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Dixon, Louise; Hamilton-Giachritsis, Catherine; Browne, Kevin

DOI:

[10.1177/0886260507307652](https://doi.org/10.1177/0886260507307652)

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Document Version

Peer reviewed version

Citation for published version (Harvard):

Dixon, L, Hamilton-Giachritsis, C & Browne, K 2008, 'Classifying Partner Femicide', *Journal of Interpersonal Violence*, vol. 23, no. 1, pp. 74-93. <https://doi.org/10.1177/0886260507307652>

[Link to publication on Research at Birmingham portal](#)

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Published in the *Journal of Interpersonal Violence* 2008.

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Full reference for this post print article: Dixon, L., Hamilton-Giachritsis, C. & Browne, K.D. (2008). Classifying partner femicide. *Journal of Interpersonal Violence*; 23, 74-93

Journal homepage: <http://jiv.sagepub.com/>

Classifying Partner Femicide

By

Louise Dixon, Catherine Hamilton-Giachritsis and Kevin Browne
Centre for Forensic and Family Psychology,
University of Birmingham, UK.

Running Title: Classifying Partner Femicide

Requests for reprints should be sent to Louise Dixon, School of Psychology, University of Birmingham, Edgbaston, Birmingham, B15 2TT, United Kingdom.

Publishers correspondence to:

Louise Dixon
Centre for Forensic and Family Psychology
School of Psychology,
University of Birmingham,
Edgbaston,
Birmingham.
B15 2TT
Email: LXD036@bham.ac.uk
Tel: 0121 414 7218/3319
Fax: 0121 414 4897

Biographical Statement

Louise Dixon, Ph.D. is a Chartered Forensic Psychologist and currently works as a Lecturer at The Centre for Forensic and Family Psychology at the University of Birmingham, UK. Her areas of writing and research interest include the heterogeneity of domestic violent men and violent families and the prediction and prevention of family violence. She has recently published several journal articles and book chapters addressing issues in these domains. Louise is also a member of the Editorial board for the Journal of Sexual Aggression.

Catherine Hamilton-Giachritsis PhD is a Chartered Forensic Psychologist and currently works as a Lecturer at The Centre for Forensic and Family Psychology at the University of Birmingham, UK. Previously, she worked for Birmingham Social Services Department undertaking care proceeding assessments and worked in a residential unit for families where child maltreatment has occurred or is suspected. She has published a number of papers and book chapters related to recurrent child maltreatment, domestic violence and the link between child maltreatment and offending behaviour. She is currently on the committee of the West Midlands branch of the British Association for the study and prevention of Child Abuse and Neglect (BASPCAN) and is a member of the British Association of Behavioural and Cognitive Psychotherapies (BABCP).

Kevin Browne PhD is a Chartered Forensic Psychologist and Chartered Biologist. He is employed by the University of Birmingham as Professor and Director of the Centre for Forensic and Family Psychology. He has been researching family violence and child maltreatment for over 22 years and has published extensively on these subjects. He co-edited the BASPCAN Wiley Journal Child Abuse Review between 1992 and 1999. He is currently an Executive Councillor of the International Society for the Prevention of Child Abuse and Neglect (ISPCAN) and is Advisor/Consultant on Child Protection to the World Health Organisation Regional Office for Europe.

Classifying partner femicide

Abstract

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, UK, were identified from 2 prison samples. A content dictionary defining offence 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 sub-groups of men characterised by a) Low Criminality/Low Psychopathology (15%) b) Moderate-High Criminality/High Psychopathology (36%) 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 for examining typologies of domestic violent men prospectively are discussed.

Key words: *Intimate partner, femicide, multidimensional scaling, domestic violence*

Introduction

Research into intimate partner violence has often investigated the violent man in attempt to understand the correlates and potential causes of his violent behaviour. For over three decades research has found that men who are violent to their female partner are a heterogeneous group, demonstrating distinct characteristic differences (e.g. Faulk, 1974; Gondolf, 1988; Saunders, 1992; Holtzworth-Munroe & Meehan, 2004). As a result research has attempted to develop classification systems of martially 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 hypothesised to most closely resemble non-violent 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 hypothesised 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 characterised by a dismissive attachment style. This offender is characterised by the highest

levels of impulsivity, antisocial personality, substance abuse and criminality, committing moderate to severe levels of violence both within and outside of the family unit.

Finally, the remaining 25% are hypothesised to be characterised by the DB sub-type, who are hypothesised 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 they are most likely to react to estrangement with violence (Dutton & Kerry, 1999) and stalk their partners (Douglas & Dutton, 2001) in order to maintain or re-establish 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 hypothesised 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 & 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 sub-types resulted (FO, n=37; DB, n=15; GVA, n=16) who differed as hypothesised. 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 (op. cit.) 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 sub-types (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. Pre-incident risk factors included perpetrators access to a gun, previous threats with a weapon, perpetrators step-child 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 non-lethal domestic assault do exist. However, these factors are situational, linked to severity of past violence or highlight past experiences which have shaped the perpetrators behaviour. 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 65-80% of femicide cases in the US (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 sub-type, 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 Holtzworth-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 sub-types.

In an attempt to differentiate between men who murder and men who assault their female partner, Dutton & Kerry (1999) compared differences in the modus operandi and personality disorder of men committing lethal and non-lethal partner assaults. Whilst they do not compare their findings to existing taxonomies, they reported that scores on the Antisocial and Sadistic sub-scales of the Millon Clinical Multi-axial Inventory (Millon, 1987) were significantly higher in the sub-sample of men who committed non-lethal assault. 'Over-controlled' 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 they 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 & 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 check lists is the FO sub-type, as they will be least likely to display characteristics that deviate from non-offenders.

Furthermore, Saunders & 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 offenders physical abuse in the relationship is not that severe (Saunders, 1992). However, other research reports contrary findings, suggesting that both the GVA and DB offenders display moderate to severe partner assault (Holtzworth-Munroe & Meehan, 2004; Holtzworth-Munroe, Meehan, Herron, Rehman & Stuart, 2000) and thus could both 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 sub-type 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 behaviour measured along dimensions. This approach allows individuals to display characteristics from several themes whilst one dominant theme is designated to predominately characterise 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 & Stuart (1994) typology.

Method

Sample

The institutional records of all prisoners held between 1st July 2003 and 18th November 2003, at two male adult prisons in England, UK, 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 1st May 1975 and 24th February 2003. All offenders were given a life sentence, with a tariff ranging from 5-25 years (mean = 13 years 7 months SD = 3.2). At the time of the offence, perpetrators age ranged from 18-76 years (mean = 37; SD = 10.1). Thirty eight men (55.1%) were unemployed, 13 (18.8%) were employed in manual labour¹, 9 (13%) in skilled professions¹, 4 (5.8%) in low skilled professions¹, 2 (2.9%) in public services, 2 (2.9%) were retired (2.9%) and 1 (1.5%) was a student². Regarding ethnicity, 77 (85.6%) men were White UK, 6 (6.7%) Afro-Caribbean, 5 (5.6%) Asian and 2 (2.2%) were of mixed ethnicity (White UK/Tunisian and South African/German). Victim age ranged between 15-59 years (mean = 34.1; SD = 11.2) at the time of death. Over 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 cohabiting². 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 post-imprisonment.

¹ 'Manual labour' constitutes gardeners, labourers 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 missing in 1 case. Percentages for each category are calculated from the total number of valid cases.

In order 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 & 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 behaviours, thus they are represented by one dimension of 'Criminality' in this study. Psychopathology/personality disorders both 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, Meehan, Herron, Rehamn & Stuart, 2000; Holtzworth-Munroe and 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 and provides a definition of each and highlights the dimension it represents (see Appendix).

The presence (scored as 1) or absence (scored as 0) of the twenty variables for each of the 90 prisoner's was identified via content analysis of their institutional records. Previous research differentiating between the behavioural themes of offences 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 extra-familial 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 Appendix). Furthermore, low occupation status has been associated with high levels of criminality (Shields, McCall & Hanneke, 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 offence (if any) at an older age (Cadsby & Crawford, 1988), 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 and a 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 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', 'offence drug use', 'alcohol abuse' and 'offence 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) and 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 & Toledmano, 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 analyses and groups like variables to provide distinct themes, in this case themes which represent different offender characteristics and behaviours. 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 behaviours co-occur across offences (Canter, Bennell, Alison & Reddy, 2003). Jaccard's coefficient was considered the most appropriate measure of association for the present data, as this equation excludes joint non-occurrences, i.e. cases in which neither variable occurs (Jaccard, 1908). 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 behaviour or characteristic not being present (Canter et al 2003).

Concatenation of variables

Of the 20 variables, 2 were originally collated in numeric form and then had to be dichotomised 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 2 variables to determine appropriate cut-off points by which data could be collapsed into a dichotomous format. Cut-off points of offenders having 10 or more convictions and using 15 or more

blows were deemed good criteria by which to categorise these variables, as this was true of less than 50% of the sample (and thus useful in the discrimination of offenders (Canter & Heritage, 1990)).

Hypothesised 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 offence theme. A label of 'present' demonstrates that there is consensus in the literature that a variable is associated with a particular sub-type to some degree. An asterisk marked against a 'present' label highlights that the literature consistently demonstrates a presence of that particular variable to a high/strong degree. An 'absent' label represents that the literature does not associate the variable with a particular sub-type.

It was hypothesised that variables would form 3 regions in the SSA plot akin to the Holtzworth-Munroe and Stuart (1994) taxonomy. Offences characterised by dimensions of 'Low Criminality and Low Psychopathology'; 'High Criminality and Low-Moderate Psychopathology'; and 'Low-Moderate Criminality and High Psychopathology' are hypothesised 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 characterised by low levels of Psychopathology. However, the present study includes variables of substance abuse ('drug abuse', 'offence drug use', 'alcohol abuse' and 'offence 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 (Holtzworth-Munroe, Meehan, Herron, Rehman & Stuart, 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.

Table 1 here

Results

Analysis of offence 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 ‘offence 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 iterations³, indicating a reasonable fit of the distances between variables in the Euclidean space and the original Jaccards association matrix. A line of best fit is added to the solution. As hypothesised, variables form three regions which can be interpreted as three offence themes of ‘Low Criminality and Low Psychopathology’ (LC & LP); ‘High Criminality and Low-Moderate Psychopathology’ (HC & L-MP); 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-H C & HP).

Figure 1 here

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 hypothesised offence themes (see Table 1), with the exception of ‘offence 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 (K-R 20) coefficients are presented, which provide an index of reliability for the offence themes. K-R 20 coefficients are an approximation

³ A stress value between 0.15 and 2.0 indicates a ‘good fit’ (Amar & Toledmano, 2001).

of the Cronbach's Alpha for use with dichotomous data (Canter, Bennell, Alison & Reddy, 2003). Previous studies that have utilised data not originally collected for the purposes of research have reported K-R 20 values of 0.5 and above as reasonable (Canter, Bennell, Alison & Reddy, 2003).

Low Criminality and Low Psychopathology (LC & LP)

Four variables constitute this region, and are situated along the two dimensions in a similar way to Holtzworth-Munroe & 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 characterise this theme. However, the presence of 'instrumental' motive demonstrates that these offences are characterised by murder for instrumental gain suggesting there is a sub-set of men who murder for personal gain rather than in response to anger and/or to make the victim suffer. The K-R-20 value for the region is 0.034, however this increases to 0.54 when 'later convictions' is omitted from the item list.

Moderate-High Criminality and High Psychopathology (M-HC & HP)

Seven variables characterise this region, which reflects Holtzworth-Munroe & Stuart's (1994) DB offender. High Psychopathology is represented by a history of depressed and suicidal behaviour ('depression/suicide'), attempted suicide post murder ('suicide'), high levels of anger, displayed by overkill ('>15 blows'), high levels of dependency and preoccupation with their partners (represented by 'stalking'), estrangement motivated offences ('estrangle') 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 characterised by a moderate to high measure of Criminality which is not characteristic of the DB non-lethal offender. Offences are also characterised by drug abuse at the time of offence ('offence drug use'). Although

this variable was expected to characterise offences classified by 'HC & L-MP' the Holtzworth-Munroe and Stuart (1994) taxonomy does hypothesise that these offenders will abuse alcohol and drugs to a moderate level. The variable 'argument' has been partitioned into this offence 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 characterise offences outside of this region. Hence, it is positioned centrally in the SSA plot. Indeed, the K-R-20 value for this region is 0.31; however this increases to 0.51 when 'argument' is omitted from the item list.

High Criminality and Low-Moderate Psychopathology (HC & L-MP)

This region is characterised by seven variables, which reflect Holtzworth-Munroe & 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 HM Prisons ('HMP') and having previous convictions for violent offences 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 K-R-20 value for this region is 0.7.

Assigning dominant themes

To examine the feasibility of the above framework, the 90 offences were categorised 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 characterised a specific case.

The variables that produced the highest K-R-20 scores within each offence 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 K-R-20 value to a less than reasonable level, thus leaving 6 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 6 variables now constitute this region, an offender could score a maximum of 6 (100%).

As with previous classification research (Canter, Bennell, Alison & Reddy, 2003), cases were assigned to one dominant theme if the percentage score for that theme was 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%) of the cases could be classified by one dominant offence 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 'Low Criminality and Low Psychopathology', 35 (48.6%) as 'High Criminality and Low-Moderate Psychopathology' and 26 (36.1%) as 'Moderate-High Criminality and High Psychopathology'.

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 characterised by themes of 'High Criminality and Low-Moderate Psychopathology' (HC & L-MP; 49%) and 'Moderate-High Criminality and High Psychopathology' (M-HC & HP; 36.1%). Offenders characterised by these themes demonstrated offence and offender characteristics consistent with those of the Generally Violent/Antisocial (GVA) and Dysphoric/Borderline (DB) offender proposed by Holtzworth-Munroe and Stuart (1994). Previous research has estimated (Holtzworth-Munroe & Stuart, 1994) and found (Holtzworth-Munroe, Meehan, Herron, Rehman & Stuart, 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 & 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. Whilst this discrepancy could be due to bias in sample selection, it is plausible that of the DB men committing non-lethal acts of partner violence in the community a sub-section with higher levels of criminality are more likely to go onto 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, whilst 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 utilising SSA models has suggested that gaps in the solution are meaningful (Canter, Bennell, Alston & Reddy, 2003; Canter & Fritzon, 1998). As this study investigated the presence of three themes of offenders that have been found to predominate in the non-lethal 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 hypothesised regions. In addition, this study utilises 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 ‘Low Criminality and Low Psychopathology’ (LC & LP) theme accounted for a minority of cases (15.3%). Whilst this dimensional profile is similar to the Family Only (FO) offender, proposed by Holtzworth-Munroe and Stuart (1994), the offences were specifically characterised 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 one off violent offence toward the victim for personal gain. These offenders would not appear in a non-lethal classification of partner violence and therefore, it is hypothesised 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 & 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 one year prior to the murder characterise 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

characterise 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 was 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, 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 & 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. Whilst 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, Meehan, Herron, Rehman & Stuart, 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 programmes with men incarcerated for femicide, unknown.

Whilst 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 behaviour 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 offence 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 offence/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 extra-familial person.
5. **instrumental.** The offender committed the murder in order to benefit himself in some way, i.e. via monetary gain, preventing the victim informing authorities of his illegal activity, or to remove the victim from his life so the could re-marry .
6. **HMP.** An offender who was previously incarcerated in HM 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 offence.
9. **no partner violence with victim.** An offender who had no recorded history of partner violence with the victim prior to the offence.
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 their own life after the murder (before arrest).
12. **>15 blows.** An offender that inflicted more than 15 blows/stabs to the victim.
13. **estrangle.** An offence that occurred after a period of estrangement from the victim.
14. **stalking.** An offender who stalked/harassed the victim prior to the offence. 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; 519).
15. **depression/suicide.** An offender who had a recorded history of suicide attempt/s in the past.
16. **argument.** An offence that took place in the context of argument between the offender and the victim.
17. **drug abuse.** An offender that had a reported history of drug abuse.
18. **offence drug use.** An offender that was reported to have committed the offence under the influence of drugs.
19. **alcohol abuse.** An offender that had a reported history of alcohol abuse.
20. **offence alcohol use.** An offender that was reported to have committed the offence under the influence of alcohol.

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Table 1

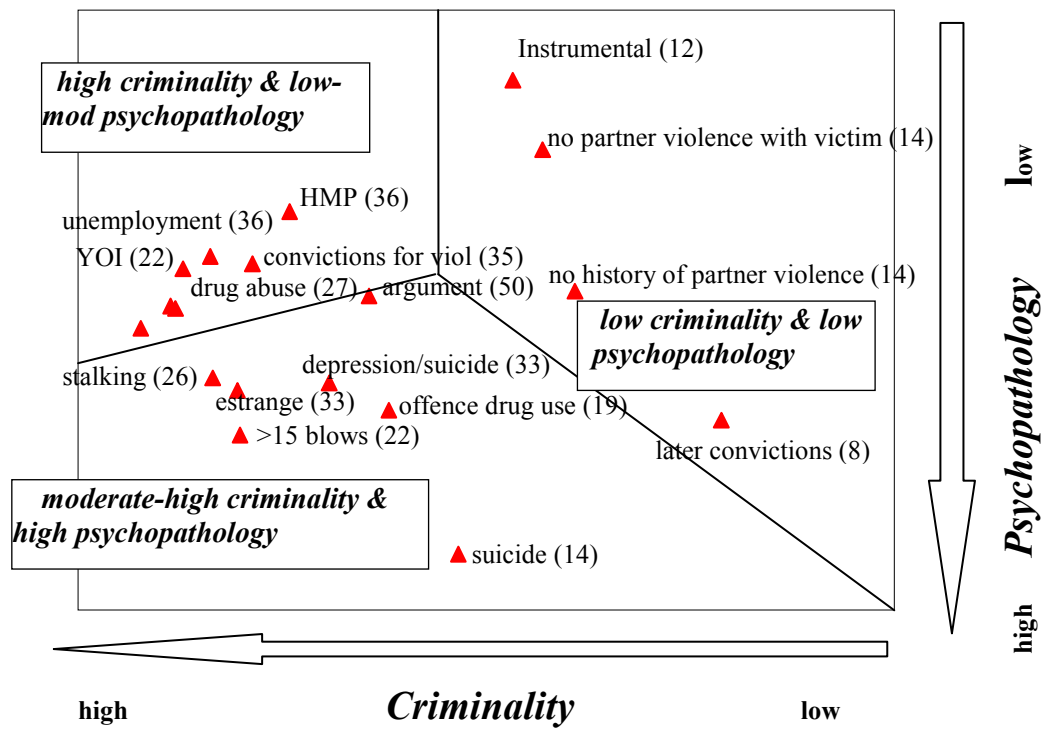
Hypothesised distribution (presence or absence)¹ of offence variables categorised into Criminality and Psychopathology dimensions based on the Holtzworth-Munroe and Stuart (1994) typology.

Proposed Offence theme typology	Holtzworth-Munroe (1994) typology		
	Family Only (FO)	Generally Violent/Antisocial (GVA)	Dysphoric/Borderline (DB)
	Low Crim/Low Psych	High Crim/Low- Mod Psych	Low-Mod Crim/High Psych
Variables²			
Criminality Dimension			
later convictions	present*	absent	absent
convictions before 16	absent	present*	present
> 10 convictions	absent	present*	present
convictions for viol	absent	present*	present
instrumental	present	present	absent
HMP	absent	present*	present
YOI	absent	present*	present
unemployment	absent	present*	present
no partner violence with victim	present*	absent	absent
no history of partner violence	present*	absent	absent
Psychopathology Dimension			
attempted suicide	absent	absent	present*
>15 blows	absent	absent	present*
estrangle	absent	absent	present*
stalking	absent	absent	present*
depression/suicide	absent	absent	present*
argument	present	present	present*
drug abuse	absent	present*	present
offence drug use	absent	present*	present
alcohol abuse	absent	present*	present
offence alcohol use	absent	present*	present

¹ 'absent' refers to no evidence of association between the variable and the typology, 'present' refers to at least some evidence of an association between the variable and the typology

* indicates a variable consistently associated with the typology in the literature

² Complete definitions of variable meanings are stated in Appendix.



2-dimensional solution; Kruskal's stress value = 0.2 in 7 iterations. Full definitions of variable labels can be found in Appendix 1. Values in brackets represent the percentage frequency with which variables occurred across the 90 cases.

Figure 1. An SSA of 18 offence and offender characteristics indicating three themes of offence type in 90 cases of partner femicide.