A Comparison of Domestic and Non-Domestic Homicides: Further Evidence for Distinct Dynamics and Heterogeneity of Domestic Homicide Perpetrators

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Abstract To facilitate a deeper understanding of domestic homicide (DH), the correctional files of 37 male DH perpetrators were examined. Victim, perpetrator and offense characteristics were compared against those from 78 non-domestic homicide perpetrator files to elucidate distinct dynamics. Risk factors preceding DHs were identified retrospectively using the revised Danger Assessment (DA; Campbell et al. 2009), and the role of psychopathy was explored via the Psychopathy Checklist-Revised (Hare 2003). DHs exhibited distinctive dynamics, especially in terms of perpetrators' predominant drives to inflict harm out of proprietary revenge. Most DHs did not occur "out of the blue", as 82.9 % of cases showed elements of planning; and 86.5 % were identified as a homicide risk according to the revised DA. Psychopathic DH perpetrators were less likely to act suicidal prior to homicides and more likely to kill in a dispassionate, premeditated and gratuitously violent manner. The findings underscore the importance of coordinated community responses.

Keywords Domestic homicide · Domestic violence · Male perpetrators · Crime characteristics · Risk assessment · Danger assessment · Psychopathy

In Canada, between 2000 and 2009, there were over 1,500 family-related homicides, with almost half of these homicides identified as spousal homicides and women continually being more likely than men to be the victims (Statistics Canada 2011). In the United States, during the period from 2000 to 2004, it has been estimated there were approximately 1,400 to 1,750 intimate partner femicides annually (Campbell et al. 2009). Much has been learned about domestic homicide (DH); and there has been remarkable progress over the past few decades in the response to domestic violence (DV) from the public and social service, health care and criminal justice systems (Campbell 2005). However, it is still not uncommon for DHs to be portrayed as inexplicable phenomena. Media outlets, for example, are known to have presented puzzled reactions to these violent acts. When speaking of the male perpetrators, shocked and confused neighbors may be reported saying: "They seemed to be nice" (Ryan et al. 2006, p. 215).

However, research indicates that a sizable number of DHs display predictable patterns and precursors, and many DV experts believe these homicides are potentially preventable (Websdale 2003). Male control/proprietariness has been identified as a dominant theme in femicides with jealousy, the woman leaving, and the woman having a new relationship identified as important triggers (e.g., Campbell et al. 2003; Wilson and Daly 1993). Formal or informal child custody/access disputes also have been identified as a variable of interest in this regard (Ontario Domestic Violence Death Review Committee [DVDRC] 2005). In fact, whether or not the victim is a man or a woman, research has shown that the number-one risk factor for DH is a history of DV against the woman (Campbell et al. 2007).

Although much has been learned about DH, relatively little of what has been learned has come from examinations of male perpetrators. Surprisingly, studies of DH generally have not involved examinations of correctional files, psychological assessments or interviews of male perpetrators. For example, a review of 35 major intimate partner homicide studies

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conducted over nearly 50 years indicated that only two studies sampled data from male perpetrators and only one of these two studies included interviews (Campbell et al. 2007). To facilitate a deeper understanding of the lethal danger some men pose to women, children, themselves and others, we examined the criminal profile and psychological assessment reports (including interview data) in the institutional files of male DH perpetrators. Victim, perpetrator and offense characteristics were compared against those from non-domestic homicide (NDH) perpetrator files to elucidate distinct dynamics. In addition to addressing the gap in research on DH perpetrators, it was important to compare DHs to NDHs because the literature indicates conflicting views. More specifically, some researchers have argued that DHs have different dynamics (i.e., nature, etiology, etc.) from other homicides (see, for example, Campbell et al. 2007), and other researchers have argued that DHs are not associated with special dynamics (see, for example, Felson and Lane 2010; Felson and Messner 1998). Some of those who have made the latter argument (e.g., Felson and Messner 1998) have even questioned whether specialization in the study of intimate partner homicide is necessary.

On another note, there has been increasing recognition that DV perpetrators are not a homogenous group. One of the most well-known typologies of DV perpetrators described a subgroup of generally violent/antisocial batterers who, engage in moderate to severe DV (including psychological and sexual abuse), engage in the most aggression outside of the family, and who have the most extensive criminal histories (Holtzworth-Munroe and Stuart 1994). These batterers were also described as having problems with substance abuse. There has been some empirical support surrounding such subtypes of DV perpetrators, and it has been hypothesized that a subset of these generally violent/antisocial batterers may be psychopaths.

Psychopathy refers to a particular cluster of deviant traits and behaviours (Hare 2003). On the affective level, psychopaths lack empathy, guilt and remorse; display shallow and labile emotions; and are short-tempered and unable to form strong emotional bonds (Hare 2006). Interpersonally, they are superficially charming, grandiose, arrogant, callous, deceptive, manipulative, and dominant (Hare and Neumann 2009). These interpersonal/affective features are associated with a socially deviant (but not necessarily criminal) lifestyle characterized by irresponsible behaviour and a tendency to violate or ignore social norms (Hare 2006). Psychopathy is characteristic of an individual's long-term functioning (Hare 2003); and these traits may help explain why psychopaths are disproportionately represented in the criminal justice system, and why they are easily able to victimize others and use violence and abuse to obtain power and control (Hare and Neumann 2009).

Psychopathy has been found to be a significantly robust risk factor for violence, for institutional problems, and for recidivism (Leistico et al. 2008). Psychopaths generally see little wrong with their actions, appear to experience little distress, and typically seek out treatment only when it is in their best interest (e.g., for parole or probation purposes) (Hare and Neumann 2009). More importantly, psychopathy has been shown to be a strong predictor of persistent and severe violent recidivism against female intimate partners, earning its place on risk assessment tools such as the Domestic Violence Risk Appraisal Guide (Hilton et al. 2008) and the Spousal Assault Risk Assessment Guide (Kropp et al. 1999). However, there is a paucity of research examining the potential harm that psychopaths may cause intimate partners and their children, especially research utilizing comprehensive assessments of psychopathy such as the Psychopathy Checklist-Revised (Hare 2003). Thus, another objective of the current study was to examine the role of psychopathy in the commission of DHs.[1]

In the current exploratory study, DHs were defined in a manner consistent with Domestic Violence Death (Fatality) Review Committees (DVDRCs), interdisciplinary teams of DV experts dedicated to understanding how and why DHs occur through a detailed examination of individuals cases (see Jaffe and Juodis 2008; Websdale 2003). Briefly, DVDRCs rely on the benefit of hindsight to recommend what could have been done in their communities to prevent each fatality with the hope that implementation of these recommendations will prevent similar deaths in the future. These committees typically define DH as a homicide involving the death of a person by a current or former partner from an intimate relationship including dating, common-law and marital relationships. Like some DVDRCs (e.g., Ontario Domestic Violence Death Review Committee; Ontario DVDRC 2004, 2005, 2006), in our definition we also included homicides involving the death of a person in an incident connected to DV such as children, women's new partners, family members, friends and third-party interveners (all other homicides were considered NDHs). The DVDRCs generally use multiagency data and interviews with families, friends and others to document, analyze and report on the histories of the victims, perpetrators, their relationships and families.

Many teams track risk factors associated with DHs in each case to assist with enhancing the predictability of these deaths. They usually examine interventions that took place prior to the deaths; consider changes in prevention and intervention systems that would ameliorate gaps in service delivery; and

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[1] We are not attempting to "psychologize" violence against women and children (see Ryan et al. 2006, p. 212) or excuse the actions of psychopaths who harm women and children. We believe these psychopaths were criminally responsible for their actions, that they understood the difference between right and wrong at the time of the offense, and that they should not be treated more leniently than other perpetrators. We believe these psychopaths readily adopted attitudes and behaviours that supported violence against women and children.

develop recommendations for coordinated community plans that are disseminated annually to increase public, professional and policymaker understanding of DH and DV. Some communities highlight the findings of their DVDRCs as rationales for new practices or legislation. For example, a large-scale public awareness campaign to educate family, friends and neighbours about DHs was launched in Ontario, Canada, in light of their DVDRC's finding that common lethality risk factors were misinterpreted or overlooked in many cases (Ontario DVDRC 2005). The DVDRCs operate under the philosophy that the perpetrators are ultimately responsible for the deaths; however, because many DH perpetrators are either incarcerated for their crimes or deceased as a result of suicide following their offenses, DVDRCs rarely have access to perpetrators to inform their work, further underscoring the importance of the current study.

Comparing Domestic and Non-Domestic Homicides

Again, to facilitate a deeper understanding of the lethal danger some men pose to women, children, themselves and others, we examined the criminal profile and psychological assessment reports (including interview data) in the institutional files of 37 male DH perpetrators from two Canadian federal prisons. Victim, perpetrator and offense characteristics were compared against those from 78 non-domestic homicide (NDH) perpetrator files to elucidate distinct dynamics. We expected victim characteristics (e.g., gender, age, developmental level and relationships to the perpetrators) to differ among DHs and NDHs on account of how the two groups were defined. However, we still captured and reported this data to emphasize the lives that were lost.

Perpetrator characteristics that were compared included the age of the perpetrator at the time of the homicide, and status concerning psychopathy according to the Psychopathy Checklist-Revised (Hare 2003). Perpetrator age plays a role in accounting for when, developmentally, an individual is likely to take risks and behave aggressively (Wilson and Daly 1985). If the contention that DHs and NDHs do not have distinct dynamics is true, then significant differences in perpetrator age at the time of the offense and psychopathy status should not be observed between the two groups.

Furthermore if the argument that DHs and NDHs do not have distinct dynamics is true, then significant differences between the groups also should not be observed with respect to the nature of the homicidal violence. Offense characteristics of interest included involvement of accomplices, given the potential role of antisocial peers in the commission of serious violent crimes (Andrews and Bonta 2003). Perpetrator use of alcohol or drugs in the commission of the offense was examined, given that substance use problems are a risk factor for DV in particular and violence in general (Harris et al. 1993;

Hilton et al. 2008; Kropp et al. 1999). We also compared the extent to which the homicides were reactive, instrumental or contained both elements (Cornell et al. 1996). Examining this data further allowed us to test the popular notion that DHs are "spontaneous crimes of passion", which some past research suggests is inaccurate (Dawson 2005). An examination of reactive and instrumental violence necessitated an examination of perpetrator motive for the homicide (e.g., money, revenge, etc.).

Other offense characteristics that were compared included: level of gratuitous violence, evidence of sadistic violence, evidence of a sexual component to the homicide, and the cause of death. Although "overkill" is considered to be more characteristic of DHs committed by men than DHs committed by women (Campbell 1992), it is not known whether such gratuitous violence is more characteristic of DHs or NDHs committed by male perpetrators. Related but not necessarily synonymous with gratuitous violence is sadistic violence—deriving pleasure or enjoyment from engaging in violence (and not necessarily limited to engaging in sexual violence in the current study). Because of the centrality of sexual deviance in explanations of sexual aggression (Quinsey et al. 2006), we examined whether sexual activity with the victims occurred immediately before, during, or after the homicides. If sexual components to the offenses are found to differ between the two groups, then different dynamics between DHs and NDHs are further implicated.

Comparing DHs and NDHs in this manner effectively answers two questions: (1) Are DH and NDH perpetrators the *same people* (i.e., with respect to age and psychopathy)? and (2) Do DHs and NDHs share the *same correlates* (i.e., with respect to offense characteristics)? Moffitt et al. (2000) have argued that both lines of questioning are necessary when comparing intimate and non-intimate partner violence. That is, even if it were found that DH and NDH perpetrators shared the same characteristics, it would not rule out the possibility that their two forms of behaviour have different causal origins. Similarly, even if it were found that DH and NDH perpetrators did not share the same characteristics, it would not rule out the possibility that DHs and NDHs have the same causes.

A Closer Examination of Domestic Homicides

Are Domestic Homicides Potentially Preventable Crimes? We examined the extent to which the above-mentioned themes and triggers applied in the 37 DH cases (i.e., male control/proprietariness, jealousy, the woman leaving, the woman having a new relationship, and formal or informal child custody/access disputes). Lethality risk factors preceding DHs were identified retrospectively using the revised Danger Assessment (DA; Campbell et al. 2009), a tool specifically designed for assessing risk of femicide that

includes some of these themes and triggers in its item content. Examining risk of femicide via the revised DA allowed us to further test popular portrayals of DHs as "random unpredictable acts" (Ryan et al. 2006, p. 215) or murders that seem to come "out of the blue" when the perpetrators appear to have no known history of violence or criminality (Dobash et al. 2009, p. 194).

Psychopathy in the Context of Domestic Homicide We sought to explore whether DHs committed by men with significant psychopathic traits, as measured by the PCL-R (Hare 2003), differed from DHs committed by other men on all of the above-mentioned variables. Also, it has been postulated that some risk assessment scales, such as the DA, better predict the type of personalities that terrorize women (e.g., psychopathic), and not the men most likely to actually kill their current or former partners (Dutton and Kerry 1999). Such speculations further necessitate investigations of psychopathy in the context of DH. If this speculation is true, then revised DA scores, as well as the presence of individual DA items, should be positively and significantly correlated with PCL-R scores.

Method

Sample

This study was based on file review and was conducted in compliance with Internal Review Boards at both academic and correctional institute levels. The sample was a convenience sample of 115 male perpetrators convicted of homicide and incarcerated in one of two medium-security Canadian federal correctional facilities in separate provinces. The sample comprised 78.7 % of homicide perpetrators (for whom adequate file information was available) from the two institutions. The perpetrators' convictions included first degree murder, second degree murder, and manslaughter. The mean age of the perpetrators at the time of homicide commission was 29.86 years (SD=9.35). The victims were female (57.4 % of cases), male (38.3 % of cases) or both females and males (4.3 % of cases). The mean age of the victims (based on 65 victims for whom there was a specific age documented) was 31.51 years (SD=20.83; range=3–92). The developmental levels of the victims (based on 93 victims for whom this information was documented) included 8 children (8.6 %; 0–12 years), 15 adolescents (16.1 %; 13–19 years), 63 adults (67.7 %; 20–64 years) and 7 seniors (7.5 %; 65+years). Following are the victim-perpetrator relationships known for 113 of the cases: stranger (38.1 %); acquaintance (23.9 %); friend (15.9 %); current or former intimate partner (16.8 %); and family member (5.3 %). Using the aforementioned definitions of DH, 37 cases involved DH perpetrators who killed

28 women, two children, and eight men. The 78 NDH perpetrators killed 34 women, nine children and 29 men.

Materials

File Documentation Concerning the Homicide Data were extracted from each perpetrator's Criminal Profile Report (CPR) and Psychological Assessment Report (PAR) in his institutional file by psychology graduate students as well as by trained undergraduate psychology research assistants in order to establish inter-rater reliability. These documents are the most important sources of information in the case file with respect to details of the perpetrator's violent crimes and his psychological characteristics. The CPR contains a detailed description of each serious offense (usually one to two pages in length) and is written by each perpetrator's case management officer. It provides a comprehensive offense description based on information in police reports submitted to the prosecutor (e.g., forensic evidence, autopsy findings, eyewitness testimony) and courtroom testimony. The PAR is written by a psychologist who formally assessed the perpetrator, providing a detailed description of the perpetrator's psychological features and a description of the psychological factors believed to be relevant to his offending behaviour. Collateral information is obtained from relevant third parties (e.g., victims, family members, previous employers, institutional staff) during the assessment process.

Psychopathy Checklist-Revised (PCL-R; Hare 2003) Psychopathy was measured dimensionally and diagnosed categorically using the PCL-R. This clinical construct rating scale contains 20 items describing affective/interpersonal traits (Factor 1) and antisocial/socially deviant lifestyle traits (Factor 2) that are characteristic of the prototypical psychopath. Factor 1 items include, for example, shallow affect, lack of remorse, superficial charm, and pathological lying. Examples of Factor 2 items include childhood behavioural problems, juvenile delinquency, criminal versatility, and a parasitic lifestyle. Although criminality and psychopathy are not one in the same, they are related, with psychopaths often having more extensive criminal histories than their non-psychopathic counterparts. Each item on the PCL-R is scored as 0, 1 or 2 according to the extent it describes the individual being assessed. Ratings are determined by drawing on information from semi-structured interview and case history information. The maximum total score that can be obtained for any given perpetrator is 40, with the recommended cutoff score for a diagnosis of psychopathy set at 30. With regard to reliability and validity, the PCL-R is considered to be a reliable and valid measure for assessing psychopathy (Acheson 2005).

In the Canadian correctional system, assessments of psychopathy are routinely conducted by psychologists trained in the use of the PCL-R. The assessment is conducted during intake and/or later for conditional release decisions. Factor 1, Factor 2 and total scores were extracted from the PAR for each perpetrator by either the graduate students or trained undergraduate research assistants. Twenty-four perpetrators had not yet had a PCL-R assessment at the time of data collection. For these perpetrators, a trained psychology graduate student and senior undergraduate student reviewed all available official file information and scored the PCL-R (after having been formally trained in its administration by a certified assessor). Raters were blind to the purpose of the study.

Danger Assessment (DA; Campbell 1995; Campbell et al. 2003, 2009) The DA is a research and clinical tool designed to assess the risk of lethal and near-lethal DV. The first part of the DA captures the frequency and severity of DV by presenting women with a calendar for the past year and documenting the approximate days when physical abuse took place. The severity of each abusive event is rated on a scale from one (less severe) to five (more severe). The second part of the original DA involved dichotomous yes/no responding to 15 risk factors associated with DH in retrospective studies. It is scored by counting the number of yes responses, and did not have a designated cutoff score. A higher number of endorsements indicated a higher degree of risk of homicide present in the case. Internal consistency of the original 15-item instrument was good (0.70–0.80; Campbell 2005), as was test-retest reliability (0.89–0.94; Campbell 2004). The DA's construct and discriminant validity also are excellent (Campbell 1995).

The 20-item DA used in the current study was revised by Campbell et al. (2003) from the original 15-item instrument based on their findings from the Risk Factors for Intimate Partner Femicide study. More specifically, multivariate analyses were conducted for an 11-city study to test the predictive validity of risk factors on the DA through a comparison of 310 intimate partner femicide cases versus 324 cases of nonlethal woman abuse (Campbell et al. 2009). Four items were added, and one item was split into two separate items. Adjusted odds ratios were used to determine the relative weights of the items, and a scoring algorithm with levels of risk was developed. The levels of danger based on the revised DA score are: (a) *variable danger* (score of 0–7); (b) *increased danger* (score of 9–13); (c) *severe danger* (score of 14–17); and (d) *extreme danger* (score of 18 or greater). An independent sample of 194 attempted femicides was used to validate the algorithm, with 0.90 of the cases included in the area under the ROC curve. The revised DA has been evaluated in the

context of a prospective study of 782 abused women, and scores were found to be predictive of severe re-assault (Campbell et al. 2005). The revised DA outperformed the victim's perception of risk in this study, partly because some women may underestimate the level of danger in their situation. Copies of the revised DA and information concerning previous studies can be found at www.dangerassessment.com.

In the current study, the revised DA was completed retrospectively for the 37 DHs via file review by the first author (a psychology graduate student with experience working for a DVDRC, as well as for a partner assault response program) and by an undergraduate psychology research assistant who was trained by the first author. This second rater was kept blind to the purpose of the study.

Procedure

Homicide Coding Scheme and Inter-Rater Reliability To avoid the potential for biased ratings by the graduate and undergraduate coders based on knowledge of psychopathy status, the PCL-R scores were removed from the files prior to coding. For the DHs, scores on the DA would not have introduced a rating bias for the homicide coding scheme because the DA was coded last. To establish the inter-rater reliability of the homicide coding scheme, two raters coded the characteristics of 21 randomly selected homicides using the same coding guidelines. The second rater was extensively trained in the coding criteria over 2 days and also was kept blind to the PCL-R scores of each perpetrator. Variables coded based on a review of the files include: reactive and instrumental violence, gratuitous violence, sadistic violence, and a sexual component.
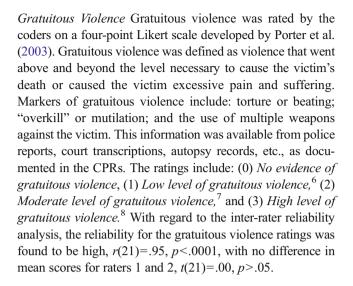
Reactive and Instrumental Violence The nature of the homicidal violence was rated by the coders on a four-point Likert scale developed by Woodworth and Porter (2002). This scale was based partly on the work of Cornell et al. (1996) for coding reactive and instrumental aggression. The scale captures reactive and instrumental violence in a more detailed and continuous, rather than dichotomous, manner. The four ratings include: (1) *purely reactive*,[2] (2) *primarily reactive with an*

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[2] A lack of planning in the commission of the offense and clear evidence for a high level of spontaneity or impulsivity characterize this rating. Additionally, powerful emotional arousal was experienced by the perpetrator immediately preceding the offense. There was no evidence of an external goal for the violence, other than to harm the victim, and the violence was immediately preceded by conflict or provocation. For example, while at a bar, an unknown victim verbally insulted the perpetrator. The perpetrator responded with rage, and fought and killed the victim.

instrumental component,[3] (3) *primarily instrumental with a reactive component,*[4] and (4) *purely instrumental.*[5] When any instrumental violence was evident (i.e., by a rating of 2, 3 or 4), it was further categorized as *primary instrumental violence* or *secondary instrumental violence.* The former classification refers to the commission of instrumental violence for the main purpose of inflicting harm, pain or suffering on the victim (e.g., out of revenge). The latter classification refers to the commission of instrumental violence as a means to achieve an external goal (e.g., to obtain money), and is not committed solely for the purpose of inflicting harm, pain or suffering. Planned revenge as a form of instrumental violence was incorporated into the coding criteria because instrumental violence may sometimes be committed for the purpose of causing harm to another individual, and because "hostile" aggression may sometimes be instrumental in nature. Thus, if there was a discernable gap in time between when the conflict or provocation and homicide took place, or if there was a "cooling off" period, then the homicide could not be considered *purely reactive* and was given a rating of 2, 3 or 4. In this circumstance, a rating of 2, 3 or 4 depended on additional contextual information, but revenge was considered the instrumental motive.

The coding of perpetrator motivation behind any degree of instrumental violence includes: (a) *monetary gain*; (b) *to obtain drugs or alcohol*; (c) *revenge/retribution;* (d) *competition over a woman*; (e) *to obtain nonconsensual sex*; or (f) *other reason*. Regarding the inter-rater reliability analyses, Cohen's kappa (K) was used to examine agreement between the two raters on the reactive/instrumental violence-related variables for the 21 randomly selected homicides. The reliability of the reactive/instrumental ratings was high, $K(21)=.81, p<.001$, as was the reliability for the specific type of instrumental violence, $K(21)=.87, p<.001$.

Gratuitous Violence Gratuitous violence was rated by the coders on a four-point Likert scale developed by Porter et al. (2003). Gratuitous violence was defined as violence that went above and beyond the level necessary to cause the victim's death or caused the victim excessive pain and suffering. Markers of gratuitous violence include: torture or beating; "overkill" or mutilation; and the use of multiple weapons against the victim. This information was available from police reports, court transcriptions, autopsy records, etc., as documented in the CPRs. The ratings include: (0) *No evidence of gratuitous violence*, (1) *Low level of gratuitous violence,*[6] (2) *Moderate level of gratuitous violence,*[7] and (3) *High level of gratuitous violence.*[8] With regard to the inter-rater reliability analysis, the reliability for the gratuitous violence ratings was found to be high, $r(21)=.95, p<.0001$, with no difference in mean scores for raters 1 and 2, $t(21)=.00, p>.05$.

Sadistic Violence Sadistic behaviour was rated by the coders on a three-point Likert scale developed by Porter et al. (2003), and defined as the derivation of pleasure or enjoyment from engaging in the homicidal violence (and not necessarily from engaging in a sexual homicide). For some cases involving gratuitous violence (e.g., those in which the victim was stabbed several times with nonfatal intent), determining whether the mediating process was pleasure-seeking or affective rage is not straightforward. Therefore, sadistic behaviour was determined conservatively using self-report information or strong forensic evidence. Sadistic behaviour ratings include: (0) *No evidence of sadistic behavior.* (1) *Some evidence of sadistic behavior:* Evidence from the crime scene. For example, pre-mortem sexual torture or mutilation documented in autopsy or court records; or (2) *Clear evidence of sadistic behavior:* The perpetrator self-reported experiencing enjoyment, thrill or arousal from inflicting the violence; or self-reported enjoyment, thrill or arousal was corroborated by evidence from the crime scene. In the inter-rater reliability analysis, there was absolute agreement between raters for the presence of sadistic violence, $r(12)=1.0, p<.0001$.

Sexual Component A sexual component to the homicide was deemed present if there was physical evidence of sexual activity with the victim immediately before, during, or after the homicide, or if the perpetrator self-reported such sexual activity with the victim.

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[3] There was evidence of both reactive and instrumental violence in the commission of the homicide, with reactive violence being the predominant quality. The perpetrator experienced emotional arousal preceding the offense, perhaps following conflict or provocation; however, there was also some indication of instrumentality. For example, there may have been a discernable gap in time between when the affective response took place and when the homicide was committed.

[4] Evidence of both instrumental and reactive violence must have been observed in the commission of the homicide, with instrumental violence being the predominant quality. For example, during the commission of a planned robbery the perpetrator killed the victim in response to frustration when the victim attempted to call for help.

[5] The violence was unambiguously goal-oriented in nature, with no evidence that it was immediately preceded by conflict or provocation. The homicide did not immediately follow powerful emotional arousal on the part of the perpetrator. A purpose for the violence, other than "hot-blooded" spontaneous anger or frustration, was identifiable. The perpetrator may have been meticulous in the planning and execution of the homicide. He may have also taken steps to conceal evidence. This kind of violence was intentional, premeditated, non-impulsive and motivated by an obvious external goal (e.g., to obtain money, drugs, nonconsensual sex or revenge).

[6] There was evidence of a relatively brief single incident of excessive violence that occurred in a relatively short period of time. For example, based on professional inference the perpetrator made an intentional yet superficial and nonfatal cut to the victim.

[7] There was evidence of two or more of the aforementioned markers over a relatively short period of time, or evidence of one of the markers spanning more than a single incident.

[8] There was evidence that excessive violence was a major feature of the homicide, or evidence that excessive violence spanned numerous incidents within the context of a relatively long and drawn out homicide.

PCL-R Inter-Rater Reliability The inter-rater reliability of PCL-R assessments was examined in two ways. First, 21 files were randomly selected and the PARs documenting the original PCL-R assessments were removed. All other file information was made available to a blind coder, who then conducted new PCL-R assessments. The purpose of these assessments was to ensure that the original PCL-R assessments conducted by the psychologists were reliable. Second, the files of 33 perpetrators were randomly selected and the details concerning the homicide offenses were removed. A blind coder then conducted new PCL-R assessments for the perpetrators. The purpose of these assessments was to confirm that PCL-R scores were not contaminated by details of the homicide and not the products of "circular" reasoning. Because the DA was coded last, it could not have had an influence on the PCL-R assessments.

With regard to PCL-R scores, the mean total score for the entire sample was 22.72 (SD=8.69; range=1–37). Using a diagnostic cutoff of ≥30, 34 (29.6 %) of the homicide perpetrators were psychopaths, and 81 (70.40 %) were non-psychopaths. When categorizing perpetrators in relation to PCL-R norms for adult male prisoners (Hare 2003), it was found that 38 perpetrators (33 %) scored "low" (0–19), 43 perpetrators (37.4 %) scored "moderate" (20–29), and 34 (29.6 %) perpetrators scored "high". In terms of the inter-rater reliability of the PCL-R, for the 21 randomly selected files in which the rater was kept blind to the original PCL-R scores, the reliabilities for PCL-R total, Factor 1 and Factor 2 scores were high/acceptable (ICCs=.92, .81 and .95, respectively, ps<.001). There was no mean difference between the two sets of scores for rater 1 (M=24.59; SD=7.91) and rater 2 (M=25.81; SD=6.91), t(40)=.37, p>.05. Further, there was an acceptable level of agreement between the two raters for classifying the perpetrators as psychopaths or non-psychopaths, K=.79, p<.001. For the set of 33 randomly selected files in which details of the homicide offense were removed prior to the new PCL-R assessments, inter-rater reliability was high/acceptable for PCL-R total, Factor 1 and Factor 2 scores (ICCs=.97, .95 and .94, respectively, ps<.001). These findings indicate that the PCL-R assessments were reliable and not contaminated by the characteristics of the homicides.

DA Coding The revised DA was completed for the 37 DHs via file reviews by the first author and by a trained psychology undergraduate research assistant who was kept blind to the purpose of the study. Coding DA risk factors from case history information is common practice among DVDRCs (Jaffe and Juodis 2008). All file information was reviewed and considered when completing the DA except for details concerning the homicide incident itself, as the DA was designed to identify risk factors that *precede* DHs (Campbell et al. 2003). This approach had the added benefit of ensuring that details of the

homicide offense did not unduly influence the coding of risk factors. It also should be noted that the DA was coded blind to any of the PCL-R scores; thus, preventing them from influencing the coding of the risk factors. In a manner consistent with DVDRC fatality reviews, relevant events that occurred outside of the year prior to the homicide were considered when coding the revised DA (e.g., violent incidents that occurred throughout a 20-year marriage).

In some cases, relevant information on the perpetrators' past intimate relationships was available (e.g., violent convictions concerning past intimate partners), and this information was also considered in the coding of risk factors. Because the victims were deceased, the calendar portion of the DA could not be completed. An inter-rater reliability analysis was conducted based on 12 randomly selected DH cases (almost 33 % of the DH cases). The reliability for the total number of femicide risk factors identified in the cases was found to be acceptable, r(12)=.88, p<.001, with no difference in the mean total number of risk factors identified by the two raters, t(11)= −0.73, p>.05.

Results

Domestic Versus Non-Domestic Homicides

Victim Characteristics As would be expected given our operational definitions of DHs and NDHs, there were several victim characteristics that differed significantly between the two groups, and we included this information to provide context to the lives lost (see Table 1). DHs were significantly more likely to involve female victims and significantly less likely to involve male victims. While there was no significant difference between the groups for the mean age of the victims, the standard deviations were large and necessitated a closer look at developmental level. Table 1 reveals a trend approaching significance in which DHs were less likely to involve children and adolescents as victims and more likely to involve adults and seniors. As would further be expected, DHs were significantly less likely to involve strangers, acquaintances and friends as victims, but were significantly more likely to involve family members.

Perpetrator Characteristics As Table 2 indicates, DH and NDH perpetrators differed significantly in terms of the mean age at the time the homicide was committed, with DH perpetrators being older, on average, than NDH perpetrators. Also, DHs do occur in the context of dating, common-law and marital relationships that vary in degrees of commitment (Dawson and Gartner 1998). In the current sample, 10 (27 %) DH perpetrators were in dating relationships, 16 (43.3 %) were in common-law relationships, and 11 (29.7 %) were in marital relationships. A one-way ANOVA

Table 1 Comparison of domestic and non-domestic homicide victim characteristics

Variable	Domestic (n=37)	Non-domestic (n=78)	t(113) or χ²(115)	d or odds ratio [95 % CIs]
Gender (%)				
Female	75.70	55.10	4.49*	2.54 [0.33, 5.34]
Male	29.70	48.70	3.70*	0.44 [0.21, 2.99]
Age at death[a], years	31.52 (16.74)	31.50 (22.71)	ns[b]	
Developmental level[c] (%)			2.89[d,†]	
Child/adolescent (<20 year)	14.70	30.50		0.39 [0.14, 3.57]
Adult or senior (≥20 year)	85.30	69.50		2.55 [0.28, 6.96]
Relationship to offender[e] (%)			**56.79[f,***]**	
Stranger	5.60	53.20		0.05 [0.03, 2.07]
Acquaintance	19.40	26.00		0.68 [0.19, 4.08]
Friend	13.90	16.90		0.79 [0.15, 5.38]
Intimate partner	52.80	0.00		
Family member	8.30	3.90		2.23 [0.10, 28.61]

Values under the second and third columns are means (and standard deviations) for continuous variables, or percentages for categorical variables. For the comparison between groups, values under the third column are significant as follows: $*p \le .05$, $**p \le .01$ and $***p \le .001$. All comparisons involved two-tailed tests, and bolded values indicate significant differences ($p \le .01$) after a family-wise Bonferroni correction. Values approaching significance ($^\dagger p \le .09$) are also included. Values in square brackets represent 95 % confidence intervals for the effect sizes

[a] The exact age of the victim could not be determined in 16 domestic homicides and 34 non-domestic homicides

[b] d.f.=1, 63

[c] The developmental level of the victim could not be determined in three domestic homicide and 19 non-domestic homicides

[d] d.f.=1, n=93

[e] The relationship of the victim to the perpetrator could not be determined in one domestic homicide and one non-domestic homicide

[f] d.f.=1, n=113

was conducted with each DH perpetrator's age in years entered as the dependent variable, and relationship status (dating, common-law or married) entered as the independent variable. The analysis indicated a significant effect of relationship status, $F(2, 36)=12.40$, $p<.001$. Tukey's HSD tests indicated that, as expected, the mean age of married DH perpetrators ($M=41.09$; $SD=7.67$) was significantly higher ($p<.001$, Cohen's $d=1.42$ [95 % CIs: 0.94, 3.07]) than the mean age of dating DH perpetrators ($M=24.7$; $SD=8.58$). Further, the mean age of married DH perpetrators also was significantly higher ($p<.05$, Cohen's $d=0.93$ [95 % CIs: 0.20, 1.84]) than the mean age of common-law DH perpetrators ($M=33.75$; $SD=6.74$). Finally, the mean age of common-law DH perpetrators was significantly higher ($p<.05$, Cohen's $d=1.05$ [95 % CIs: 0.34, 2.06]) than the mean age of dating DH perpetrators.

With respect to psychopathy, Table 2 reveals that DH and NDH perpetrators differed significantly in their mean PCL-R scores. DH perpetrators obtained significantly lower mean total, Factor 1 and Factor 2 scores. Taking a categorical approach, Table 2 shows a trend approaching significance—a smaller proportion of DH perpetrators were classified as psychopaths. When categorizing perpetrators in relation to PCL-R norms for adult male prisoners (Hare 2003), a significantly greater proportion of DH perpetrators scored "low".

Offense Characteristics The offense characteristics of DHs and NDHs differed significantly in many ways (see Table 3). The results indicate that DH perpetrators were significantly less likely to involve accomplices. Although there were no significant differences between the groups in the proportion of homicides involving purely reactive or purely instrumental violence, DHs were significantly more likely to involve primarily reactive violence with an instrumental component (rating 2). In contrast, NDHs were significantly more likely to involve primarily instrumental violence with a reactive component (rating 3). Further, DHs were significantly more likely to be characterized by primarily reactive violence (ratings 1 or 2), and less likely to be characterized by primarily instrumental violence (ratings 3 or 4). However, it is worth noting that both groups were comprised of relatively few homicides involving purely reactive violence. Precisely 82.8 % and 90 % of DHs and NDHs, respectively, showed some degree of instrumental violence (evidenced by a rating of 2, 3 or 4). It is also worth noting that 40 % of DHs and NDHs were purely instrumental and were not immediately preceded by conflict or provocation, and did not immediately follow powerful emotional arousal on the part of the perpetrator.

Table 3 shows that DH perpetrators were significantly more likely to commit primary instrumental violence and were significantly less likely to commit secondary instrumental

Table 2 Comparison of domestic and non-domestic homicide perpetrator characteristics

Variable	Domestic (n=37)	Non-domestic (n=78)	t(113) or χ^2(115)	d or odds ratio [95 % CIs]
Age at offense[a], years	33.49 (9.63)	28.09 (8.74)	**2.98[b],****	0.58 [0.20, 1.00]
Psychopathy checklist-revised				
Total score	18.97 (9.41)	24.50 (7.77)	**3.32****	0.64 [0.26, 1.06]
Factor 1 score	7.95 (4.58)	9.73 (4.03)	2.12*	0.42 [0.03, 0.82]
Factor 2 score	8.11 (4.45)	11.35 (3.79)	**4.04*****	0.76 [0.40, 1.21]
Level of traits (%)			**6.47***	
Low (total <20)	48.60	25.60		2.75 [0.34, 5.37]
Moderate (20≤ total <30)	32.40	39.70		0.73 [0.24, 3.46]
High (total ≥30)	18.90	34.60	2.97[†]	0.44 [0.17, 3.39]

Values under the second and third columns are means (and standard deviations) for continuous variables, or percentages for categorical variables. For the comparison between groups, values are significant as follows: *p≤.05, **p≤.01 and ***p≤.001. All comparisons involved two-tailed tests, and bolded values indicate significant differences (p≤.008) after a family-wise Bonferroni correction. Values approaching significance ([†] p≤.09) are also included. Values in square brackets represent 95 % confidence intervals for the effect sizes

[a] The exact age of the perpetrator could not be determined in two non-domestic homicides

[b] d.f.=1, 111

violence. With respect to perpetrator motivations, some motive categories had to be excluded from analysis or amalgamated with others due to the small number of cases. This allowed comparisons between DHs and NDHs that did not violate statistical assumptions. Monetary gain (n=24) and the obtainment of drugs/alcohol (n=1) were combined into a single category reflecting the shared characteristics of robbery and secondary instrumental violence. Cases involving competition over a female (n=10) were combined with revenge/retribution (n=30), reflecting the shared characteristic of primary instrumental violence and statements made by the perpetrators. Cases involving other motives (n=6) were excluded from the analysis because they could not be combined on conceptual grounds. As seen in Table 3, DH perpetrators were significantly more likely to be motivated by revenge and less likely to be motivated by money, drugs, alcohol or nonconsensual sex. DH perpetrators also were significantly less likely to engage in sexual activity with the victims immediately before, during or after the offenses.

In some regards, DHs and NDHs shared similar characteristics. Table 3 shows that the two groups did not differ significantly with respect to the perpetrators' use of substances in the commission of the offenses. Specifically, 64.9 % and 70.5 % of DHs and NDHs, respectively, involved substance use in the commission of the offense. Both groups of perpetrators inflicted similar levels of gratuitous violence and sadistic violence. Specifically, 67.6 % of DH perpetrators and 69.2 % of NDH perpetrators inflicted violence against the victims that went beyond the level necessary to cause the deaths. In 21.6 % of DHs and 26.9 % of NDHs there was evidence the perpetrator derived enjoyment from inflicting the violence. There were no significant differences between the groups in the causes of death.

A Closer Examination of the Domestic Homicides

Themes and Triggers in the Domestic Homicides What issues underlie the predominant drive of DH perpetrators to seek revenge and cause harm? Of the 37 DHs here, 70.3 % occurred in the context of relationship separation, 62.2 % involved constant and violent jealousy, 54.1 % involved perpetrators who controlled most or all of the victims' daily activities, 45.9 % involved new partners in the women's lives, and 21.6 % occurred in the context of formal or informal child custody/access disputes. These variables appeared to be absent in only 13.5 % of cases.

Risk Factors for the Domestic Homicides Table 4 shows the revised DA risk factors identified in the files of the 37 DH perpetrators. The mean number of identified risk factors was 8.59 (SD=3.86; range=2–16).

Using the revised DA scoring algorithm (Campbell et al. 2009), 13.5 % of cases were classified as representing variable danger, 27 % represented increased danger, 16.2 % represented severe danger, and 43.2 % represented extreme danger. With the benefit of hindsight, and using the most liberal cutoff for the revised DA (increased danger), 86.5 % of cases would have been identified as a homicide risk. To determine whether revised DA scores varied as a function of any victim, perpetrator or offense characteristics, correlations were calculated for the number of revised DA risk factors present and each of the variables listed in Tables 1, 2, and 3. All analyses involved two-tailed tests. Results indicated that the total number of revised DA risk factors was not significantly related to any victim, perpetrator or offense characteristics (all ps>.05).

Table 3 Comparison of domestic and non-domestic homicide offense characteristics

Variable	Domestic (n=37)	Non-domestic (n=78)	t(113) or χ^2(115)	d or odds ratio [95 % CIs]
Accomplice involved (%)	18.90	37.20	3.89*	0.39 [0.17, 3.23]
Substance use involved (%)				
None	35.10	29.50	*ns*	
Alcohol	51.40	51.30	*ns*	
Drugs	43.20	43.60	*ns*	
Alcohol and drugs	29.70	24.40	*ns*	
Violence rating[a] (%)			8.94[b,]*	
Purely reactive (1)	17.10	10.00		1.86 [0.19, 8.92]
Mostly reactive (2)	37.10	21.40		2.17 [0.30, 5.43]
Mostly instrumental (3)	5.70	28.60		0.15 [0.04, 3.55]
Purely instrumental (4)	40.00	40.00		1.00 [0.27, 3.68]
Combined violence rating[a] (%)			5.12[b,]*	
Mainly reactive (1 or 2)	54.30	31.40		2.60 [0.35, 5.00]
Mainly instrumental (3 or 4)	45.70	68.60		0.39 [0.20, 2.86]
Instrumental violence type (%)				
Primary[c]	93.10	65.10	**8.09[d,]****	7.23 [0.32, 18.19]
Secondary[c]	13.80	42.90	7.51[d,]**	0.21 [0.12, 2.84]
Instrumental motive[e] (%)			**21.39[f,]*****	
Money/drugs/alcohol	7.10	39.70		0.12 [0.05, 2.86]
Revenge	82.10	29.30		11.07 [0.49, 11.57]
Nonconsensual sex	10.70	31.00		0.27 [0.11, 3.41]
Gratuitous violence rating (%)			*ns*	
No evidence (0)	32.40	30.80		
Low (1)	18.90	21.80		
Moderate (2)	29.70	25.60		
Major (3)	18.90	21.80		
Sadistic violence rating (%)			*ns*	
Evidence present (1 or 2)	21.60	26.90		
Sexual component (1) (%)	13.50	42.30	**9.40****	0.21 [0.12, 2.86]
Cause of death (%)			*ns*	
Stabbing/cutting	35.10	21.80		
Shooting	18.90	26.90		
Strangulation/smothering	13.50	20.50		
Beating/assault	16.20	16.70		
Other	16.20	14.10		

Values under the second and third columns are means (and standard deviations) for continuous variables, or percentages for categorical variables. For the comparison between groups, values are significant as follows: *$p \leq .05$, **$p \leq .01$ and ***$p \leq .001$. All comparisons involved two-tailed tests, and bolded values indicate significant differences ($p \leq .004$) after a family-wise Bonferroni correction. Values in square brackets represent 95 % confidence intervals for the effect sizes

[a] Instrumental/reactive violence ratings could not be determined in two domestic homicides and eight non-domestic homicides

[b] d.f.=1, n=105

[c] The general type of instrumental violence did not apply in six domestic homicides and in seven non-domestic homicides, as they were purely reactive homicides. Primary and secondary instrumental violence could not be coded in another two domestic homicides and eight non-domestic homicides due to missing information

[d] d.f.=1, n=92

[e] Instrumental motives did not apply in six domestic homicides and in seven non-domestic homicides, as they were purely reactive homicides. Instrumental motives could not be coded in another three domestic homicides and 13 non-domestic homicides, as they were either indeterminable or idiosyncratic

[f] d.f.=1, n=86

Psychopathy in the Context of Domestic Homicide

Relationship with Victim, Perpetrator, and Offense Characteristics A series of correlations were calculated for PCL-R total scores and the variables listed in Tables 1, 2, and 3. All analyses involved two-tailed tests. Results indicated that scores were not significantly related to any victim or perpetrator characteristics (all $ps > .05$). With respect to offense characteristics, the PCL-R total scores were significantly positively related to higher ratings of instrumental violence, $r(35) = .49$, $p < .01$ [95 % CIs: 0.22, 0.71].[9] More specifically, they explained 24 % of the variability in reactive/instrumental violence ratings. In other words, there was a significant association observed between primarily reactive/instrumental violence ratings and the categorization of perpetrators in relation to PCL-R norms for adult male prisoners, $\chi^2(1, n=35) = 6.56$, $p = .01$. On this point, DH perpetrators who exhibited moderate-to-high levels of psychopathy ($n=18$) committed more homicides characterized by primarily instrumental violence (66.7 %) than by primarily reactive violence (33.3 %).

In contrast, DH perpetrators who exhibited low levels of psychopathy ($n=17$) committed more homicides characterized by primarily reactive violence (76.5 %) than by primarily instrumental violence (23.5 %), Odds ratio = 6.52 [95 % CIs: 0.43, 7.59]. The results also indicated that PCL-R total scores were significantly positively related to higher ratings of gratuitous violence, $r(37) = .37$, $p < .05$ [95 % CIs: 0.08, 0.61]. That is, PCL-R total scores explained approximately 14 % of the variability in gratuitous violence ratings. PCL-R total scores were not significantly related to any other offense characteristics (all $ps > .05$).

Relationship with Risk Factors for Domestic Homicide A series of correlations were calculated for PCL-R total scores and the presence/absence of each of the revised DA risk factor items listed in Table 4. Results indicated that PCL-R total scores were significantly negatively related to offender threats or attempts of suicide, $r(37) = -.39$, $p < .01$ [95 % CIs: -0.64, -0.07]. PCL-R total scores were not significantly related to the other revised DA risk factors (all $ps > .05$).

Discussion

Although DHs and NDHs displayed similar dynamics in some respects (e.g., perpetrators' use of substances in the commission of offenses, causes of death, use of gratuitous and sadistic violence), our findings indicate there are important dynamics that appear to be unique to DHs and NDHs. Domestic

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[9] Note: Reactive/instrumental violence ratings could not be determined in two cases.

Table 4 Danger assessment risk factors identified in the files of domestic homicide perpetrators

Item #	Item description (Paraphrased)	% of 37 cases
1	Domestic violence increasing in frequency and/or severity	83.8
12	Alcoholic or problem drinker	75.7
3	Actual or pending separation	70.3
11	Uses illegal drugs	64.9
7	Avoided arrest for domestic violence	62.2
14	Jealousy	62.2
13	Controls most or all of woman's daily activities	54.1
4	Unemployed	51.4
6	Threats to kill	51.4
19	Stalking	45.9
2	Access to firearms	40.5
18	Woman believed offender was capable of killing her	40.5
5	Threats or assaults with a weapon	32.4
9	Forced sex	32.4
16	Offender threatened or attempted suicide	29.7
8	Woman had a child that was not the offender's biological child	18.9
10	Choking	18.9
17	Threats to harm children	13.5
15	Beaten while pregnant	5.4
20	Woman threatened or attempted suicide	5.4

homicide perpetrators were responsible for the deaths of a wide range of victim types (e.g., children, women's new partners, other family members), but it was obvious that women who were current or former intimate partners represented the primary victims as a result of how the two groups were defined. With regard to perpetrator characteristics, the results suggested that perpetrator age played a role in accounting for when different homicidal acts take place (Wilson and Daly 1985), with NDHs being committed by relatively younger perpetrators on average. This finding also may partly be the result of fewer younger perpetrators being involved in intimate relationships, even though some relatively youthful perpetrators did commit DHs.

The results indicate that psychopathic traits and diagnoses (and also probably extensive criminal histories) were more characteristic of NDH perpetrators. The reason for this finding is not clear and should be considered in future research. The reason, however, does extend beyond simple definitional issues surrounding psychopathy (i.e., criminal versatility as a criterion of psychopathy) because Factor 1 scores that encompassed interpersonal/affective features, and not simply antisociality, were higher for NDH perpetrators on average. It may be that many psychopaths find intimate relationships requiring some degree of commitment to be boring or a

nuisance. However, the finding does not imply that psychopathy is irrelevant to DHs, as both psychopathic and nonpsychopathic men committed them.

Interpreted continuously, many DH perpetrators were still well-above average with regard to psychopathic traits when considering available norms for men in the general population (see Neumann and Hare 2008). Thus, traits related to selfishness, callousness, remorselessness and antisociality may be relevant to the perpetration of DHs, but not observed at the same level as in other types of homicides. Still, the findings suggest that men with psychopathic traits may readily adopt attitudes and behaviours that support violence against women and children. Future studies that measure these traits via the PCL-R in samples of batterers who have not murdered intimate partners could further our understanding of similarities or differences in lethal and non-lethal DV.

In terms of the nature of the offenses and violence, it was not surprising that accomplice involvement was more characteristic of NDHs, highlighting the potential role of antisocial peers in the commission of serious violent crimes (Andrews and Bonta 2003). With regard to reactive and instrumental violence, our results indicate that powerful emotional arousal in response to conflict or provocation was more characteristic of DHs than NDHs. In contrast, emotional arousal arising in the context of violence to achieve external gain (e.g., to obtain money) was more characteristic of NDHs. Emotional reactivity in general was more characteristic of DHs; however, both groups were comprised of relatively few homicides involving reactive violence at a level that would be considered impulsive. Similar to results obtained by Dawson (2005), our findings run counter to popular views of DHs as "spontaneous crimes of passion". Although powerful emotional arousal may have been observed more often in DHs than NDHs, the majority of homicides in both groups (82.8 % and 90 %, respectively) evidenced some degree of instrumental violence, suggesting some level of planning on the part of the perpetrators (even when powerful emotional arousal in response to conflict or provocation was involved). In fact, the results also indicate that powerful emotional arousal may not even be a necessary condition for DHs, as 40 % of both DHs and NDHs occurred in "cold blood" and were not immediately preceded by conflict or provocation, and did not immediately follow powerful emotional arousal on the part of the perpetrator.

In terms of motives, DHs were chiefly about inflicting pain and suffering on the victims out of revenge. In contrast, committing violence for external gain (i.e., to obtain money, drugs, alcohol, or nonconsensual sex) was more characteristic of NDHs. Thus, it also was not surprising that sexual activity with victims was more characteristic of NDHs. Consistent with previous research, it appeared to be male control/proprietariness, jealousy, the woman leaving, the woman having a new relationship, and formal or informal child custody/access disputes that may underlie DH perpetrators' desires for

revenge and causing harm to victims (Campbell et al. 2003; Ontario DVDRC 2005; Wilson and Daly 1993).

Our results build on previous findings suggesting that DHs are potentially preventable crimes (Ontario DVDRC 2004, 2005, 2006). With the benefit of hindsight, and using the most liberal cutoff for the revised DA (i.e., increased danger; Campbell et al. 2009), 86.5 % of our DH cases would have been identified as a homicide risk. It was found again that the most common lethality risk factor for DH was prior DV against the woman (Campbell et al. 2007). Importantly, the results also suggested the revised DA may be a robust DH risk assessment instrument in the sense that the total number of risk factors did not vary as a function of any DH victim, perpetrator or offense characteristics, not even the reactive/instrumental violence ratings. This latter finding is particularly noteworthy because it indicates that even DHs characterized by relatively low levels of planning on the part of the perpetrators were still potentially preventable given their histories (i.e., these cases were not associated with a significantly lower total number of DA risk factors). These findings are in stark contrast to popular portrayals of DHs as random or unpredictable events that occur "out of the blue" (Ryan et al. 2006; Dobash et al. 2009).

With regard to psychopathy in the context of DH, results indicated that DHs committed by psychopathic and non-psychopathic men were similar in many ways. However, consistent with the work of Cornell and colleagues (1996), DH perpetrators with psychopathic traits were more likely to kill in a dispassionate and highly planned fashion. These men also were more likely to inflict violence above and beyond the level necessary to kill the victims. Thus, psychopathy may be a particularly important variable for explaining variations in how DHs are committed.

Contrary to previous speculations (Dutton and Kerry 1999), the results of our study indicated that the revised DA captured risk of DH by both psychopathic and non-psychopathic men, lending further evidence of its utility. Only one lethality risk factor was deemed to be present less often for DH perpetrators with psychopathic traits—the offender threatened or attempted suicide. This finding suggested that DH perpetrators with psychopathic traits also may be less likely to present as distressed prior to the homicides, perhaps because of their shallow experience of emotion (Hare 2003). Collectively, our findings lend further support to the notion that DV perpetrators are a heterogeneous group (Holtzworth-Munroe and Stuart 1994), and that efforts to better understand who we are dealing with in the perpetration of DHs are worthwhile.

Study Limitations

Some study limitations should be considered when interpreting the findings. Although the sample size was

relatively large in comparison to previous in-depth studies of homicide, it was small in absolute numbers, so future attempts at replicating our findings are justified. On this point, it is possible that significant differences between DHs and NDHs (or between psychopathic DH perpetrators and non-psychopathic DH perpetrators) were not observed for some of the variables under investigation because of issues concerning sample size and statistical power. It should be noted that the files contained little information from or about the victims; thus, some data (e.g., presence of certain DA risk factors) may represent underestimates. Also, it was not possible to examine DH perpetrators who completed suicide following their offenses or perpetrators who managed to avoid arrest and prosecution for their homicide offenses.

Furthermore, our sample was comprised of perpetrators from two medium-security Canadian federal correctional facilities that may differ in some ways from samples of perpetrators from forensic hospitals, minimum-security, maximum-security or non-Canadian correctional facilities. It also should be noted that some Canadian offenders may be routed to specific institutions depending on their offences or mental health needs, so the potential for sampling bias may exist. Additionally, the revised DA was completed retrospectively, and some retrospective assessments may be vulnerable to bias.

With further regard to study limitations, data were not obtained from samples of domestic and non-domestic perpetrators who did not commit homicides; thus, conclusions regarding the specificity of the study findings are not warranted. While this study is among the few that examined data obtained from perpetrators, it relied on file review and we were dependent on the work of others (i.e., we were unable to tailor our own interview questions to the variables of interest). It also is worth noting the study was correlational in nature, so further investigations could involve attempts at matching cases on potential confounding variables prior to some statistical analyses. Future studies that address these issues (where possible) may further inform the field as to the generalizability of our findings.

Conclusions

The distinctive dynamics involved in DHs that were uncovered in this study provide further justification for specialization in both DV research and practice, the necessity of which has been questioned by some researchers. Given the current study found the DA to be a potentially robust femicide risk assessment instrument, and that the DA is available for free online (with training also available online at a minimal cost), the DA should be embedded within an array of criminal justice, social service and healthcare agencies in a more high-profile manner. Widespread professional and community education from DV specialists concerning DH dynamics and

risk factors are a very promising strategy for preventing future tragedies. Domestic violence specialists should also keep an open mind to factors involved in other forms of violence that may play a role in the manifestation of DH.

Ultimately, the most complete explanations for DH (and DV generally) will likely incorporate biological, psychological and social factors. The explanations will outline factors that predispose some men to using DV (e.g., exposure to DV as a child), factors that precipitate most cases of DV (e.g., separation, jealousy), factors that perpetuate many cases of DV (e.g., denial, blaming, patriarchal societies), and factors that are protective against DV (e.g., shelter, arrest). Some of these factors will be common to other forms of violence, and some factors will not. These explanations will specify "who" is most likely to commit this crime, and "how" proximal causes (e.g., controlling attitudes in combination with separation) lead to DHs in current environments. These proximal causes also will complement ultimate causes addressing "why" DHs occur (i.e., proprietariness/male control).

The findings from this study also demonstrate there is noteworthy heterogeneity in perpetrators who carry out DHs, even though there appear to be many risk factors and themes common to the majority of DHs. Psychopathy appears to be an important variable in explaining DHs that occur in a dispassionate, strongly-planned and gratuitously violent fashion. Psychopathic DH perpetrators are less likely to present as suicidal prior to homicides and are probably also less distressed than non-psychopathic DH perpetrators. These findings imply that risk management strategies may need to be adjusted depending on characteristics of the potential perpetrator. In other words, with respect to prevention and intervention, "what" might work and "when" it might work best may depend on "who" is under consideration and "where" he is on the pathway to offending.

Only a few of the complexities involved in research, practice and policy concerning DH and DV were communicated in the current study. These complexities underscore that multiple practitioners with various strengths and expertise (e.g., those with expertise in DV and substance abuse/dependence intervention) are needed for preventing and managing the danger posed by high-risk DV perpetrators and for ensuring the safety of women and children (a more detailed discussion of the practical implications for preventing lethal and nonlethal DV that stem from this research can be found in Juodis et al. 2014). When feasible, a promising approach might involve a multi-agency, high-risk case management team (for examples of such teams, see Ontario DVDRC 2004, 2005, 2006). Under ideal circumstances, the approach will include quick and judicious adjudication of cases, careful monitoring of correctional outcomes via regular court reviews or specialized probation/parole programs, continuing safety planning for victims and risk management for perpetrators, and vigilant supervision involving consequences for those who fail to

Kropp, P. R., Hart, S. D., Webster, C. D., & Eaves, D. (1999). *Spousal assault risk assessment guide*. NY: Multi-Health Systems Inc.

Leistico, A. R., Salekin, R. T., DeCoster, J., & Rogers, R. (2008). A large-scale meta-analysis relating the Hare measures of psychopathy to antisocial conduct. *Law and Human Behavior, 32*, 28–45. doi:10.1007/s10979-007-9096-6.

Moffitt, T. E., Krueger, R. F., Caspi, A., & Fagan, J. (2000). Partner abuse and general crime: how are they the same? How are they different? *Criminology, 38*, 199–232. doi:10.1111/j.1745-9125.2000.tb00888.x.

Neumann, C. S., & Hare, R. D. (2008). Psychopathic traits in a large community sample: links to violence, alcohol use, and intelligence. *Journal of Consulting and Clinical Psychology, 76*, 893–899. doi:10.1037/0022-006X.76.5.893.

Ontario Domestic Violence Death Review Committee. (2004). *Annual report to the Chief Coroner*. Toronto: Office of the Chief Coroner.

Ontario Domestic Violence Death Review Committee. (2005). *Annual report to the Chief Coroner*. Toronto: Office of the Chief Coroner.

Ontario Domestic Violence Death Review Committee. (2006). *Annual report to the Chief Coroner*. Toronto: Office of the Chief Coroner.

Porter, S., Woodworth, M., Earle, J., Drugge, J., & Boer, D. (2003). Characteristics of sexual homicides committed by psychopathic and nonpsychopathic offenders. *Law and Human Behavior, 27*, 459–470. doi:10.1023/A:1025461421791.

Quinsey, V. L., Harris, G. T., Rice, M. E., & Cormier, C. A. (2006). *Violence offenders: Appraising and managing risk* (2nd ed.). Washington: American Psychological Association.

Ryan, C., Anastario, M., & DaCunha, A. (2006). Changing coverage of domestic violence murders: a longitudinal experiment in participatory communication. *Journal of Interpersonal Violence, 21*, 209–228. doi:10.1177/0886260505282285.

Statistics Canada. (2011). *Family violence in Canada: A statistical profile*. Ottawa, Ontario: Statistics Canada.

Websdale, N. (2003). Reviewing domestic violence deaths. *National Institute of Justice Journal, 250*, 26–31.

Wilson, M., & Daly, M. (1985). Competitiveness, risk taking, and violence: the young male syndrome. *Ethology and Sociobiology, 6*, 59–73. doi:10.1016/0162-3095(85)90041-X.

Wilson, M., & Daly, M. (1993). Spousal homicide risk and estrangement. *Violence and Victims, 8*, 3–16.

Woodworth, M., & Porter, S. (2002). In cold blood: characteristics of criminal homicides as a function of psychopathy. *Journal of Abnormal Psychology, 111*, 436–445. doi:10.1037/0021-843X.111.3.436.