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# Classifying Partner Femicide

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The heterogeneity of domestic violent men has long been established. However, research has failed to examine this phenomenon among men committing the most severe form of domestic violence. This study aims to use a multidimensional approach to empirically construct a classification system of men who are incarcerated for the murder of their female partner based on the Holtzworth-Munroe and Stuart (1994) typology. Ninety men who had been convicted and imprisoned for the murder of their female partner or spouse in England were identified from two prison samples. A content dictionary defining offense and offender characteristics associated with two dimensions of psychopathology and criminality was developed. These variables were extracted from institutional records via content analysis and analyzed for thematic structure using multidimensional scaling procedures. The resultant framework classified 80% (n = 72) of the sample into three subgroups of men characterized by (a) low criminality/low psychopathology (15%), (b) moderate-high criminality/ high psychopathology (36%), and (c) high criminality/low-moderate psychopathology (49%). The latter two groups are akin to Holtzworth-Munroe and Stuart's (1994) generally violent/antisocial and dysphoric/borderline offender, respectively. The implications for intervention, developing consensus in research methodology across the field, and examining typologies of domestic violent men prospectively are discussed.

**Keywords:** intimate partner; femicide; multidimensional scaling; domestic violence

Research into intimate partner violence has often investigated the violent man in attempt to understand the correlates and potential causes of his violent behavior. For more than three decades, research has found that men

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who are violent to their female partner are a heterogeneous group, demonstrating distinct characteristic differences (e.g., Faulk, 1974; Gondolf, 1988; Holtzworth-Munroe & Meehan, 2004; Saunders, 1992). As a result, research has attempted to develop classification systems of maritally violent men.

# **Classifying Intimate Partner Violence**

Recent pioneers, Holtzworth-Munroe and Stuart (1994), constructed a hypothetical typology to discriminate between subtypes of domestic violent men living in the community. This was achieved using three descriptive dimensions of the severity of marital violence, the generality of violence, and psychopathology/personality disorder of the abusive male. Three types of domestic violent men were proposed, namely family only (FO), generally violent/antisocial (GVA), and dysphoric/borderline (DB). In addition, a model of distal and proximal etiological variables was proposed to explain the development and characteristic differences of each subtype.

Holtzworth-Munroe and Stuart (1994) suggested that 50% of domestic violent men will be best described by the FO category. These offenders were hypothesized to most closely resemble nonviolent comparison groups, having low levels of criminality, alcohol and drug abuse, and infrequent use of violence, which would be limited to family members and be of low severity. Their violence is assumed to occur from a combination of low-level risk factors, such as poor communication skills with their partner, mild impulsivity, and dependency on their partner.

The GVA subtype is proposed to classify 25% of domestic violent men. This subtype is hypothesized to have low levels of psychological distress and depression alongside moderate levels of anger. Holtzworth-Munroe and Stuart (1994) suggest that the interpersonal relationships of the GVA group are characterized by a dismissive attachment style. This offender is characterized by the highest levels of impulsivity, antisocial personality, substance abuse, and criminality, committing moderate to severe levels of violence within and outside of the family unit.

Finally, the remaining 25% are hypothesized to be characterized by the DB subtype and are hypothesized to be the most psychologically distressed and emotionally volatile. They may show characteristics of borderline personality and experience high levels of dependency on and preoccupation with intimate partners, reacting with anger when they feel rejected, abandoned, or slighted. Research therefore suggests that they are most likely to react to estrangement with violence (Dutton & Kerry, 1999) and stalk their partners (Douglas & Dutton, 2001) to maintain or reestablish a relationship (Rosenfeld, 2000). In addition, they are also most likely to display high

levels of depression and anger and low-moderate levels of criminality and substance abuse. Violent acts are hypothesized to be of moderate-high severity and limited to mainly family members.

Initial support has been gathered for Holtzworth-Munroe and Stuart's (1994) typology. Holtzworth-Munroe, Meehan, Herron, Rehman, and Stuart (2000) tested their typology in a community sample of 102 men who had physically aggressed against their female partner in the past year. Cluster analysis, using the three descriptive dimensions they described, revealed four types of men. The three originally predicted subtypes resulted (FO, n = 37; DB, n = 15; GVA, n = 16) who differed as hypothesized. In addition, a low-level antisocial type (LLA; n = 34) emerged who fell intermediate to the GVA and FO groups on many measures. Research published since the Holtzworth-Munroe and Stuart (1994) review has generally supported the typology, either identifying the GVA and DB offenders (Chase, O'Leary, & Heyman, 2001; Gottman et al., 1995; Tweed & Dutton, 1998) or all of the three proposed subtypes (Hamberger, Lohr, Bonge, & Tolin, 1996; Waltz, Babcock, Jacobson, & Gottman, 2000; White & Gondolf, 2000).

# **Classifying Intimate Partner Femicide**

In the 11-city femicide study, Campbell et al. (2003) identified several factors associated with increased risk of intimate partner femicide, in comparison to abused control cases. Preincident risk factors included perpetrator's access to a gun, previous threats with a weapon, perpetrator's stepchild in the home, and estrangement, especially if the victim's partner was controlling. Never living together and prior arrests for domestic violence lowered risk. Thus, identifiable differences between lethal and nonlethal domestic assault do exist. However, these factors are situational, linked to severity of past violence or highlight past experiences which may have shaped the perpetrator's behavior. In addition, this study found femicide occurred in the context of past domestic violence, with victims in 70% of cases abused by the same perpetrator prior to their death. Other research sights this overlap in 65% to 80% of femicide cases in the United States (Campbell, 2004; Moracco, Runyan, & Butts, 1998). Therefore, it is plausible that the main characteristics thought to define types of domestic violent men in the community are representative of men committing lethal domestic violence. However, research has not empirically tested the prevalence of the various types of men identified by Holtzworth-Munroe and Stuart (1994) in a sample of men convicted for the murder of their female partner.

Longitudinal research suggests that the FO offender, who demonstrates infrequent and less severe forms of violence than other subtypes, does not

escalate his violence over time and is most likely to desist from violence, rather than increase in severity and frequency over time (see Holtworth-Munroe & Meehan, 2004). As an increase in severity and frequency of violence has been associated with increased risk of femicide (Campbell, 1995), it is plausible that FO men are less likely to murder their partner than other subtypes.

In an attempt to differentiate between men who murder and men who assault their female partner, Dutton and Kerry (1999) compared differences in the modus operandi and personality disorder of men committing lethal and nonlethal partner assaults. Although they do not compare their findings to existing taxonomies, they reported that scores on the Antisocial and Sadistic subscales of the Millon Clinical Multiaxial Inventory (Millon, 1987) were significantly higher in the subsample of men who committed nonlethal assault. Overcontrolled personalities were significantly more prevalent in men committing murder and, of particular interest, murders which were carried out as a reaction to estrangement were committed exclusively by men with overcontrolled-dependant personalities. The authors question the use of risk assessment tools as they claim the assessment tools tap into violence conducted by the psychopathic or aggressive-sadistic offender, whom they found not to be representative of men committing partner femicide in their study. However, examination of assessment tools (Bixenstine, 1999; Campbell, 1995) demonstrates that a multitude of questions are posed to assess risk, some of which are characteristic of Holtzworth-Munroe and Stuart's (1994) GVA offender (e.g., history of assault on others, substance abuse, prior criminal record) and DB offender (threat of suicide, obsessional harassment, recently divorced or estranged). The type of offender least likely to be identified by such checklists is the FO subtype, as they will be least likely to display characteristics that deviate from nonoffenders.

Furthermore, Saunders and Browne (2000) suggest that the DB offender proposed by Holtzworth-Munroe and Stuart (1994) appears to be most at risk of killing his partner, despite their previous findings that this offender's physical abuse in the relationship is not that severe (Saunders, 1992). However, other research reports contrary findings, suggesting that the GVA and DB offenders display moderate to severe partner assault (Holtzworth-Munroe & Meehan, 2004; Holtzworth-Munroe et al., 2000) and thus could potentially be at high risk of committing femicide. Thus, due to the lack of consensus among published research, it is necessary to explore the subtypes of violent men that exist within a sample of offenders committing lethal partner assault. The likelihood of one particular subtype going on to murder their partner can then be examined.

However, a problem that has been highlighted with many typologies has been the rigid classification systems used which have been formed via factor or cluster analysis (Canter, 1994). Indeed, Canter (1994) suggests that classification should be made on the basis of dominant themes of behavior measured along dimensions. This approach allows individuals to display characteristics from several themes while one dominant theme is designated to predominately characterize the offender. This study aims to use a multidimensional approach to empirically construct a classification system of men who murder their female partner, based on the Holtzworth-Munroe and Stuart (1994) typology.

#### Method

# Sample

The institutional records of all prisoners held between July 1, 2003, and November 18, 2003, at two male adult prisons in England were viewed to identify men that had been convicted and imprisoned for the murder of their female partner or spouse. Ninety men were identified.

The murders were committed between May 1, 1975, and February 24, 2003. All offenders were given a life sentence, with a tariff ranging from 5 to 25 years (M = 13 years, 7 months; SD = 3.2). At the time of the offense, perpetrators' ages ranged from 18 to 76 years (M = 37; SD = 10.1). Thirtyeight men (55.1%) were unemployed, 13 (18.8%) were employed in manual labor, 9 (13%) in skilled professions, 4 (5.8%) in low-skilled professions, 2 (2.9%) in public services, 2 (2.9%) were retired (2.9%), and 1 (1.5%) was a student. 1 Regarding ethnicity, 77 (85.6%) men were White, 6 (6.7%) Afro-Caribbean, 5 (5.6%) Asian, and 2 (2.2%) were of mixed ethnicity (White/Tunisian and South African/German). Victims' ages ranged between 15 and 59 years (M = 34.1; SD = 11.2) at the time of death. More than one third of victims were estranged from the perpetrator (n = 32, 36%), 26 (29.2%) were cohabiting, 20 (22.5%) married, and 11 (12.4%) were involved in a romantic relationship but were not cohabiting.2 The age disparity between the victim and offender ranged from 0 to 31 years, the mean disparity being 7.5 years (SD = 7.1).

# **Procedure**

Institutional records consisted of several legal documents: police statements of arrest, trial judge's comments, and psychological reports compiled postim-prisonment. To construct a classification system derived by multidimensional

scaling techniques, variables that have been associated with the different types of domestic violent men in the literature need to be identified. This is because men who possess a majority of variables associated with one particular type of domestic violent man are likely to represent that type. This study used the three dimensions of severity of marital violence, generality of violence, and psychopathology/personality disorder proposed by Holtzworth-Munroe and Stuart (1994) as a framework from which to identify variables that could potentially discriminate between the male prisoners.

The present study explored two dimensions. Marital violence and general violence are considered within the same dimension as they are both deemed criminal behaviors, thus they are represented by one dimension of criminality in this study. Psychopathology/personality disorders encompass symptoms and traits of mental health problems and thus are considered together and represented by one dimension of psychopathology. Twenty variables that have been associated with each dimension in the published literature (Douglas & Dutton, 2001; Dutton & Kerry, 1999; Holtzworth-Munroe et al., 2000; Holtzworth-Munroe & Stuart, 1994) and which were frequently cited in each of the 90 case files were chosen to discriminate between prisoners. A content dictionary lists the 20 variables, providing a definition of each and highlighting the dimension it represents (see the appendix).

The presence (scored as 1) or absence (scored as 0) of the 20 variables for each of the 90 prisoners was identified via content analysis of their institutional records. Previous research differentiating between the behavioral themes of offenses has found a dichotomous approach to be the most reliable way of identifying content variables (Canter & Heritage, 1990). The 20 dichotomous variables provided the data matrix on which multidimensional scaling analysis was conducted.

# **Rationale for Including Variables Within Each Dimension**

Criminality. A high level of criminality has been indicated by extensive criminal convictions, convictions for extrafamilial violence (Holtzworth-Munroe & Stuart, 1994), first convictions for crime at a younger age (Cadsky & Crawford, 1988), arrests for any type of crime (Shields, McCall, & Hanneke, 1988), extensive arrest records (Gondolf, 1988), and murder for instrumental gain (Dutton & Kerry, 1999). Based on such research, variables of >10 convictions, convictions for violence, convictions before 16, YOI, HMP, and instrumental were chosen to map these findings (see the appendix). Furthermore, low occupation status has been associated with

high levels of criminality (Shields et al., 1988), and thus information on unemployment status was collected. Research has shown that offenders with low levels of criminality are more likely to have received their first conviction for a criminal offense (if any) at an older age (Cadsky & Crawford, 1988) and have the least marital problems (Saunders, 1992) and least relationship violence (Holtzworth-Munroe & Stuart, 1994). To reflect this, variables of *later convictions*, *no partner violence with victim*, and *no history of partner violence* were collated.

*Psychopathology.* Psychopathology has been indicated by the presence of mental health problems, such as depression (Holtzworth-Munroe & Stuart, 1994), suicide, an unhealthy preoccupation and dependency on a romantic partner (Douglas & Dutton, 2001; Dutton & Kerry, 1999), and high levels of anger (Holtzworth-Munroe & Stuart, 1994) which have been demonstrated in murders of intimate partners by excessive overkill (Dutton & Kerry, 1999). Therefore, variables of depression/suicide, attempted suicide, estrangement, stalking, and >15 blows were collated (see the appendix). Substance abuse, particularly as a precipitating factor to violence, has previously been used to define dimensions of psychopathology in male offenders (Holtzworth-Munroe & Stuart, 1994); thus, variables of drug abuse, offense drug use, alcohol abuse, and offense alcohol use were collated. Furthermore, men characteristic of the DB offender, displaying high levels of psychopathology, have been demonstrated to be more likely to overreact with violence to trivial interpersonal disputes (Holtzworth-Munroe & Stuart, 1994); thus, argument was included within this dimension.

#### **Treatment of Data**

Multi-Dimensional Scaling (MDS) refers to a group of procedures which depict the relationship between variables as distances in an abstract space (Schiffman, Reynolds & Young, 1981). An association or correlation matrix is calculated and then an iterative algorithm is performed to find the best model which maximises the closeness of fit between distances in space and the associations/correlations between variables (Canter, Bennell, Alison, & Reddy, 2003). The goodness of fit between distances in space and the associations/correlations between variables is measured by a stress value, with a value between 0.15 and 2.0 deemed as "good fit" (Amar & Toledano, 2001).

In the present study, the geometric Smallest Space Analysis (SSA) technique (Lingoes, 1973) was approximated using a Euclidean distance model derived in SPSS version 11.5 for Windows. This technique was used as it

analyzes and groups like variables to provide distinct themes, in this case themes which represent different offender characteristics and behaviors. A geometric representation of the relationship that each variable has with every other variable is produced, based on relationships within an association matrix. SSA plots each variable as a point in a Euclidean space in such a way that the higher the similarity between two variables, the closer they are represented in space. Similarity is judged by the degree of co-occurrence in the matrix. Only relative distances between points are of concern. Thus, the closer any two points are together, the more likely that those characteristics or behaviors co-occur across offenses (Canter et al., 2003). Jaccard's coefficient was considered the most appropriate measure of association for the present data, as this equation excludes joint nonoccurrences, that is, cases in which neither variable occurs (Canter et al., 2003). This is an appropriate measure for the present data, as it is possible that absent information merely reflects omissions in the recording of the data, rather than a certain behavior or characteristic not being present (Canter et al., 2003).

#### **Concentration of Variables**

Of the 20 variables, 2 were originally collated in numeric form and then had to be dichotomized before entered into the SSA analysis, to produce consistency in the coding of variables for analysis. These were (a) the specific number of convictions an offender had (10 convictions) and (b) the number of blows he struck the victim with (>15 blows). After data collection, frequency analysis was run on the variables to determine appropriate cutoff points by which data could be collapsed into a dichotomous format. Cutoff points of offenders having 10 or more convictions and using 15 or more blows were deemed good criteria by which to categorize these variables, as this was true of less than 50% of the sample and thus useful in the discrimination of offenders (Canter & Heritage, 1990).

# Hypothesized Structure of the Classification System

The present study uses a dichotomy of present or absent to measure the extent to which each prisoner possessed each of the 20 variables. The 20 content variables were expected to differentiate between offenders. Table 1 details the likely presence or absence of each variable, representative of the dimensions of criminality or psychopathology, within each offense theme. A label of *present* demonstrates that there is consensus in the literature that a variable is associated with a particular subtype to some degree. An *absent* 

label represents that the literature does not associate the variable with a particular subtype.

It was hypothesized that variables would form three regions in the SSA plot akin to the Holtzworth-Munroe and Stuart (1994) taxonomy. Offenses characterized by dimensions of low criminality and low psychopathology, high criminality and low-moderate psychopathology, and low-moderate criminality and high psychopathology are hypothesized to result and be analogous to the FO, GVA, and DB offenders, respectively, as shown in Table 1. A region of high criminality and high psychopathology was not expected to result, as this has not featured previously in the domestic violence literature.

The Holtzworth-Munroe and Stuart (1994) typology proposes that the GVA offender is characterized by low levels of psychopathology. However, the present study includes variables of substance abuse (drug abuse, offense drug use, alcohol abuse, and offense alcohol use) as a measurement of the psychopathology dimension; this has been considered to represent psychopathology in previous typologies of domestic violent men (Holtzworth-Munroe & Stuart, 1994). As GVA offenders have been demonstrated to have the highest levels of substance abuse (Holtzwoth-Munroe et al., 2000), it is expected that in this study men who demonstrate similarities to the GVA offender, having high levels of criminality, will also demonstrate at least low-moderate levels of psychopathology because of their high levels of substance abuse.

## **Results**

# **Analysis of Offense and Offender Characteristics**

Variables that occur with high frequency (commonly) within a given sample are less likely to differentiate between individuals (Canter & Heritage, 1990). Therefore, the variables alcohol abuse and offense alcohol use, which were present for more than 50% of the sample, were omitted from the SSA analysis.

The two-dimensional SSA solution (see Figure 1) was found to have a Kruskal's stress value of 0.2 in 7 iterations, indicating a reasonable fit of the distances between variables in the Euclidean space and the original Jaccard's association matrix.<sup>3</sup> A line of best fit is added to the solution. As hypothesized, variables form three regions which can be interpreted as three offense themes of low criminality and low psychopathology (LC & LP), high criminality and low-moderate psychopathology (HC & L-MP),

Table 1
Hypothesized Distribution (presence or absence) of Offense
Variables Categorized Into Criminality and
Psychopathology Dimensions Based on the HoltzworthMunroe and Stuart (1994) Typology

Holtzworth-Munroe (1994) and Proposed Offense Theme Typology		
Family Only (FO), Low Criminality/Low Psychopathology	Generally Violent/ Antisocial (GVA), High Criminality/ High Psychopathology	Dysphoric/ Borderline (DB), Low-Moderate Criminality/High Psychopathology
Present <sup>a</sup>	Absent	Absent
Absent	Present <sup>a</sup>	Present
Absent	Present <sup>a</sup>	Present
Absent	Present <sup>a</sup>	Present
Present	Present	Absent
Absent	Present <sup>a</sup>	Present
Absent	Present <sup>a</sup>	Present
Absent	Present <sup>a</sup>	Present
n Present <sup>a</sup>	Absent	Absent
Present <sup>a</sup>	Absent	Absent
Absent	Absent	Present <sup>a</sup>
Present	Present	Present <sup>a</sup>
Absent	Present <sup>a</sup>	Present
	Family Only (FO), Low Criminality/Low Psychopathology  Present <sup>a</sup> Absent	Holtzworth-Munroe (1994) and Offense Theme Typolog  Generally Violent/ (FO), Low Antisocial (GVA), Criminality/Low High Criminality/ Psychopathology High Psychopathology  Present <sup>a</sup> Absent Absent Present <sup>a</sup> Absent Present <sup>a</sup> Absent Present Absent Present Absent Present Absent Present Absent Present Absent Absent Present Absent Absent Present Absent Present Absent Present Absent Present Absent Absent Present Absent

Note: Absent = no evidence of association between the variable and the typology; present = at least some evidence of an association between the variable and the typology. Complete definitions of variable meanings are stated in the appendix.

and low-moderate criminality and high psychopathology. However, in the latter region, variables were situated at the middle and toward the higher end of the criminality dimension and thus is renamed moderate-high criminality to reflect this (M-HC & HP).

a. Indicates a variable consistently associated with the typology in the literature.

Instrumental (12) high criminality & lowmoderate psychopathology no partner violence with victim low (14)unemployment no history of partner violence YOI (22) Convictions for viol drug abuse (27) argument (50) low criminality & low psychopathology depression/suicide(33 stalking(26) estrange(33) Aoffence drug use (19)  $\triangle > 15$  blows(22) later convictions (8) moderate-high criminality & high psychopathology ▲ suicide (14) Criminality high low

Figure 1
Two-Dimensional Solution

Note: Kruskal's stress value = 0.2 in 7 iterations. Full definitions of variable labels can be found in the appendix. Values in brackets represent the percentage frequency with which variables occurred across the 90 cases.

The location and position of variables along these dimensions, from low to high, is shown by the arrows in Figure 1. All variables fell into the previously hypothesized offense themes (see Table 1), with the exception of offense drug use, which fell into M-HC & HP, and instrumental, which was characteristic of the LC & LP region.

Each theme is discussed below, and Kuder-Richardson 20 (KR-20) coefficients are presented, which provide an index of reliability for the offense themes. KR-20 coefficients are an approximation of the Cronbach's alpha for use with dichotomous data (Canter et al., 2003). Previous studies that have utilized data not originally collected for the purposes of research have reported KR-20 values of 0.5 and above as reasonable (Canter et al., 2003).

#### LC & LP

Four variables constitute this region, and are situated along the two dimensions in a similar way to Holtzworth-Munroe and Stuart's (1994) FO

offender. Low criminality is represented by no previous history of partner violence with the victim or past intimate partners (no history of partner violence with victim and no history of partner violence) and receiving criminal convictions later in life and just 24 months or less, prior to the murder (later convictions). The variables are situated toward the low end of the psychopathology dimension, demonstrating the absence of psychopathology for men who characterize this theme. However, the presence of instrumental motive demonstrates that these offenses are characterized by murder for instrumental gain, suggesting that there is a subset of men who murder for personal gain rather than in response to anger and/or to make the victim suffer. The KR-20 value for the region is 0.034; however, this increases to 0.54 when the variable of later convictions is omitted from the item list.

#### M-HC & HP

Seven variables characterize this region, which reflects Holtzworth-Munroe and Stuart's (1994) DB offender. High psychopathology is represented by a history of depressed and suicidal behavior (depression/suicide), attempted suicide postmurder (suicide), high levels of anger displayed by overkill (>15 blows), high levels of dependency and preoccupation with their partners (represented by stalking), estrangement-motivated offenses (estrange), and offenders reacting to interpersonal disputes (arguments) with anger and violence. However, the positioning of variables toward the middle and the high end of the criminality dimension reflects that this region is characterized by a moderate to high measure of criminality, which is not characteristic of the DB nonlethal offender. Offenses are also characterized by drug abuse at the time of offense (offense drug use). Although this variable was expected to characterize offenses classified by HC & L-MP, the Holtzworth-Munroe and Stuart (1994) taxonomy does hypothesize that these offenders will abuse alcohol and drugs to a moderate level. The variable argument has been partitioned into this offense region as the literature reports that these offenders are the most likely to react to interpersonal disputes. However, as this variable represents exactly 50% of the cases, it will characterize offenses outside of this region. Hence, it is positioned centrally in the SSA plot. Indeed, the KR-20 value for this region is 0.31; however, this increases to 0.51 when argument is omitted from the item list.

#### HC & L-MP

This region is characterized by seven variables, which reflect Holtzworth-Munroe and Stuart's (1994) generally violent/antisocial offender. High criminality is represented by offenders having gained convictions before age 16 (convictions before 16), having more than 10 convictions (>10 convictions), being unemployed (unemployment), having been incarcerated in Young Offenders Institutes (YOI) and Her Majesty's Prisons (HMP), and having previous convictions for violent offenses outside the family (convictions for viol). In addition, the positioning of variables toward the low-to-middle section of the psychopathology dimension demonstrates that offenders classified by this region have fairly low levels of psychopathology, drug abuse being characteristic of this. The KR-20 value for this region is 0.7.

# **Assigning Dominant Themes**

To examine the feasibility of the above framework, the 90 offenses were categorized into one of the three identified themes. Three scores were assigned (one score for each region) to each of the 90 cases. Each score represented how well one region characterized a specific case.

The variables that produced the highest KR-20 scores within each offense theme were used to calculate a score for each region. For example, argument was excluded from the M-HC & HP region as it reduced the KR-20 value to a less than reasonable level, thus leaving six variables to represent this region. The presence or absence of variables in each region was calculated as a score (presence = 1 point) for each case, and then that score derived as a percentage. For example, to derive a score for the M-HC & HP region, an offender would score 1 for each variable he possessed. As six variables now constitute this region, an offender could score a maximum of 6 (100%).

As with previous classification research (Canter et al., 2003), cases were assigned to one dominant theme if the percentage score for that theme were greater than the percentage sum of the other two themes combined. Where this did not occur, cases were classified as hybrids. In addition, those cases which did not possess any of the variables in each theme, or only one variable, were deemed unclassifiable.

Using this method of classification, 72 (80%) cases could be classified by one dominant offense theme, with 10 (11.1%) cases classified as hybrid and 8 (8.9%) as unclassifiable. Of the 72 cases, 11 (15.3%) were classified as LC & LP, 35 (48.6%) as HC & L-MP, and 26 (36.1%) as M-HC & HP.

# Discussion

This study identifies a framework which successfully classifies 80% (n = 72) of men who have murdered their female partner into one of three themes, using two dimensions of criminality and psychopathology.

The majority of classifiable cases were characterized by themes of HC & L-MP (49%) and M-HC & HP (36.1%). Offenders characterized by these themes demonstrated offense and offender characteristics consistent with those of the GVA and DB offender proposed by Holtzworth-Munroe and Stuart (1994). Previous research has estimated (Holtzworth-Munroe & Stuart, 1994) and found (Holtzworth-Munroe et al., 2000) prevalence rates for both GVA and DB offenders living in the community of less than 25%. However, the present study demonstrates a much higher representation of offenders analogous to these groups, in a population of male offenders perpetrating lethal domestic violence. Thus, the present findings suggest that GVA and DB offenders are more likely to commit femicide than FO offenders. The high frequency of men classified by the HC & L-MP region is contrary to work by Dutton and Kerry (1999) and Saunders and Browne (2000), who propose that men resembling an overcontrolled-dependent or DB category will be most at risk of murdering their partner. However, it must be noted that as a high percentage of men resembling the DB profile are likely to commit femicide suicide (Dutton & Kerry, 1999), they may be underrepresented in a prison sample.

The present framework found that M-HC & HP perpetrators, akin to the DB offender, were positioned in the moderate-high region of the criminality dimension. Holtzworth-Munroe and Stuart (1994) proposed that DB offenders living in the community would have low-moderate levels of criminality, committing fewer criminal acts (if any) in comparison to GVA men. Although this discrepancy could be due to bias in sample selection, it is plausible that of the DB men committing nonlethal acts of partner violence in the community, a subsection with higher levels of criminality are more likely to go on to murder their female partner. Further research would need to compare men classified as DB offenders from different populations, such as criminal and community volunteer samples, to test this hypothesis.

In addition, although a region of M-HC & HP resulted, variables did not form a region of high criminality and high psychopathology; indeed, variables in this region were not positioned as far along the criminality dimension as variables in the HC & L-MP region. Previous research utilizing SSA models has suggested that gaps in the solution are meaningful (Canter et al., 2003; Canter & Fritzon, 1998). As this study investigated the presence of three themes of offenders who have been found to predominate in the nonlethal domestic violence literature, variables that would identify the presence or absence of these men were collated. It could therefore be argued that the current study has not identified variables which represent offenders falling outside of the three hypothesized regions. In addition, this study utilizes a prison sample; collecting data from Regional Secure Units may better identify this

thematic region. However, it is possible that offenders with high criminality and high psychopathology are so distressed that they are rarely involved in intimate relationships or are apprehended by the judicial system for other crimes.

The LC & LP theme accounted for a minority of cases (15.3%). Although this dimensional profile is similar to the FO offender, proposed by Holtzworth-Munroe and Stuart (1994), the offenses were specifically characterized by instrumental attacks in the absence of any history of violence with the victim or other intimate partners in the past. These variables do not relate to any previous classification of domestic violent men in the literature. This would appear to suggest that some offenders classified by this region may be executing a violent offense toward the victim for personal gain. These offenders would not appear in a nonlethal classification of partner violence and, therefore, it is hypothesized that these cases are specific only to intimate partner femicide. Indeed, this split of instrumental/expressive aggression is consistent with established models of homicide (Salfati, 2000). Furthermore, this region of the SSA plot is sparse, containing only four variables. It is plausible that the LC & LP region could be partitioned to reflect two regions of low criminality and low psychopathology and low criminality and high psychopathology. Indeed, the variables of instrumental, no partner violence with victim, and no history of partner violence are situated close together, producing a higher reliability coefficient without the inclusion of later convictions, which suggests that these variables alone better represent LC & LP.

A region of low criminality and high psychopathology did not result. The variable later convictions was positioned in this region, which may imply that offenders who commit crimes later in life and within 1 year prior to the murder characterize this region. This variable may better represent psychological distress (psychopathology) than a criminal lifestyle (criminality). Therefore, identifying other factors that capture offenders who have psychological problems but have no criminal background prior to a current period of stress in their lives (such as financial problems or relationship breakdown, which may lead to the development of mental health problems and poor coping) may characterize a low criminality and high psychopathology region. Again, accessing samples from Regional Secure Unit, in addition to prisons, may better identify this region.

# Methodological Considerations and Implications for Further Research

It must be noted that these results should be interpreted with caution, as the data were not originally collated for the purpose of this study and thus will contain omissions. Variables were only coded present when it was stated that they had occurred in the records. Thus, an absence of these variables does not necessarily mean that they did not occur, but rather that they had not been recorded in the institutional records.

The variable argument was found to reduce the reliability of the H-MC & HP region. Argument may better discriminate between regions if the context of the interpersonal dispute is taken into account. For example, it may be expected that DB men will be more likely to react to arguments about problems in the relationship and threats/attempts of abandonment by the woman, as opposed to GVA men, who may be more likely to react to disputes about women not fulfilling their patriarchal expectations in the home.

Adopting a two-dimensional approach to the classification of offenders is useful, considering the ambiguity associated with typologies of domestic violent men in the literature. Unlike the Holtzworth-Munroe and Stuart's (1994) classification system, the current framework does not use severity of past marital violence as a discriminating factor, as this has proved a point of controversy in the literature. Some research suggests that men who murder their partner do not necessarily perpetrate severe partner violence prior to the murder (Saunders & Browne, 2000). This is contrary to research which has found an increase in severity and frequency of violence to be associated with an increased risk of femicide (Campbell, 1995). Indeed, preliminary research suggests that violence levels are relatively stable over time (see Holtzworth-Munroe & Meehan, 2004), with initial violence severity being a good predictor for future levels of violence. Although this study demonstrates that men akin to the GVA and DB subtypes are highly representative of men who murder their female partner, more longitudinal research which monitors severity of intimate partner violence is needed to understand the relationship between severity of marital violence and lethality.

### Conclusion

If the underlying processes that result in domestic violence and femicide are to be understood, consensus within the field is needed. Unified definitions of the types of men, dimensions which produce the most valid classification system, and consensus as to the forms and severity of abuse perpetrated by each type need to be established. The present study suggests that men characteristic of the DB and GVA offenders will be most likely to commit femicide, and other recent research (Holtzworth-Munroe & Stuart, 1994; Holtzworth-Munroe et al., 2000) suggests that these men display

moderate-severe levels of marital violence. However, this is contrary to other research (Dutton & Kerry, 1999; Saunders & Browne, 2000), and as a result of such ambiguity, risk assessment and prediction remain difficult and the utility of domestic violence intervention programs with men incarcerated for femicide, unknown.

Although this study demonstrated that perpetrators analogous to the DB and GVA offenders predominate in femicide cases, this was the first study of its kind, using a small group of English cases. Therefore, research would benefit from longitudinal, cross-cultural studies to assess typologies of men and their behavior over time and to prospectively examine which men go on to murder their intimate partner.

# Appendix Content Dictionary of the 20 Variables Derived From Content Analysis of File Information

For consistency, the variable label is presented here as it is in the SSA solution in Figure 1.

- 1. *later convictions*: Offenders who were 28 years and older when they committed their first offense and who committed this within a maximum of 24 months prior to the murder.
- 2. *convictions before 16*: Offenders who had been convicted for one or more criminal offense/s before 16 years.
- 3. *10 convictions*: An offender who had 10 or more criminal convictions, prior to the murder.
- 4. *convictions for viol*: An offender who has a conviction for violence against an extrafamilial person.
- 5. *instrumental*: The offender committed the murder to benefit himself in some way, that is, via monetary gain, preventing the victim from informing authorities of his illegal activity, or to remove the victim from his life so he could remarry.
- 6. *HMP*: An offender who was previously incarcerated in Her Majesty's Prison prior to the murder.
- 7. *YOI*: An offender who was incarcerated in a Young Offender Institute for a period of time prior to the murder.
- 8. *unemployment*: An offender who was unemployed at the time of the offense.
- 9. *no partner violence with victim*: An offender who had no recorded history of partner violence with the victim prior to the offense.
- 10. no history of partner violence: An offender who had no previous recorded history of being violent toward women with whom he had had a relationship in the past.

- 11. *suicide*: An offender who attempted to take his own life after the murder (before arrest).
- 12. >15 blows: An offender who inflicted more than 15 blows/stabs to the victim.
- 13. *estrange*: An offense that occurred after a period of estrangement from the victim.
- 14. *stalking*: An offender who stalked/harassed the victim prior to the offense. Defined as "repeated following, communicating and contacting a person in a threatening manner that causes the person to fear, on a reasonable basis, for his or her safety" (Douglas & Dutton, 2001, p. 519).
- 15. *depression/suicide*: An offender who had a recorded history of suicide attempt(s) in the past.
- 16. *argument*: An offense that took place in the context of argument between the offender and the victim.
- 17. drug abuse: An offender who had a reported history of drug abuse.
- 18. offense drug use: An offender who was reported to have committed the offense under the influence of drugs.
- 19. alcohol abuse: An offender who had a reported history of alcohol abuse.
- 20. offense alcohol use: An offender who was reported to have committed the offense under the influence of alcohol.

#### **Notes**

- 1. Manual labor constitutes gardeners, laborers, and builders. Skilled profession constitutes business managers, computer technicians, engineers, estate agents, and salesmen. Low-skilled profession constitutes taxi drivers and market workers.
- 2. Employment status of the perpetrator was missing in 21 cases; the relationship status of the victim and perpetrator was missing in 1 case. Percentages for each category are calculated from the total number of valid cases.
  - 3. A stress value between 0.15 and 2.0 indicates a good fit (Amar & Toledano, 2001).

## References

- Amar, R., & Toledano, S. (2001). *Hudap manual with mathematics and Windows interface*. Jerusalem: The Hebrew University of Jerusalem.
- Bixenstine, V. E. (1999). Spousal homicide. In H. V. Hall (Ed.), *Lethal violence: A sourcebook of fatal domestic, acquaintance and stranger violence.* Boca Raton, FL: CRC Press.
- Cadsky, O., & Crawford, M. (1988). Establishing batterer typologies in a clinical sample of men who assault their female partners. *Canadian Journal of Community Mental Health*, 7, 119-127.
- Campbell, J. C. (1995). Prediction of homicide of and by battered women. In J. C. Campbell (Ed.), *Assessing dangerousness: Violence by sexual offenders, batterers, and child abusers* (pp. 96-113). Thousand Oaks, CA: Sage.
- Campbell, J. C. (2004). Helping women understand their risk in situations of intimate partner violence. *Journal of Interpersonal Violence*, 19(12), 1464-1477.

- Campbell, J. C., Webster, D., Koziol-McLain, J., Block, C. R., Campbell, D., Curry, M. A., et al. (2003). Risk factors for femicide in abusive relationships: Results from a multi-site case control study. *American Journal of Public Health*, 93, 1089-1097.
- Canter, D. V. (1994). Criminal shadows. London: HarperCollins.
- Canter, D. V., Bennell, C., Alison, L. J., & Reddy, S. (2003). Differentiating sex offences: A behaviourally based thematic classification of stranger rapes. *Behavioral Sciences and the Law*, 21, 157-174.
- Canter, D. V., & Fritzon, K. (1998). Differentiating arsonists: A model of fire-setting actions and characteristics. Legal and Criminological Psychology, 3, 73-96.
- Canter, D. V., & Heritage, R. (1990). A multivariate model of sexual offence behaviour: Developments in "offender profiling." The Journal of Forensic Psychiatry, 1, 185-212.
- Chase, K. A., O'Leary, K. D., & Heyman, R. E. (2001). Categorizing partner-violent men within the reactive-proactive typology model. *Journal of Consulting and Clinical Psychology*, 69, 567-572.
- Douglas, K. S., & Dutton, D. G. (2001). Assessing the link between stalking and domestic violence. Aggression and Violent Behavior, 6, 519-546.
- Dutton, D. G., & Kerry, G. (1999). Modus operandi and personality disorder in incarcerated spousal killers. *International Journal of Law and Psychiatry*, 22(3-4), 287-299.
- Faulk, M. (1974, July). Men who assault their wives. *Medicine, Science and the Law*, 180-183.Gondolf, E. W. (1988). Who are these guys? Toward a behavioural typology of batterers. *Violence and Victims*, 3, 187-203.
- Gottman, J. M., Jacobson, N. S., Rushe, R. H., Shortt, J., Babcock, J., La Taillade, J. J., et al. (1995). The relationship between heart rate reactivity, emotionally aggressive behaviour and general violence in batterers. *Journal of Family Psychology*, 9, 227-248.
- Hamberger, L. K., Lohr, J. M., Bonge, D., & Tolin, D. F. (1996). A large sample empirical typology of male spouse abusers and its relationship to dimensions of abuse. *Violence and Victims*, 11, 277-292.
- Holtzworth-Munroe, A., & Meehan, J. C. (2004). Typologies of men who are martially violent: Scientific and clinical implications. *Journal of Interpersonal Violence*, 19(12), 1369-1389.
- Holtzworth-Munroe, A., Meehan, C., Herron, K., Rehman, U., & Stuart, G. L. (2000). Testing the Holtzworth-Munroe and Stuart (1994) batterer typology. *Journal of Consulting and Clinical Psychology*, 68(6), 1000-1019.
- Holtzworth-Munroe, A., & Stuart, G. L. (1994). Typologies of male batterers: Three subtypes and the differences among them. *Psychological Bulletin*, *116*(3), 476-497.
- Lingoes, J. C. (1973). The Guttman-Lingoes non-metric program series. Ann Arbor, MI: Mathesis. Millon, T. (1987). Manual for the MCMI (2nd ed.). Minneapolis, MN: National Computer Systems
- Moracco, K. E., Runyan, C. W., & Butts, J. D. (1998). Femicide in North Carolina, 1991-1993: A statewide study of patterns and precursors. *Homicide Studies*, 2(4), 422-446.
- Rosenfeld, B. (2000). Assessment and treatment of obsessional harassment. *Aggression and Violent Behavior*, 5(6), 529-549.
- Salfati, G. (2000). The nature of expressiveness and instrumentality in homicide: Implications for offender profiling. *Homicide Studies*, 4(3), 265-293.
- Saunders, D. G. (1992). A typology of men who batter women: Three types derived from cluster analysis. *American Journal of Orthopsychiatry*, 62, 264-275.
- Saunders , D. G., & Browne, A. (2000). Intimate partner homicide. In R. T. Ammerman and M. Hersen (Eds.), Case studies in family violence (2nd ed.). New York: Kluwer Academic/Plenum Publishers.

- Schiffman, S. S., Reynolds, M. L., & Young, F. W. (1981). *Introduction to multidimensional scaling: Theory, methods and applications*. New York: Academic.
- Shields, N. M., McCall, G. J., & Hanneke, C. R. (1988). Patterns of family and nonfamily violence: Violent husbands and violent men. Violence and Victims, 3, 83-97.
- Tweed, R. G., & Dutton, D. G. (1998). A comparison of impulsive and instrumental subgroup of batterers. *Violence and Victims*, 13, 217-230.
- Waltz, J., Babcock, J. C., Jacobson, N. S., & Gottman, J. (2000). Testing a typology of batterers. *Journal of Consulting and Clinical Psychology*, 68(4), 658-669.
- White, R. J., & Gondolf, E. W. (2000). Implications of personality profiles for batterer treatment. *Journal of Interpersonal Violence*, 15, 467-488.

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