

TREATMENT, ASSESSMENT AND TYPOLOGIES OF INTIMATE PARTNER
VIOLENCE

by

RAKHEE FATANIA

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ABSTRACT

Traditionally, sociological accounts of the causes of intimate partner violence (IPV) have been adhered to by researchers and practitioners who consider men's violence against female partners. However, a wide array of methodologically sound empirical literature highlights the importance of adopting a multi-factorial perspective in understanding the nature and aetiology of IPV and in informing policy, intervention and assessment in this domain. This thesis adheres to the empirical literature and aims to explore issues of IPV from a multifactor and gender inclusive perspective, with specific focus on the contribution that psychology can lend to understanding this phenomenon.

A systematic review is presented to examine the interplay of psychological factors on the aetiology of male perpetration of IPV. The review identified that variables related to substance abuse, childhood abuse, psychopathology and anger are predictive of male perpetration of IPV. Future research should consider causal factors of IPV perpetrated by females. Next, a critique of the psychometric State-Trait Anger Expression Inventory-2 is discussed in relation to the validity and reliability of its measurement of anger. Overall this protocol is a well established measure of anger in male IPV offenders. However, further research is required to specify its applicability to the female population of IPV offenders. Third, an individual case study of an IPV and generally violent offender evaluates the usefulness of adopting a treatment strategy that is individually selected to suit the client's criminogenic need. The outcome supports the notion that individualised approaches should be adopted in the context of treatment and assessment of IPV offenders. Finally, an empirical study explores the heterogeneity of females convicted of IPV and provides support for the typologies theorised by Holtzworth-Munroe and Stuart (1994). It is concluded that future research should consider exploring this phenomena in community samples and the context of the violence when investigating subtypes of female IPV offenders.

Consistently, the findings from this thesis highlight the need to adopt a multi-factorial and gender inclusive perspective in order to understand the true nature and aetiology of IPV. Multifactor approaches should be considered in the context of assessment and treatment of IPV offenders.

DEDICATION

In loving memory of Malde Luxman Fatania and Desmond Grimley

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INTRODUCTION

Introduction

Definition, History and Prevalence of Intimate Partner Violence (IPV)

Domestic violence refers to any form of violence that occurs within the family including child maltreatment, parent abuse, sibling abuse, violence between partners and elderly victimisation. The focus of this thesis is intimate partner violence (IPV). IPV includes acts of physical and sexual aggression, emotional abuse and controlling behaviours by a current or former partner or spouse (Heise & Garcia-Moreno, 2002). It can happen within marriage, long-term partnerships or short-term intimate relationships and can be perpetrated by ex-partners when relationships have ended (Harvey, Garcia-Moreno & Butchart, 2007). IPV occurs on a world wide scale across an array of countries and cultures (Archer, 2006; Garcia-Moreno et al., 2006; Straus, 2008).

The early 1970's gave birth to the feminist movement which strived for equality between men and women. IPV was incorporated into this movement as part of the agenda to address inequality towards women (Dobash & Dobash, 1979). Following this, IPV became a focal point of government and media attention. The first legislative policy, which was produced in an attempt to address IPV, was the Domestic Violence Act (1976). This has since been reformed to the Domestic Violence, Crime and Victim Act (2004). An update to the legislation took place with the intention of allowing IPV offenders to be more easily prosecuted and to strengthen the rights of victims. However, domestic violence of the partner abuse kind is not a specific statutory offence. Individuals who are prosecuted for assaulting their partners are usually convicted of actual or grievous bodily harm.

The prevalence of IPV is difficult to determine as studies use different definitions and methodologies to clarify rates. The Bureau of Justice Statistics (2003) reports that the National Crime and Victimization Survey estimated that in the US, 103,220 IPV offences were committed against men and 691,710 against women in 2001. The findings also suggest that women and men accounted for 85% and 15% of victims respectively. UK based statistics from The British Crime Survey (2007/2008) identified that 17.1% (2.7 million) of male and 26.7% (4.3 million) of female respondents experienced assault by their partners since the age of 16 years. In terms of the most

severe consequence of IPV, between 2007 and 2008, 34 men and 72 women were murdered by a partner or ex-partner. The rates for male murder has increased from 2005 to 2006, where as the rate for female murder between 2007 and 2008 is the lowest in 11 years.

When interpreting these figures it must be noted that crime surveys report higher rates of IPV victimisation of women and perpetration by men. However this may be for a number of reasons which underpin the nature and context in which the data is gathered. Firstly, these surveys are based on crime and victim filters. Males may fail to perceive female violence perpetrated against them as a crime and therefore are less likely to disclose any victimisation (Archer, 2000; Dutton & Nicholls, 2005; Straus, 1997). Secondly, surveys which incorporate police data of arrest and conviction records may result in under reporting of the true extent of female perpetrated IPV. This is because females are less likely to be arrested at a domestic violence call out involving IPV (Buzawa & Austin, 1993; Dutton & Nicholls, 2005; Straus, 2006; Watkins, 2005). Even though male victimisation is not as extensive as female victimisation, it warrants cause for concern and it is unethical and negligent to ignore it. Therefore, to assess and address the true nature of IPV both genders need to be considered in the context of research, assessment and prevention strategies.

The National Family Violence Surveys (NFVS), which were conducted in 1975 and ten years later in 1985, used a more representative community sample compared to the samples selected for the crime surveys (Straus & Gelles, 1996). The authors used a gender inclusive approach to construct questions about victimisation and perpetration of aggressive acts. The gender inclusive approach stipulates that both men and women can be victims and perpetrators of IPV. Utilising this perspective, the occurrence of IPV during 1975 was reported at roughly equal rates of 11.6% for females and 12.1 % for males. The prevalence of IPV reported in 1985 was 12.1% for females and 11.3% for males. These statistics demonstrate a slight increase in female to male violence and a decrease in male to female violence (Straus & Gelles, 1996). Higher rates of female only assault was further replicated in a 1992 survey, even when wives self-reported their own use of violence against their partners (Straus & Kantor, 1994). These findings of higher reported rates of female perpetrated IPV are consistent across the literature (Archer, 2000; Douglas & Straus, 2003; Stets & Straus, 1992; Straus, 2008).

Whilst these results are somewhat different to those reported in crime surveys, Straus (1997) argues that each of the findings is representative of populations from which the sample has been taken. He states that no one data set is correct as the findings may be associated with different aetiological explanations for IPV of clinical and community populations. It would therefore be detrimental to ignore either group.

Effects of IPV

There is a wealth of empirical literature that investigates the impact of IPV on victims. Females who are exposed to this form of violence can experience psychopathological problems as a result (Campbell & Lewandowski, 1997; Stets & Straus, 1990), including thoughts of suicide and self injury and substance abuse (Kilpatrick et al., 1997). There is also evidence to suggest that there are implications for males who are subjected to IPV such as psychological problems and distress (Simonelli & Ingram, 1998; Stets & Straus, 1990) and alcoholism (Hines & Malley-Morrison, 2001).

The co-occurrence of partner and child maltreatment has also been documented in the literature (Antle et al., 2007; Cox, Kotch & Everson, 2003; Salzinger et al., 2002; Straus & Gelles, 1990; Herrenkohl et al., 2008) at high rates of 45% (Slep & O'Leary, 2005), 40% (Dixon, Hamilton-Giachritsis & Browne, 2007) and 30 to 60% (Edelson, 1999). In a recent study using police records for men and women who reside in the UK, findings illustrate that children were present in 55% (n=96) of IPV cases (Hester, 2009).

Exposure to IPV has been reported to increase the risk of maladaptive and behavioural problems in children (Ferguson, Boden & Horwood, 2006), developing pro-violent attitudes (Kilbo, Blakely & Engleman, 1996) and perpetration or victimisation of IPV in future relationships (Ferguson, Boden & Horwood, 2006; Kitzmann et al., 2003). Additionally, females who are victims of IPV may extend victimisation to their child(ren), such that they are twice as likely to subject their child(ren) to maltreatment compared to women who are not abused by their partners (Straus & Gelles, 1990). IPV is also a risk factor in the context of parenting whereby being a victim of partner abuse compromises the standard of care delivered resulting in neglect (Antle et al., 2007; Osofsky, 1999).

Much of the literature on the effects of and co-occurrence of child maltreatment with IPV has focused its efforts on ‘paternal’ perpetrated abuse whereby the aggressive husband is seen as the main IPV offender (Hamel, 2007). Nonetheless there is empirical support to suggest that children who witness and experience female perpetrated abuse are at risk of significant harm to their development and socialisation (English, Marshall & Stewart, 2003; Johnson & Roseby, 1997). It has also been reported that witnessing a mother’s abuse against a father increases the risk of perpetrating IPV in adulthood more so than observing father to mother violence (Langhinrichsen-Rohling, Neidig & Thorn 1995; Straus, 1992).

It is clear that violence is wide spread in the context of the family unit, indeed both mothers and fathers can aggress towards each other, their child or both (Dixon et al., 2007). For these reasons, it is important to examine and determine the aetiology of IPV, including further research on long neglected male victims and female perpetrators.

Theories of IPV

Feminist theory proposes an explanation for IPV which stems from a sociological perspective. Dobash and Dobash (1979) suggest that as a consequence of gender socialisation, men assume a dominant role in the majority of social institutions including their relationships. Through the process of socialisation, men have adopted patriarchal attitudes and beliefs of superiority and subsequently perceive women as subordinate and inferior. Therefore men assert their power, control and dominance of women in the form of violence and aggression which in turn enables them to exercise their authority. Dobash and Dobash (1979) state that when females challenge the authority of their husbands they are likely to endure a ‘...beating into submission’ (pg 11). Whilst feminists acknowledge that violence occurs at all levels within the household, including common couple assault and female to male violence, they do not consider this as a violent relationship and describe it as ‘...trivial’ (Dobash & Dobash, 1979, pg. 11). Ultimately, feminists consider patriarchy, asserted in form of power and control by men of women, as the singular causal explanation of IPV. Consequently they consider men as perpetrators and women as the victims of IPV.

Feminist political ideologies of patriarchal power and control as a direct cause of IPV have been most influential in forming the basis for policies and prevention of this type of abuse. It is only in the context of academic research that has given rise to the true notion and extent of IPV, including female perpetration (Archer, 1999, 2000, 2006; Babcock, Miller & Siard, 2003; McClellan, Summer & Daley, 2002; Straus, 1993, 1997, 1999, 2006, 2008; Straus & Gelles, 1986, 1990). The concept of female perpetrated IPV is contrary to feminist arguments and overrides social role theory as a sole explanation.

Feminists have addressed the issue of women aggressing towards their partner and explain their violence as reactive in an act of self-defence and fear (Dobash et al., 1992; Saunders, 1988). However, alternative explanations such as gaining attention, initiating control and dominance and sexual jealousy have been found as motivating factors for female perpetrated assault (Babcock, Miller & Siard, 2003; Hines, Brown & Dinning, 2007). Additionally, females have reported using violence against their non-violent partners (Straus, 1993). The evidence so far is contrary to feminist arguments. Whilst self-defence and fear may be one cause for female IPV, it is not an exclusive explanation as other variables also contribute to this type of abuse.

Another argument stipulated by feminists is that women are subjected to the severest forms of violence when compared to men (Dobash et al., 1992; Saunders, 1988). In line with this argument, Archer (2002) found that women (n = 7,531) are injured more frequently when compared to men (n = 7,011). He also found that women (n = 6, 323) receive higher rates of injury which warrant medical treatment in comparison to men (n = 4,936). However, Archer (2000) also identified that 38% of men were injured as a consequence of female IPV. He went on to demonstrate that men and women carry out qualitatively difference acts of violence but they are both severe.

Females have been reported to be more likely than males to use weapons when they carry out assaults against their partners (Hester, 2009; Straus & Gelles, 1986, 1990) and that nearly as many men (48%) as women (52%) have experienced severe brutal force perpetrated by their partner (The British Crime Survey, 2007-2008). Although there is support for the argument that females are more likely to sustain injury as a consequence of IPV (Archer, 2000; Dobash et al.,

1991; Hester, 2009; Saunders, 1988), there is evidence that males are also harmed by their partner (Archer, 2000, 2002; Straus & Gelles, 1986, 1990) and therefore also warrants attention.

The studies which support feminist notions of females being subjected to the severest form of violence and injury have selected their samples from women who have sought refuge from their aggressive partners at shelters and have exclusively questioned female victims (Archer, 2002). Generating information from this specific population is likely to distort findings as individuals who have sought refuge are most likely to have experienced the most severe forms of violence and therefore report higher prevalence of injury (Archer, 2002). Alternatively, the NFVS approach IPV from a different angle of adopting a gender inclusive approach and producing different results to those proposed by feminists (Straus & Gelles, 1990). Findings using this style of questioning illustrate that women have reported using severe strategies of violence at the same rate as men such as punching, kicking and assault with a weapon (Busch & Rosenberg, 2004; Straus & Gelles, 1986, 1990). Additionally females are more likely to use weapons when compared to their male counterparts (Hester, 2009; Straus & Gelles, 1986, 1990).

In support of feminist arguments, studies which have assessed the prevalence of IPV across multiple geographical locations have found gender equality to be a moderating factor for gender differences in perpetration of IPV (Archer, 2006; Straus, 2008). However in western countries where gender equality for women is high, an increase in female perpetrated IPV is also evident. Therefore, whilst gender socialisation may not be entirely irrelevant for some cultures, it is not substantial as a single explanation for all cultures (Archer, 2006).

Contrary to the single faceted feminist explanation of power and control as the explicit cause of IPV, it has become evident in the literature that multi-factorial approaches, which combine psychologically related variables with the social context, are also pertinent to the explanation of IPV (Dutton, 1995, 2006; O'Leary, Slep & O'Leary, 2007; Stith et al., 2004). One such multi-factorial approach is the nested ecological model proposed by Dutton (1995, 2006). This model incorporates a range of variables from the broader cultural, social and individual contexts as an explanation for IPV. It comprises of four levels, all of which interact with one another; macrosystem, exosystem, microsystem and ontogenetic. The macrosystem incorporates societal and cultural values and beliefs and also has an influence on the exo, micro and ontogenetic

systems. The exosystem relates to social structures such as work, peer groups, support groups etc. For example, factors such as job stress, unemployment and relationship problems may contribute to IPV. The microsystem consists of the family unit and the immediate context in which the abuse takes place such as the dynamics of the relationship and the antecedents and consequences of the IPV. Finally, the ontogenetic level includes individual characteristics and internal factors which predispose the individual to abusing their partners. This includes the offenders' developmental experiences, attitudes, empathy, emotional regulation, management and problem solving.

Recent evidence to support Dutton's (1995, 2006) nested ecological model has been provided by O'Leary, Slep and O'Leary (2007) and Stith et al. (2004) who demonstrate how multiple factors drawn from varying ecological levels operate with each other to predict partner aggression.

Another multi-factorial type approach which is somewhat different to the feminist perspective is the discovery of heterogeneity within IPV offenders. Typologies and subgroups of IPV offenders have been theoretically and empirically identified (Dixon & Browne, 2003 Dixon et al., 2008; Holtzworth-Munroe & Stuart, 1994; Holtzworth-Munroe et al., 2000; Holtzworth-Munroe et al., 2003) suggesting that IPV offenders are not a homogenous group. Some research has begun to investigate the extent of these typologies in female perpetrators (Babcock, Millar & Siard, 2003).

Research which has used heterogeneous approaches to explore IPV offenders have largely focused on validating Holtzworth-Munroe and Stuart's (1994) theoretical proposals of IPV. Their typologies are based on three dimensions; generality of violence, severity of violence and psychopathology. From these dimensions Holtzworth-Munroe and Stuart (1994) suggest three IPV subtypes of the family only (FO), generally violent/anti-social (GVA) and dysphoric/borderline (DB) offender. They predict that the FO offender limit their violence to the context of their family, engage in the least severest forms of violence and substance abuse and experience the lowest levels of psychopathology. Alternate to the FO type, the GVA offender generalises their violence to both within and outside of the family. They also suffer from low to moderate intensity of psychopathology. The GVA offender, similar to the DB, perpetrate a moderate to high degree of severity of violence on their victims and engage in moderate to low

amounts of substance abuse. However, the DB offender is the subgroup which experiences the highest rates of psychopathology.

The subgroups proposed by Holtzworth-Munroe and Stuart (1994) have since been empirically validated for both male (Dixon & Browne, 2003; Dixon et al., 2008; Boyle et al., 2008; Holtzworth-Munroe et al., 2000; Holtzworth-Munroe, et al., 2003; Holtzworth-Munroe & Meehan, 2004; Huss & Langhinrichsen-Rohling, 2006 ;Waltz et al., 2000) and tentatively for female IPV offenders (Babcock, Millar & Siard, 2003). There is a need for further research in relation to subgroups of the female population of IPV offenders (Dixon & Browne, 2003).

Treatment

Despite evidence which demonstrates that IPV is caused by factors other than patriarchy, the Duluth Model has been commonly described as the most effective and appropriate approach used in the intervention and treatment of IPV offenders (Gondolf, 2007; Pence & Paymar, 1993). This approach has been adopted by various treatment strategies implemented in the US and the UK (Graham-Kevan, 2007). However, recidivist rates for individuals following completion of these treatment programmes have been reported as high as 40% in a six month follow-up (Shepard, 1992) and more recently in a six to 12 month follow-up as 35% and 21% according to self-reports by wives and criminal justice data respectively (Babcock, Green & Robie, 2004).

The high recidivist rates associated with the Duluth intervention may be because the political framework of this programme only applies to a small proportion of IPV men described as ‘patriarchal terrorists’ (Johnson, 1995; Johnson & Ferraro, 2000). ‘Patriarchal terrorists’ constitute approximately 33% of the IPV population (Stets & Straus, 1992). Utilising a treatment strategy which only applies to a small proportion of the population hinders the effectiveness and success of treatment (Dutton, 2007; Graham-Kevan, 2007; Hamel, 2007; Hamel & Nicholls, 2007).

In relation to treatment, it has been suggested that therapeutic programmes which aim to address violence and aggression for non-partner violent offenders are potentially applicable to individuals who perpetrate violence against their partners (Day et al., 2009; Graham-Kevan, 2007).

Additionally, when devising and delivering treatment it is important to note the heterogeneity among IPV offenders whereby offence and offending characteristics may differ across subgroups (Dixon & Browne, 2003; Dixon et al., 2008; Holtzworth Minroe & Stuart, 1994; Holtzworth-Munroe et al., 2000; Holtzworth-Munroe et al., 2003; Waltz et al., 2000; Howells et al., 2005). For this reason, and to reduce the risk of recidivism, it is imperative to consider individual treatment and risk need to ensure that treatment is best matched to the offender and targets the specific factors which predispose them to perpetrate IPV (Andrews & Bonta, 2003; Day et al., 2009; Graham-Kevan, 2007).

Overview of Thesis

Overall this thesis adheres to the aforementioned empirical literature and aims to explore issues of IPV from a multifactor and gender inclusive perspective, with specific focus on the contribution that psychology can lend to understanding this phenomenon.

In doing so it attempts to challenge the stereotypes advocated by feminist theory which continue to inform assessment, prevention and treatment of IPV in the face of more scientific and methodologically sound conceptions about the nature and aetiology of IPV.

Chapter One presents a systematic literature review which explores risk factors for male IPV offenders. The chapter focuses on the variables of substance abuse, childhood abuse, psychopathology and experience of anger as these are key features associated with the ontogenetic level of Dutton's (1995, 2006) nested ecological model. Researching these variables highlights the importance of considering such factors within a multifaceted response to IPV. The concentration of male perpetrators in this chapter is due to the large quantity of good quality research on this population and lack of availability of studies on female perpetrators of IPV.

Chapter Two discusses the psychometric properties of State-Trait Anger Expression Inventory-2 (STAXI-2: Spielberger, 1999), which is commonly used to assess the emotional experience and expression of anger. The STAXI-2 was critiqued for reasons that the psychological variable of anger, as an emotional response, has been associated with perpetration of violent behaviour and IPV. Therefore, anger frequently forms a part of psychological risk assessments for this kind of offending. This chapter explores the validity and reliability of the tool and its applicability to the

forensic population of IPV offenders. It also highlights the need to consider the construct of anger in the management, assessment and treatment of IPV offenders which is contrary to the traditional feminist theory of patriarchy as the exclusive cause of IPV.

Chapter Three presents a case study which details a psychological risk assessment and treatment of a violent offender who has perpetrated both extra-familial violence and IPV. This chapter explores and discusses the efficacy of utilising an individual approach to the assessment and treatment of an IPV offender. The aim of this study was two-fold. First, to identify the characteristics that predisposed the offender to perpetrate IPV utilising an individualised assessment framework. Second, to assess the effectiveness of a psychological based treatment programme using a cognitive-behavioural and skill orientation approach in reducing the risk of further violent offending. This individual case study demonstrates that risk factors which adhere to a multi-factorial approach predispose individuals to perpetrate IPV. It also brings to attention the need to prescribe treatments based on an offenders' individual criminogenic and risk need.

Chapter Four is an empirical research paper which explores the heterogeneity of female IPV offenders using a statistical approach adopted from the domain of investigative psychology. The primary aim of this chapter was to test Holtzworth-Munroe and Stuart's (1994) theoretical typologies of the FO, GVA and DB IPV offenders in a sample of females. The study is based on prior work by Dixon et al. (2008) which explore this phenomenon in a sample of men incarcerated for the murder of their female partner. The sample of the current study consists of 274 females residing in England and Wales, all of whom had been convicted of perpetrating IPV against their partner. A total of 30 variables, which were mapped onto two dimensions of Criminality and Psychopathology, were considered in the final statistical analysis. Consistently, as with the other chapters of this thesis, Chapter Four highlights the need to focus on IPV from a multifaceted and gender inclusive approach.

Finally, the discussion completes the thesis by presenting the overall findings, limitations and practical implications of the work presented. Overall, this thesis validates the utilisation of a multi-factorial and gender inclusive approach to understanding the true nature and aetiology of IPV.

CHAPTER ONE

Investigating the Validity of Substance Abuse, Psychopathology, Childhood Abuse and Anger as Risk Factors for Male Intimate Partner Violence Perpetration: A Systematic Literature Review

ABSTRACT

This review aims to assess how well the psychological risk factors substance abuse, psychopathology, childhood abuse and anger, which are associated with Dutton's (1995, 2006) ontogenetic level of the nested ecological model, contribute to the prediction of male intimate partner violence (IPV) perpetration.

Cohort and case control studies were identified from Cochrane HTA and DARE database, Campbell Collaboration, PsycINFO, OvidMEDLINE, Web of Science and contact with experts. Studies that were eligible for this review were those which included an adult male population who had been exposed to the risk factors being reviewed. IPV was defined as any form of sexual, emotional and/or physical abuse against an intimate partner. Two thousand eight hundred and thirty one studies were initially identified through the adopted search strategy, 14 met the inclusion criteria. A further study was excluded after quality assessment, leaving a total of 13 studies to be included in this review.

Data synthesis of the included studies revealed that the total number of studies which demonstrated a significant association of IPV perpetration with substance abuse, childhood abuse, psychopathology and anger was six (75%), six (80%), four (100%) and two (67%) respectively.

The overall findings of this review suggest that the majority of good quality studies showed that the four risk factors were each significantly associated with IPV. However, results from the studies included in this review contain methodological flaws including differences in conceptualisation of definitions and the utilisation of different assessment tools across studies, some of which included the use of unstandardised and unvalidated measures. In addition there are too few good quality studies to make any sound conclusions. Future research would benefit from good quality studies to determine the true extent of these risk factors as possible predictors for the perpetration of IPV.

Investigating the Validity of Substance Abuse, Psychopathology, Childhood Abuse and Anger as Risk Factors for Male Intimate Partner Violence Perpetration: A Systematic Literature Review

Background

Definition, Prevalence and Effects of IPV

IPV is defined as “... any behaviour within an intimate relationship that causes physical, psychological, or sexual harm to those in the relationship. Such behaviours include acts of physical aggression, psychological abuse, forced intercourse and other forms of sexual coercion, [and] various controlling behaviours such as isolating a person from their family and friends, monitoring their movements, and restricting their access to information or assistance” (Heise & Garcia-Moreno, 2002, p. 89). It can happen in all types of relationships including marriage, long-term partnerships or short-term intimate relationships, heterosexual and homosexual relationships and can be perpetrated by former partners (Harvey, Garcia-Moreno & Butchart, 2007).

IPV received a vast amount of attention during the early 1970's which influenced the first legislation of the Domestic Violence Act (1976). The act has since been reformed and updated to the Domestic Violence, Crime and Victim Act (2004) incorporating a change in legislation allowing IPV offenders to be more accessibly prosecuted and strengthening the rights of domestically abused victims.

Recent statistics from the Home Office (2009) illustrate that domestic violence accounts for 14% of all violent incidents, one in four women and one in six men will be a victim of domestic violence in their lifetime and that one incident of domestic violence is reported to the police every minute. The results produced by the Home Office indicate that IPV is a serious health issue which needs to be tackled and addressed.

Research into the impact of IPV has increasingly highlighted that those who are subjected to abuse by their partners often experience psychological difficulties such as trauma (Astin, Lawrence & Foy, 1993) and depression (Campbell & Lewandowski, 1997). Additionally,

research has demonstrated the detrimental effects IPV has on children whether they are exposed directly or indirectly to this form of violence (Antle et al., 2007; Browne & Herbert, 1997; Ferguson, Boden & Horwood, 2006; Kilbo, Blakely & Engleman, 1996; Kitzmann et al., 2003; Osofsky, 1999; Straus & Gelles, 1990).

Theories and Risk Factors Associated with IPV

Feminist explanations suggest that gender socialisation of male dominance, power and control over women is the core conception for IPV (Dobash & Dobash, 1979; Pence & Paymar, 1993) regardless of the lack of empirical support for patriarchy as an exclusive risk factor (O’Leary, Slep & O’Leary, 2007; Stith et al., 2004; Sugarman & Frankel, 1996). There is much research to suggest that alternative factors at different levels of an ecological model are more valid in explaining the aetiology of IPV perpetration (Dutton, 1995, 2006; Dixon & Browne, 2003 Dixon et al., 2008; Holtzworth-Munroe & Stuart, 1994; Holtzworth-Munroe et al., 2000; Holtzworth-Munroe et al., 2003; O’Leary, Slep & O’Leary, 2007; Stith et al., 2004).

Multi-factorial perspectives of IPV, which are contrary to feminist explanations, are more reliable and valid at identifying risk factors which predict an outcome of this kind of violence (Dutton, 1994, 1995, 2006; O’Leary, Slep & O’Leary, 2007; Stith et al., 2004). More specifically, Dutton (1995, 2006) proposed the nested ecological model which identifies variables that are associated with the individual, social context and broader societal system and cultural factors. His model consists of four levels of the macrosystem, exosystem, microsystem and ontogenetic, all of which interact with one another to influence the outcome of IPV. The macrosystem forms the basis for broad societal cultural values and perspectives and the exosystem relates to an individual’s formal and informal social structures such as employment groups, friendships and support networks. The microsystem constitutes the context of the family setting, specifically where the abuse occurs. Finally, the ontogenetic level is associated with the individual characteristics and developmental history which predisposes an outcome of IPV.

Recent evidence to support Dutton’s (1995, 2006) nested ecological model has been provided by Stith et al. (2004) who demonstrate how multiple factors drawn from varying ecological levels operate with each other to predict partner aggression. Stith et al. (2004) conducted a meta-

analytic review of 85 studies using the nested ecological model as a framework to assess risk factors which pertain to male perpetration and female victimisation of IPV. Their findings demonstrated large to medium effect sizes for microsystem variables of sexual abuse ($r = 0.45$), emotional abuse of a partner ($r = 0.49$) and history of partner abuse ($r = 0.24$); exosystem variable of career/life stress ($r = 0.26$); and ontogenetic factors related to illicit drug use ($r = 0.31$), attitudes condoning marital violence ($r = 0.30$), anger and hostility ($r = 0.26$), alcohol abuse ($r = 0.24$), depression ($r = 0.23$) and traditional sex-role ideology ($r = 0.29$). In relation to victims, Stith et al. (2004) found that the microsystem characteristic of violence towards a partner ($r = 0.41$) is the biggest predictor of victimisation followed by the ontogenetic variables of depression ($r = 0.28$) and fear of partner ($r = 0.27$).

From their study, Stith et al. (2004) concluded that factors which are less predictive of IPV are those which are most distal from the act of violence such as the exosystem. However factors which are most closely related to the context of the violence and the individual are most important when attempting to understand IPV. One problem with this conclusion is that Stith et al. (2004) did not review factors which pertain to the macrosystem of the wider society and broader culture.

An additional study which researched multiple factors as predictors for IPV was conducted by O'Leary, Slep and O'Leary (2007). Using a representative community sample of couples ($N=453$), they found that direct predictors for male and female IPV range from dominance and jealousy, marital adjustment and partner responsibility attribution. They also concluded that witnessing violence within the family, anger expression and perceived social support are all causal variables for male perpetration of IPV. In relation to females, a history of aggression as a teenager is predictive of IPV. A surprising find to their study is that alcohol abuse is not a causal variable for IPV and therefore this is not a plausible direct or indirect predictor of IPV. This study highlights the relevance of exploring IPV using an integrated approach from a variety of perspectives, particularly from an ontogenetic and psychological perspective.

Existing Reviews

Prior to conducting this review, a search was conducted to seek out any existing reviews on risk factors associated with male perpetration of IPV. Searches on the Cochrane HTA and DARE database, Campbell Collaboration, psycINFO, ovidMEDLINE and Web of Science were carried out. One review completed by Cattaneo and Goodman (2005) was located.

A critical review completed by Cattaneo and Goodman (2005) explored variables which predict an outcome of re-abuse in cases of IPV. They suggest that along with alcohol use, an offender's history of abuse in their family of origin is a predictive variable associated with spousal re-abuse. However a history of alcohol use was not an independent significant predictor. In regards to Cattaneo and Goodman's (2005) assessment of studies concerning psychopathology and personality types as a variable related to repeat IPV, they reported mixed results. One study illustrates that elevated borderline, antisocial and avoidant personality traits were more likely to predict re-assault. Contradictory to this, another study found that narcissism was associated with greater risk of re-abuse. Nonetheless all of the personality styles specified are classifications of psychopathology.

Although Cattaneo and Goodman's (2005) findings provide beneficial information for implications for further research in the field of IPV, their review was not conducted in a systematic format. Additionally, their review focused on risk factors for repeat offending, a secondary outcome after the abuse has already occurred. Whilst considering the high prevalence and impact of IPV, it would be far more beneficial to review studies that predict a primary incident of IPV. Identifying risk factors which may be a precursor for partner abuse would help to educate professionals on identifying the first hand risk variables which are associated with the perpetration of IPV, allowing for primary preventative measures to be put in place prior to the abuse occurring. Thus making attempts to prevent the problem rather than cure it. Additionally, identifying primary risk factors which may be a predictor of IPV can help to inform treatment focus and standardise measures used in the risk assessment process.

The Current Review

Due to the prevalence, nature and impact of IPV it is important to understand the true notion of causal risk factors which pertain to IPV perpetration. Only through rigorous empirical investigation can we be sure which factors should be targeted in prevention and intervention of this type of offence. The risk factors of substance abuse, childhood abuse, psychopathology and anger are all commonly tested in the literature (E.g., Stith et al., 2004; O’Leary, Slep & O’Leary, 2007) at the ontogenetic level of Dutton’s (1995, 2006) nested ecological model.

Four variables were chosen for reasons related to a limited length of time in which to complete this review and only one researcher was assigned to this project. Studies which tested risk factors in an adult male population of IPV offenders were included as the majority of research has predominantly been conducted on men. Motives and risk factors for perpetration of IPV by females has been researched, but to a lesser degree (Medeiros & Straus, 2007). Previous reviews such as Stith et al. (2004) have made attempts to assess the aetiology of female perpetrated IPV; however attempts have been unsuccessful due to the lack of good quality studies. Therefore, this review will concentrate on synthesising the evidence around male perpetration only.

Aim: This review aims to assess the role of psychologically related risk factors identified at the ontogenetic level of Dutton’s (1995, 2006) nested ecological model in their prediction of male perpetration of IPV.

Objective: Specifically, the objectives of this review are to determine if the following variables are significantly and reliably associated with male IPV perpetration:

- substance abuse
- psychopathology
- childhood abuse
- anger

Method

Inclusion Criteria

A scoping exercise was initially conducted to develop and establish the inclusion criteria. Searches were completed in Cochrane HTA and DARE database, Campbell Collaboration, PsychINFO, OvidMEDLINE and Web of Science. The review focused on the role of psychological factors at the ontogenetic level of Dutton's (1995, 2006) ecological model and male perpetration due to this population being commonly researched and tested in relation to predictive risk factors for IPV perpetration.

On completion of the scoping exercise it became apparent that whilst there are an extensive number of risk factors which have been researched in the context of IPV, four risk variables were commonly and repeatedly identified at the ontogenetic level in empirically sound literature; substance abuse, childhood abuse, psychopathology and anger. As physical, sexual and emotional abuse is considered to constitute IPV (Heise & Garcia-Moreno, 2002) they were considered as the outcome measure. Although language was not restricted in this review, fortunately all studies presented in a foreign language had been pre-translated into English. Therefore the inclusion criteria for this review were:

- Adult male IPV perpetrators
- Studies which examined substance abuse, psychopathology, childhood abuse and anger as risk factors for IPV
- Perpetration of IPV which consists of emotional, physical and/or sexual abuse

Studies which attempt to verify risk factors are commonly observational studies. Whilst considering the hierarchy of study types, only studies which adopted a cohort and case control design were included in the review to ensure consistency of quality. As cross sectional, before and after studies and opinion papers are compromised due to bias and subjectivity, these papers were excluded from the current review (see Appendix 1 for Inclusion/Exclusion Criteria). Table 1.1 illustrates the characteristics of the studies extracted from the literature review after application of the inclusion criteria. The table provides a summary of the information based on

the study design utilised, the number of participants in each study, what type of risk factor/s were assessed and the outcome of each study.

Sources of Literature

Electronic bibliographic databases including PsychINFO (1967 to September week 2 2009 completed on 18th September 2009), Ovid MEDLINE (1950 to week 2 September 2009 completed on 18th September 2009) and Web of Science (1970 to week 2 September 2009 completed on 18th September 2009) were searched. The search was restricted to studies produced from 1970 onwards as during the 1970's IPV received a great deal of media attention and the legislation of the Domestic Violence Act (1976) was introduced. Gateways Cochrane HTA and DARE database and Campbell Collaboration were also searched. Two experts in the field of IPV, Dr Erica Bowen and Dr Louise Dixon were also contacted. Due to time constraints, it was impossible to conduct a hand search of identified meta-analyses and previous reviews (see Appendix 2 for search syntax).

Search Strategy

Searches were conducted on all five of the databases using the following search terms:

Offenders OR Perpetrators OR Criminals

AND

Risk Factors OR Risk Characteristics OR Reoffend OR Recidivism OR Characteristics

AND

Domestic Violence OR Partner Violence OR Partner Abuse OR Interpersonal Violence OR Intimate Partner Violence OR Marital Conflict OR Spouse Abuse

AND

Anger OR Violence OR Aggressive Behaviour

OR

Personality Disorder OR Mental Disorder

OR

Alcoholism OR Alcohol OR Drug Abuse OR Substance Abuse OR Alcohol Abuse

OR

Transgenerational Pattern OR History of Abuse OR Repeat Abuse OR Previous Abuse OR Child Abuse OR Intergenerational Violence OR Intergenerational Abuse

Study Selection

All studies were screened using a pre-defined inclusion/exclusion criteria form consisting of a PICO (see Appendix 1 for inclusion/exclusion criteria). Studies which adhered to the PICO as defined below were ordered in their full texts. The inclusion/exclusion criteria comprised of the following:

- Population: Adult males aged 18 or over.
- Exposure: Risk factors associated with substance abuse, mental health problems, childhood abuse and anger
- Comparator: No risk factors OR different risk factors OR different levels of exposure to risk factors.
- Outcome: Domestic Violence (physical, emotional or sexual).
- Study Type: Cohort and Case Control.

Quality Assessment

A quality assessment was conducted to distinguish and include studies which are of the best quality in the final analysis. After excluding the studies which failed to meet the inclusion criteria, quality assessment was conducted on all of the included studies using a pre-developed quality assessment tool (see Appendix 3 for quality assessment checklist). The protocol was formulated based on the Quality Assessment of Studies of Diagnostic Accuracy Included in Systematic Reviews (QUADAS) found from the Centre for Reviews and Dissemination (CRD, 2008). The quality analysis was performed to assess the extent to which each included study's methodology used measures to minimise bias such as selection, sampling, detection/measurement and attrition bias and generally to extrapolate poor reporting of results. This is because the biases outlined have a significant impact on the validity and outcome of the study. The studies were scored as follows:

- 0 Does not meet the criteria
- 1 Partially meets the criteria
- 2 Fully meets the criteria
- U Unclear

An 'unclear' response certifies the accuracy of reporting. A measurement of accuracy was employed by subtracting the number of unclear responses from the total score e.g. if there were 3 unclear responses this would be subtracted from a total score of 26 making the total quality assessment score of 23. The method of subtracting the unclear responses from the overall quality score was utilised as it is the criteria outlined in the QUADAS approach from which the quality assessment forms were devised. To account for objectivity, a total of 20% (3) of the studies were verified by a second independent reviewer. Inconsistencies in the scoring between the reviewers were discussed and agreements were reached for an appropriate total quality assessment score. Usually the quality scores for the studies would be analysed to look for a significant difference in order to determine a cut-off point of which to include and exclude studies. However in this case there was no specific variation between quality scores for each of the studies which ranged from 71% to 87%. Therefore all remaining studies were included in the final analysis.

Data Extraction

Data extraction was performed on the 13 good quality studies using a standardised protocol to ensure consistency, validity and reliability of the analysis (see Appendix 4 for data extraction form). Contact with authors to clarify information which was unclear was initiated, however not reciprocated as they failed to answer any questions. The following data was extracted using the data extraction form:

- Studies were verified for a second time to ensure they were eligible for the inclusion criteria.
- Population characteristics including target population, study inclusion and exclusion criteria, recruitment procedures and participation rates if available and base line characteristics of population specifically extracting data pertaining to demographic variables.
- Type/s of risk factor (exposure) measured (substance abuse, childhood abuse, Psychopathology problems and level of aggression).
- Whether measurement taken at base line was also measured after exposure to risk factor.
- Whether blinding of both assessors and participants was implemented.
- Type/s of measurement tools used and if they are validated including evidence for validation.
- Attempts to increase the validity of self reported behaviour.
- Time intervals between first and second measurement and between first and last measurement.
- Dropout rates including proportion of those who did not agree to participate and reasons for drop out.
- Analysis of data including statistical test which was employed and statistically adjusting for confounding variables.
- Overall attrition rate and if the attrition data was dealt with adequately including the percentage of participants who were followed up from each condition.
- Overall study quality.
- Number of 'unclear' or unanswered assessment responses.

Results

On conducting a literature review from all sources of information, 2831 hits were found of which 1247 were duplicates and irrelevant. Sixteen of the remaining articles were unobtainable and a further 1534 studies were removed according to the inclusion/ exclusion criteria leaving 34 studies of relevance to this review. However, one publication could not be located at the British Library and an additional 19 unpublished studies consisting of theses and dissertations could not be obtained due to financial constraints. Efforts were made to contact authors for reprints, however only three replied and suggested obtaining their article from the source of which it was located. Subsequently, the exclusion of unpublished studies suggests that publication bias will be a major drawback. This needs to be taken into consideration when evaluating the findings from this review.

Once all excluded studies were omitted from the review, a total of 14 studies were available for quality assessment. After the quality assessment stage was completed one further study was excluded (Cloitre et al., 2001). The quality assessment outcome of this study identified that the proportion of the cohort that was followed up was unacceptable resulting in attrition bias, particularly as similarities or differences between participants who did and did not complete the study were not verified. Due to this major error which compromised the validity of the results, the study was excluded from the final analysis. Therefore 13 studies remained to be included in the final analysis. Figure 1.1 demonstrates this study selection process.

A descriptive summary of the findings from the final 13 studies included in the review can be found in the following data synthesis section. Tables 1.1, 1.2, 1.3, & 1.4 illustrate each risk factor independently in regards to the outcome of quality assessment for alcohol abuse, childhood abuse, psychopathology and anger consecutively. The tables summarise to what extent each study accounted for selection bias by controlling for or statistically adjusting for confounding variables, measurement/detection bias based on the validity of the assessment tools they employed and attrition bias by accounting for the number of participants who dropped out of the study.

Figure 1.1 - Flow Diagram of Study Selection Process

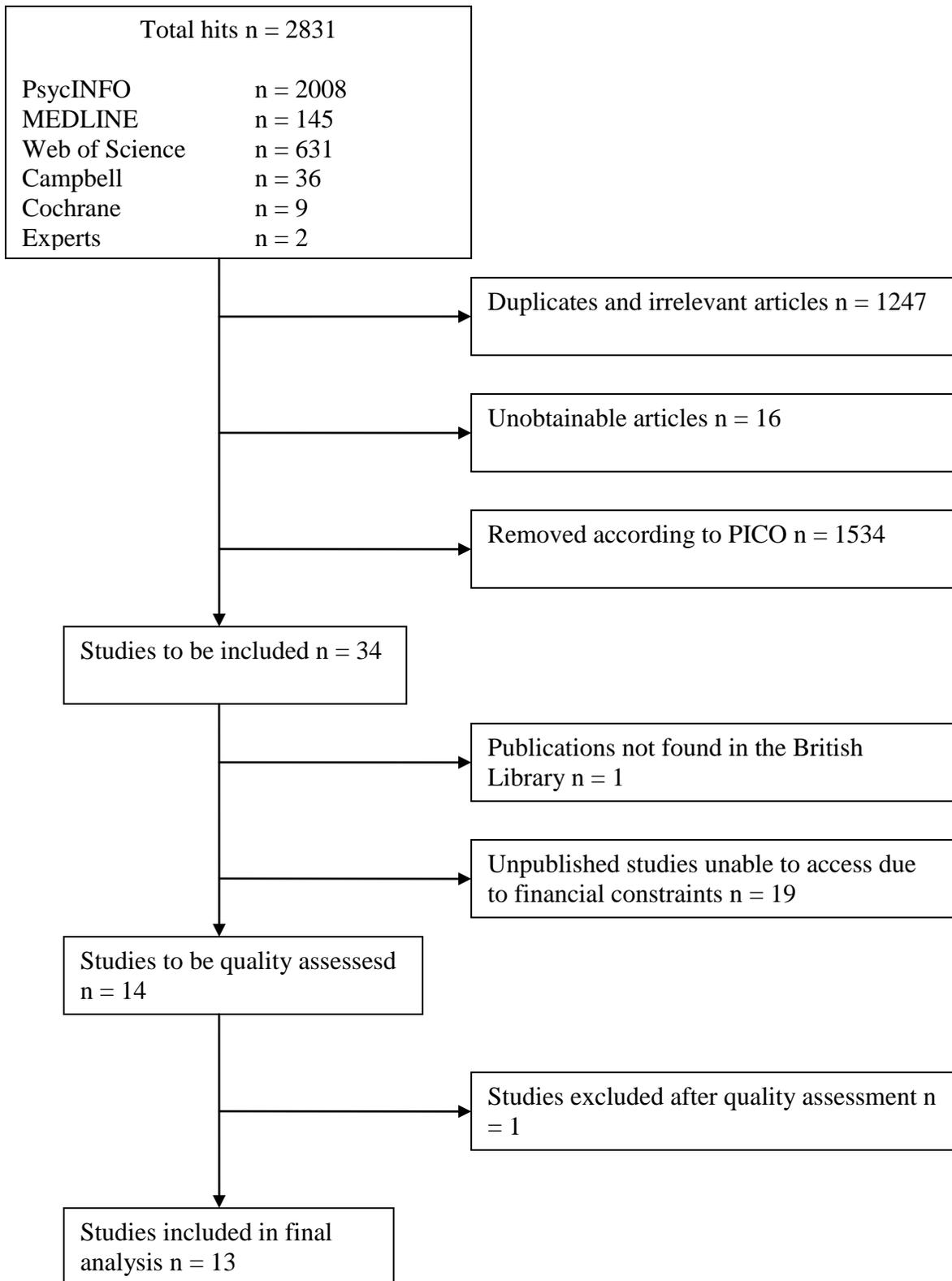


Table 1.1 - Quality of Included Studies for Substance Abuse as a Risk Factor for IPV (N = 7)

Author	Study Design	Study Design and Population	Adjustment for Confounding Variables	Validity of Assessment Instruments	Attrition Rates	Results	Quality Assessment Score
Belfrage & Rying (2004)	Case Control	Cases: Spousal Homicide Offenders n = 164 Control: Non-Spousal homicide offenders n = 690	No	Yes	1% missing data 24% deceased	Significantly higher rates of substance abuse in spousal homicide offenders compared to non spousal homicide perpetrators ($\chi^2_{(1)} = 79.59, p < 0.001$)	23/32 (72%)
Bell et al. (2006)	Case Control	Cases: Spouse Abusers n = 6507 Controls: Non-Spouse Abusers n = 17821	Yes	Yes	Cases n = 1222 Controls n = 3845 Missing data	After adjusting for demographic and psychosocial factors, heavy weekly drinking of 14 < units per week was a significant predictor of IPV among Hispanic and white participants. (multivariate logistic regression: white OR = 0.90, CI = 1.03-1.49; Hispanic OR = 0.94, CI = 0.91-0.96)	28/32 (87%)

Eckhardt (2007)	Case Control	Cases: IPV men n = 46 Controls: Non-IPV men n = 56	No	Yes	Unclear	Interaction between IPV status and alcohol intoxication on aggressive verbalisations were supported such that martially violent men who were intoxicated with alcohol were significantly more likely to assert aggression compared to non martially violent men who were not intoxicated ($F_{(2,33)} = 6.19, p = 0.005$)	23/32 (72%)
Hanson et al. (1997)	Case Control	Cases: Spouse Abusers n = 813 Controls: Non-Abusive men n = 184	Yes	Yes	Unclear	Abusive men reported higher rates of substance abuse compared to non-abusive men ($F = 18.1, p < 0.0001$).	24/32 (75%)
Leonard et al. (1985)	Cohort	Cohort n = 484	Yes	Yes	Unclear	A diagnosis of alcohol misuse or dependence (within the previous 3 years) is significantly related to marital conflict ($\chi^2_{(4)} = 21.62, p < 0.001$)	24/28 (86%)
Nguyen & Yoshika (2006)	Case Control	Cases: Batteres n = 62 Controls: Non-batteres n = 138	Yes	Yes	Unclear	Logistic regression analysis revealed that frequency of alcohol consumption and alcoholism levels were not statistically significant in predicting battering among Vietnamese men	23/32 (72%)

Pahlen et al. (1997)	Case Control	Cases: Spouse abusers n = 19 Controls: Non spouse abusers n = 19	Yes	No	Unclear	Spouse abusers monthly intake of alcohol consumption was significantly higher than controls ($t_{(36)} = 4.37, p < 0.001$).	23/32 (72%)
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Table 1.2 - Quality of Included Studies for Childhood Abuse as a Risk Factor for IPV (N = 5)

Author	Study Design	Population	Adjustment for Confounding Variables	Validity of Assessment Instruments	Attrition Rates	Results	Quality Assessment Score
Ceasor (1988)	Case Control	Cases: Batterers n = 26 Controls Non-Batterers n = 18	No	Partially	Unclear	Batterers (38%) were significantly more likely than controls (11%) to have been abused as children (Fisher's exact probability value = 0.05)	24/32 (75%)
Hanson et al. (1997)	Case Control	Cases: Spouse Abusers n = 813 Controls: Non-Abusive men n = 184	Yes	Yes	Unclear	Abusive men reported higher rates of experiencing physical abuse during childhood when compared to non-abusive men ($F = 11.6, p < 0.0001$)	24/32 (75%)

Hastings & Hamberger (1988)	Case Control	Cases: Battered n = 125 Controls: Non-violent n = 43	No	Yes	Unclear	There was no significant difference between batterers and non-violent controls proportion of childhood abuse experienced ($\chi^2_{(3)} = 3.4, p < 0.34$)	25/32 (78%)
Pahlen et al. (1997)	Case Control	Cases: Spouse abusers n = 19 Controls: Non spouse abusers n = 19	Yes	No	Unclear	Spouse abusers recalled higher rates of childhood physical abuse in their family of origin compared to control group ($t_{(36)} = 2.82, p < 0.01$)	23/32 (78%)
Kunitz et al. (1998)	Case Control	Cases: IPV perpetrators n = 374 Control: Non IPV men n = 531	Yes	Yes	Unclear	Childhood abuse is a significant risk factor for IPV perpetration independent of the affects of alcohol use after using regression analysis (Est = 0.457, S.E. = 0.134, $p < 0.0007$)	24/32 (75%)

Table 1.3 - Quality of Included Studies for Psychopathology as a Risk Factor for IPV (N = 5)

Author	Study Design	Population	Adjustment for Confounding Variables	Validity of Assessment Instruments	Attrition Rates	Results	Quality Assessment Score
Belfrage and Rying (2004)	Case Control	Cases: Spousal Homicide Offenders n = 164 Control: Non-Spousal homicide offenders n = 690	No	Yes	1 % missing data 24% deceased	Higher rates of psychiatric diagnosis in spousal homicide (95%) Significantly more spousal homicide offenders were subjected to a forensic psychiatric examination ($\chi^2 (1) = 36.78, p < 0.001$) In almost 96% of cases (n=157) the forensic psychiatric reports displayed a history of depressive episodes throughout their lives that had resulted in contacts with psychiatrists or psychologists	23/32 (72%)
Edwards et al. (2003)	Case Control	Cases: IPV convicted offenders n = 43 Controls: Non-violent convicted	No	Yes	Unclear	Significant correlations between spouse abusers ratings on the CTS and scores on Antisocial Personality Disorder ($r = 0.437, p < 0.05$) and Borderline Personality Disorder ($r = 0.454, p < 0.05$)	23/32 (72%)

		offenders n = 40				Significant difference between IPV and non-violent men's on scores on the borderline PD ($t_{(74)} = 3.156, p = 0.002$)	
Hanson et al. (1997)	Case Control	Cases: Spouse Abusers n = 813 Controls: Non-Abusive men n = 184	Yes	Yes	Unclear	Abusive men suffered from significantly more psychopathology complications compared to non-abusive men such as depression ($F = 17.2, p < 0.0001$) and antisocial personality disorder ($F = 18.4, p < 0.0001$)	24/32 (75%)
Hastings & Hamberger (1988)	Case Control	Cases: Batterers n = 125 Controls: Non-violent n = 43	No	Yes	Unclear	Batterers scored significantly higher than non-batterers on depression inventories ($t_{(67)} = 3.48, p < 0.001$). The batterer group also exceeded non-violent controls on the borderline scale of the MCMI ($F_{(1,65)} = 14.59, p < 0.001$)	25/32 (78%)
Maiuro et al. (1988)	Case Control	Cases: IPV n = 39 Control: Non-Violent n = 29	Yes	Yes	Unclear	Domestically assaultive men obtained significant scores relating to depression ($r = -0.63, p = 0.001$) when compared to general assaulters and control group.	23/32 (72%)

Table 1.4 - Quality of Included Studies for Anger as a Risk Factor for IPV (N = 3)

Author	Study Design	Population	Adjustment for Confounding Variables	Validity of Assessment Instruments	Attrition Rates	Results	Quality Assessment Score
George et al. (2001)	Case Control	Cases: IPV offenders n = 23 Control: Non-IPV offenders n = 20	Yes	Yes	Unclear	IPV perpetrators obtained significantly higher scores on all measures related to aggression Brown-Godwin Lifetime Aggression Scale ($F_{(2,37)} = 32.5$, $p < 0.001$) and Buss-Durkee Hostility Inventory ($F =_{(2,34)} 32.5$, $p < 0.001$) compared to non-IPV men	24/32 (75%)
Hastings & Hamberger (1988)	Case Control	Cases n = 125 Controls n = 43	No	Yes	Unclear	Batterers obtained significantly lower scores on scales associated with anger compared to non-batterers ($t_{(67)} = 3.85$, $p < 0.001$)	25/32 (78%)
Maiuro et al. (1988)	Case Control	Cases: IPV n = 39 Control: Non-IPV n = 29	Yes	Yes	Unclear	Compared to the non-violent control group, domestically violent men scored significantly higher on all scales of the BDHI and HDHQ	23/32 (72%)

The methodology that was employed to synthesise the data was a vote counting exercise which involves reviewing each of the studies by assessing whether they fall in one of three directions; positive, negative and neutral. Where a study reports statistical significance in favour of a risk factor being associated with the outcome this would be deemed positive. A negative direction relates to a statistical significance in favour of the control and where no statistical significance is found this is reported as neutral. This procedure is most useful in describing the overall effects of the studies as the category that has most counts represents the typical finding. Table 1.5 illustrates the number of studies which fell into a positive, negative or neutral direction following the application of a vote counting exercise procedure for each risk factor.

Table 1.5 - Results of Vote Counting Exercise for Substance Abuse, Childhood Abuse, Psychopathology, and Anger as Risk Factors for IPV

Risk Factor	Positive	Negative	Neutral	Range of Quality Scores (%)
Substance Abuse	6	0	1	72 – 87
Childhood abuse	4	0	1	75 – 78
Psychopathology	5	0	0	72 – 87
Anger	2	1	0	72 – 78

Whilst it has been suggested that using the quantitative procedure of a meta-analysis has the advantage of increasing the precision and power of the overall result by calculating effect sizes and assessing for experimental effects (Greenhalgh, 1997; Mulrow, 1994), this method of analysis was not used to synthesis the data. This is because it has been argued by Egger, Schneider and Smith (1998) that using a statistical approach to assess data from observational studies has the potential to produce misleading results. They propose that using a narrative and qualitative approach has the advantage of examining the heterogenic features between the studies,

for example the population from which the participants were drawn and the methods of assessments used to measure the exposure and the outcome therefore allowing for a thorough evaluation and analysis.

Substance Abuse

Table 1.5 indicates that a total number of six studies fell in a positive direction of substance abuse as a risk factor for IPV (Belfrage & Rying, 2006; Bell et al., 2006; Eckhardt, 2007; Hanson et al., 1997; Leonard et al., 1985; Pahlen et al., 1997) and one fell in a neutral direction (Nguyen & Yoshika, 2006). The statistical analysis of the data for all six positively directed studies suggests significant result of substance abuse related to IPV.

Belfrage and Rying (2004) found significantly higher rates of substance abuse in spousal homicide offenders compared to non spousal homicide perpetrators ($\chi^2_{(1)} = 79.59, p < 0.001$). In their study they accounted for and controlled for confounding variables, reducing problems with selection bias. A statistically significant association between the risk factor of alcohol consumption and perpetration of IPV was also found in a study conducted by Bell et al. (2006) even after adjusting for demographic and psychosocial factors. Their findings demonstrated that heavy drinking of 14 units or more per week was a significant predictor of IPV among Hispanic and white men. Eckhardt (2007) found that martially violent men who were intoxicated with alcohol were significantly more likely to assert aggression towards their partners when compared to non-maritally violent participants ($F_{(2,33)} = 6.19, p = 0.005$).

Consistent with the positively directed studies, abusive men reported higher rates of substance abuse compared to non-abusive men ($F = 18.1, p < 0.0001$) (Hanson et al., 1997) and a diagnosis of alcohol misuse or dependence, within the previous 3 years, was significantly related to marital conflict ($\chi^2_{(4)} = 21.62, p < 0.001$) (Leonard et al., 1985). Finally, Pahlen et al. (1997) found that spouse abusers monthly intake of alcohol consumption was significantly higher than controls ($t_{(36)} = 4.37, p < 0.001$). The results from this study are taken from a small sample size of non-spouse abusers (n = 19) and spouse abusers (n = 19) consequently impacting on the reliability of findings.

Nguyen and Yoshika's (2006) study fell in a neutral direction due to the logistic regression analysis revealing that that frequency of alcohol consumption and alcoholism levels were not statistically significant in predicting battering among men. The sample in this study is taken from a population of Vietnamese men therefore the findings are specific to this ethnic group and cannot be generalised across cultures.

Of the studies which used validated and standardised measures to assess for problematic alcohol consumption, Nguyen and Yoshika (2006) and Hanson et al. (1997) used the Michigan Alcohol Screening Test (MAST; Selzer et al., 1975). Leonard et al. (1985) and Belfrage and Rying (2004) utilised the criteria as specified by the American Psychiatric Association of the Diagnostic Statistics Manual – III and the Diagnostic Statistic Manual IV respectively. Two studies failed to use standardised and validated assessment tools and relied on the self report of the participants' frequency of alcohol consumption from clinical interview (Eckhardt, 2007; Pahlen et al., 1997).

Childhood Abuse

The vote counting results for childhood abuse as a risk factor for IPV identified that four studies fell in a positive direction (Ceasor, 1988; Hanson et al., 1997; Pahlen et al., 1997; Kunitz et al., 1998) and one study in a neutral direction (Hastings & Hamberger, 1988). The range of quality scores for those studies which achieved statistical significance in a positive direction of childhood abuse associated with IPV was from 75% to 78%. In relation to the studies which fell in a positive direction Ceasor (1988) identified that IPV men (38%) were significantly more likely than controls (11%) to have been abused as children and Kunitz et al. (1998) found that childhood abuse is a significant risk factor for IPV perpetration independent of the affects of alcohol use after using regression analysis ($p < 0.0007$). The sample for this study is taken solely from the Navajo population. Hanson et al. (1997) found that abusive men reported higher rates of experiencing physical abuse during childhood when compared to a control group of non-violent men ($F = 11.6, p < 0.0001$) as did Pahlen et al. (1997) ($t_{(36)} = 2.82, p < 0.01$). However Pahlen et al. (1997) used relatively small sample sizes in their study (cases $n = 19$, controls $n = 19$) questioning the reliability and generalisability of the findings.

One study fell in a neutral direction of no statistically significant association between IPV and childhood abuse ($\chi^2 = 8.01, p < .24$) (Hastings & Hamberger, 1988). The sample of non-violent controls was recruited from local marriage and family therapy clinics. This study achieved a quality assessment score of 78% indicating a good quality study.

All studies which assessed childhood abuse as a risk factor for the outcome of IPV did not use any standardised psychometric assessments. Alternative they relied on the participants self report of frequency of and experience of childhood abuse.

Psychopathology

All five studies included in this review related to psychopathology as a predictor of IPV fell into a positive direction reporting statistical significance in favour of the risk factor being associated with the outcome. The quality scores across studies ranged from 72% to 87%. Although the classifications of psychopathology that have been assessed vary across studies from depression to personality disorders, the consistency of the direction of the positive relationship is reflected in the statistical significance of all the studies reviewed.

Belfrage and Rying's (2004) sample consisted of spousal homicide offenders ($n = 164$) and non-spousal homicide offenders ($n = 690$). They found high rates of 95% of their spousal homicide offenders to have been diagnosed with a psychiatric condition, more spousal homicide offenders were subjected to a forensic psychiatric examination compared to controls ($\chi^2_{(1)} = 36.78, p < 0.001$) and in almost 96% of cases the forensic psychiatric reports indicated the experience of at least one depressive episodes which had resulted in contact with a psychiatrist or psychologist. Findings reported by Edwards et al. (2003) demonstrated significant correlations between spouse abusers ratings on the Conflict Tactics Scale and scores on Antisocial Personality Disorder ($r = 0.437, p < 0.05$) and Borderline Personality Disorder ($r = 0.454, p < 0.05$) and a significant difference between IPV and non-violent men's scores on Borderline Personality Disorder scales ($t_{(74)} = 3.156, p = 0.002$). Hanson et al.'s (1997) study indicates that IPV men are more likely to suffer from depression ($F = 17.2, p < 0.0001$) and Antisocial Personality Disorder ($F = 18.4, p < 0.0001$). Hastings and Hamberger (1988) also found that IPV men obtained significant scores relating to depression ($r = -0.63, p = 0.001$) when compared to general assaulters and a non-

violent control group as did Maiuro et al. (1988) ($t_{(67)} = 3.48, p < 0.001$). In Maiuro et al.'s study the IPV groups also exceeded non-violent controls on the borderline scale of the MCMI ($F_{(1,65)} = 14.59, p < 0.001$).

The studies in this category used psychometric measures and assessments which are commonly used to assess for clinical personality patterns and disorders such as the Million Clinical Multi-axial Inventory (MCMI; Millon, 1983), The Personality Assessment Inventory (PAI; Morey, 1991) and The Diagnostic Statistics Manual's third and fifth edition. All of the studies which found depression to be associated with perpetration of IPV utilised the Beck Depression Inventory (BDI; Beck et al., 1961).

Anger

A vote counting exercise of all three studies relating to anger as a predictor of IPV produced two positively directed studies (George et al., 2001; Maiuro et al., 1988) and one study in a negative direction (Hastings & Hamberger, 1988). George et al. (2001) found that IPV perpetrators obtained significantly higher scores on all measures related to aggression on both the Brown-Godwin Lifetime Aggression Scale ($F_{(2,37)} = 32.5, p < 0.001$) and the Buss-Durkee Hostility Inventory (BDHI) ($F_{(2,34)} = 32.5, p < 0.001$) compared to non-IPV men. Maiuro et al. (1988) compared IPV men with non-violent controls and found that IPV men scored higher on all scales of the BDHI and the Hostility and Direction of Hostility Questionnaire (HDHQ, Caine, Foulds & Hope, 1967) which are both well validated and standardised measures.

The statistical output of the data following a positive direction indicates significant scores which suggest that anger is a factor associated with IPV. In regards to the quality of these studies, both George et al. (2001) and Maiuro et al. (1988) controlled for confounding variables illustrating that anger is a risk for IPV, independent of other factors associated with its occurrence. Quality assessment of revealed the scores for the overall quality of the studies ranged from 72% to 78%. Hastings and Hamberger's (1988) study found that anger was not related to IPV as the batterers obtained significantly lower scores on scales associated with anger when compared to non-batterers ($t_{(67)} = 3.85, p < 0.001$). The cases and the controls in this study were not matched and confounding variables were not adjusted for which may have affected the results of this study.

Discussion

Main Findings

This systematic review aimed to assess how well the psychological risk factors substance abuse, psychopathology, childhood abuse and anger, which are associated with Dutton's (1995, 2006) ontogenetic level of the nested ecological model, contribute to the prediction of male IPV perpetration.

On completion of a descriptive data synthesis and a vote counting exercise, a direct association between alcohol abuse and IPV perpetration was found in six studies (Belfrage & Rying, 2006; Bell et al., 2006; Eckhardt, 2007; Hanson et al., 1997; Leonard et al., 1985; Pahlen et al., 1997). One of the studies, conducted by Nguyen and Yoshika (2006,) fell in a neutral direction implying that the findings of the study produced no statistical significance for the control group of 'non-batterers' or the cases of 'batterers'. As the sample in this study was exclusively recruited from the Vietnamese population, this limits its applicability and generalisability across other nations and cultures. Additionally the neutral finding may be culture specific to this ethnic population.

In relation to childhood abuse, four studies were positively directed identifying a significant relationship with IPV (Ceasor, 1988; Hanson et al., 1997; Pahlen et al., 1997; Kunitz et al., 1998). An insignificant finding between childhood abuse and IPV was discovered for one study resulting in its categorisation of a neutral direction (Hasting & Hamberger, 1988). The neutral result may be due to the population characteristics of the control group of non-IPV men. The non-IPV comparisons were recruited from local marriage and family therapy clinics. People who participate in therapy may have endured traumatic experiences in childhood and thus are likely to report a higher rate of abuse.

All studies included in the review relating to psychopathology were found to be positively directed as a predictor for IPV (Belfrage & Rying, 2004; Edwards et al., 2003; Hanson et al., 1997; Hastings & Hamberger, 1988; Maiuro et al., 1988). Although the classifications of psychopathology that were assessed between studies varied from depression to personality disorders, it can be argued that the consistency of the direction of the positive relationship is

reflected in the statistical significance of all the studies reviewed. Additionally all of the studies used valid and reliable measures to assess for psychopathological symptoms in their sample.

For the risk factor anger, the vote counting exercise identified that two of studies demonstrated significant results of anger as a predictor for IPV (George et al., 2001; Maiuro et al., 1988) and one study fell in a negative direction whereby statistical significance was in favour of the control group (Hastings & Hamberger, 1988).

Interpretation of Findings

The overall findings of this systematic review identified the variables of substance abuse, childhood abuse, psychopathology and anger which are associated with the ontogenetic level of Dutton's (1995, 2006) nested ecological model, are predictive of male perpetration of IPV. A breakdown of the frequencies of studies which fell in a positive direction was 86% for substance abuse, 80% for childhood abuse, 100% for psychopathology and 67% for anger. Although the majority of studies for each risk factor fell in a positive direction, substance abuse, psychopathology and childhood abuse appear to be most strongly associated with IPV. The lower percentage of studies which fell in a positive direction for anger may be due to the fewer number of studies which were included in this review.

In light of other reviews, and similar to this review, Stith et al. (2004) also found that variables at the ontogenetic level of substance abuse, psychopathology and anger are also positively associated with prediction of male perpetration of IPV. However, contrary to these findings O'Leary, Slep and O'Leary's (2007) assessment of factors which are predictive of IPV indicated that alcohol is neither directly nor indirectly related to this kind of violence.

Additionally, O'Leary, Slep and O'Leary (2007) concluded that anger is a strong predictor of the outcome of IPV for males. In relation to the findings from the current review, three good quality studies were positively associated with anger. Those studies which identified a significant finding reliably controlled for confounding variables, therefore classifying anger as a risk factor for IPV independent of any confounding factors (George et al., 2001; Maiuro et al., 1988). The study that found an insignificant outcome of anger as an explanation for failed to match

participants during the recruitment process and adjust for confounding variables during their statistical analyses of their data IPV (Hastings & Hamberger, 1988). This may have compromised their data and had an impact on their findings.

Cattanoë and Goodman's (2005) results pertaining to childhood abuse and psychopathology were similar to the results in this review however their results for substance abuse were inconclusive due to the insignificant findings of the studies they included in their analysis. A limitation of Cattanoë and Goodman's (2005) review is that they did not take a systematic approach in their methodology and thus did not quality assess the articles from which they concluded their findings. They also verified predictive factors for secondary re-abuse. Whilst this useful to identify offenders who are most at risk at recidivism, they failed to consider variables which may be indicative of primary risk before the first offence has occurred.

Strengths and Weaknesses

The systematic framework employed in this review facilitated a very thorough scope of the appropriate and best quality studies available from the relevant sources. By applying a pre-defined inclusion criterion, this ensured that only those studies relevant to the topic of interest were extracted from the many titles found. Additionally, utilising a quality assessment tool, which has been formulated according to the study design, ensures that only those studies which are of good quality and account for those biases prone to their study type are included in the review. A second independent assessor also quality assessed 20% of articles in order to account for objectivity. Overall, only the best quality studies were included in the final analyses.

The systematic approach also incorporated a data extraction procedure. As the data extraction procedure consists of a pre-designed protocol, it ensured consistency of the data extracted from each study. The advantage of using this method to obtain information from the literature is that it allows for comparisons and provides unbiased information about the included studies.

Although this review has many strengths because of the systematic nature and process of which it was conducted, due to time constraints weaknesses can also be identified. Firstly, it was not possible to hand search articles from other reviews and meta-analyses. Excluding these studies is

a limitation as this may have restricted the number of studies that were included in the final analysis and possibly compromising the overall results. Had there been more time allocated to complete this review, additional articles would have been hand searched and the outcome and conclusions of this review may have been different. Secondly, due to financial constraints, only published articles were included. Unpublished thesis research papers were omitted from analysis due to issues related to the cost of accessing these articles. Whilst attempts were made to contact the authors for reprints, those which responded suggested purchasing the articles from the sources where they were found. Excluding unpublished articles compromises this review due to publication bias. The exclusion of these studies which were overlooked may have had an influence on the outcome of the results.

The primary method used to synthesis the data was a descriptive approach of a vote counting exercise. Whilst this method of analysis is useful for identifying an overall positive, negative or neutral outcome, it does not take into account the experimental effects of each of the studies. Incorporating an analysis of the effect sizes, such as Cohen's (1992) d , would have added value to this review such that a comparison of the size of the experimental effects across the studies would have been established via thresholds of a small ($d = 20$), medium ($d = 50$) and large ($d = 80$) effect. Calculating the effect sizes of the included studies would have added more precision and statistical power to the overall results (Greenhalgh, 1997; Mulrow, 1994).

Although substance abuse, childhood abuse, psychopathology and anger are considered as risk factors associated with IPV, there are many other factors which also contribute towards an understanding of this kind of violence at various levels such as those suggested by Dutton (1995, 2006) in his nested ecological model. Inclusion of these outstanding variables may have produced a different set of findings. However, due to working to a limited time frame, other risk factors could not be addressed. With more time, risk factors may have been mapped out to include variables at multiple levels such as the context of the broader culture, community, family and at an individual level and female IPV offenders would have been included.

The findings of this review can only be applied to a male population of IPV offenders which in turn excludes their female counterparts. Little is known about the true extent and nature of female to male directed partner abuse (Hester, 2009) therefore clearly there is a need for future

research on this forensic population. This is especially necessary in light of empirical research which demonstrates the importance of adopting a gender inclusive approach to the study of IPV (Hamel, 2007). Indeed, this is often a difficult task due to the paucity of good quality research in the published literature. For example, whilst Stith et al. (2004) attempted to identify risk factors associated with female perpetration, due to a lack of good quality studies, only one variable of marital satisfaction was determined.

It can be argued that research on women who abuse their partners should be further investigated as a recent evaluation of the longitudinal literature of women and men's IPV identified that "...women (and men) who are involved as perpetrators and victims may have multiple problems including suffering from psychopathology" (Pg. 15, Graham-Kevan, 2009). Specifically, risk factors associated with conduct disorders (Moffitt et al., 2001) and anger and aggression in early life (Hay, 2005; Kukko & Pulkkinen, 2005), all of which have been cited by Graham-Kevan (2009), have been identified in the context of longitudinal research. Additionally, Graham-Kevan (2009) found that variables associated with low intellectual functioning, impulsivity, fearlessness, a general lack of empathy and negative emotionality also appear to be predictive of partner violence. From the understanding of this research further systematic reviews should concentrate on risk factors which are pertinent to the perpetration of IPV in women.

Practical Implications

Overall, the outcome of this literature review is dissimilar to feminist descriptions of patriarchy as a direct and exclusive cause of IPV. The findings suggest that risk factors which are associated with the ontogenetic level of Dutton's (1995, 2006) ecological model are also relevant in the aetiology of male perpetration of IPV. Regardless, it is feminist theory which continues to form the basis for social policy, prevention and assessment of IPV offenders.

Due to the high prevalence of IPV, the findings from this review may have beneficial and practical implications in the field of IPV. Practical implications of this review are that the variables which were assessed are easily accessible and measurable to professionals who are responsible for assessment and intervention of IPV. Additionally, the current systematic review analysed variables from a primary perspective. This is useful as exploring the aetiology of IPV

would be beneficial in identifying what predisposes an individual to be aggressive towards their partner. Exploring these predispositions is useful from a screening point of view of identifying those who are most at risk of perpetrating IPV prior to the offence occurring.

Additionally, from a treatment perspective, intervention from a primary level of implementing preventative measures to reduce the risk of an individual perpetrating IPV prior to their first offence, for example, early intervention and educational strategies. Currently, the common procedure for intervention is secondary treatment after the offence has occurred. However if professionals are knowledgeable of the first hand risk factors, preventative measures can be put into place before incidents of IPV transpire.

The current review highlights the need for additional treatment approaches which are different to those guided by the feminist theory. This is because risk factors alternative to patriarchy such as substance abuse, childhood abuse, psychopathology and anger have been found to be associated with the prediction of this kind of violence. Whilst the general finding of this study suggests that risk factors at an individual level are associated with IPV, it does not suggest that all offenders will present with all four causal variables and that no one singular variable is exclusively predictive of IPV. Alternatively, it is the constellation of risk factors which predispose the outcome of partner abuse. This suggests that each offender will have a unique treatment need which should be guided by the aetiological factors which predispose the individual to perpetrate violence against their partner. Therefore these characteristics should be addressed and targeted during intervention and assessment of IPV offenders.

Conclusions and Recommendations

The overall findings of this systematic literature review suggest that feminist notions are not exclusive explanations of IPV. Alternatively, this review highlights that individual and psychologically related variables such as substance abuse, childhood abuse, psychopathology and anger play an important role in the prediction of IPV. The practical implications of these findings are that those variables which have been identified to be predictive of IPV should be addressed and targeted in the context of risk assessment and treatment of male IPV offenders. However, clinicians must take into account the individual risk need for each offender rather than assume

homogeneity of IPV. Furthermore, research should be considered on the marginalised groups of female offenders and male victims of IPV.

CHAPTER TWO

Psychometric Critique of the State-Trait Anger Expression Inventory-2

ABSTRACT

This chapter is a critique of the State-Trait Anger Expression Inventory – 2nd Edition (STAXI-2) developed by Spielberger (1999). The STAXI-2 is a psychometric tool used in assessment procedures to measure the construct of anger. The protocol is a self report assessment which consists of 57 items and three scales of State Anger, Trait Anger and Anger Expression. The tool is used widely in risk assessment, research and evaluation of treatment.

An evaluation of the STAXI-2 in relation to the psychometric properties identified that it is a reliable and valid measure of the experience and expression of anger. Whilst the tool has been appropriately normed on the general population, psychiatric population and males and females across three age categories, there is scope to produce normative data on the forensic population of offenders. Nonetheless, the STAXI-2 has been established as a useful tool to assess anger among men who perpetrate intimate partner violence (IPV). Specifically those subtypes that experience the highest levels of anger are most severely violent (Barbour et al., Holtzworth-Munroe et al., 2000; Holtzworth-Munroe, Rehman & Herron, 2002). Validation of the measure has primarily focused on male IPV offenders and therefore future research should consider the population of female IPV offenders. Another limitation is the need for duplication of research supporting the STAXI to be applied to the STAXI-2.

Overall, the empirical literature conducted on the STAXI-2 validates the emotional experience and expression of anger as a risk factor for perpetration of IPV. This is dissimilar to arguments of feminists that patriarchy is the one and only explanation for partner violence. The evidence presented in the critique provides support for the multi-factorial perspective. Therefore anger should be considered in the context of assessment, management and treatment of IPV offenders.

Psychometric Critique of the State-Trait Anger Expression Inventory and State-Trait Anger Expression Inventory – 2

Background

Anger

Anger is described as a negative phenomenological experience which can vary in frequency, intensity, duration and expression (Kassinove & Tafrate, 2002). Novaco (1994) argues that anger is an emotional response to provocation and whilst it is an activator for aggression, it does not always elicit an aggressive response.

Novaco's (1994) model of anger consists of three elements which he proposes are developed and learnt over time; cognitions, arousal and behaviour. Cognitions are referred to as schemas processed from the external environment and circumstances, arousal is associated with physiological responses, and behaviour is the reaction or response of anger. Behavioural responses to anger depend on behaviour patterns that have been developed and reinforced in an individual (Averill, 1983). Whether or not anger occurs after the activation of anger depends on a number of factors such as reinforcement contingencies, expected outcomes, modelling influences and disinhibitory controls (Bandura, 1983). Kassinove and Tafrate (2002) suggest that some individuals are primed to become angry in almost any situation as a result of personality characteristics and traits. They are therefore predisposed to experience anger frequently and are more likely to display their anger.

Generally anger is perceived as a problem when it leads to aggressive behaviour (Novaco, 1994) and whilst it may be viewed as disruptive and dysfunctional, anger can be a positive and constructive if it has a sense of value to the individual (Kassinove & Tafrate, 2002). Anger has been identified as an important potential mediator for offending behaviour (Suter, Byrne, Byrne, Howells & Day, 2002) and IPV (Barbour et al., 1998).

As research suggests that anger arousal is a mediator for aggression (Novaco, 1994), it can be argued at face value many individuals who perpetrate violence towards their partner experience anger. Social learning theory proposes that aggressive behaviour is learned by conditioning or

observational learning (Bandura, 1973). It can therefore be argued that the experience of exposure to parental violence during childhood influences perpetration of IPV in adulthood (Clarke et al., 1999).

The link between anger and IPV has been determined in a meta-analytic review of 33 studies conducted by Norlander and Eckhardt (2005). They found that higher levels of anger were identified in IPV men when compared to non-violent men and martially discordant non-violent men. This suggests that there are characteristics associated with anger which are apparent in the population of IPV offenders. Additionally their results distinguished between subtypes of IPV offenders whereby severity of violence was associated with experience anger. Specifically, Norlander and Eckhardt (2005) found that the more severely violent men reported higher levels of anger than the low to moderate subtype of violent men.

Assessment of Anger

Assessments of anger have been devised to measure the construct of anger via psychometric testing using instruments such as the Novaco Anger Scale (NAS; Novaco, 1994) and the State-Trait Anger Expression Inventory-2 (STAXI-2; Spielberger, 1999). The NAS is a 48 item self-report instrument which measures an individuals' inclination toward anger reaction. It is divided into three scales measuring the cognitive, arousal and behavioural domains of anger. The cognitive subscale items focus on anger justifications, rumination, hostile attitude and suspicion. Items on the arousal subscale assess duration, anger intensity, tension and irritability. The behavioural subscale items are related to impulsive reaction, verbal and physical aggression, and indirect expression. The instrument also incorporates a Provocation Inventory which describes situations that induce anger and assesses anger intensity and generality across five subscales; disrespectful, treatment, unfairness-injustice, frustration-interruption, annoying traits and irritation.

The NAS was initially devised for assessment of violent offenders and is better at discriminating anger in the more aggressive populations (Selby, 1984). A key feature of the NAS is that it can distinguish between forensic in-patients who are likely to assault and those who are not and can also be used to predict potential for violent behaviour in the community following hospital

discharge (Novaco, 1994). It can therefore be argued that the NAS is more useful for assessing anger in a forensic population and would be less useful for assessing anger in a community sample. In relation to IPV, research suggests that this population of offenders are heterogeneous whereby they differ in relation to the severity of violence and experience of anger (Holtzworth-Munroe & Stuart, 1994; Norlander & Eckhardt, 2005). Therefore not all IPV offenders are from clinical populations and many would be determined from a community sample. For this reason the STAXI-2 was the choice of psychometric to critique due to its diversity of being a reliable measure of anger in both a clinical and non-clinical population (Spielberger, 1999).

The State-Trait Anger Expression Inventory-2 (STAXI-2; Spielberger, 1999) is a revised 57 item assessment of the original 44 item STAXI (Spielberger, 1988). Spielberger developed and revised the measure for two reasons first to assess the components of anger for a thorough evaluation of normal and abnormal personality and second to provide an assessment of the components of anger. The test is claimed to be a measure of the experience, expression and control of anger. Typically, the measure is used within the medical, psychiatric and forensic field. The STAXI-2 can be utilised as an assessment for screening individuals for sufficient problems with anger that require clinical intervention and as an outcome measure for treatment evaluation.

The STAXI-2 is a self-report assessment which consists of three major scales, State Anger, Trait Anger and Anger Expression. State Anger refers to the subjective emotional feeling of anger while Trait Anger measures the predisposition to perceive a wide scope of circumstances as annoying or frustrating and the tendency to react to such circumstances with more frequent elevations in State Anger. The Anger Expression Index assesses the expression of anger and has four major components; Anger Expression Out, Anger Expression In, Anger Control Out and Anger Control In. The Anger Control subscales relate to the frequency with which an individual controls their expression or suppression of anger. The items are rated on a 4 point scale based on the frequency of experiencing, expressing or suppressing and controlling anger.

The interpretation of the STAXI-2 considers scores between the 25th and 75th percentiles to fall within the normal range. For those who score above the 75th percentile, Spielberger (1999) suggests that the individual's experience, expression and control of anger may interfere with their

core functioning. He concludes that the level of anger of these persons may contribute to relationship difficulties and/or psychological and physiological problems. Scores below the 25th percentile, particularly on Trait Anger, Anger Expression Out and Anger Expression In, suggest a tendency to experience and express or suppress generally small levels of anger. However if an individual obtains low scores on all the mentioned scales, this insinuates an excessive use of denial and repression as defences to prevent an individual from experiencing intolerable anger.

Development of the STAXI

Factor structure and test construction establishes the suitability of items to the measure. In order to assess the development of the revised anger control scales, a 69 item STAXI Experimental Test Form (STAXI-ETF) was devised (Forgays, Forgays & Spielberger, 1997; Forgays et al., 1998). A factor analysis for each gender (700 males and females) taken from a sample of university students was conducted to assess the strength of the loading of the items and to provide clarity of the meaning of each item as associated to the theoretical classification of the STAXI-2 scales and subscales. An eight factor solution was revealed which is identical to the original STAXI. Those items that were considered to be ambiguous or obsolete were removed, as were the items that did not increase the item total correlations. Subsequently, the final 57 items of the STAXI-2 were selected. The State Anger, Trait Anger, Anger Expression and Anger Control indices were further evaluated in separate factor analyses to the items comprised in each of the scales. This accounted for the individual differences in the frequency of experiences and expression of anger as well as providing further validation for the structure of the overall assessment.

Psychometric Properties

Spielberger (1999) states that the STAXI-2 “...provides a concise measure of the experience, expression and control of anger” (pg. 1). In order to evaluate this statement, the standard of the reliability and validity will be discussed to identify if the STAXI-2 is an accurate measure of the construct of anger.

Reliability

Reliability refers to the degree to which a tool measures a construct and produces consistent results. A number of factors which pertain to reliability will be examined.

Internal Reliability

If a measure demonstrates internal consistency, an assumption that different items in the test contribute equally to the overall score, it can be labelled as internally reliable. Generally, an alpha coefficient of .70 demonstrates good internal reliability (Kline, 1999). Spielberger (1999) reports the alpha coefficients as .84 or higher for all scales and sub scales other than the Angry Reaction subscale for normal adults, which is .76 for females and .73 for males on sample sizes of 977 and 667 respectively. Such findings suggest that the STAXI-2 demonstrates satisfactory internal reliability which is not influenced by gender or psychopathology.

Test-retest Reliability

It is essential that a psychometric yields the same score for an individual, or when applied to the same population on more than one occasion, only then can it be deemed test-retest reliable. This can be assessed using correlation analysis. A minimum level of .70 must be achieved in order to satisfy a good standard.

The coefficients for the original STAXI were deemed to be a good indicator of test-retest reliability (Bishop & Quah, 1998; Jacobs, Latham & Brown, 1988). Kroner and Reddon (1992) examined the psychometric properties of the Anger Expression and State and Trait Scales of the STAXI on a population of prison inmates. They found that the test-retest coefficients for the trait scale were stronger than the coefficients for the state scale. A strong test-retest score for the trait scale is somewhat surprising as traits are associated with long term and embedded characteristics which are unlikely to change over a short period time. Alternatively states are associated with mood and more likely to change between intervals of testing. Therefore it would be assumed states are more likely to be susceptible to change during test-retest analysis. Test-retest reliability is yet to be determined for the STAXI-2.

Validity

Validity refers to whether a test measures what it is supposed to measure. There are various types of validity which relate to psychometric properties of measurements.

Face Validity

Face validity adheres to a common sense understanding of the items and simply relating them to the purpose of the test. It is clear that by scanning the items of the STAXI-2, they are relevant to the construct of anger. Face validity, however, is a subjective analysis and lacks scientific support, and as such, other areas of validity must also be considered.

Concurrent Validity

Concurrent validity is the extent to which a test correlates with other tests that measure the same construct. There is a large quantity of empirical research which has provided evidence of the STAXI correlating with a number of other measures which test for the same concept. Spielberger (1988) suggests significant correlations with the Buss Durkee Hostility Inventory (Buss & Durkee, 1957), the Hostility scales (Cook & Medley, 1954) and Overt Hostility Scales (Schultz, 1954) of the Minnesota Multiphasic Personality Inventory (Hathaway & McKinley, 1967). Measures which assess hostility and anger should concur as hostility involves the experience of angry feelings and psychometric measures of hostility generally assess angry feelings with the expression of anger in aggressive behaviour (Spielberger, 1999). Whilst the STAXI has been found to correlate with hostility, the concurrent validity of the STAXI-2 with measures of hostility is yet to be explored.

Additionally, Spielberger (1999) found that the Psychoticism scale of the Eysenck Personality Questionnaire (EPQ; Eysenck & Eysenck, 1975) has a small but significantly positive correlation with the State Anger (females = 0.27, males = 0.26) and Trait Anger (females = 0.20, males = 0.21) subscales of the STAXI-2. In relation to the Neuroticism scale of EPQ, low to moderate significant positive correlations were found with State Anger (females = 0.27, males = 0.43) and

the Trait Scale (females = 0.49, males = 0.50). These positive correlations between the STAXI-2 and the EPQ are expected as individuals with personality traits that are characteristic of psychopathological problems have the tendency to experience extreme anger when compared to mentally stable individuals (Spielberger, 1999). Whilst this was a statistically significant finding, due to it being a correlation type analysis, it is difficult to determine the direction of the cause and effect.

Swaffer and Epps (1999) demonstrated a correlation between the STAXI and the Novaco Anger Scale (NAS; Novaco, 1994). Lindqvist, Daderman and Hellstrom (2003) have established concurrent validity of the adapted Swedish version of the STAXI-2, the STAXI-2-S, and the NAS. The STAXI-2-S is a translation of the original STAXI-2, consisting of the same scales, subscales and items of the original measure. Both the NAS and the STAXI-2 should correlate as they are both measures of the experience and expression of anger. The findings presented may indicate that the STAXI-2 is also concurrently valid with the NAS, however further research is required in order for this to be a sound conclusion.

Predictive Validity

Predictive validity is the extent to which a measure is able to predict a future outcome. In relation to the STAXI Markovitz et al. (1991) provided evidence to suggest the STAXI is a good predictor of hypertension and blood pressure. Hypertension and blood pressure has been found to co-occur with the chronic experience of anger which in turn can impact of or our physical health and well being (Spielberger, 1999). Although a significant finding for the medical field, further research into the quality of predictive validity of the STAXI-2 on other populations and disciplines is needed. This is true for the forensic population and violent offenders as anger is a likely indicator for aggression within the offending population (Novaco, 1999).

Content Validity

Content validity refers to whether a test measures all aspects of the construct. There have been many difficulties associated with measuring the construct of anger independently from other emotional factors. Spielberger (1999) developed the STAXI and STAXI-2 to overcome the

confusion between anger, hostility and aggression. His theoretical framework of state and trait anger as well as anger expression allows for distinctions between the three concepts. Spielberger (1999) further developed the test to measure the construct of anger in its suppressed form by adding the Anger Control scale to the STAXI-2.

Construct Validity

Good construct validity is indicative of a test accurately assessing the construct that it sets out to measure. It is an ongoing process as construct validity continually becomes refined as a result of new research.

The STAXI and the STAXI-2 have been researched extensively in the medical field particularly on the effects of anger on hypertension and high blood pressure (Culbertson & Spielberger, 1996) and its effects on gender and ethnic differences (Johnson, 1989a; 1989b). It has also been researched on cardiovascular activity and reactivity (Engebretson, Matthews & Scheier, 1989), coronary heart disease (Lisspers, Nygren & Soederman, 1998) and Post Traumatic Stress Disorder (Duckro, Chibnall & Greenberg, 1995). In the psychological literature, the STAXI has been used to evaluate the effectiveness of anger management programmes for various treatments and to assess the extent of anger in individuals (Deffenbacher, 1994; Deffenbacher et al., 1990). Another area of psychological literature which has contributed to the construct validity of the STAXI is the assessment of anger in detained adolescents (Sweffer & Epps, 1999).

In considering the use of the STAXI in the forensic field of psychology, Barbour et al. (1998) utilised the STAXI to assess the experience and expression of anger in a community sample of men who were violent towards their partners (n = 31), were martially dissatisfied but not violent towards their partners (n = 23) and a control group of men who were martially satisfied and non-violent (n = 34). They found that IPV men scored significantly higher on Trait Anger and Anger Expression scales and lower on the Anger Control scales compared to non-violent men. This finding is consistent with a more recent study conducted by Eckhardt, Jamison and Watts (2002) who utilised the revised STAXI-2. They also identified that IPV men (n = 17) obtained elevated scores on Trait Anger and lower scores on Anger Control when compared to non-violent

counterparts (16). These findings are consistent with empirical studies which have highlighted anger as a risk factor for the perpetration of IPV (George et al., 2001; Maiuro et al., 1988).

From these findings it can be concluded that IPV men are predisposed to perceive a wide scope of circumstances and annoying and or frustrating and have the tendency to react to such situations with aggression and violence. This suggests that domestically violent men experience more intense levels of anger arousal and have tendencies to express more outward forms of anger when compared to non-violent counter parts. However, caution must be taken when interpreting these results as the sample sizes reported in these studies are relatively small. Therefore future research should be conducted on larger sample sizes of IPV men.

Additionally, the STAXI and STAXI-2 differentiate levels of anger between subtypes of IPV men (Holtzworth-Munroe et al., 2000; Holtzworth-Munroe, Rehman & Herron, 2002). Findings suggest that both the original and the revised version of the measure have consistently found that the experience of anger differs across subtypes of IPV offenders, such that the most severely violent men have higher levels of anger (Barbour et al., 1998; Holtzworth-Munroe, Rehman & Herron, 2002). Specifically the generally violent and dysphoric/borderline types experience the highest levels of anger when compared to the family only offenders who demonstrate the lowest levels of anger.

There is a lack of evidence which warrants standardisation of the STAXI-2 on female perpetrators of IPV. As anger has been correlated with perpetration of partner abuse and there is an ample amount of research to suggest that women are also perpetrators of partner assault (Archer, 1999, 2000a, 2006; Babcock, Miller & Siard, 2003; McClellan, Summer & Daley, 2002; Straus, 1993, 1997, 1999, 2006, 2008; Straus & Gelles, 1986, 1990), there is need for further validation of the STAXI-2 for this offender group.

Appropriate Norms /Populations

To obtain an accurate interpretation of a psychometric measure, normative information is an essential requirement. The normative sample for the STAXI-2 is based on two populations. The first is a community sample of 1644 adults, consisting of 977 females and 667 males. This

sample includes individuals from a variety of occupational backgrounds. The STAXI-2 has been normed separately for males and females across three age groups, allowing better interpretive quality when compared to other measures assessing the construct of anger.

The second set of normative data has been derived from a sample of 274 psychiatric in-patients, 103 of which were female and 171 males. Although the standardisation of the STAXI-2 has been conducted on the populations which it has been normed on, caution must be taken when evaluating results for psychiatric individuals due to the small sample size from which the appropriate norms have been obtained.

A limitation of the STAXI-2 is that it is primarily applicable to a United States based population on which it has been standardised. Although the STAXI-2 has been successfully adapted in French (Borteyrou, Bruchon-Scewitzer & Spielberger, 2008) and Swedish (Lindqvist, Daderman & Hellstrom, 2003), these are still western based populations which adhere to values and attitudes different to those from other cultures and societies. As there is no evidence to suggest that the STAXI-2 is a cross culturally valid assessment, there are issues with interpretation of the STAXI-2 on individuals who descend from non-western populations. Additionally when considering its measure of the construct of anger, which is a predisposing factor of violence and aggression (Novaco, 1994), further information of normative data for forensic populations such as violent offenders is required (Foley et al., 2002).

Distorted Responding

Socially desirable and defensive responding has been documented as a confounding factor in self-report tools (Paulhus & Reid, 1991). Despite this, the STAXI-2 does not contain any type of validity scale. It is therefore difficult to assess if the examinee is responding to the test items in a socially desirable or defensive manner. In order to detect biased responding, Foley et al. (2002) suggest the addition of validity scales to assess for denial or socially desirable responding patterns should be including in the measure. However, Spielberger (1999) suggests that low scores on all scales (below the 25th percentile) may indicate defensive responding. He also implies that if a professional using the measure believes an individual is responding to the test items in a biased manner, an additional measure to test for distorted responding should be

utilised. Generally, psychometric tools should never be used in isolation and other measures should be used by professionals to make sound clinical judgements (Jacobson & Miller, 1997).

Conclusions and Recommendations

The constellation of research has confirmed the many psychometric properties of the STAXI-2. While it has good psychometric properties pertaining to its reliability and validity, there is limited research and information on the revised version of the measure. Further research and evaluation needs to be conducted on the STAXI-2 to support its psychometric properties, particularly as this is the current test which is being used in research and clinical applications/assessments.

The STAXI-2 has been appropriately normed on community and psychiatric populations, males and females and across three age categories. However the samples used in the research have been drawn from a US based population. This suggests that the measure lacks cross cultural validity which limits the extent to which the measure can be generalised to populations outside of the US. Primarily, validation studies for the STAXI-2 have been conducted on non-forensic populations. Regardless, it is still widely used in risk assessments, research and as pre and post measures of therapeutic interventions in the forensic field of psychology. In order to draw accurate conclusions when using the STAXI-2 to measure anger in these populations, normative data on male and female offenders is imperative.

While the STAXI-2 is used as a common measure for assessing the construct of anger, professionals who use this measure should take into account its limitations and weaknesses. It is also important that the STAXI-2 is used in conjunction with other methods of assessment in order to draw sound evidence, conclusions and recommendations.

Finally, the STAXI-2 has proved to be a useful tool when assessing anger among men who perpetrate violence against their partners. Using this measure to research the construct of anger among IPV men has established that different subtypes experience the emotion at different degrees such that the most severely violent men experience the highest levels of anger. It may be concluded from this that the sub types of IPV who experience high intensity anger are the most dangerous and likely to severely injure their partner. However, validation of the measure's use

with IPV offenders has been exclusive to males, despite the research to suggest that IPV is also perpetrated by women (Archer, 1999, 2000a, 2006; Babcock, Miller & Siard, 2003; McClellan, Summer & Daley, 2002; Straus, 1993, 1997, 1999, 2006, 2008; Straus & Gelles, 1986, 1990).

Overall, this critique has identified that anger is one of many risk factors for the perpetration of IPV and one that can be measured through the use of the STAXI-2. This is contrary to feminist arguments that IPV is solely a product of male control and dominance. Therefore, the evidence provides validation for approaching IPV from a multi-factorial perspective of considering a constellation of variables in the aetiology of IPV

CHAPTER FOUR

An Exploration of Holtzworth-Munroe & Stuart's (1994) Typology with Female Perpetrators of Intimate Partner Violence

ABSTRACT

This research aims to explore the extent to which Holtzworth-Munroe and Stuart's (1994) typology of male intimate partner violent (IPV) offenders can be applied to a UK sample of females convicted of a violent offence against their intimate partner.

To assess typologies of IPV offenders 30 variables, which were either empirically or theoretically linked to IPV, were assessed across 274 female offenders convicted of physically assaulting their partners. Smallest Space Analysis (SSA) was employed to analyse the data.

Two distinct types of female IPV offenders were found; high-moderate criminality and high-moderate psychopathology (HMC-HMP, 62 %) and high-moderate psychopathology and low-moderate criminality (HMP-LMC, 11 %). The subtypes identified in this study closely resemble Holtzworth-Munroe and Stuart's (1994) generally violent/anti-social (GVA) and dysphoric/borderline (DB) respectively.

This research has provided a significant contribution to the empirical literature as it is the first of its kind to use an offender profiling approach to verify Holtzworth-Munroe and Stuart's (1994) theory of IPV offender subtypes in relation to UK resident females. In respect to the efficacy of intervention to reduce the risk of re-offending, treatment and assessment should address the individual criminogenic need of the offender to target the underlying factors and characteristics pertaining to the perpetration of IPV.

An Exploration of Holtzworth-Munroe & Stuart's (1994) Typology with Female Perpetrators of Intimate Partner Violence

Background

The definition of Intimate partner violence (IPV) incorporates physical, sexual and emotional abuse as well as controlling behaviours by a present or previous partner (Heise & Garcia-Moreno, 2002). The abuse can happen in marital relationships, long-standing or short-term partnerships and can be perpetrated by ex-partners when relationships have ended (Harvey, Garcia-Moreno & Butchart, 2007) and can also occur in same sex relationships (McClellan, Summer & Daley, 2002).

There is an ample amount of evidence to suggest that IPV has an impact on female victims such as alcoholism and drug abuse (Kilpatrick, Acierna, Resnick, Saunders & Best, 1997), mental health issues (Campbell & Lewandowski, 1997), post-traumatic stress disorder and battered women syndrome (Walker, 2000), depression, psychosomatic symptoms (Stets & Straus, 1990) and thoughts of suicide and self-mutilation (Carmen, Ricker & Mills, 1984, Garcia-Moreno et al, 2006). The empirical literature in this area has almost exclusively reported the effects of male to female directed IPV. Preliminary studies which have been conducted on the effects of female to male violence have found that male victims can experience depression, psychosomatic symptoms, psychological distress (Simoenlli & Ingram, 1998; Stets & Straus, 1990b), alcoholism and post-traumatic stress symptoms (Hines & Malley-Morrison, 2001b). Therefore it is clear that IPV has detrimental effects for both men and women, and as such it is important to determine the aetiology of IPV from a gender inclusive perspective.

Feminist Explanations of IPV

To date, feminist perspectives have primarily informed public policy, service provision and assessment and treatment with victims and perpetrators of IPV over and above other theoretical perspectives. Feminists explain IPV in relation to social role theory and suggest that "the correct interpretation of violence between husbands and wives conceptualises such violence as the extension of the domination and control of husbands over their wives" (Dobash & Dobash, 1979,

p. 15). The assumption from this perspective is that IPV is a product of gender socialisation and patriarchy whereby men hold societal power and control over women and enforce this power through the use of aggression and violence (Dobash & Dobash, 1979; Pence & Paymar, 1993). From this perspective, men are perceived as the perpetrators and females the victims of IPV. Support for these conceptions is gathered from government based surveys assessing victimisation and crime via self reports from the victims, police records, arrest rates and reports such as the British Crime Survey and the US National Crime Victimization Survey. Generally, these surveys report higher rates of male offenders and female victims of IPV (Finney, 2006; Mirrles-Black, 1999; Walby & Allen, 2004).

However, it has been argued that prevalence rates of IPV reported by government surveys, largely under-report female perpetration and male victimisation due to their focus on crime and victimisation (Archer, 2000; Straus, 1997, 1999). Males do not tend to view female violence against them as a crime and therefore are less likely to report their own experiences of assault by a partner (Archer, 2000; Dutton & Nicholls, 2005; Straus, 1997). Additionally, law enforcers are less likely to arrest females as male victimisation of IPV is not taken as seriously (Buzawa & Austin, 1993; Dutton & Nicholls, 2005; Straus, 2006; Watkins, 2005).

Archer (2000) argues that feminists reach their conclusions because of their selection of samples from female shelters and males court mandated to treatment. Consequently, they report high levels of male perpetration and female victimisation. However, research using community samples report roughly equal rates of IPV perpetration between genders and slightly higher rates for women (Straus, 1997, 1999, 2006). In his meta-analytical review of both shelter and community samples, Archer (2000) found that women were significantly more likely to have used physical aggression towards their partners and to have used it more frequently. The validity and representation of these studies that have reported high rates of women who perpetrate IPV exceeds that of government surveys due to their focus on the context of violence within an intimate relationship, straying away from crime and victim filters. Subsequently, this increases the level of disclosure of reported IPV by both men and women (Archer, 1999, 2000; Straus & Gelles, 1990).

Feminists explain and justify female partner abuse as being reactive and an act of self defence against male violence (Dobash et al., 1992; Saunders, 1988). Whilst the explanation of self-defence cannot be rejected, it cannot be validated as the only reason (Straus, 1997).

Alternative motives such as dominance, control, revenge and to gain attention have also been found as moderating factors for female IPV (Babcock, Miller & Siard, 2003; Hines, Brown & Dinning, 2007). Partner violence has also been identified in lesbian relationships (McClellan, Summer & Daley, 2002) and females have reported using violence against their non-violent partners (Straus, 1993). These findings contradict the belief that women's violence is exclusively a product of reactivity and self-defence.

Feminists also argue that women are more likely than men to be injured as a consequence of IPV (Dobash et al., 1992; Saunders, 1988). However, these conclusions have been drawn from studies conducted on samples derived for female victims of IPV who have sought refuge from their aggressive partners due to being subjected to the most severe and brutal forms of violence. Conflictual data from representative community samples show that perpetration of severe assault is roughly equal between men and women (Hamberger & Guise, 2002; Straus, 1997) and that females have reported using severe strategies such as punching, kicking and assaulting with a weapon at the same rate as men (Busch & Rosenberg, 2004; Straus & Gelles, 1986, 1990). More importantly, females are more likely to use weapons when they carry out assault against their partners when compared to their male counterparts (Brown, 2004; Hester, 2009; Hines, Brown & Dunning, 2007).

For the reasons outlined in the literature, it is important to consider IPV from a gender inclusive perspective and conduct research on females who are perpetrators of IPV. Only when this is considered in the context of scientifically sound literature can the true nature of female perpetration of IPV be understood.

Heterogeneity of IPV Offenders

Whilst many accept that power, control and dominance are associated with IPV, they are not exclusive to its explanation (Archer, 2000a, 2006). This single-factor explanation has been criticised as treating IPV individuals as a homogenous group and failing to take into account

individual variations in characteristics of the offenders and assaultive behaviour (Dixon & Brown, 2003; Graham-Kevan, 2007). It is also unsuccessful in explaining why some men are not aggressive towards their partners (Dutton, 1995, 1995). Alternative explanations take into account an array of factors which are of a proximal and distal nature (Holtzworth-Munroe & Stuart, 1994) and from a multi-factorial level including the broader culture, family and the individual (Dutton, 1994, 2006).

One such explanation which uses a multi-factorial approach to explain IPV is Dutton's (1995, 2006) nested ecological model. From this perspective risk factors from varying levels, of the macrosystem, exosystem, microsystem and ontogenetic system, interrelate to trigger an outcome of IPV. The macrosystem corresponds to the wider societal cultural values and the exosystem to social structures and networks. The microsystem is associated with the context of the family unit such as dynamics of interpersonal relationships, and takes into consideration the context of which IPV occurs. Finally, the ontogenetic level is concerned with variables which pertain to the individual and their developmental history which influence the outcome of IPV.

There is an ample amount of evidence to suggest that IPV individuals can be treated with heterogeneity and divided into subgroups (Dixon & Browne, 2003; Dixon et al., 2008; Holtzworth-Munroe & Stuart, 1994; Holtzworth-Munroe et al., 2000; Holtzworth-Munroe et al., 2003). Following a review of the literature, Holtzworth-Munroe and Stuart (1994) theoretically proposed typologies of male IPV offenders based on proximal and distal variables and three dimensions of severity of violence, generality of violence and psychopathology. On the foundations of these dimensions, they concluded three subtypes of male IPV perpetrators of family-only (FO), generally violent/anti-social (GVA) and dysphoric/borderline (DB). According to their theory, the FO offender engages in the least severe forms of violence which they mainly perpetrate against their family. They experience the least psychopathological problems, criminality and drug and alcohol abuse. The causes of IPV perpetrated by the FO offender are explained in relation to a mixture of low level risk factors such as reliance towards their partner, inadequate communication skills and mild impulsivity. Holtzworth-Munroe and Stuart (1994) hypothesised that this category accounts for 50% of IPV men.

The GVA category of IPV perpetrators have been described by Holtzworth-Munroe and Stuart (1994) as using violence and aggression in an instrumental manner. They are reported as having the highest levels of criminality, conduct moderate to high levels of severity of violence and extend their violence outside of the family, thus possessing the highest rates of extra-familial violence. Whilst the GVA offender is predicted to experience low to moderate level psychopathology, they are also characterised as antisocial and described to engage in a moderate to high degree of substance abuse. It is assumed by Holtzworth-Stuart and Munroe (1994) that 25% of IPV men would be classified into this subtype.

Compared to the FO and GVA offender, the DB type has been described as exhibiting the most forms of psychopathology such as personality disorder type characteristics and mental health problems. Their insecure attachment dynamic predisposes them to being dependent on their partners, highly fearing of rejection and abandonment and they use violence under these perceived circumstances (Linehan & Kehrer, 1993). They are likely to present with high levels of depression, low to moderate levels of criminality and substance abuse and perpetrate moderate to high severities of violence which is generally inflicted on family members. Holtzworth-Munroe and Stuart (1994) propose that the DB subtype account for 25% of the IPV population. These typologies outlined have gathered support from several empirical studies and reviews (Boyle et al., 2008; Dixon & Brown, 2003; Holtzworth-Munroe et al., 2000; Holtzworth-Munroe et al., 2003; Huss & Langhinirichsen-Rohling, 2006).

Dixon et al. (2008) tested the Holtzworth-Munroe and Stuart's (1994) categories with 99 male perpetrators of partner femicide. The results of their research indicated that the characteristics of the offender and their offence were consistent with the GVA and DB subtype, finding the prevalence of classification for the GVA and DB IPV subtypes to be 49% and 36% respectively. Generally, the findings suggest that GVA and DB IPV offenders are most at risk of conducting the most severe assaults on their partners.

Female Subtypes of IPV Offenders

Although the identification of subtypes has provided insight into the various processes and underlying causes of IPV, typologies have primarily been investigated on male offenders. When

considering the evidence which suggests that females are also perpetrators of IPV (Archer, 1999, 2000a, 2006; Babcock, Miller & Siard, 2003; McClellan, Summer & Daley, 2002; Straus, 1993, 1997, 1999, 2006, 2008; Straus & Gelles, 1986, 1990) and an increase in arrest rates for females (DeLeon-Granados et al., 2006; Hester, 2009), it is important to consider a gender inclusive approach and conduct research on women who assault their partners to fully understand the phenomena of IPV (Graham-Kevan, 2007).

Babcock, Millar and Siard (2003) concluded clear differences in the categorisation of partner only (similar to FO) and generally violent (similar to GVA) women. They found that generally violent women tend to use instrumental aggression, report higher rates of psychological distress and are most likely to have witnessed their mothers exerting physical aggression when compared to their partner only counterparts. Therefore there is some evidence to suggest that Holtzworth-Munroe and Stuart's (1994) typologies may be applicable to female offenders. Although this study has granted some validation of the theoretical assumption of IPV subtypes for female offenders, it is limited by the failure to take into account and assess the DB offender.

In relation to the dimension of psychopathology, women who have been arrested for IPV are more likely to present with personality disorder type traits, to have a history of arrest and endorse pro-violent attitudes (Simmons, Lehman & Cobb, 2004). Other studies of female IPV offenders have found women to be consistent with the GVA group of being most likely to use instrumental violence, experience early conduct disorders problems (Henning, Jones & Holdford, 2003) and engage in serious substance abuse (Busch & Rosenberg, 2004; Hamberger & Guse, 2002).

Henning, Renauer & Holdford (2006) found a clear distinction between women who used coercive forms of aggression with women who were either nonviolent prior to the IPV offence or who used non-coercive forms of aggression. Coercively violent women were found to engage in the most severest forms of violence against their partners, have a history of childhood abuse, early conduct problems and witness inter-parental violence. This is also consistent with the GVA type. In a study of male victim accounts of partner abuse (N=190), Hines, Brown and Dunning (2007) discovered that substance abuse, mental health problems, history of trauma and threats of suicide were apparent in female IPV perpetrators.

Henning, Jones and Holdford (2003) conclude that compared to men, women are more likely to have a history of mental health complications such as previously attempting suicide and prescribed psychotropic medication. They also found that females are more likely to present with clinically significant elevations of clinical syndromes and personality disorder traits. This suggests that IPV women are more likely to have long-standing personality traits that may complicate their social and adaptive functioning in general life, including intimate relationships. However caution must be taken in generalisation of these results as 86% of the sample consisted of IPV females who were of an African American origin.

Classifying sub-types of IPV offenders is most useful in providing awareness and insight into differences among functions, causes and motivation of this kind of abuse. A clear understanding would further contribute to establishing a sound basis for risk assessment on the likelihood of recidivism and to determine appropriate and suitable treatments rather than the current feminist approach of 'one size fits all'.

Most empirical research on typologies of IPV offenders in general is limited in its generality as it is predominantly conducted on US male samples. Additionally, many of the studies have used small sample sizes, divided subtypes into groups based on self-report and used statistical techniques such as cluster and factor analysis (Dixon & Browne, 2003). Whilst the use of these procedures are statistically sound and robust, alternative methods such as Multidimensional Scaling (MDS) techniques, adopted from offender profiling research, allows offenders to be classified along dimensions, rather than being strategically placed into such typologies. This technique has previously been used to assess various offending behaviours including sex offending (Sturidsson et al., 2006), serial murder (Canter et al., 2004) and terrorism and hostage taking behaviours (Wilson, 2000).

The current research is based on prior work by Dixon et al. (2008) using the MDS technique of Small Space Analysis (SSA) to explore the prevalence of Holtzworth-Munroe and Stuart's (1994) typology in a sample of men incarcerated for the murder of their female partner. This study aims to explore the extent to which Holtzworth-Munroe and Stuart's (1994) typology of male IPV offenders can be applied to a UK sample of females convicted of a violent offence against their intimate partner.

Specifically the following research aims will be tested:

1. To investigate the extent to which Holtzworth-Munroe and Stuart's (1994) typologies of IPV offenders are applicable to females convicted of IPV.
2. To examine the percentage of the sample that falls into each category.

Method

Sample

Participants were drawn from the Offender Assessment System (OASys) database which is owned by the OASys Data Evaluation and Analysis Team (ODEAT) within the Ministry of Justice (MOJ). An anonymous random selection of 10,000 convicted female offenders who had undergone an OASys assessment was selected via a computer generated process from a national sample of 250,000 offenders. The selection was restricted to those assessments that fulfilled the criteria of having completed an OASys during the financial year of 2006-2007 and those who had provided valid answers on 80% or more of the scored questions in sections 1-12. Sections 1-12 were most appropriate as these sections incorporated the risk factors which were of interest in this study.

Participants were further filtered and selected depending on the presence of IPV. This was assessed based on the responses provided to Question 2.3D of the OASys assessment “does the current offence involve physical violence towards their partner”. Partner violence in this item referred to physical violence of any kind towards a partner with whom the offender has had an intimate relationship.

This resulted in a total of 274 female IPV perpetrators in the final sample. At the time of assessment, perpetrator ages ranged from 18 to 60 years ($M = 35$ years, $SD = 10.34$). Information pertaining to occupational status was not available, however 171 (62.4 %) of the sample were unemployed and 103 (37.6 %) were employed. Regarding ethnicity, 3 (1.1 %) were Asian, 3 (1.1%) were black, 4 (1.5%) mixed race, 213 (77.7%) white and 51 (18.6%) cases were missing and unavailable.

Measure – Offender Assessment System (OASys)

The OASys was used to collect information on risk factors for IPV perpetration for each participant. This measure is a national protocol used in the assessment of adult offenders by prison and probation services in England and Wales. The OASys is a structured clinical

risk/needs assessment and management tool and consists of four main components of an analysis of offending-related factors, risk of serious harm analysis, a summary sheet and sentence plan. The offending related factors include 13 sections that cover criminal history, analysis of current offences, assessment of ten dynamic risk factors and suitability to undertake sentence-related activities (e.g. offending behaviour programmes). The OASys incorporates both static and dynamic risk factors which are empirically related to recidivism. It is an evidence based measure which includes variables related to the offenders background and does not rely solely on self-reported data as it includes collateral evidence from previous documents and records in addition to interviewing the offender.

The OASys is currently viewed as an essential part of the management of offenders and identifying offender risks and needs and linking these into individualised sentence and risk management plans. It therefore allows practitioners to formulate how to best address each individual offender in reducing the risk of re-offending.

Ethics

Consent to use the data has been provided by the ODEAT at the MOJ. Although the MOJ do not gain consent from each individual participant for use of their data in research, there are exemptions under the Data Protection Act (1988) which permit use of this data for research purposes. Exemptions apply when using data for research, historical or statistical purposes and crime prevention. The MOJ commonly use this exemption in order to conduct research with criminal justice data. Additionally, ethical approval to conduct this research was granted by the Ethics and Research Committee of The University of Birmingham (see Appendix 8).

Procedure

Variables previously associated with types of IPV offenders in the literature were identified via content analysis of the OASys reports. Criteria for selection of variables was based on Holtzworth-Munroe and Stuart's (1994) three dimensions which determine subtypes of IPV offenders including severity of violence, generality of violence and psychopathology. This is illustrated in table 4.1 and 4.2. Based on the availability of information, a total of 33 variables

were extracted from each of the OASys reports of the 274 offenders (see Appendix 9 for a full list of the variables and content dictionary). Variables were coded based on their absence (0) or presence (1) for each of the 274 offenders. The present study explored the variables across two dimensions of Criminality and Psychopathology. The rationale for these two dimensions is that IPV and extra-familial violence pertain to criminal offences and therefore are included in one dimension of criminality. Psychopathology, which is related to personality disorders, traits and characteristics and mental health problems, formed the basis for the second dimension. This was also based on previous coding procedures used to research male IPV offenders who had murdered their partner employed by Dixon et al. (2008).

Rationale for Including Variables in Each Dimension

Criminality: Low levels of criminality have been associated with offenders who received their first conviction for a criminal offence at an older age (Cadsy & Crawford, 1988), have the least marital problems (Saunders, 1992) and least relationship violence (Holtzworth-Munroe & Stuart, 1994). For these reasons the variables which are associated with low level criminality are later convictions, no history of intimate partner violence and no history of intimate partner violence with current partner. High levels of criminality have been associated with perpetration of extra-familial violence, arrests for any type of crime (Shields, McCall & Hanneke, 1988), pro-criminal and discriminatory attitudes (Holtzworth-Munroe & Stuart, 1994), impulsivity (Blackburn, 1993), use of violence for instrumental purposes (Dutton & Kerry, 1999), low occupational status (Shields, McCall & Hanneke, 1988), behavioural problems during childhood and convictions from a young age (Cadsy & Crawford, 1988). Furthermore, individuals who lack general conflict resolution skills have been associated with high levels of criminality (Holtzworth-Munroe & Stuart, 1994) as have individuals who violate terms of conditional release or community orders (Grann & Wedin, 2002).

Table 4.1 - Prediction for Criminality Variables for Female IPV Offenders Based on Holtzworth-Munroe & Stuart's (1994)

Theoretical Typologies

Variable	<u>Holtzworth-Munroe & Stuart (1994) typologies of IPV offenders</u>		
	Family Only (Low Criminality/Low Psychopathology)	Generally Violent/Antisocial (High Criminality/Low- Moderate Psychopathology)	Dysphoric/Borderline (High Psychopathology/Low- Moderate Criminality)
Young age at first conviction	Absent	Present	Present
Young age first contact with police	Absent	Present	Present
Later convictions	Present	Absent	Absent
Previous custodial sentence	Absent	Present	Present
Criminal versatility	Absent	Present	Present
Extra-familial violence	Absent	Present	Present
Inadequate interpersonal skills	Absent	Present	Present
Young behavioural problems	Absent	Present	Present
No history of IPV	Present	Absent	Absent
No history of IPV with current partner	Present	Absent	Absent
Unemployed	Absent	Present	Present
Pro-criminal attitudes	Absent	Present	Present
Discriminatory attitudes	Absent	Present	Present
Instrumental aggression	Absent	Present	Present
Breach	Absent	Present	Present
Impulsive	Absent	Present	Present
Reckless	Absent	Present	Present

Table 4.2 - Prediction of Psychopathology Variables for Female IPV offenders Based on Holtzworth-Munroe & Stuart's (1994) Theoretical Typologies

Variable	<u>Holtzworth-Munroe & Stuart (1994) typologies of IPV offenders</u>		
	Family Only (Low Criminality/Low Psychopathology)	Generally Violent/Antisocial (High Criminality/Low- Moderate Psychopathology)	Dysphoric/Borderline (High Psychopathology/Low- Moderate Criminality)
Alcohol abuse at times of offence	Absent	Present	Present
History of alcohol abuse	Absent	Present	Present
Drug use at time of offence	Absent	Present	Present
History of drug abuse	Absent	Present	Present
Depression	Absent	Absent	Present
Suicide/Self-Harm	Absent	Absent	Present
Sectioned	Absent	Absent	Present
Psychiatric problems at time of offence	Absent	Absent	Present
History of psychiatric problems	Absent	Absent	Present
Current psychiatric treatment	Absent	Absent	Present
History of psychiatric treatment	Absent	Absent	Present
Childhood abuse	Absent	Present	Present
Emotional distress at time of offence	Absent	Absent	Present
Emotional distress motivation for IPV	Absent	Absent	Present
Weapon	Absent	Present	Present
Excessive violence	Absent	Present	Present

For these reasons variables associated with high criminality are ‘extra-familial violence’, ‘criminal versatility’, ‘previous custodial sentences’, ‘pro-criminal attitudes’, ‘discriminatory attitudes’, ‘impulsive’, ‘instrumental aggression’, ‘reckless’, ‘unemployment’, ‘young behavioural problems’, ‘young age at first conviction’, ‘young age first contact with the police’, ‘inadequate interpersonal skills’ and ‘breach’ of terms of conditions of probation, parole, licence, bail or community based sentences.

Psychopathology: Psychopathology has been indicated by the presence of mental health problems including depression (Holtzworth-Munroe & Stuart, 1994) and pre-occupation with suicide and self harm. Therefore variables of ‘depression’, ‘suicide/self-harm’, ‘emotional distress at time of offence’ and ‘emotional distress as a motivation for IPV’, ‘sectioned’ under mental health act (1983), a ‘history of and current psychiatric problems’ and a ‘history of and current treatment for psychiatric problems’ were included in this dimension. Research has also found the most severe forms of psychopathology and mental health issues are associated with high experiences of anger (Greene, Coles & Johnson, 2006) which have been demonstrated in severe acts of intimate partners by excessive overkill (Dutton & Kerry, 1999). Indeed, Holtzworth-Munroe and Stuart (1994) suggest that individuals with a predisposition to psychopathology possess high levels of anger and are more likely to react to unimportant issues or minor disputes with their partner with violence. Therefore variables of ‘weapon use’ and ‘excessive violence’ were considered in this dimension.

In addition, the experience of abuse and maltreatment during childhood can impact on emotional and social development and has been closely linked to attachment and psychopathology related disorders (Van Ijzendoorn et al., 1997). Evidence also suggests that having a psychiatric illness increases vulnerability to a co morbid substance use disorder (Kessler et al., 1994) and that the co-occurrence between these two factors is high (Beisel, Scott & Dixon, 1999). High rates of co-occurrence of personality disorders, such as antisocial and borderline, and substance abuse has been identified in clinical and community samples when compared to substance use disorders in the general population (Welch, 2007). More specifically, studies have found that personality disorders in adolescence are highly predictive and a risk factor for the development of later substance abuse disorders (Cohen et al., 2007).

Based on the aforementioned literature, variables related to ‘childhood abuse’, ‘a history of alcohol abuse’, ‘history of drug use’, ‘drug use at time of offence’ and ‘alcohol use at time of offence’ were included in this section.

Treatment of Data

A Multidimensional Scaling technique, called Smallest Space Analysis (SSA) was applied using SPSS version 17. SSA calculates correlations between a set of variables and represents these as proximities in an n-dimensional space (Schiffman, Reynolds & Young, 1981). The present study uses a 2-dimensional space. The proximities of variables are represented in a similarity matrix following an appropriate measure of association. The Jaccard’s coefficient measure of association (Jaccard, 1908), which excludes any joint non-occurrences, was used as it has been argued to be the most appropriate method of analysis when investigating ambiguous data (Canter et al., 2003).

The similarity matrix is then transformed, using the SSA solution, into a scatterplot which provides a visual representation of each variable in terms of its relationship to every other variable. The distances between the points are referred to as the Euclidian distance which represents the strength of associations between the variables so, for example, the smaller the distance the greater the association. On this note, Canter et al. (2003) argues that the closer the variables are situated on the scatter plot, the greater the likelihood of the behaviour co-occurring in an offence.

The goodness of fit between the variables is measured according to the stress values whereby low stress scores and high fit scores suggest an overall good fit of the data (Schiffman, Reynolds & Young, 1981). Additionally, another indication of goodness of fit is when the Kruskal Stress (S-Stress) value is less than 0.15 (Guttman, 1954; Kruskal, 1964a; Kruskal & Wish, 1978). The variables within the plot are visually assessed and lines are drawn across the data to represent categories of offenders according to the dimensions, theoretical predictions and Euclidian distance between the variables.

This technique of SSA has been described to overcome some of the limitations of alternative methods such as over-inclusive factors, or frequency biases and the difficulties of factor rotation (Bishopp & Hare, 2008). SSA is most useful when exploring theoretical assumptions with data as it allows for theory to be empirically explored and validated using a scientifically sound statistical technique.

A number of variables were dichotomised to ensure consistency of coding across variables. To dichotomise the data, cut off points were determined for each of the variables by running an analysis and identifying a region where less than 50% of the sample had the variable present. This method is most practical in discriminating offenders (Canter & Heritage, 1990). The variables 'young age at first conviction' and 'young age first contact with the police' was initially presented in their numerical form. These variables were dichotomised on the basis that all those who were 15 years of age and below at the time of receiving a conviction for a criminal offence or having contact with the police were coded as present and for individuals who were 16 years or above, the variable was coded as absent.

The variable 'later convictions' was dichotomised by coding as present those participants who received their first conviction at 28 years or older. 'Previous custodial sentence' cut-off point was determined if an offender had received one or more sentences. An additional variable of 'high criminal versatility' was also presented in numerical quantity. The cut-off point of IPV females having six or more categories of convictions was used to identify the presence of high criminal versatility.

Some of the variables included in this study are weighted based on the OASys scoring system of the severity of a factor present (2 = significant problems, 1 = some problems and 0 = no problems). Therefore the variables of 'childhood abuse', 'reckless', 'depression', 'current psychiatric problems', 'inadequate interpersonal skills', 'impulsivity', 'pro-criminal attitudes', 'discriminatory attitudes' and 'instrumental aggression' were dichotomised to ensure SSA statistical procedures were adhered to. The data was coded based on whether the variable was present or not for example, *significant problems* and *some problems* were coded as present and *no problems* were coded as absent.

Hypothesised Structure of the Classification System

Table 4.1 and 4.2 detail how the 33 variables were expected to differentiate between offender themes, according to the literature. The likely presence or absence of each variable, associated with the two dimensions of Criminality and Psychopathology, is highlighted within each offence theme. It is hypothesised that variables will form 3 regions in the SSA plot akin to the Holtzworth-Munroe and Stuart (1994) classification. According to the Holtzworth-Munroe and Stuart typology, offences are likely to be characterised by dimensions of ‘Low Criminality and Low Psychopathology’; ‘High Criminality and Low-Moderate Psychopathology’; and ‘High Psychopathology and Low-Moderate Criminality’, analogous to the FO, GVA and DB offenders respectively.

A region of ‘High Criminality and High Psychopathology’ is not expected to result as this has not featured previously in the domestic violence literature. However, Dixon et al. (2008) previously found evidence for a theme in the region of Moderate-High Criminality and High Psychopathology, showing that a sample of femicide offenders had a higher level of criminality than may be expected from DB offenders in the community. Therefore, considering that female partner violence perpetrators have been shown to have higher levels of mental health issues than men (Henning, Jones & Holdford, 2003) it is entirely possible that a theme displaying higher levels of criminality and psychopathology will be evident in this sample.

As noted in Dixon et al. (2008) the Holtzworth-Munroe and Stuart (1994) typology proposes the GVA offender to have low levels of Psychopathology. However, the present study includes variables of substance abuse (‘history of drug abuse’, ‘drug use at time of offence’, ‘history of alcohol abuse’ and ‘alcohol use at time of offence’) as a measurement of Psychopathology and as GVA offenders are purported to have the highest levels of substance abuse (Holtzworth-Munroe, et al., 2000) it is expected that women who demonstrate similarities to the GVA offender, having high levels of Criminality, will also demonstrate low to moderate levels of Psychopathology because of their high levels of substance abuse.

Preliminary Analysis

A frequency analysis of the 33 variables was conducted. Table 4.3 illustrates the frequencies of the percentage and number of cases where the variable was present for the 274 female IPV offenders for both the Criminal and Psychopathology dimensions.

Table 4.3 - Frequencies of Variables for Female IPV Offenders for Criminality and Psychopathology Dimension

Criminality Variables	Frequency of Variable Present	
	%	n
Young age at first conviction	8%	23
Young age first contact with the police	13%	37
Later convictions	43%	117
Previous custodial sentence	11%	31
Breach	25%	70
Criminal versatility	3%	9
Extra-familial violence	18%	50
Instrumental aggression	28%	76
Pro-criminal attitudes	13%	37
Discriminatory attitudes	2%	6
Inadequate interpersonal skills	30%	83
Reckless	32%	89
Impulsive	25%	69
Young behavioural problems	16%	44
No previous IPV with current partner	83%	229
No history of IPV	15%	41
Unemployment	62%	171
Psychopathology Variables		
Motivation for IPV emotional distress	88%	240
Emotional distress at time of offence	75%	208
Alcohol at time of offence	70%	193
History of alcohol abuse	38%	104
Drugs use at time of offence	9%	24
History of drug abuse	40%	110
Psychiatric problems at time of offence	7%	20
History of psychiatric problems	29%	80
History of psychiatric treatment	17%	51

Current psychiatric treatment	12%	33
Sectioned	3%	8
Childhood abuse	58%	160
Depression	32 %	88
Suicide/Self-harm	54%	149
Weapon	54 %	149
Excessive violence	12%	34

Following the completion of a frequency count of the 33 variables all variables which accounted for less than 5% and greater than 95% were removed from the final SSA analysis. This is because removing the high frequency and low frequency variables will improve the reliability and consistency of the results by reducing the likelihood of skewed data (Canter, Heritage & Wilson, 1991). The variables which fell into the lower bound of the frequency count of less than 5% were ‘criminal versatility’ which represented 3% (n = 9) of the sample, ‘sectioned’ which accounted for 3% (n = 8) and ‘discriminatory attitudes’ which was present in only 2% (n = 6) of the female IPV offenders. Therefore these variables were not included in the SSA analysis. No variables occurred in the upper bound region of greater than 95%, therefore 30 of the initial 33 variables remained in the final MDS analysis.

Results

1. Investigating the extent to which Holtzworth-Munroe and Stuart's (1994) typologies of IPV offenders are applicable to females convicted of IPV.

The SSA analysis was conducted on 274 female offenders. Figure 4.1 illustrates the SSA solution and the division of sub-types of female IPV offenders and the percentage of cases which fell into each dominant theme of High to Moderate Criminality & High to Moderate Psychopathology (HMC-HMP), High to Moderate Psychopathology & Low to Moderate Criminal (HMP-LMC) and Low to Moderate Criminality and Low to Moderate Psychopathology (LMC-LMP).

The final SSA output had a normalised raw stress score of 0.0290, a Stress-I score of 0.1702 and a Stress-II score of 0.3422. The solution had a Tucker's fit score of 0.9854. These low stress scores and high fit scores suggest a 'good fit' for the data (Schiffman, Reynolds & Young, 1981). Additionally, the SSA solution provided a Kruskal's Stress value of 0.0914 which also suggests a good fit to the data (Kruskal, 1964a; Kruskal & Wish, 1978) and an acceptable precise SSA solution (Guttman, 1974).

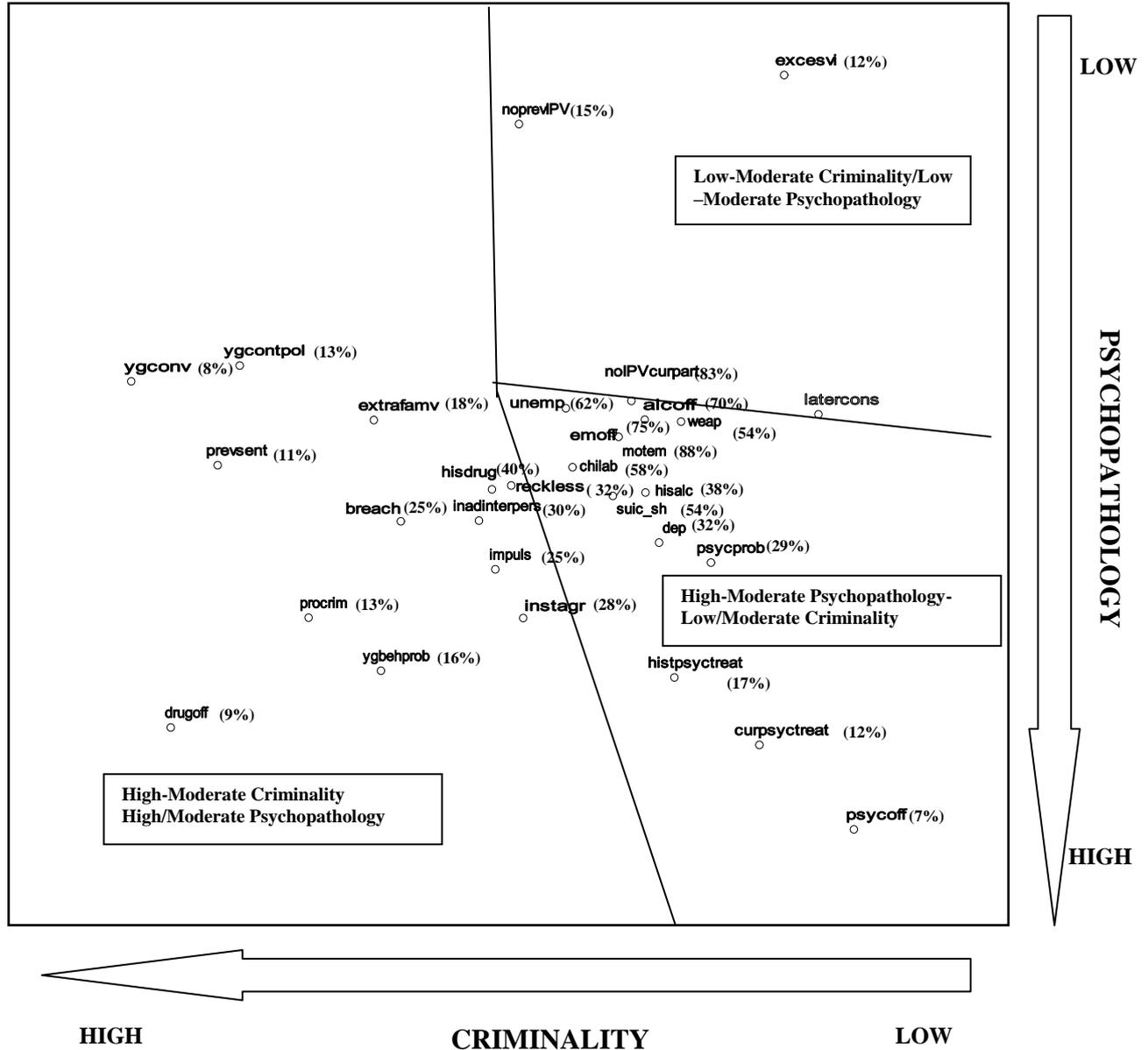
A Kuder-Richardson-20 (KR-20) coefficient was used to assess the reliability of the variables within the categorised group. A KR-20 value equal to or greater than 0.5 is an acceptable value (Canter et al., 2003). The organisation of the variables in relation to their region on the scatter plot and interaction with the criminality and psychopathology dimensions are as follows:

Low-Moderate Criminality and Low –Moderate Psychopathology (LMC-LMP):

The four variables which fell into the LMC-LMP region were 'no history of IPV'; 'excessive violence during IPV'; 'no history of IPV with current partner' and 'later convictions'. Whilst three of the variables (no history of IPV, no history of IPV with current partner and later convictions) correspond to the Holtzworth-Munroe and Stuarts's (1994) FO type of IPV offender, excessive violence does not. The KR-20 coefficient value of - 0.25 is negative due

to a negative average covariance among the items which violates the assumptions of the reliability model.

Figure 4.1 - SSA Scatter Plot for Subtypes of Female IPV Offenders



KEY: *psycycoff* = psychiatric problems at time of offence; *curpsycyctreat* = current psychiatric treatment; *histpsycyctreat* = history of psychiatric treatment; *psycprob* = history psychiatric problems; *dep* = depression; *suic_sh* = suicide/self-harm; *prevsent* = previous custodial sentence; *ygconv* = young age at first conviction; *ygcontpol* = young age first contact with police; *drugoff* = drug use at time of offence; *hisdrug* = history of drug abuse; *alcoff* = alcohol use at time of offence *hisalc* = history of alcohol aduse; *ygbehprob* = young behavioural problems; *procrim* = pro-criminal attitudes; *instagr* = instrumental aggression, *impuls* = impulsive; *breach* = breach; *inadinterpers* = inadequate interpersonal skills; *reckless* = reckless; *extrafamv* = extra-familial violence; *chilab* = childhood abuse; *motem* = emotional distress motivation for IPV; *emoff* = emotional distress at time of offence; *unemp* = unemployed; *noIPVcurpart* = no IPV with current partner; *weap* = weapon; *latercons* = later convictions; *noprevIPV* = no previous history of IPV; *excesvi* = excessive violence.

When a later conviction is deleted from the analysis, the KR-20 coefficient value increased to 0.163. However this is still below the acceptable value of 0.5 therefore the variables associated with this region are not reliable to constitute a group.

High-Moderate Criminality and High-Moderate Psychopathology (HMC-HMP):

The HMC-HMP region included variables of ‘young age at first conviction’; ‘young age at first contact with the police’; ‘extra-familial violence’; ‘previous custodial sentence’; ‘history of drug abuse’; ‘reckless’; ‘breach’; ‘inadequate interpersonal skills’; ‘impulsive’; ‘pro-criminal attitudes’; ‘instrumental aggression’; ‘young behavioural problems’ and ‘drug use at time of the offence’. The variables that fell into this category are similar to those which would be found in Holtzworth- Munroe & Stuart’s (1994) GVA IPV offender. The KR-20 coefficient value of 0.78 did not improve when variables were removed from the analysis.

High-Moderate Psychopathology and Low – Moderate Criminality (HMP-LMC):

The HMP-LMC subtype of female offenders found in this study closely resembles that of Holtzworth-Munroe and Stuart’s (1994) DB offender. The HMP-LMC region consisted of a total of 13 variables which were ‘unemployment’; ‘alcohol at time of the offence’; ‘history of alcohol misuse’; ‘weapon’; ‘emotional distress at time of offence’; ‘motivation for IPV emotional distress’; ‘childhood abuse’; ‘attempted suicide/self-harm’; ‘depression’; ‘psychiatric problems at time of the offence’; ‘history of psychiatric problems’; ‘history of psychiatric treatment’ and ‘current psychiatric treatment’. The KR-20 coefficient value was calculated as 0.68 which did not improve when variables were omitted from the analysis.

2. Examining the percentage of the sample that fell into each category

To explore the viability of the overall framework and categorisation of subtype of IPV offenders from the SSA solution, each of the 274 cases were individually assigned to a dominant theme to provide a frequency for the HMC-HMP and HMP-LMC category of offender identified. The method employed allocates each case to a dominant theme if the percentage score for one theme was greater than the overall percentage score of the other themes combined (Canter et al., 2003). In instances where this did not occur, the case was

classified as 'mixed'. In cases where only one variable or no variables were present, the case was labelled as 'unclassified'.

As the variables in the LMC-LMP category are not reliable to constitute a group, these variables were omitted from the classification of dominant themes process. Figure 4.2 illustrates the frequency of classifications to each dominant theme of the IPV females. Following the assignment of each case to a dominant theme, 11 % (30) of IPV females fell into the HMC-HMP group, 62% (170) of cases were classified as HMP-LMC, 4% (10) were mixed and 23% (65) of participants were deemed unclassified. The high frequency count of the classification of the HMP-LMC group may be due to the occurrences of high frequency variables in this category and the co-occurrence of variables with the HMC-HMP group.

Testing the Appropriateness of Dimensions

As both the HMC-HMP and HMP-LMC share similar variables of criminality and psychopathology, to determine if there is an actual significant association between risk factors associated with the different subtypes of IPV females, a frequency and chi-square analysis of the variables for each dominant theme was calculated. The frequency of each risk factor within each category is presented in Table 4.4 for the Criminality and Psychopathology dimensions.

For the criminality dimension, there was a significant difference between groups in relation to the variables 'breach' ($\chi^2_{(1)} = 28.156, p = 0.000$); 'extra-familial violence' ($\chi^2_{(1)} = 18.255, p = 0.000$); 'young behavioural problems' ($\chi^2_{(1)} = 11.764, p = 0.000$); 'instrumental aggression' ($X^2_{(1)} = 8.579, p = 0.004$); 'pro-criminal attitudes' ($\chi^2_{(1)} = 28.082, p = 0.000$); 'reckless' ($\chi^2_{(1)} = 11.708, p = 0.000$); 'impulsive' ($\chi^2_{(1)} = 6.485, p = 0.000$); 'history of drug use' ($\chi^2_{(1)} = 9.497, p = 0.000$) and 'inadequate interpersonal skills' ($\chi^2_{(1)} = 22.074, p = 0.000$).

Due to 25% of the cases having an expected count of less than five, The Fisher's Exact Test was reported for 'young age at first conviction' ($FE_{(1)} = 0.000, p < 0.001$), 'young age first contact with police' ($FE_{(1)} = 0.000, p < 0.001$) and 'previous custodial sentence' ($FE_{(1)} = 0.000, p < 0.001$), all of which were significantly associated with the criminality. The

‘unemployment risk’ factor did not represent a significant association with either of the IPV subtypes ($\chi^2_{(1)} = 0.201, p = 0.412$). This may be because the prevalence of unemployment was similar for the HMC-HMP (71%) and HMP-LMC (67%) groups.

Overall, there was a clear distinction between the two subtypes; the women categorised by the HMC-HMP group had a significantly higher frequency of criminality variables present. These results are consistent with the predictions outlined in Table 4.1 and with Holtzworth-Munroe and Stuart’s (1994) classification of the GVA IPV offender type.

Figure 4.2 - Frequency of Classification of Dominant Themes

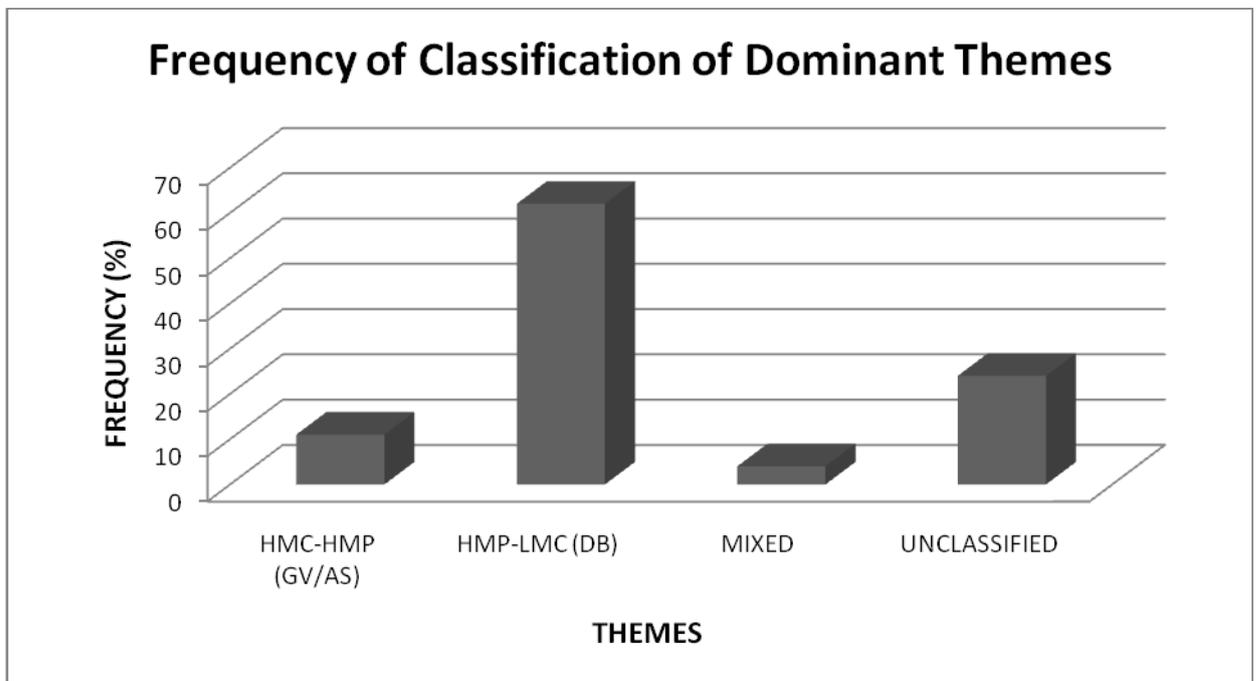


Table 4.4 - Frequencies and Pearson's Chi-Square for HMC-HMP and HMP-LMC IPV Females for Variables Associated with Criminality and Psychopathology

Criminality Variables	HMC-HMP	HMP-LMC	$\chi^2(1)^a$
	N = 31 % n	N= 169 % n	
Young age at first conviction	32 (10)	6 (10)	20.195* b
Young age first contact with police	48 (15)	27 (15)	28.632* b
Previous custodial sentence	48 (15)	9 (15)	32.074* b
Breach	74 (23)	25 (43)	28.156*
Extra-familial violence	55 (17)	19 (32)	18.255*
Young behavioural problems	42 (13)	15 (26)	11.764*
Unemployment	71 (22)	67 (113)	0.201
Instrumental aggression	58 (18)	31 (52)	8.579**
Pro-criminal attitudes	51 (16)	12 (20)	28.082*
Reckless	71 (22)	38 (64)	11.708*
Impulsive	52 (16)	28 (48)	6.485**
History of drug abuse	77 (24)	47 (80)	9.497**
Inadequate interpersonal skills	77 (24)	32 (55)	22.074*
Drugs use at the time offence	32 (10)	8 (13)	15.532*b
Psychopathology Variables			
Motivation for IPV emotional distress	81 (25)	89 (151)	1.879
Emotional distress during the offence	64 (20)	79 (133)	2.931
Childhood abuse	68 (21)	67 (116)	0.010
History of alcohol abuse	23 (7)	48 (81)	6.831**
Alcohol use at the offence	39 (12)	77 (131)	19.357*
Depression	19 (6)	38 (64)	3.947***
Suicide/Self-Harm	45 (14)	63 (107)	3.617***
Current psychiatric problems	10 (3)	31 (53)	6.109**
Psychiatric problems during the offence	3 (1)	7 (12)	0.647
History of psychiatric treatment	13 (4)	22 (38)	1.450
Current psychiatric treatment	0 (0)	15 (25)	5.241**b
Weapon	23 (7)	61 (103)	15.579*

a Chi-square statistic
b 25% of cases expect count <5
* p < 0.001
** p < 0.01
*** p < 0.05

For the Psychopathology dimension, there was a significant difference between groups in relation to the variables of 'alcohol use at time of offence' ($\chi^2_{(1)} = 19.357, p = 0.000$); 'history of alcohol abuse' ($\chi^2_{(1)} = 6.831, p = 0.007$); 'depression' ($\chi^2_{(1)} = 3.947, p = 0.034$); 'suicide/self-harm' ($\chi^2_{(1)} = 3.617, p = 0.046$); 'current psychiatric problems' ($\chi^2_{(1)} = 6.109, p = 0.008$) and weapon use ($\chi^2_{(1)} = 15.579, p = 0.000$).

As 25% of cases had an expected count of less than five, The Fisher's Exact Test for 'drug use at time of the offence' ($FE_{(1)} = 0.001, p < 0.01$) and 'current psychiatric treatment' ($FE_{(1)} = 0.011, p < 0.05$) suggests a significant difference between subtypes. However 'emotional distress as motivation for IPV' ($FE_{(1)} = 0.143, p > 0.05$) and 'psychiatric problems at time of the offence' ($FE_{(1)} = 0.371, p > 0.05$) indicate that there is no significant association between the variables and types of IPV offenders.

The women categorised by the HMP-LMC group had a significantly higher frequency of psychopathology related variables present. This coincides with Holtzworth-Munroe & Stuart's (1994) DB type of IPV and is consistent with the hypothesis of this study outlined in Table 4.2. However, there was no significant differentiation between the two subtypes of IPV offenders and risk factors associated with 'emotional distress at the time of the offence' ($\chi^2_{(1)} = 2.931, p = 0.073$), 'childhood abuse' ($\chi^2_{(1)} = 0.010, p = 0.537$), 'psychiatric problems during the offence' ($\chi^2_{(1)} = 0.647, p = 0.371$) and 'history of psychiatric treatment' ($\chi^2_{(1)} = 1.450, p = 0.168$). The percentage of the variable present for 'childhood abuse' was similar for both the HMC-HMP and HMP-LMC groups at 68% and 67% respectively. However, there was a higher frequency of 'emotional distress at the time of IPV' (HMC-HMP = 64%; HMP-LMC = 79%), 'psychiatric problems during the offence' (HMC-HMP = 3%; HMP-LMC = 7%) and a 'history of psychiatric treatment' (HMC-HMP = 13%, HMP-LMC = 22%) for the HMP-LMC type.

Discussion

The aim of this study was to explore the existence of the Holtzworth-Munroe and Stuart's (1994) typologies of male IPV offenders in a sample of UK female offenders convicted of a violent offence against their intimate partner. To assess this objective, a sample of 274 females who had been convicted of assaulting their partners and undergone assessment by the probation or prison service was utilised.

Summary of Results

Following an assessment of risk factors across two dimensions of Criminality and Psychopathology, the overall results demonstrate successful classification of 73% (n = 200) of female IPV offenders into two groups of the HMC-HMP and HMP-LMC which corresponds to Holtzworth-Munroe and Stuart's (1994) GVA and DB type respectively. However, only 11% (n = 30) of the women were categorised as HMC-HMP and the majority of cases of 62% (n = 170) were classified as HMP-LMC. The higher prevalence of HMP-LMC IPV offenders in this study may be due to the co-occurrence of criminality and psychopathology variables across groups. To account for the issue of both types of offenders being commonly associated with similar variables, further statistical analysis was conducted to determine significant associations of variables to the offender types of HMC-HMP and HMP-LMC.

Further analysis revealed clear distinctions in the prevalence of risk factors for each of the classifications of HMC-HMP and HMP-LMC. The HMC-HMP group, compared to the HMP-LMC were significantly more likely to breach their licence or requirements of discharge, engage in extra-familial violence, have a history of behavioural problems during childhood, use instrumental aggression for self gain, uphold pro-criminal attitudes, engage in reckless behaviour, have high levels of impulsivity, have a history of drug use, have inadequate interpersonal skills, previously received custodial sentences, receive their first conviction for a criminal offence at a young age and have contact with the police at a young age. These findings are consistent with the hypothesis of this study as outlined in table 4.1 and consistent with the GVA IPV offender (Holtzworth-Munroe & Stuart, 1994).

The HMP-LMC offender, compared to the HMC-HMP females, are more likely to use a weapon during an assault against a partner, be intoxicated with alcohol during the offence, engage in psychiatric treatment at the time of perpetrating IPV, to be under the influence of drugs at the time of the offence, have history of alcohol abuse, suffer from depression, to have made attempts at suicide and/or self-harm and experience psychiatric related problems. The variables allocated to this classification of IPV offender correspond to the DB offender (Holtzworth-Munroe & Stuart, 1994) and are consistent with the initial hypothesis of this study as illustrated in table 4.2. The variables of unemployment and experience of childhood abuse were insignificant, both having similar prevalence across the groups.

Findings of the Current Study in Relation to Previous Literature

Historically, the majority of studies on IPV have focused on researching females as victims and males as the offenders. The empirical evidence which proposes these assumptions typically recruit their samples from shelters for women who seek refuge from their abusive partners due to being subjected to IPV and men who had been court mandated to attend programmes for perpetrating IPV (Archer, 2000). It is therefore no surprise that female perpetration of IPV is under reported and researched (Archer, 1999, 2000; Straus & Gelles, 1990). Using community based samples there is an ample amount of evidence to suggest that females are equally, if not more, violent towards their partners when compared to males (Douglas & Straus, 2003; Straus, 1993, 1997, 1999, 2006; Stes & Straus, 1992).

A preliminary analysis of the data revealed that whilst only 15% (41) of the sample of women had no previous history of being violent towards their partners, 85% (233) did. Therefore, the majority of the sample had previously committed an IPV offence. This finding provides support and validation for the literature which has found that females are also violent towards their partners.

Although feminists accept that women are aggressive towards their partners, they argue that the motives of female violence are solely reactive in the nature of self-defence against male aggression (Dobash et al, 1992; Saunders, 1988). This assumption is contradictory to the findings of this study as 28% of the female sample used aggression against their partners in an

instrumental manner. It has also been suggested that females are subjected to the most severe forms of injury (Archer 2000; Dobash et al., 1992; Saunders, 1988). Nonetheless, this study found that 12% of the sample of women (n = 34) to have used excessive, severe and brutal violence against their partners and over half of the sample (54%, n = 149) had used a weapon. This is consistent with literature which suggests that women also engage in severe acts of violence and injure their partners (Archer, 2000; Busch & Rosenberg, 2004; Straus & Gelles, 1986, 1990). The finding of half of the sample using a weapon during IPV is not surprising given that the use of an implement creates greater intimidation and compensates for the female's lesser physical size and appearance when compared to men (Hamel, 2007).

Research which has assessed perpetrators of IPV has treated this population of offenders as homogenous (Dixon & Browne, 2003). However, in light of Holtzworth-Munroe and Stuart's (1994) typologies, a common finding between studies is that IPV offenders can be divided into subgroups where common characteristics and behaviours co-occur (Dixon & Browne, 2003; Holtzworth-Munroe et al., 2000; Holtzworth-Munroe et al., 2003; Holtzworth-Munroe & Stuart, 2004; Waltz et al., 2000). Therefore, the nature of IPV can be treated with heterogeneity. Whilst this has been determined for men, there is limited research to suggest that these assumptions can be applied to females (Dixon & Browne, 2003). Therefore, this study took the data one step further and aimed to assess Holtzworth-Munroe and Stuart's (1994) typologies of FO, GVA and DB applicability to female perpetrators of IPV.

The variables which were identified in the LMC-LMP region, namely 'no history of IPV with current partner' and 'later convictions', closely resemble Holtzworth-Munroe and Stuart's (1994) FO group. The finding of low levels of criminality and psychopathology in the LMC-LMP subgroup is also consistent with research on female subtypes (Babcock, Miller & Siard, 2003). However the variable of excessive violence fell into this low level criminality and psychopathology category, and as such, grouping of these variables was unreliable.

The use of severe and excessive violence by the LMC-LMP offender is inconsistent with previous assumptions that individuals in this category are likely to engage in the least severe forms of violence (Holtzworth-Munroe & Stuart, 1994). This may have occurred due to the nature of the sample. The participants in this study were recruited from a criminal population

and received a conviction of assault against their partner. As it is usually severe injury which results in police arrest and conviction, it is therefore no surprise that individuals within this category used brutal violence against their partner. This is consistent with literature taken from representative community populations which suggest that females also perpetrate severe assaults against their partners (Archer, 2000; Busch & Rosenberg, 2004; Hamberger & Guse, 2002; Straus, 1997; Straus & Gelles, 1996, 1990).

The grouping of variables which fell into the HMC-HMP category of young age at first conviction, young age of first contact with the police, extra-familial violence, previous custodial sentence, history of drug abuse, reckless, breach, inadequate interpersonal skills, impulsive, pro-criminal attitudes, instrumental aggression, young behavioural problems and history of drug use are consistent with Holtzworth-Munroe and Stuart's (1994) theorised GVA offender. They hypothesise that the GVA offender is more likely to have a history of criminality, generalise their violence both within and outside of the family, display anti-social behaviours and attitudes and uphold unconventional beliefs of pro-criminality.

Additionally the findings of the HMC-HMP female have provided validation for previous empirical literature which identified that female IPV offenders use instrumental aggression (Babcock, Millar & Siard, 2003; Henning, Jones & Holdford, 2003; Henning, Renauer & Holdford, 2006), present with conduct disorders during childhood (Henning, Jones & Holdford, 2003; Henning, Renauer & Holdford, 2006) and engage in substance abuse (Busch & Rosenberg, 2004; Hamberger & Guse, 2002; Hines, Brown & Dunning, 2007). Risk factors associated with history of arrest and pro-violent attitudes have also been linked to the female GVA offender (Simmons, Lehman & Cobb, 2004).

Holtzworth-Munroe and Stuart (1994) hypothesised that psychopathological problems such as personality disorders, mental health problems and depression are pertinent to the DB subgroup. They have also been described as engaging in low-moderate levels of criminality and substance misuse. These theoretical assumptions have been validated throughout the literature as there are consistent reports of female perpetrators of IPV presenting with psychopathological problems such as traits which are characteristic of personality disorders (Simmons, Lehman & Cobb, 2004; Henning, Jones & Holdford, 2003), mental illness

(Henning, Jones & Holdford, 2003; Hines, Brown & Dunning, 2007), suicide (Henning, Jones & Holdford, 2003; Hines, Brown & Dunning, 2007) and history of substance abuse (Hines, Brown & Dunning, 2007).

The HMP-LMC group of females identified in this study closely resemble Holtzworth-Munroe and Stuart's (1994) DB IPV perpetrator. The risk factors identified in the HMP-LMC group were alcohol use at the time of the offence, history of alcohol misuse, use of weapon, attempted suicide/self-harm, depression, psychiatric problems at time of the offence, and current psychiatric treatment group. All of the above variables were found to be reliable indicators of this subgroup and have provided validation for Holtzworth-Munroe and Stuart's (1994) DB offender to female perpetrators of IPV.

The overall classification of female IPV offenders to subgroups found a higher prevalence of cases assigned to the HMP-LMC (62%) category when compared to the HMC-HMP (11%). This finding is somewhat different to Holtzworth-Munroe and Stuart's (1994) classification of the GVA and DB offender each accounting for 25% of overall IPV males. Dixon et al. (2008) classified their sample of IPV males who had murdered their partners as 49% for the high criminality low-moderate psychopathology (HC&LMP) and 36% for the medium-high criminality high psychopathology (MHC&HP) which are respectively similar to the HMC-HMP and HMP-LCM groups of this study.

The high rate of HMP-LMC and low finding for the HMC-HMP group may be due the similarity in characteristics and behaviours which co-occur across the two groups. This is consistent with previous research where there have been disputes about the clear distinctions between the GVA and DB subtype of IPV perpetrators (Holtzworth-Munroe & Meehan, 2004; Holtzworth-Munroe et al, 2003; Waltz et al, 2000). The current study has taken this research one step further by identifying those variables that differentiate between each subtype of IPV offender.

Another reason for the higher rate of the psychopathological subtype of IPV offender in this study, which is dissimilar to the findings presented by Dixon et al. (2008) and Holtzworth-Munroe and Stuart (1994), may be for reasons that the sample consisted exclusively of

women. It has been proposed that personality disorders in females are closely related to relationship dysfunction such that maladaptive functioning in relationships was determined as a consequence of Axis II pathology (Daley et al., 2000). Another study conducted by Wishman (1999) linked marital dissatisfaction to adult psychiatric disorders. From this it can be argued that women who perpetrate IPV also display evidence of psychopathology (Graham-Kevan, 2009). Generally individuals with psychiatric conditions are more likely than persons without psychiatric convictions to be arrested and charged (Crocker et al., 2009), personality disorder has been found in samples of generally violent females (Weizmann-Henelius, Viemerö & Eronen, 2004) and in a sample of detained offenders, more females met the criteria for psychiatric disorders when compared to males (Abram et al., 2003). The research outlined suggests that there is a higher threshold for women who present with psychopathology to enter the criminal justice systems.

Limitations, Future Research and Practical Implications

Whilst this study has provided validation of Holtzworth-Munroe and Stuart's (1994) theoretical proposals of the GVA and DB typologies for a sample of UK female IPV offenders, caution must be taken when interpreting these results. This research has been limited by the type of and number variables which could be extracted. OASys is primarily used for offenders undergoing assessment in the criminal justice system. Therefore it is only natural that criminal variables were more available.

The limited availability of variables became apparent following the statistical analysis to determine subtypes of female IPV offenders. A vacant space became apparent on the scatter plot of the SSA solution. It has been argued that these unoccupied spaces are meaningful and that variables which fall outside of the common themes are absent (Canter et al., 2003). To overcome this problem, additional variables should be considered and collected. Additional variables which take into account the context of which the violence occurs would also be beneficial, as this study does not consider these types of risk factors. Variables which pertain to macrosystem and exosystem of Dutton's (1995, 2006) nested ecological model would also add value to the research.

Using a statistical approach to dichotomise the data can lead to practical issues of dissimilar cut off points for variables which pertain to similar characteristics. For example the cut off points for the two variables of young age at first conviction and young age at first offence was less than 15 years and less than 16 years respectively. An alternative method may be to use a theoretical approach to determine cut off points to the data.

Caution must be taken in relation to the generalisability of the findings from this research due to the sample of females being taken from a criminal population who have a background of convictions and are known to the criminal justice system. However, the conclusions made are important for and can be applied to a clinical and forensic population as the aetiology for IPV may be dependent and exclusive to the sample type (Straus, 1997). Future research would need to take into account community samples of females who perpetrate. This would help to determine typologies for this specific population.

Conclusion and Recommendations

Identifying typologies of IPV females is useful in relation to identification of treatment needs by facilitating and matching the type of intervention to the individual offender. Directly targeting the offender's criminogenic need would increase efficacy of treatment and reduce the risk of future re-offending. Establishing the aetiology of IPV can also help to inform and validate risk assessment of female IPV offenders. However, in order to determine risk of recidivism for each subtype, longitudinal research would need to be completed to determine those types which are most dangerous and at risk of recidivism.

Overall the classification of HMC-HMP and HMP-LMC types of female IPV perpetrators is consistent with Holtzworth-Munroe & Stuart's (1994) typology of GVA and DB IPV offender respectively. Therefore, supporting the notion that female offenders of IPV should be treated with heterogeneity. This is the first research of its kind to assess the heterogeneity of female IPV perpetrators using a scientific method of an offender profiling approach on a UK based sample.

In regards to the practical implications of the findings, treatment and assessment of female IPV offenders should adopt an individualised approach which targets criminogenic need. However, further research needs to be conducted to address the limitations and to further validate the findings of the subtypes identified in this study. Future research, such as follow up studies to assess recidivist rates for each type, stability of type over time and treatment effectiveness would be beneficial to this area. As the current study is based on a forensic population, exploration into female IPV offenders in a community sample would be useful to determine subtypes in the community population. Additionally, variables associated with the context of the relationship should also be considered in future research.

DISCUSSION

Discussion

To date feminist perspective continue to inform policy, legislation, assessment and prevention of intimate partner violence (IPV) regardless of research which refutes the notion that power and control of women by men is the prime cause of IPV (Babcock, Miller & Siard, 2003; McClellan, Summer & Daley, 2002; Dixon & Browne, 2003; Dixon et al., 2008; Dutton, 1995, 2006; Hamel, 2007; Hamel & Nicholls, 2007; Hines, Brown & Dinning, 2007; Holtzworth-Munroe & Stuart, 1994; Holtzworth-Munroe et al., 2000; Holtzworth-Munroe et al., 2003; Medeiros & Straus, 2007; O'Leary, Slep & O'Leary, 2007; Stith et al., 2004; Straus, 1993, 1997, 1999, 2006, 2008; Straus & Gelles, 1986, 1990). There is much methodologically sound empirical research that has demonstrated the importance of adopting a gender inclusive perspective and multifactor approach to understanding IPV, and it is this literature on which the ethos of this thesis draws. Specifically, this thesis aimed to explore issues of IPV from a multifactor and gender inclusive perspective, with specific focus on the contribution that psychology can lend to understanding this phenomenon.

Summary of Findings

Chapter One is a systematic review which aims to explore psychologically related IPV variables that are pertinent to the ontogenetic level of Dutton's (1994, 2006) nested ecological model. The variables that were assessed were substance abuse, psychopathology, childhood abuse and anger, all of which have commonly been associated with IPV. The findings from this chapter indicate that all four risk factors are predictive of IPV. Specifically engaging in substance abuse, the experience of psychopathology and childhood abuse was highly predictive of IPV. Anger was also correlated with IPV, but to a lesser degree. Indeed, this highlights the importance of psychological variables in the assessment and treatment for perpetrators of IPV.

Chapter Two is a critique of the State-Trait Anger Expression Inventory -2 (STAXI-2), a psychometric measure commonly used to assess the experience and expression of anger which, as noted in Chapter One, is one of many psychological risk factors empirically associated with IPV (George et al., 2001; Mauro et al., 1988; O'Leary, Slep & O'Leary,

2007; Stith et al., 2004). The findings of this critique suggest that the psychometric properties of the STAXI-2 have been identified through empirical evaluation and extensive research deeming it an appropriate, valid and reliable measure of the construct of anger. It has been validated on forensic and clinical populations and has determined differences in the experience and expression of anger between subgroups of IPV offenders. Specifically the STAXI-2 has determined that the most severely violent subtypes of the generally violent/antisocial and the dysphoric/borderline men experience the highest levels of anger when compared to the family only offenders (Barbour et al., 1998; Holtzworth-Munroe, Rehman & Herron, 2002).

The differentiation between subgroups supports the notion that IPV offenders can be identified as heterogeneous as they vary in characteristics and differ due their experience and expression of anger. It may also be argued that this would suggest that the subtypes which present with higher levels of experience and expression of anger are the most dangerous type of IPV offender as they are more likely to inflict severe injury on their partner. As Holtzworth-Munroe and Stuart (1994) suggested that the dyphoric/borderline and generally violent offender engage in the severest forms of violence, it is therefore these offenders which may be deemed the more dangerous of the subtypes.

Chapter Three evaluates the effectiveness of a treatment programme which adopted a cognitive-behavioural and skills orientation approach on an IPV and generally violent offender. This case study highlights the importance of understanding the contribution of psychological factors in the assessment and treatment of IPV offenders. A thorough clinical and actuarial assessment of the client identified multiple factors which contribute to his violent offending such as elevated levels of the experience and expression of anger, substance abuse, an insecure attachment style, pro-violent attitudes, anti-social type traits and maladaptive coping styles.

The intention of the intervention reported in Chapter Three was to address the client's anger and maladaptive behaviours through emotional recognition and regulation and skills orientation. Following an evaluation of this treatment, it became apparent that the frequencies of violent and aggressive behaviours deteriorated, therefore reducing the risk of perpetrating

IPV in the future. However, although to a lesser degree, the client continued to present with offending related behaviours. This may be for reasons that there remained additional underlying factors of anti-social and pro-violent attitudes, substance abuse and an insecure attachment which contribute to his offending. It could be argued that these factors should be addressed through additional treatments which are not specific to IPV such as substance abuse intervention and relapse prevention, further motivational interviewing and psychotherapeutic work to address his insecure attachment dynamic all of which should be considered in the context of his overall rehabilitation.

An empirical paper which explored typologies of female IPV offenders using the theoretical framework proposed by Holtzworth-Munroe and Stuart (1994) was presented in Chapter Four. This study extrapolated prior work by Dixon et al., (2008) who explored this phenomenon in a sample of men incarcerated for the murder of their female partner. The sample of the current study consisted of 274 females resident in England and Wales who had been convicted for a violent offence against their partner. Using statistical techniques commonly used in investigative psychology, two groups of High-Moderate Criminal and High-Moderate Psychopathology (HMC-HMP) and High-Moderate Psychopathology and Low-Moderate Criminality (HMP-LMC) were reliably associated with the generally/violent anti-social (GVA) and dysphoric/borderline (DB) subtypes consecutively.

Furthermore, clear distinctions between the groups were found whereby the female HMC-HMP type were more likely to breach their license or conditions of discharge, perpetrate extra-familial violence, engage in instrumental aggression for self gain, uphold pro-criminal attitudes, be highly impulsive and reckless, have a history of drug abuse and childhood behavioural problems and lack in adequate interpersonal skills. In relation to the female HMP-LMC type, they were most likely to be use weapons against their partner, be intoxicated with alcohol at the time of perpetrating IPV, have a history of alcohol abuse, depression, and suicide/self-harm and suffer from mental health problems.

This study validates Holtzworth-Munroe & Stuart's (1994) theoretically proposed GVA and DB typologies in a sample of convicted UK female offenders. The empirical paper highlights the importance of exploring the aetiology of IPV from a multi-factorial perspective of

considering an array of variables which are associated with an increased risk of perpetrating IPV. Different types of offenders will be best characterised by different variables at levels of an ecological model (Dutton, 1995; 2006) and as such different theoretical approaches will best explain a particular subtypes perpetration of IPV.

Clinical and Practical Implications

Overall, all four papers presented in this thesis identify three points that hold implications for practice, in particular for the risk assessment and treatment of IPV. First, the multifactor nature of IPV is demonstrated. Second, further support for the heterogeneity of IPV perpetrators is provided. Third, the need to adopt a gender inclusive approach to the understanding and response to IPV is shown. Only when these points are considered in the response to IPV can the efficacy of assessment and treatment be improved and a resultant reduction in recidivism achieved. The research presented throughout the chapters will now be discussed under three sub titles that capture the aforementioned points and highlight the clinical and practical applications of the collective body of work in this thesis.

Demonstrating the Role of Multifactor Models in Understanding IPV, Risk Assessment and Treatment

The work throughout this thesis demonstrates the importance of exploring IPV from a multifactor perspective and using sound methodological research from which to draw conclusions. It is these conceptions which need to form the basis of assessment, intervention and research of IPV such that evidence based practices is the preferred method to political ideologies. This thesis stresses the importance of exploring psychological risk factors in the context of an ecological model. Chapter One and Three specifically highlight the importance of an array of psychological factors in determining the aetiology of IPV and informing risk assessment and treatment.

Feminist explanations have influence over the framework of which treatment programs for IPV offenders are devised and delivered despite academic research and empirical evidence which refutes their notions of control and power as the only cause of IPV perpetration. Their

description of patriarchy as an explanation for IPV is lacking in empirical support. However, more scientifically sound research of multi-factorial and heterogeneous approaches have become apparent in the literature (Babcock, Millar & Siard, 2003; Dixon & Browne, 2003; Dixon et al., 2008; Dutton, 1994, 2006; Dutton, 1994, 2006; Holtzworth-Munroe & Stuart, 1994; Holtzworth-Munroe et al., 2000; Holtzworth-Munroe et al., 2003; O'Leary, Slep & O'Leary, 2007; Stith et al., 2004).

The general outcome of this thesis challenges the 'one size' fits all approach proposed by feminists who assume that the Duluth program is an appropriate form of intervention for IPV offenders (Gondolf, 2007; Pence & Paymar, 1993). The Duluth model is implemented as the most common form of treatment for IPV offenders regardless of reported high attrition and recidivist rates (Babcock, Green & Robie, 2004; Graham-Kevan, 2007; Shepard, 1992). As the findings presented in this thesis are contrary to feminist perspectives, continuing to enforce this framework for intervention with IPV offenders will have detrimental consequences on effectiveness of treatment, reduction of recidivism and for the victims who are subjected to this abuse. For example, it may be that individuals who attend these programmes do not uphold a patriarchal belief system of power and control over women and may have alternative causal factor which contribute to their perpetration of IPV. Therefore their attendance to the Duluth Program would be counter-productive and ineffective at reducing their risk of further perpetration of IPV resulting in them continuing to abuse their partners.

Chapter Two explores the suitability of assessing anger in the role of IPV perpetration. Whilst those assessments which are primarily tailored to assess the probable outcome of re-offending in the IPV population require further empirical validation (Kropp, 2004), one such measure commonly used to assess anger in IPV offenders is the STAXI-2. The psychometric tool has established that IPV men are more likely to experience and express anger and least likely to control their expression of anger when compared to non-violent men (Barbour et al., 1998; Eckhardt, Jamison & Watts, 2002).

Distinctions of level of anger have also been classified between subtypes of IPV offenders such that intense levels of anger arousal correlate with perpetration of severe violence

(Barbour et al., 1998; Holtzworth-Munroe, Rehman & Herron, 2002). The finding that the STAXI-2 is most useful in the assessment of anger in IPV men also validates the finding that psychologically related variables are important to consider when assessing and treating IPV. However, there is a lack of evidence to substantiate this with female offenders of IPV which should be considered in future research. From these findings it can be argued that it is important to consider anger in the context of male perpetrated IPV because, as Novaco's (1994) theory suggests, anger is an activator for aggression and violence. By assessing an individual's likelihood of the experience and expression of anger may indeed be an indicator that they are at risk of perpetrating IPV against their partner. Additionally, high levels of experience and expression of anger may differentiate between offenders who are more dangerous and at greater risk of inflicting serious injury including murder of their partners.

Indeed, collectively, each chapter identifies that an array of factors are important in understanding IPV, contrary to popular feminist claims (Dutton, 1994, 1995, 2006). Feminists argue that the sole cause of IPV is control and power ignoring other risk factors such as substance abuse. Their conceptualisation of the use of alcohol and drugs is that individuals who perpetrate IPV consciously misuse substances so that intoxication provides an excuse for their violent behaviour (Field, Caetano & Nelson, 2004; MacAndrew & Edgerton, 1969). Subsequently, feminists have ignored empirical research which has validated substance abuse (Leonard, 2001, 2005) and other variables as contributing to the outcome of IPV (Dutton, 1994, 2006; Hamel & Nicholls, 2007) even though there is a large amount of scientific studies that argue otherwise (Babcock, Millar & Siard, 2003; Dixon & Browne, 2003; Dixon et al., 2008; Dutton, 1994, 2006; Holtzworth-Munroe & Stuart, 1994; Holtzworth-Munroe et al., 2000; Holtzworth-Munroe et al., 2003; O'Leary, Slep & O'Leary, 2007; Stith et al., 2004).

The identification of predictive factors has important implications for treatment. For example, in the case of substance abuse, research suggests that treatment for IPV should coincide with substance misuse intervention (Leonard, 2001). From this perspective it could be argued that methods of treatment which are alternative to the traditional feminist approach, such as those used for individuals who have mental health problems, issues with interpersonal skills or anger management problems can also be utilised in the treatment of IPV offenders.

In the context of recommending treatment, rigorous assessments should be conducted with the each individual offender in order to identify the factors which pertain to their perpetration of IPV. Only then can the correct treatment be prescribed and be most effective at tackling their violent behaviour and reducing to the risk to their victim.

Chapter Three lends support for multi-factorial and heterogeneous approaches and suggests that treatment effectiveness can be achieved by using alternative approaches to those proposed by feminists (Dutton, 1994, 1995, 2006; Graham-Kevan, 2007; Hemal & Nicholls, 2007). This case study identified that using alternative treatment strategies of adopting a cognitive-behavioural and skills orientation framework can be considered in the context of treatment of IPV offenders. Additionally, a number of contributory factors were pertinent to the client's perpetration of partner violence; this also supports the multi-factorial perspective. The additional underlying causes which contribute to IPV should be addressed by additional and appropriate treatments which target the offenders criminogenic and risk needs (Graham-Kevan, 2007).

In reference to risk assessment, Chapter One validates risk tools commonly used in the assessment of IPV offenders. For example all the items that were assessed in the systematic review are also apparent in the Spousal Abuse Risk Assessment (SARA) (Kropp et al., 1998), thus providing validation for this measure. However, research on actuarial measures for IPV remains in the early stages with a need to investigate the psychometric properties of reliability and validity (Kropp, 2004).

The Importance of Understanding the Heterogeneity of IPV Perpetrators

This thesis shows the need to consider the heterogeneity of IPV offenders. Specifically Chapter Four showed that research into the classifications of subtypes is also beneficial in identifying the functions of IPV perpetration which in turn informs the process of assessment and treatment. Risk assessment tools such as actuarial measures are commonly used to identify clinical risk and treatment need of an offender. As it is these protocols which allow professional to make informed decisions, it is imperative that actuarial assessments are well researched, validated and are reliable.

In addition to providing support for the need to research and assess IPV from a gender inclusive perspective as suggested by Hamel (2007), Chapter Four also validates Holtzworth-Munroe and Stuart's (1994) GVA and DB offender for female perpetrators of IPV. This suggests that offenders vary in relation to their offending characteristics and behaviours and provides evidence to suggest that multi-faceted and heterogeneous explanations are more relevant when compared to feminist perspectives. Political ideologies which stipulate that males are solely perpetrators and female victims of IPV cannot be supported by this empirical paper. This furthermore highlights the importance of considering an individualised approach to the treatment and assessment of IPV.

Chapter Four may be evidence to suggest that methods used to treat female IPV offenders do not necessarily need to be IPV specific and can be extrapolated from other areas such as the DB type offender would be best suited to interventions which target the psychological well being of the offender such as cognitive behavioural therapies for depression. The GVA offender would be best suited to interventions which target their criminality such as pro-violent and anti-social attitudes, inadequate interpersonal skills and impulsivity. Treatment for this type of offender may be those which are commonly used in the HMP Prison service which address these issues such as Controlling Anger and Learning to Manage It (CALM) or Enhanced Thinking Skills (ETS).

The Need for a Gender Inclusive Conception of IPV

Due to feminist misconceptions that females are predominantly victims of IPV (Dobash & Dobash, 1979), women were not considered as perpetrators and therefore primarily researched as victims. However there is much scientific support to suggest that women do commit acts of IPV (Archer, 1999, 2000, 2006; Babcock, Miller & Siard, 2003; McClellan, Summer & Daley, 2002; Straus, 1993, 1997, 1999, 2006, 2008; Straus & Gelles, 1986, 1990) which is a common argument of the gender inclusive approach (Hamel, 2007). The gender inclusive conception argues that in order to understand the true nature of IPV, IPV should be considered and researched in the context of both genders as perpetrators and victims of IPV. Only by conducting scientifically sound research on both genders can we really understand

the true nature of IPV and implement appropriate treatment to reduce the impact and consequences to the victims.

Chapter Four adopts and highlights the importance of considering a gender inclusive approach by empirically testing and considering females as perpetrators of IPV. Overall, the findings contribute to an understanding of the aetiology of female IPV, subsequently contributing to the understanding of the treatment needs for female offenders. The utilisation of individualised and heterogeneous approaches in treatment is validated by the discovery that females can be categorised into sub-types. This suggests that in order for treatment to be effective, it must be tailored to the individual need of the offender by addressing the underlying factors which contribute to the perpetration of IPV (Graham-Kevan, 2007). Chapter Four provides new insights into typologies of female IPV offenders, therefore providing further awareness and contributing to the argument against stand alone feminist political ideologies and stereotypes which misinform social policy and legislation, prevention and assessment.

It can be argued that the resistance to consider females as perpetrators in IPV relationships would be detrimental with possible and severe consequences to both partners and the overall family unit. Failing to address a female's perpetration of violence in a relationship where they may be the sole or joint aggressor with their partner, may result in the continued perpetration of violence in their current and future intimate relationships. This would have consequences for all who are exposed to or experience the violence. For the perpetrator, there is a risk of retaliation from the victim and thus themselves being assaulted. In relation to the victim/s of the abuse they would continue to be assaulted and any new partners in future relationships would be subjected to IPV. In the context of the family where there are children involved, they would continue to be exposed to the violence. In line with this argument and the findings presented in this thesis, it is important to consider in that females are also assessed in the context of assessments.

Limitations of Thesis

Whilst this thesis has contributed to knowledge in the literature and informs clinical practice for IPV, a number of limitations have been identified. These limitations will be discussed in relation to each chapter.

In Chapter One, due to financial constraints, 19 unpublished studies which met the inclusion criteria could not be accessed and included in the overall evaluation due to a limited amount of time. Excluding these studies introduces publication bias whereby only the research papers which had been peer reviewed and published were included in the final analysis. Omitting these unpublished studies may have distorted the outcome of the overall findings; had they been included the reported results may have been different. Additionally, there were issues surrounding methodological problems of the studies that were included in the review. These problems relate to the various conceptualisations and definitions of the risk factors under assessment, the utilisation of different assessment tools to measure the risk factor and the use measures which had not been validated and standardised. To overcome this problem, further research in the future may consider the use of consistent definitions and measures which have reliable and valid psychometric properties.

Chapter One primarily focuses on the population of male IPV offenders, therefore excluding female perpetration and male victimisation. Although the context of exploring risk factors from multi-factorial and heterogeneous perspectives is relevant in the context of a gender inclusive approach, the exclusion of these populations is a limitation to this thesis. Additionally, due to the practical implications of time restraints, only four risk factors were considered in this review. The inclusion of other variables, such as those which relate to a nested ecological model (Dutton, 1995, 2006), male victims and female perpetrators would be beneficial and would further contribute to an understanding of IPV. Therefore this should be considered in future research.

Chapter Two highlights that the STAXI-2 as a valid measure of anger for the male population of IPV offenders. However, it is yet to be standardised on the female offenders of IPV. Additionally, this measure exclusively assesses anger which is one of many risk factors

associated with IPV. Therefore the STAXI-2 would not be an appropriate tool to use in the assessment of risk and treatment on its own. Instead, it should be used in conjunction with other measures, such as the SARA (Kropp et al., 1998), which is also useful in the assessment of risk and recidivism of IPV offenders. Additionally, future assessments of IPV offenders may consider measures which are not necessarily IPV specific. It can be argued that alternative protocols which are used in mental health settings and/or used for general offenders would also be useful to consider in the assessment of IPV offenders. For example the Beck Depression Inventory (Beck, Steer & Brown, 1996) would be appropriate for an assessment of an IPV offender who presents with depressive type symptoms or the Coping Response Inventory (Moos, 1993) or Coping Style Questionnaire (Roger, Jarvis & Najarian, 1993) for an individual who presents with inadequate coping skills.

There are a number of limitations in relation to Chapter Three. Firstly, the findings from this case study must be taken with caution as this is an individual assessment of one offender. Therefore the generalisation of these findings cannot be applied to the general population of IPV perpetrators. Secondly, the success of a reduction in the client's aggressive and violent behaviour is difficult to determine if this was the outcome of psychological intervention or medical management. This is for reasons that medical intervention of the client being prescribed a mood stabiliser coincided with the onset of therapy.

It is also important to note issues related to responsivity may also have impacted on the client's engagement in treatment. Research suggests that responding to factors such as personality and intelligence, which may interfere with an individuals' ability to respond to treatment can increase the effectiveness of treatment (Bonta & Andrews). Whilst Mr P's low level of intellectual functioning was addressed, issues associated with his personality style and characteristics were not. It can be argued that this therefore hindered the treatment process. In order to maximise learning during treatment and therefore reduce the risk of reoffending, issues associated with an offenders characteristics and abilities should be considered (Bonta & Andrews, 2007; Howells, Krishman & Daffern, 2007; Kennedy, 2006). The responsivity principle suggests that factors which may interfere with the efficacy of treatment should be considered in regards to the characteristics and abilities of the individual/group being treated (Howells, Krishman & Daffern, 2007). Personality

characteristics, attitude, motivational level and intellectual functioning can impact on the effectiveness of treatment and therefore should also be assessed and considered in the context of intervention (Kennedy, 2006). Issues which may interfere with the treatment process should be addressed as they have the potential to either increase or decrease an individuals' learning during rehabilitation (Bonta & Andrews, 2007). Under the circumstances that responsivity issues are acknowledged, this in turn maximises an offender's ability to learn from treatment and therefore treatment can be enhanced (Bonta & Andrews, 2007).

The empirical paper presented in Chapter Four consists of a criminal sample of female offenders who had been convicted of assaulting their partner. For this reasons, the findings of this research can only be applied and generalised to this particular cohort, failing to account for a representative community sample. Another limitation of this research is due to the extrapolation of variables from the Offender Assessment System (OASys) data. Although the variables that were extracted were theoretically and empirically linked to IPV perpetration, there was a restriction in relation to the types of variables that could be used. There was no information available from the OASys that specifically related to the context and nature of violence perpetrated by the female participants. This was emphasised by the finding of an abstract space following the application of the statistical procedure. Generally, an abstract space suggests that additional variables, which are representative of themes alternative to those already identified, are missing from the data (Canter et al., 2003).

To overcome the problems specified in Chapter Four, future research should consider a representative community sample, couples who engage in reciprocal violence and variables associated with the context and nature of the violence.

Conclusions and Recommendations for Future Research

Overall the findings of this thesis authenticate psychological, multi-factorial and heterogeneous explanations of IPV, which are opposing to the feminist perspective. The practical implications of these findings are that they can help to form the basis of current social policy, legislative procedures, risk assessment and treatment of IPV perpetration. Specifically, it is imperative to consider the assessment, management and treatment of IPV

offenders from a multi-factorial and gender inclusive perspective. Under these circumstances the effectiveness of treatment in its reduction of recidivism can be achieved, in turn reducing the impact on the victims of IPV.

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APPENDIX 1: Inclusion/Exclusion Criteria

	INCLUSION	EXCLUSION
POPULATION	Adult male 18+	Females, adolescents
EXPOSURE	Risk Factors: <ul style="list-style-type: none"> a) Alcohol/drug misuse b) Past childhood abuse/witnessing domestic violence c) Personality disorder/psychiatric problems/ mental health problems d) Level of aggression/violent tendencies 	Any other risk factors associated with domestic violence
COMPARATOR	No risk factors OR different risk factors OR different levels of exposure to risk factor	No comparator
OUTCOME	Domestic violence (physical, sexual or emotional).	
STUDY DESIGN	Cohort, case control.	Cross sectional, before and after studies, reviews and opinion papers.

APPENDIX 2: Search Syntax

PsycINFO 1967 to September Week 2 2009

<input checked="" type="checkbox"/>	# ▲	Searches	Results
<input type="checkbox"/>	1	offender\$.mp.	18845
<input type="checkbox"/>	2	exp Perpetrators/	15962
<input type="checkbox"/>	3	criminal\$.mp. or exp Criminals/	29225
<input type="checkbox"/>	4	exp Domestic Violence/	7007
<input type="checkbox"/>	5	exp Intimate Partner Violence/ or partner violence.mp.	2281
<input type="checkbox"/>	6	exp Partner Abuse/	4501
<input type="checkbox"/>	7	interpersonal violence.mp.	808
<input type="checkbox"/>	8	exp Marital Conflict/	2439
<input type="checkbox"/>	9	exp Aggressive Behavior/	83998
<input type="checkbox"/>	10	exp Anger/	8549
<input type="checkbox"/>	11	exp Violence/	40417
<input type="checkbox"/>	12	exp Personality Disorders/	16024
<input type="checkbox"/>	13	exp Mental Disorders/	320751
<input type="checkbox"/>	14	exp Alcohols/	11226
<input type="checkbox"/>	15	exp Alcoholism/	21384
<input type="checkbox"/>	16	history of abuse.mp.	594
<input type="checkbox"/>	17	repeat abuse.mp.	7
<input type="checkbox"/>	18	previous abuse.mp.	30
<input type="checkbox"/>	19	exp Child Abuse/	18457
<input type="checkbox"/>	20	exp Transgenerational Patterns/	1567
<input type="checkbox"/>	21	intergenerational violence.mp.	15
<input type="checkbox"/>	22	intergenerational abuse.mp.	10
<input type="checkbox"/>	23	exp Drug Abuse/	67106
<input type="checkbox"/>	24	exp Alcohol Abuse/	31040
<input type="checkbox"/>	25	1 or 3 or 2	39666

<input type="checkbox"/>	26	8 or 6 or 4 or 7 or 5	13007
<input type="checkbox"/>	27	11 or 10 or 9	90583
<input type="checkbox"/>	28	13 or 12	320751
<input type="checkbox"/>	29	24 or 23 or 15 or 14	76473
<input type="checkbox"/>	30	22 or 21 or 18 or 19 or 16 or 17 or 20	20267
<input type="checkbox"/>	31	27 and 25 and 26	1659
<input type="checkbox"/>	32	25 and 28 and 26	110
<input type="checkbox"/>	33	25 and 26 and 29	90
<input type="checkbox"/>	34	25 and 30 and 26	149

Ovid MEDLINE(R) 1950 to September Week 2 2009

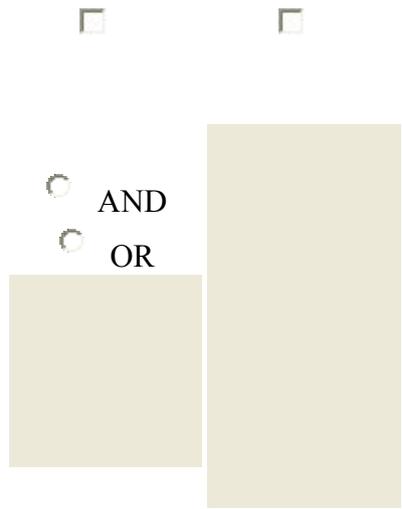
# ▲	Searches	Results
1	offender\$.mp.	5372
2	perpetrator\$.mp.	2242
3	criminal\$.mp.	16138
4	Domestic Violence/	3574
5	partner violence.mp.	1534
6	Spouse Abuse/	4292
7	partner abuse.mp.	250
8	interpersonal violence.mp.	526
9	marital conflict.mp.	331
10	Risk Factors/	395702
11	risk characteristics.mp.	382
12	re offend\$.mp.	71
13	recidivism.mp.	1418
14	characteristics.mp.	504426
15	Anger/	4584
16	Violence/	19055

17	Aggression/ or aggressive behaviour\$.mp.	22799
18	Hostility/	3706
19	Personality Disorders/	12951
20	Alcohols/	10418
21	Alcoholism/	59650
22	drug abuse.mp.	10743
23	substance misuse.mp.	749
24	alcohol abuse.mp.	8668
25	history of abuse.mp.	408
26	transgenerational pattern.mp.	0
27	repeat abuse.mp.	2
28	previous abuse.mp.	48
29	intergenerational violence.mp.	6
30	intergenerational abuse.mp.	3
31	1 or 2 or 3	21731
32	4 or 5 or 6 or 7 or 8 or 9	8416
33	10 or 11 or 12 or 13 or 14	873188
34	15 or 16 or 17 or 18	45910
35	20 or 21 or 22 or 23 or 24	84063
36	Mental Disorders/	100325
37	19 or 36	111047
38	27 or 28 or 29 or 30	59
39	31 and 32 and 33 and 34	100
40	31 and 32 and 33 and 35	18
41	31 and 32 and 33 and 37	27
42	31 and 32 and 33 and 38	0

Web of Science - Search History 1970-2009

Set	Results		
# 11	114 #7 AND #3 AND #2 AND #1 Databases=SCI-EXPANDED, SSCI, A&HCI Timespan=1970-2009	<input type="checkbox"/>	<input type="checkbox"/>
# 10	89 #6 AND #3 AND #2 AND #1 Databases=SCI-EXPANDED, SSCI, A&HCI Timespan=1970-2009	<input type="checkbox"/>	<input type="checkbox"/>
# 9	57 #5 AND #3 AND #2 AND #1 Databases=SCI-EXPANDED, SSCI, A&HCI Timespan=1970-2009	<input type="checkbox"/>	<input type="checkbox"/>
# 8	371 #4 AND #3 AND #2 AND #1 Databases=SCI-EXPANDED, SSCI, A&HCI Timespan=1970-2009	<input type="checkbox"/>	<input type="checkbox"/>
# 7	27,462 TS=(history of abuse or repeat* abuse* or previous abuse* or child abuse* or transgenerational pattern* or transgenerational abuse or intergenerational violen* or intergenerational abuse*) Databases=SCI-EXPANDED, SSCI, A&HCI Timespan=1970-2009	<input type="checkbox"/>	<input type="checkbox"/>
# 6	>100,000 TS=(alcohol* or drug* abuse* or substance misuse* or alcohol abuse) Databases=SCI-EXPANDED, SSCI, A&HCI Timespan=1970-2009	<input type="checkbox"/>	<input type="checkbox"/>
# 5	76,630 TS=(personality disorder* or mental disorder* or mental illness*) Databases=SCI-EXPANDED, SSCI, A&HCI Timespan=1970-2009	<input type="checkbox"/>	<input type="checkbox"/>
# 4	64,370 TS=(anger or violence or aggressi* behaviour* or hostility) Databases=SCI-EXPANDED, SSCI, A&HCI Timespan=1970-2009	<input type="checkbox"/>	<input type="checkbox"/>
# 3	>100,000 TS=(risk factor* or risk character* or character* or reoffen* or recidivis*) Databases=SCI-EXPANDED, SSCI, A&HCI Timespan=1970-2009	<input type="checkbox"/>	<input type="checkbox"/>
# 2	11,590 TS=(domestic violence or partner violence or partner abuse or interpersonal violence or marital conflict or spouse abuse) Databases=SCI-EXPANDED, SSCI, A&HCI Timespan=1970-2009	<input type="checkbox"/>	<input type="checkbox"/>

1 [30.328](#) TS=(ofender* or perpetrator* or criminal*)
Databases=SCI-EXPANDED, SSCI, A&HCI
Timespan=1970-2009



APPENDIX 3: Quality Assessment Checklist

QUALITY ASSESSMENT CHECK LIST - COHORT

Question	Y	N	P	U	Comments
Selection Bias					
Was the cohort representative? Sufficient sample size used?					
Were the groups (domestic violent and non domestic violent men) similar at base line such as demographics and background factors (age, ethnicity)?					
Were the groups comparable in all important confounding variables (e.g. previous criminal history)					
Was there any control or adjustments for the effects of confounding factors?					
Measurement and Detection Bias					
Were the measurements for the outcome objective?					
Was the outcome measure validated?					
Were the assessment instrument(s) used to measure the outcome standardised?					
Was the outcome assessed in the same way across all groups of participants?					
Were the participants blind to the research?					
Were the assessors blind to the exposure?					

Attrition Bias					
What proportion of the cohort was followed up is this acceptable?					
Were drop out rates similar across groups of participants?					
Was the statistical analysis appropriate?					
Are those who completed the study the same as those who did not?					

QUALITY ASSESSMENT CHECK LIST – CASE CONTROL STUDY

Question	Y	N	P	U	Comments
Selection Bias					
Was the cases representative of the defined population?					
Has the classification of cases been reliably assessed and validated?					
Was the controls representative of the defined population?					
Has the classification of controls/comparison groups been reliably assessed and validated?					
Was the description of background/demographic factors clear and comprehensive?					
Are the cases and controls comparable with respect to demographic/potential confounding variables such as previous criminal history/violent offending/therapy.					

Were any potentially confounding variables (if there are any and they are not controlled by matching) statistically controlled for?					
Measurement and Detection Bias					
Was the classification of exposure adequate and clearly defined?					
Were the assessors blind to the research?					
Were the participants blind to the research?					
Was the exposure assessed in the same way across all groups of participants?					
Were the assessment instrument(s) used to measure the exposure standardised?					
Was the exposure measure validated?					
Attrition Bias					
Were drop out rates and reasons for drop out similar across groups of participants?					
Was the statistical analysis used appropriate?					

APPENDIX 4: Data Extraction Form

General Information

Date of data extraction

Author

Notes

Re-verification of study eligibility

Population:	Adult males 18 +	Y	N	?
Exposure:	Substance Misuse	Y	N	?
	Psychiatric problems	Y	N	?
	Past abuse	Y	N	?
	Aggressive tendencies	Y	N	?
Comparator:	No risk factors OR different risk factors OR different levels of exposure to risk factors.	Y	N	?
Outcome:	Domestic violence	Y	N	?

Study Design Cohort Case Control

Specific Information

Population Characteristics

1. Target population (describe)
2. Inclusion criteria
3. Exclusion criteria
4. Recruitment procedures used (participation rates in available)

5. Baseline characteristics of participants:

	Domestic violent males	Non-domestic violent males
No. of participants enrolled		
No. of participants completed		
Age		
Ethnicity		
Other information		

Exposure

- a) Substance Misuse ()
- b) Psychiatric problems ()
- c) Past childhood abuse ()
- d) Aggressive tendencies ()

Outcome

- 1) What was measured at baseline?
 - a.
 - b.
 - c.
 - d.
 - e.
- 2) What was measured after the exposure
 - a.
 - b.
 - c.
 - d.
 - e.
- 3) Who carried out the measurement? Was the assessor blinded?
- 4) what was the measurement tool?

- 5) Were the tools validated? If so, how?
- 6) How was the validity of the self reported behaviour maximised?
- 7) Time interval between first and second measurement:
- 8) Time interval between first and last measurement:
- 9) Drop out rates (plus proportion of those who did not agree to participate if stated) and reason for drop out:
- 10) Notes:

Analysis

1. Stats technique used
2. Does the stats adjust for confounding?
3. Attrition rate (overall rates)
4. Was attrition (missing data) adequately dealt with?
5. Number (or %) followed up from each condition
 - a) Condition A
 - b) Condition B
 - c) Condition C
 - d) Condition D
6. Overall study quality good reasonable poor
7. Number of 'unclear' or unanswered assessment items:
8. Notes:

APPENDIX 5: Mr P’s Consent Form

This consent form is an agreement that [REDACTED] provides his consent to use the information from his treatment programme for an academic project of a Case Study.

[REDACTED] is working with Rakhee Fatania who is a Forensic Psychologist in Training at the University of Birmingham. As part of her training, Rakhee would like to use the information about your treatment for an assignment called a case for the university. The information that is written in the assignment will be ANONYMOUS so that no names will be included and no one will know who you are.

[REDACTED] does not have to agree to his information being used for academic purposes. If he does not agree then Rakhee will not use his information for the project but will carry on his treatment programme. If [REDACTED] does agree, he can change his mind at any time and Rakhee will not use his information for the assignment.

I [REDACTED] agree for Rakhee Fatania to use the information about my treatment for her training at the University of Birmingham. I understand that the information included in the assignment will be anonymised so that I can not be identified. I Understand that I do not have to agree and can change my mind about this at any time.

Signed ([REDACTED])..... Date.....

Signed (Rakhee Fatania)..... Date.....

APPENDIX 6: HCR-20 Assessment for Mr P

HCR-20

Historical Items

H1. Previous Violence:

0	No previous violence -
1	Possible/less serious previous violence (one or two acts of moderately severe violence).
2	Definite/serious previous violence (three or more acts of violence, or any acts of severe violence).

All violence occurring up to and including the time of assessment is known as ‘previous violence’. This would include the index offence, violence during incarceration or hospitalisation, or violence directed at the assessor during interview. Acts of moderate or less serious violence would include slapping, pushing and other behaviours unlikely to cause serious or permanent injury to victims. Acts of severe violence would include but are not limited to, those which cause death or serious injury to or maiming the victim.

Score: 2 – Mr P has a well established pattern of attacking others that range from punching, kicking, breaking another’s hand and to wielding a knife.

H2. Young Age at First Violent Incident:

0	40 years and older at first known violent act
1	Between 20 and 39 years at first known violent act
2	Under 20 years at first known violent act

Age is established by considering the date of the first known violent incident and not using the date of the index offence or assessment.

Score: 2. The date of Mr P first serious violent incident is around age 15 according to his self-report and available documentation.

H3. Relationship History:

0	Relatively stable and conflict-free relationship
1	Possible/less serious unstable and/or conflictual relationship pattern
2	Definite/serious unstable and/or conflictual relationship pattern

This item only applies to romantic, intimate, or non platonic relationships and excludes friendships with friends and family. The item is geared toward whether an individual shows evidence of having the ability to form and maintain stable long-term relationships and engages in these when given the opportunity.

Score: 2. Mr P’s one serious relationship is reported to have been conflicted and violence was

involved in the relationship culminating in the index offence.

H4. Employment Problems

0	No employment problems
1	Possible/less serious employment problems
2	Definite/serious employment problems

Individuals who warrant high scores on this item may refuse to seek legitimate employment, or have a history of having many jobs in a short time period, or frequently being fired or quitting jobs. Assessors may take into account certain limited circumstances which may reduce the reduce scores from 2 to 1 or 0 (i.e. economic factors, physical or mental disabilities that preclude employment).

Score: 1. Mr P has been asked to leave college twice due to violent incidents and has also been asked to leave employment due to carrying a knife at work. However, he has had limited exposure to the workplace to fully assess his ability to hold down employment. Hence a score of 1 is awarded.

H5. Substance Use Problems

0	No substance use problems
1	Possible/less serious substance use problems
2	Definite/serious substance use problems

Misuse of prescription drugs is included, along with use of other substances such as solvents or glue. The mere presence of psychiatric diagnosis of substance abuse or dependence does not warrant a score of 2 without corroboration. The assessor is interested in existing impairment of functioning in areas of health, employment, recreation and interpersonal relationships which is attributed to substances. Substance use problems also include neurological damage as a result of substance use.

Score: 2. Mr P has a history of drinking heavily and using illicit drugs. Whilst evidence of dependence or the presence of withdrawal symptoms is not apparent, alcohol is heavily implicated in a number of his relationship problems and incidences of violence.

H6. Major Mental Illness

0	No major mental illness
1	Possible/less serious major mental illness
2	Definite/serious major mental illness

A diagnosis of major mental illness should conform to an official psychological system such as the DSM IV or ICD-10. This item is scored on the basis of past history and is unaffected by whether the disorder is currently active or in remission. This item applies to illnesses involving thought and affect. The item should be coded 2 when the evidence of major mental illness is unequivocal. If the evidence is equivocal then a code of 1 is appropriate. Less

serious mental illnesses such as anxiety, impulse control and somatoform disorders are not considered in the coding of this item.

Score: 1. There is some evidence that Mr P has suffered from depressive symptoms and mention is made of auditory hallucinations though these would not meet criteria for schizophrenia. In addition, however, his level of cognitive functioning, falls into the borderline learning disability range.

H7. Psychopathy

0	Non psychopathic. Score of under 20 on the PCL-R, or under 13 on PCL:SV.
1	Possible/less serious psychopathy. Score of 20-29 on the PCL-R, or 13-17 on PCL:SV.
2	Definite/serious major mental psychopathy. Score of 30-40 on the PCL-R, or 18-24 on PCL: SV.

It must be stressed that this rating is to be made on the basis of an informed and trained psychopathy assessment using the PCL-R or PCL: SV scores available.

Score: 0. Mr P has not undergone a Psychopathy assessment using the PCL-R or PCL:SV. There is no evidence to indicate such an assessment is necessary.

H8. Early Maladjustment

0	No maladjustment.
1	Possible/less serious maladjustment.
2	Definite/serious maladjustment.

This item includes two very different ways in which childhood maladjustment predicts later violence. One way is through childhood victimisation, the other through being a childhood victimiser or delinquent. Although both are predictors for adult violence, they have different implications for intervention. It is recommended that maladjustment is demonstrated in two of the three domains of home, school and community for a score of 2 to be given, or that the maladjustment in one area was so severe as to warrant a score of 2.

Score: 2. Mr P was adopted away from his biological parents and there is suspicion of neglect. He reports that he was frequently suspended from school as he was difficult to manage in the classroom and was disruptive. He was a victim of bullying inside and outside of school and was frequently involved in fights.

H9. Personality Disorder

0	No personality disorder.
1	Possible/less serious personality disorder.
2	Definite/serious personality disorder.

A diagnosis of personality disorder should conform to an official nosological system such as DSM-IV or the ICD-10. This item is scored on the basis of past history and is unaffected by whether the disorder is currently active or in remission.

Score: 1: There is no evidence at present that Mr P has been diagnosed with a personality disorder. However, his notes make numerous references to him being very sensitive to abandonment, he has a history of conflicted interpersonal relationships. In addition, he appears to have some attitudes which are supportive of violence as a means of solving problems; he has a history of failure to conform to social norms and illegal behaviours; he shows little remorse for his past actions and is lacking in empathy for others; he has a history of impulsive behaviours, irritability and aggression; there is evidence of conduct disorder before age 15 years. On this basis there may be personality traits of a dependent and antisocial nature but this requires further investigation.

H10. Prior Supervision Failure

0	No supervision failure(s).
1	Possible/less serious supervision failure(s).
2	Definite/serious supervision failure(s).

Failures during any institutional or community placement are relevant here. A supervision failure is considered to be serious if it resulted in the individual being (re-) apprehended or (re-) institutionalised by a correctional or mental health agency. Less serious failures are technical breaches of release conditions that have resulted in minor disciplinary actions such as lost privileges.

Score: 2. Mr P has been returned to prison shortly after release due to serious acts of violence; he has also breached a restraining order placed upon him

Clinical Items

C1. Lack of Insight

0	No lack of insight.
1	Possible/less serious lack of insight.
2	Definite/serious lack of insight.

This item refers to the degree to which the client fails to acknowledge and comprehend their mental disorder, and its effects on others. Some persons with clearly evident major mental illnesses are unable or unwilling to see that they will likely act violently without regular use of prescribed medication. Others have difficulty realising the importance that a well-structured support group may have in averting violence, while others have little comprehension of their generally high levels of anger and dangerousness.

Score: 1. Mr P acknowledges that he has a problem with anger but does not engage well in treatment of this issue to reduce his risk and often attributes his actions to external interpersonal factors. He has some insight into his alcohol and drug use playing a role in his problems and states that he is willing to address this though he has failed to do so previously.

C2. Negative Attitudes

0	No negative attitudes.
1	Possible/less serious negative attitudes
2	Definite/serious negative attitudes

This item does not refer to the occasional pessimistic or other such attitude, but to entrenched antisocial and negative attitudes and beliefs. It is worth noting that some individuals more or less declare their antisocial biases by the kinds of organisations to which they belong.

Score: 2. Mr P appears to lack remorse for his past actions but his requires further assessment. He has been noted to find his past action amusing and to note that his victims ‘deserved it’. He tends to blame others for his actions and to minimise his own role. He seems to view violence as an acceptable way of solving problems and there is some evidence of grievance thinking and angry rumination over long periods.

C3. Active Symptoms of Major Mental Illness

0	No active symptoms of major mental illness.
1	Possible/less serious active symptoms of major mental illness.
2	Definite/serious active symptoms of major mental illness.

Assessors should follow a classification system such as DSM-IV or ICD-10 for definitions of psychotic symptoms.

Score: 0. There is no evidence that Mr P suffers from any current or ongoing negative or positive psychotic symptoms.

C4. Impulsivity

0	No impulsivity.
1	Possible/less serious impulsivity.
2	Definite/serious impulsivity.

Impulsivity refers to dramatic hour-to-hour, day-to-day, or week-to-week fluctuations in mood or general demeanour. It pertains to the ability to remain composed and directed even when under pressure to act. Impulsivity may influence behavioural and affective domains. Impulsive persons are quick to (over-) react to real and imagined slights, insults and disappointments. Both negative and positive reactions may appear exaggerated and overdone.

Score: 1. Mr P has a long history of impulsive behaviour that range from emotional outburst, aggressiveness, violence, , suicide and self-harm attempts and threats. He may react angrily with relatively little provocation to perceived slights and this has resulted in a range of problematic behaviours. At present, however this is less evident than previously.

C5. Unresponsive to treatment

0	Responsive to treatment.
1	Possible/less serious unresponsiveness to treatment.

2	Definite/serious unresponsiveness to treatment.
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This item includes any treatment designed to ameliorate criminal, psychiatric, psychological, social or vocational problems. It does not refer to treatments which are largely irrelevant to criminal or psychiatric tendencies. Individuals scoring high on this item may respond poorly or not at all to treatment attempts. No motivation or effort is extended. Individuals are non-compliant with medication and they tend not to reach stated goals. People who score high may refuse to start treatment, start but stop treatment, sham their through treatment or complete treatment but fail to benefit from it.

Score: 1. Mr P has responded well to behavioral programs in the past and is willing to discuss issues related to his offending with psychology. However, he has failed to consistently engage in psychology sessions related to anger management in the past and issues relating to his substance use have also not been fully addressed.

Risk Management Items ('In')

R1. Plans Lack Feasibility

0	Low probability that plans will not succeed
1	Moderate probability that plans will not succeed.
2	High probability that plans will not succeed.

Lack of feasibility may be due to the fact that community agencies are unwilling or unable to provide assistance. Alternatively, the patient may have played no role in making plans or be uninvolved with family or peers. Finally, family and peers may be unwilling or unable to provide help.

Score: 1. Mr P has some reasonable plans to engage with college and wishes to move to supported living. He acknowledges a number of potential areas where he will require help to gains skills and confidence to cope with living independently in teh community. However, he underestimates the issues relating to his risk and the likely stay at Rose Lodge at present.

R2. Exposure to Destabilizers.

0	Low probability of exposure to destabilizers.
1	Moderate probability of exposure to destabilizers.
2	High probability of exposure to destabilizers.

In large part, persons may be exposed to destabilizers because of inadequate professional supervision. Assessors should determine whether persons will be attending specialized treatment and support programs for assistance with abstaining from destabilizers such as alcohol or narcotics.

Score: 2. Mr P is easily provoked to anger particularly in the presence of alcohol. Conflict has arisen in the past in context of strangers, familial relationships and intimate relationships,

It is highly likely that he will be exposed to such destabilising triggers. He is also at risk of being exploited by more dominant and cognitively able individuals to his own detriment. When sufficiently stressed and unsupported, he may have difficulty in managing his anger and distress resulting in attempts to harm himself and others.

R3. Lack of Personal Support

0	Low probability of lack of personal support.
1	Moderate probability of lack of personal support.
2	High probability of lack of personal support.

This item can be coded present if support (emotional, financial or physical) from friends or family is available but the individual is unwilling to accept it. It is very important to determine exactly what services will be available, from whom, and to look beyond the ‘good intentions’ of relatives and friends.

Score: 1. Mr P scores a 1 because though his family provide support this has been present previously and has deteriorated into familial conflict which all parties have found difficult to cope with. He does not score a 2 because his family is able to provide some support.

R4. Non-compliance with remediation attempts

0	Low probability of non-compliance with remediation attempts.
1	Moderate probability of non-compliance with remediation attempts.
2	High probability of non-compliance with remediation attempts.

Individuals who score high on this item may lack motivation to succeed and willingness to comply with medication and therapy, or refuse to follow rules. This item should be construed broadly to include remediation attempts in both therapeutic and supervision/management realms.

Score: 1. Mr P’s engagement is heavily dependent on his mood and lifestyle. He lacks some insight and responsibility for his behaviour and tends to deflect responsibility onto others or events. For example, He will blame others when he has done something wrong. He has breached the conditions of previous supervision with little thought for the consequences. However, his recent progress does indicate a compliance with rules in the presence of strict boundaries on his behaviour and the use of salient reinforcers for appropriate behaviour.

R5. Stress

0	Low probability of stress.
1	Moderate probability of stress.
2	High probability of stress.

This item can be coded present if the individual is likely to be exposed to serious stressors. Alternatively, the anticipated stressors may be less serious, but the assessor is concerned that the individual may cope poorly with them.

Score: 2. Mr P adopts maladaptive coping strategies and has resorted to anger outbursts, violence, substance use, self-harm and suicidal gestures when stressed. He is highly sensitive to rejection and to new circumstances and people and under these conditions experiences a great deal of stress. He is likely to experience a great deal of stress if unsupported due to his personality style, lack of coping strategies and limited support networks. This is a pattern of established behaviour throughout his past and he has shown little evidence that he is able to deal with stressful situations in a safe and pro-social manner.

APPENDIX 7: Mr P's Behaviour Modification Program Incorporating an Incentive Plan

Protocol for Behavioural Management Programme Incorporating the Incentive Plan

Stage 1: The patient's inappropriate behaviours which are to be the target of the intervention

- Damage to property
- Punching doors/walls
- Making threats to harm/kill others
- Shouting at staff/patients
- Swearing at staff/patients
- Not attending treatment/psychology
- Not complying with unit rules
- Refusing to take medication
- History of weapon use

Stage 2.

The behaviours which are a high risk and high impact are:

Physical assault

Whilst there have been no incidents of physical assault since July 2007, Mr P has presented with one minor incident of physical assault of pushing a member of staff in October 2008. Other than this, incident he has refrained from physically assaulting others, however the risk of this occurring is still present and if it was to occur the impact of the assault would be high.

The 'early warning signs which precede the behaviour

- Being abrupt and short with staff or other patients such as speaking or responding to staff in a manner which is impolite and bad-mannered.
- Refusing to engage in treatment/psychology – usually when 'wound up' or feeling down.
- Refusing to comply with unit rules and or requests made by staff.
- Saying something along the lines of "...the staff can't tell me what to do".
- Making threats to harm and or kill others – this does not happen often, however when this does occur Mr P is usually very wound up.
- Swearing and shouting at staff or other patients.

- Having paranoid thoughts e.g. nobody cares about me, my girlfriend is lying to me. Usually when Mr P is experiencing paranoid thoughts, he isolates himself in his bedroom, become quite with minimal interactions with others and is abrupt towards staff and/or clients. His thoughts consist of the ‘the staff don’t care about me’, ‘things aren’t going well with my girlfriend’ and also thoughts surrounding perceived threats from others.
- Perceived rejection from girlfriend or from staff e.g. she does not turn up to visit Mr P or he is having arguments with her.
- Becoming confrontational and argumentative with staff and or other patients.
- Presenting himself with and walking around holding an intimidating body posture e.g. chest out, shoulders up.
- Pacing up and down the corridor.
- Isolating himself in his bedroom and avoiding people.
- Feeling anxious about moving on and progressing e.g. unescorted leave.
- Feeling anxious/nervous.
- Feeling anxious about being rejected/abandoned.
- Being quiet and not initiating or joining in conversation with others.
- Presenting himself with an intimidating body posture e.g. making him self look bigger, chest out, shoulders out...signal to people don’t mess with me I’m not in the mood
- Slamming doors.
- Listening to music very loud of an unbearable level that is purposefully disruptive.

What should staff do when they observe the early warning signs?

Mr P’s early warning signs are usually his way of communicating that he is under stress, feeling anxious and vulnerable, experiencing difficulties, is in a bad mood and at times wants to be left alone. Whilst it may be difficult to approach Mr P when he is presenting himself in an intimidating manner, usually he is doing this as an indirect message to the staff and others around him that he is need of support. The following points are a set of guidelines to help Mr P to manage his behaviour and prevent his emotional arousal from escalating into an aggressive episode.

- Try to direct Mr P’s attention away from the problem e.g. by suggesting that he take some community leave and go out for a walk to help him calm down.

- Tell Mr P that he is displaying early warning signs. Mr P has difficulties tracking his early warning signs and level of emotional arousal. As these are behaviours that he has learnt and has presented with over many years, they have become automatic responses to emotional arousal and he is not always consciously aware that he is presenting with them. It would be useful to tell Mr P that you have observed an early warning sign and which ones you have seen. This will bring to his attention that he is wound up and there is chance that he might kick off.
- Offer Mr P one to one support. Mr P finds it difficult to verbally ask for support when he needs it; instead he will give non-verbal signs to indicate to the staff that he is feeling distressed e.g. pacing, isolating himself in his bedroom and slamming doors. Therefore, when he begins to present with early warning signs, it may be useful to Mr P to offer him one to one support e.g. a chat. This will allow him to communicate and ventilate what is causing him distress. One to one support may also be useful to offer Mr P when a key trigger of rejection from his girlfriend e.g. an argument or her failing to attend a visit. If this happens, as soon as it happens e.g. learning that girl friend is not turning up, it would be useful if staff approach Mr P straight away and give him the chance to talk about the situation. At this point, Mr P can also be reminded of his coping strategies and appropriate problem solving skills to reduce the risk of him becoming wound up and eventually kicking off.
- Remind Mr P of his coping strategies. On observation that Mr P is beginning to get wound up e.g you have seen an early warning sign, suggest to him to adopt a coping or distraction strategy to help him to calm down and cope with the problem in an appropriate manner. His coping strategies and distraction techniques consist of:
 - going for a walk
 - listening to music
 - watching a DVD
 - going to the shops/using community leave
 - playing a game on his play station which does not wind him up e.g. driving game,
 - change his thoughts such as thinking about positive things e.g. his progress so far, thinking about college.
 - Doing some exercise
 - Thinking about the consequences of his behaviour
- Remind Mr P of the consequences of aggressive behaviour This should help to deter Mr P from becoming aggressive.
 - Being arrested by the police
 - Receiving a conviction
 - Staying 'locked up' for longer
 - Getting a bad report
 - Being seen by others in a negative way

- Remind Mr P of appropriate problem solving skills e.g. using assertive behaviour at the right time when the situation has de-escalated.

The appropriate behaviours we would wish the patient to display.

Ideally these should be behaviours which would serve the same function for the patient but meet their needs in a less aversive or disruptive way (e.g. making appropriately assertive requests rather than shouting and threatening staff.

- For Mr P to begin to verbally communicate with staff how is feeling.
- For Mr P to be aware of when he is presenting with his early warning signs or when a trigger for his inappropriate behaviour has occurred.
- For Mr P to implement his coping strategies and distraction techniques and actually put them into practice.
- Using appropriate problem solving skills such as assertive behaviour to deal with a situation appropriately and calmly.
- To politely and respectfully address whoever has annoyed him without swearing or shouting at the individual or making threats to harm them.
- To use more of his community leave, taking him away from an enclosed environment which at times can be hostile and distress provoking.
- To begin to communicate with staff when he is feeling wound up or upset or if something has annoyed him in an appropriate manner without shouting or swearing.
- To present himself as settled, calm and easy to get on with and not ‘kicking off’
- Joking about and laughing with staff and peers

Stage 3:

Defining potential reinforcers

The following are potential reinforcers and rewards which might help to motivate Mr P to achieve change. These reinforcers should immediately follow the positive behaviours outlined above. If the client displays positive behaviours over a certain period of time, he will receive a reward.

Reinforcers:

- Being commended for his good behaviour or his ability to handle a situation calmly and appropriately.
- Being commended for his progress so far e.g. applying to go to college, improvement in his behaviour, attending psychology sessions, getting good reviews in MDT/CPA’s

Rewards.

- Receiving rewards such as go-karting, visits to the cinema and trips to theme parks.

Level 1: Tick chart:

The tick chart is designed to show the presence of good behaviours and absence of bad behaviours. Ticks are to given three times per day by nursing and support staff i.e. end of the morning, end of the afternoon, end of the evening.

Level 2: Short term reinforcers (small rewards):

Mr P has chosen the small reward of going to the cinema. This list is not exhaustive and additional small rewards can be added to his incentive scheme. For Mr P to receive his small rewards, he must achieve six out of seven days of good behaviour with no more than one day without a tick. However, Mr P taking his leave to receive his reinforcer/reward for good behaviour must be in conjunction with his care plan; taking leave is dependent on mental state. If Mr P's mental state has deteriorated and he is not permitted to take his leave, he can take it at an alternative date when his mental state has improved.

Level 3: Longer-term reinforcers (big rewards):

Mr P has chosen to include larger rewards into his incentive plan of go-karting and visiting theme parks. This list is not exhaustive and can be expanded where alternative and additional rewards can be added to the list.

To be granted the big reward of go-karting, Mr P must have had 4 weeks of pro-social behaviour (six out of seven days of good behaviour per week over a period of four weeks). This target has been set to assure Mr P will have some success in the early stages and does not need to achieve perfection.

Level 4: Guidelines for staff:

Mr P must be encouraged to display more pro-social and appropriate behaviours. Not to display verbal aggression, physical aggression or make threats to harm others. He should be encouraged to use his coping strategies and problem solving techniques that he has learnt during his 1:1 psychology sessions and group. It is important that staff should familiarise themselves with these so that they have the knowledge and skills to appropriately redirect Mr P to more pro-social behaviours. He should also be positively praised for using appropriate behaviours.

Mr P should be given a tick on his incentive chart every morning (8am-12pm), afternoon (12pm – 5pm) and evening (5pm – bedtime). He must achieve three ticks each day for six out of seven days to receive his reward. If Mr P achieves a total of six days then he has achieved a small reward. He does not have to achieve ticks for six consecutive days in order to receive a big reward however to obtain positive ticks for six days or more out of seven.

EARLY WARNING SIGNS

An early warning sign is a sign which consistently seems to appear before the behaviour occurs. This gives an early signal to suggest a build up towards challenging behaviour. Some early warning signs may be internal e.g. thoughts and feelings and are therefore more difficult to identify. However they are useful to know. Mr P's early warning signs are as follows:

1. Being abrupt towards staff or other patients
2. Refusing to engage in treatment/psychology
3. Refusing to comply with unit rules/requests
4. Saying something along the lines of "...the staff can't tell me what to do"
5. Pacing around unit
6. Presenting himself with a hostile and intimidating demeanour/body language e.g. raised shoulders, making himself look bigger
7. Making threats to harm and or kill others
8. Swearing and shouting at staff or other patients
9. Having paranoid thoughts
10. Perceived rejection from girlfriend e.g. she does not turn up to visit Mr P
11. Becoming confrontational/argumentative with staff and or other patients
12. Presenting himself/walking around holding an intimidating body posture
13. Isolating himself in his bedroom
14. Feeling anxious about moving on and progressing e.g. unescorted leave
15. Feeling anxious about being rejected/abandoned

ACTION PLAN:

1. On observation of an early warning sign or any signs of emotional arousal or distress, make attempts to re-direct Mr P away from the focal problem situation.
2. Explain to Mr P that he is presenting with Early Warning Signs and tell him which ones you have observed.
3. Remind Mr P about his coping strategies and problem solving skills that he has learnt during his psychology sessions. These are as follows:
 - a) Walk away
 - b) Spend some time in his bedroom to calm down
 - c) Play on his games console
 - d) Watch a DVD or TV
 - e) Go for a walk
 - f) Do some exercises in his bedroom
4. If Mr P continues to show challenging behaviours, another coping strategy that he has previously used himself which has been quite successful is thinking about the consequences for his actions. Remind him of the following consequences if he continues to behave in a challenging manner:
 - a) Being arrested by the police
 - b) Receiving a conviction
 - c) Staying 'locked up' for longer
 - d) Getting a bad report
 - e) Being perceived in a negative light

Please give the client a tick if you feel as a staff team that Mr P not displayed any negative behaviours and have displayed more positive alternatives on the shift in question. Once the number of ticks required for a small incentive/reward is achieved then please tick overleaf.

Number of ticks required for small reward are 15 (e.g. 5 days of three ticks out of seven): = ____

Shift	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Morning							
Afternoon							
Evening							

Behaviours to be Avoided (list here)

- Damaging Property
- Shouting and/or swearing at staff/patients
- Being abrupt and rude towards staff/patients
- Making threats to harm others
- Not attending psychology
- Non-compliance with unit rules
- Ignoring staff requests

Behaviours to be encouraged (list here)

- Ventilating thoughts and feelings to staff
- Utilising coping strategies and distraction techniques
- Using appropriate problem solving skills
- Dealing with stress in a calm manner
- Attending psychology

Please place tick in the box below to indicate whether the person has earned a small reward/incentive during that week.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Small Reward obtained? YES/NO							
Which reward did patient choose? (Put number in from below)							

Possible Short Term Rewards:

1. Cinema
2. Bull Ring Shopping Centre
3. Going out for a Meal
4.
5.
6.
7.
8.
9.
10.

Possible Long-Term Rewards:

1. Go-Karting
2. Visit to a Theme park.
3.
4.
5.
6.

END OF WEEK REVIEW: Weekly Reward Achieved? **YES /NO** (Please circle)

APPENDIX 8: Ethics Consent Letter

Dr Louise Dixon
School of Psychology
University of Birmingham

15th January 2010

Dear Dr Dixon

**Re: “Typologies of Male and Female Intimate Partner Violent Offenders
Application for Ethical Review ERN_09-235**

I can confirm that conditional ethical approval was granted for the above research project by the Life and Health Sciences Ethical Review Committee on 27th March 2009, and that the conditions of ethical approval were met on 3rd April 2009.

I would like to remind you that any substantive changes to the nature of the study as described in the Application for Ethical Review, and/or any adverse events occurring during the study should be promptly brought to the Committee’s attention by the Principal Investigator and may necessitate further ethical review.

Kind regards

Susan Cottam
Research Ethics Officer
Research and Commercial Services
University of Birmingham

cc Ms Rakhee Fatania

APPENDIX 9: Content Dictionary and Variable List

1. ***Young age at first conviction*** - offenders who were convicted of an offence before the age of 16 years
2. ***Young age first contact with the police*** – offenders who received cautions, reprimands, final warnings before the age of 16
3. ***Later convictions*** – offenders who were 28 years or older when they were first convicted of a criminal offence
4. ***Previous custodial sentence*** – an offender who has previously been incarcerated at Her Majesty’s Prison prior to the IPV offence on one or more occasions
5. ***Breach*** – an offender who has breached the conditions of probation, parole, licence, bail or community based sentence
6. ***Criminal versatility*** – an offender who has convictions for six or more different categories of offences
7. ***Extra-familial violence*** – an offender who has perpetrated violence against an extra-familial person
8. ***Instrumental aggression*** – an offender use has used violence and aggression for self-gain in order to achieve their objectives
9. ***Pro-criminal attitudes*** – the offender holds attitudes and beliefs that their criminal behaviour is acceptable and normal
10. ***Discriminatory attitudes*** – the offender holds attitudes or displays behaviours which are discriminatory towards other groups within society
11. ***Weapon*** – any weapon the offender had in their possession or implement used as a weapon during the offence
12. ***Excessive violence*** – use of excessive violence during the offence such as beating a victim who is offering no resistance, repeatedly stabbing and wounding
13. ***No history of IPV with current partner*** – no history of previously assaulting their current partner
14. ***No history of IPV*** – offender never previously committing any acts of assault against their current and past partners
15. ***Emotional distress motivation for offence*** – IPV occurred due to offender suffering from depression, stress or other highly emotional states

16. ***Emotional distress at time of offence*** – emotional state or distress of offender affecting rational judgement and reducing self-control at time of assaulting partner
17. ***Alcohol use at time of offence*** – intoxicated with alcohol at time of violence towards partner which may have acted as a disinhibitor
18. ***History of alcohol abuse*** – presence of alcohol problems including regular binge drinking and/or excessive alcohol intake in the last 6 months level of use
19. ***Drug use at time of offence*** – under the influence of any illegal drugs at time of IPV which may have acted as a disinhibitor
20. ***History of drug abuse*** – previous history of illegal drug misuse
21. ***Unemployment*** – an offender who is unemployed at the time of the offence
22. ***Childhood abuse*** – any experience of abuse during childhood including emotional, sexual and physical abuse
23. ***Reckless*** – offenders engaging in thrill seeking and risk taking behaviour
24. ***Impulsive*** – offenders who act rather than plan and do not reflect any regret for actions later
25. ***Depression*** – any experience of depression which has been diagnosed and/or documented
26. ***Suicide/Self-harm*** – if the offender has ever made any attempts of self-injurious behaviour such as suicide or self-mutilation
27. ***Psychiatric problems at time of offence*** – the offender suffering from any psychiatric conditions or illnesses at the time of assaulting their partners
28. ***History of psychiatric problems*** – any psychiatric problems that the offender has experienced including illness and symptoms diagnosed by a GP or psychiatrist such as schizophrenia, manic depression, compulsive behaviours etc
29. ***Young behavioural problems*** – an offender who has had childhood behavioural problems
30. ***History of psychiatric treatment*** – the offender having previously received treatment by either a psychologist or psychiatrist as an in-patient or out-patient of a psychiatric hospital including any treatment received in prison, special hospital or regional secure unit
31. ***Section/hospitalisation*** – the offender has previously been detained under the Mental Health Act (1983) as a patient at a psychiatric hospital or regional secure unit
32. ***Current psychiatric treatment*** – the offender is currently receiving treatment for a psychiatric condition, including cases where psychiatric treatment is pending

33. *Inadequate interpersonal skills* – any deficits or difficulties in their ability to interact with others