 15:443–58, 2000
66. Tjaden P, Thoennes N: Stalking in America: Findings from the National Violence Against Women Survey. Washington, DC: U.S. Department of Justice, 1998
67. McFarlane J, Campbell JC, Watson K: Intimate partner stalking and femicide: urgent implications for women's safety. Behav Sci & L 20:51–68, 2002
68. Richards B: The anatomy of envy. Psychoanal Stud 2:65–76, 2000
69. Klein, M: Envy and gratitude, in Envy and Gratitude and Other Works. New York: Delacorte, 1993/1957, pp 176–235
70. Debbane E: Envy and its relation to destructiveness. Can J Psychoanal 19:108–24, 2011
71. Mitchell SA, Black MJ: Freud and Beyond: A History of Modern Psychoanalytic Thought. New York: Basic Books, 1995
72. Kivisto AJ: Abandonment and engulfment: a bimodal classification of anxiety in domestic violence perpetrators. Aggress Violent Behav 19:200–6, 2014
73. Campbell JC: Assessing Dangerousness: Violence by Sexual Offenders, Batterers and Child Abusers. Newbury Park, CA: Sage, 1995
74. Meloy JR: Empirical basis and forensic application of affective and predatory violence. Aust NZ J Psychiatry 40:539–47, 2006