

Candidate Number: Pol-1525

**Lee Barnham**

Wolfson College

Supervisor: Dr Geoffrey C Barnes

**Targeting perpetrators of partner abuse in the Thames Valley:**

**A two-year follow up of crime harm and escalation**

Submitted in part fulfilment of the requirements for the  
Masters Degree in Applied Criminology and Police Management

2016

## **Abstract**

In England and Wales, acknowledgement of the nature and extent of domestic abuse has led to increasing interest in what can be done by the police to systematically target repeat and prolific perpetrators. Initial suggestions about how the police can bring about a reduction in domestic abuse recidivism are limited to a focus on the frequency of offending and an assumption that tactics used to reduce other types of crime can be successfully applied to perpetrators of domestic abuse. Existing research is dominated by an almost exclusive concentration on violent offending with methodological problems making it difficult for the police to operationalise the findings for the purposes of targeting perpetrators.

By analysing 140,998 incidents of abuse between intimate partners reported to Thames Valley Police between 2010 and 2015, this descriptive study provides insight into the characteristics of re-offending including violence and non-violence, measuring frequency as well as severity of harm. The results of the research challenge commonly held beliefs that repeated abuse is not only almost inevitable but that it gets worse. The results of this research show that amongst the most harmful perpetrators from 2010, there were decreasing levels of harm and recidivism over the next five years. The two year follow up of all perpetrators shows that most offenders did not go on to be involved in any crime against an intimate partner over that period. Of those who were involved in a repeat incident, the results point to a concentration of a small number of high harm offenders. The results did show that after a perpetrator repeated once, the probability of a further incident increases with each passing incident. The results also highlight that as the number of repeats increases, the number of days between each incident gets shorter. However, the severity between these incidents showed little variation.

The results of the research highlight the importance of using a consistent measure of severity of harm and call for further consideration of the way in which the police currently target cases of abuse between intimate partners. The results could also be used to inform the development of a forecasting model to better predict the harm caused by perpetrators of intimate partner abuse.

## Acknowledgements

I would like to begin by thanking Thames Valley Police and the College of Policing for providing me with the opportunity of a lifetime to undertake academic study at the University of Cambridge. In particular, I would like to thank my line managers at the time I applied for this programme, Detective Inspector Penny Mackenzie and now Superintendent Nigel Doak, for the wholehearted support they gave me in pursuing this endeavour. I am also enormously grateful to our former Chief Constable, Sara Thornton, and Alison Sercombe for selecting me to attend the course.

At the Institute of Criminology, I would first and foremost like to thank my thesis supervisor, Dr Geoffrey Barnes, for his support, words of encouragement and time spent talking through the research in Cambridge and during FaceTime calls across the pond. I also owe thanks to John Parkinson OBE, my first year supervisor, for his insightful and grounded words of wisdom. I also would like to recognise the sterling efforts of Lucinda Bowditch and Glenn Garner whose attention to detail in marshalling the course have made studying in Cambridge an experience I will never forget.

Finally, I would like to thank my husband, Fraser, for putting up with my frequent failure to attend to the “pink” household tasks and for endless conversations about logic and processing data. More than anything, thank you for your support and understanding.

## Contents

<b>Abstract.....</b>	<b>i</b>
<b>Acknowledgements .....</b>	<b>iii</b>
<b>Contents.....</b>	<b>iv</b>
<b>List of Figures.....</b>	<b>viii</b>
<b>List of Tables .....</b>	<b>ix</b>
<b>Chapter 1: Introduction.....</b>	<b>1</b>
1.1. Overview .....	1
1.2. The issue of targeting perpetrators of abuse in the UK.....	1
1.3. The purpose and structure of this research .....	2
<b>Chapter 2: Literature Review .....</b>	<b>5</b>
2.1. Introduction.....	5
2.2. The extent of abuse between intimate partners.....	5
2.3. Repeated patterns of abuse.....	8
2.4. Escalation.....	10
2.5. Breaking down partner abuse: intimate terrorism and situational couple violence .....	12
2.6. Measuring partner abuse: utilising the concept of harm .....	13
2.7. Summary .....	17
<b>Chapter 3: Methodology .....</b>	<b>18</b>
3.1. Introduction.....	18
3.2. Using official police data: The source for this research.....	18
3.3. Key definitions applied in this research.....	20

3.3.1. Partner abuse.....	20
3.3.2. Victim and suspect.....	21
3.3.3. Repeat offending.....	21
3.4. The dataset, issues and limitations.....	22
3.4.1. Issue 1: Relationship of suspect to victim.....	22
3.4.2. Issue 2: Perpetrator details.....	24
3.4.3. Issue 3: No-crimes and non-personal crimes.....	25
3.4.4. Issue 4: Delayed reports.....	26
3.4.5. Summary of dataset.....	27
3.5. Answering the research questions.....	27
3.6. Conditional probability.....	29
<b>Chapter 4: Results.....</b>	<b>30</b>
4.1. Frequency of partner abuse overall: 2010 - 2015.....	30
4.2. Frequency of repeat offending: 2010 - 2015.....	32
4.3. The profile of partner abuse repeat perpetrators in TVP: 2010 – 2015.....	34
4.4. Average crime harm: 2010 - 2015.....	38
4.5. Exploring high harm offenders.....	39
4.6. Re-offending: A two year follow up.....	43
4.6.1. Incident crime harm.....	44
4.6.2. Concentration of harm amongst unique perpetrators.....	45
4.6.3. Repeat crime harm amongst re-offenders.....	45
4.6.4. Conditional probability of repeat offending.....	47
4.6.5. Time between repeat incidents.....	49

4.6.6. Repeat incident average crime harm scores .....	50
4.7. Victimisation.....	51
4.7.1. Overall extent of victimisation.....	51
4.7.2. Victimisation in the two year follow up .....	53
4.8. Summary of results.....	54
<b>Chapter 5: Discussion.....</b>	<b>57</b>
5.1. Frequency, demographic profile and year on year average crime harm of partner abuse re-offending in the Thames Valley.....	57
5.1.1. The importance of a broad definition for accurate measurement of partner abuse .....	57
5.1.2. Not just a number: Measurement of harm .....	58
5.1.3. The demographic profile of partner abuse re-offenders .....	59
5.1.4. Average crime harm.....	59
5.2. Escalation.....	60
5.2.1. Severity of harm.....	60
5.2.2. Frequency and speed of re-offending .....	62
5.3. Unique victims.....	63
5.4. Implications for policy and practice in tackling partner abuse.....	63
5.5. Research implications .....	65
5.6. Strengths and limitations of this research .....	66
5.6.1. The data.....	66
5.6.2. External validity.....	67
<b>Chapter 6: Conclusion .....</b>	<b>68</b>
<b>References .....</b>	<b>72</b>

---

**Annex A: Offence classifications and crime harm scores..... 79**



## List of Figures

Figure 1 : All incidents 2010 - 2015 .....	31
Figure 2 : Crime harm score for all incidents 2010 - 2015.....	31
Figure 3 : Repeat incidents 2010 - 2015 .....	32
Figure 4 : Crime harm score for repeat incidents 2010 - 2015 .....	33
Figure 5 : Perpetrator ethnicity for repeat incidents 2010 - 2015.....	36
Figure 6: Unique repeat perpetrators by sex .....	37
Figure 7: Unique perpetrator average crime harm scores .....	38
Figure 8 : Mean crime harm scores for top 50, 100 and 500 unique perpetrators in 2010 .....	40
Figure 9 : Mean harm scores for the top 50 unique perpetrators .....	40
Figure 10 : Mean crime harm scores for the top 100 unique perpetrators .....	41
Figure 11 : Mean crime harm scores for the top 500 unique perpetrators .....	42
Figure 12 : Proportion of perpetrators from the 2010 cohort who re-offend .....	43
Figure 13 : Incident based crime harm scores in 2 year follow up (including first crime harm) .....	44
Figure 14 : Cumulative harm: 2 year follow up.....	45
Figure 15 : Perpetrator repeat crime harm scores in 2 year follow up.....	46
Figure 16 : Conditional probability of repeat incident (all).....	47
Figure 17 : Conditional probability of repeat incident (crime) .....	48
Figure 18 : Average days between incidents.....	49
Figure 19 : Average crime harm scores for repeat incidents .....	50
Figure 20 : Conditional probability: additional victims 2010 – 2015 .....	52
Figure 21 : Conditional probability: additional victims: 2 year follow up .....	53

## List of Tables

Table 1 : Records where relationship not recorded.....	23
Table 2 : Non-crime incidents where relationship field blank.....	24
Table 3 : Incidents where no perpetrator listed .....	25
Table 4 : Incidents where no crime occurred or was non-personal.....	26
Table 5 : Incidents which occurred more than 90 days before date reported.....	26
Table 6 : Summary of all exclusions.....	27
Table 7 : Final number of incidents.....	27
Table 8 : Demographic data from Office for National Statistics (ONS) Census 2011: Thames Valley and England & Wales.....	34
Table 9 : Perpetrator age and sex for repeat incidents 2010 - 2015.....	35
Table 10 : Unique repeat perpetrators for all incidents .....	37
Table 11 : Average change in rank amongst the top 50, 100 and 500 from 2010 .....	42
Table 12 : Victimisation of multiple partners: 2010 – 2015 .....	51
Table 13 : Victimisation of multiple partners: 2 year follow up.....	53

## **Chapter 1: Introduction**

### **1.1. Overview**

Over recent decades, there has been increased recognition of domestic abuse as a social problem, rather than a private issue to be kept free from intervention by agencies of the state. In the United Kingdom (UK), successive governments have put the criminal justice system at the heart of policies designed to tackle domestic abuse, placing responsibility for such behaviour on the perpetrator rather than the victim (Groves and Thomas 2014). Knowledge about the various forms of abuse has also increased, leading to the creation of new legislation criminalising particular behaviours such as forced marriage (Home Office 2014) and coercive control (Home Office 2015).

### **1.2. The issue of targeting perpetrators of abuse in the UK**

One of the UK's leading domestic abuse charities, SafeLives, estimate there are 100,000 people in the UK living at high and imminent risk of being murdered or seriously injured as a result of domestic abuse. Apart from the impact on its victims, Walby (2009) estimated that, in 2008, domestic abuse cost the criminal justice system in England and Wales a total of £1.26bn. In Her Majesty's Inspectorate of Constabulary (HMIC) widely publicised national report on the issue, it is stated the "extent and nature of domestic abuse remains shocking" (2014a: p. 5).

The HMIC report drew particular attention to the need for the police service to do more to systematically target repeat and prolific perpetrators of domestic abuse to reduce victimisation. It recommended police forces make use of techniques applied to reduce other types of offending as well as multi-agency work used in integrated offender management (IOM). However, this recommendation is based on the assumption that because these tactics worked for other repeat offenders, they will be equally as successful with domestic abuse recidivists. The suggested approach to targeting repeat perpetrators of domestic abuse is

also limited to simply identifying those responsible for the highest number of offences, without consideration of precisely how much harm they inflict or whether it is possible for police to analyse patterns in offending.

### **1.3. The purpose and structure of this research**

The importance of carrying out research to find patterns of offending cannot be understated, since it provides a foundation for testing and tracking police interventions (Sherman 2013). It is through this process that police can ultimately establish what works (or doesn't) in reducing harm (Sherman 2013). This research is a descriptive study which seeks to identify patterns of offending amongst a particular group of domestic abuse perpetrators: those responsible for abusing intimate partners. The aim is to gain a better understanding of re-offending using police data to identify opportunities to target repeat perpetrators of partner abuse to seek to reduce harm. Whilst this research touches on one-time offenders, the focus of this thesis is on those who re-offend. In order to do this, the research will address three questions:

1. What is the frequency, demographic profile and year on year average crime harm value of partner abuse re-offending?
2. Does partner abuse get worse/escalate over time?
3. How many unique victims do partner abuse offenders have over varying periods of time?

This research draws on information contained within 140,998 incidents of partner abuse reported to Thames Valley Police (TVP) between 2010 and 2015. TVP is the largest non-metropolitan police force in England and Wales covering the counties of Berkshire, Buckinghamshire and Oxfordshire. The research provides a comparison of frequency of abuse between partners versus the level of harm inflicted, uses demographic data to profile repeat perpetrators, and tracks average crime harm caused by re-offending across each of the six years covered by the study. This is followed by a detailed examination of the issue of

escalation in the severity and frequency of harm caused by re-offending in two ways. Firstly, by analysing what happens to the most harmful 50, 100 and 500 perpetrators from 2010 in the years that follow and, secondly, by examining all re-offending using a fixed 2 year follow up period from the first incident in the dataset. The extent to which offenders abuse multiple partners is also examined across the 6 years covered by the data, as well as during the fixed follow up period. The Cambridge Crime Harm Index (CHI) provides the measurement of harm by applying a value to each type of crime using the sentencing guidelines for a first time offender, allowing distinctions between the severity of offences to be made (Sherman et al. 2014; 2016).

In the following chapter, a review of the existing literature explores current knowledge about the extent of partner abuse re-offending and the challenges faced by agencies, such as the police, in operationalising the findings. In particular, the almost exclusive focus on the use of violence in definitions of intimate partner abuse is explored along with the influence methodological choices have on the results of extant studies. The review also considers how more recent research calls into question previously accepted theory that partner abuse is nearly always repeated and gets worse. The chapter concludes with a critical assessment of attempts to develop a meaningful and sustainable way of measuring the severity of harm between different types of offences.

This is followed by a chapter explaining the methodology used in this research including a justification for using police data and describes the key definitions applied in this thesis. This chapter also describes the nature and quality of the data extracted from the TVP crime recording system known as NICHE RMS (Records Management System), the process undertaken to prepare the dataset for analysis and outlines how the data will be analysed.

The results of are presented in the fourth chapter, following the structure of the research questions. In the fifth chapter the results and their implications for theory, policy and practice in targeting abuse between intimate partners are discussed. This narrative is

juxtaposed with the current approach to targeting partner abuse and considers how this study could inform future research which aims to make better and more accurate predictions about re-offending of this nature. The chapter also considers the strengths and limitations of this research as a contribution to existing work concerned with the study of abuse between intimate partners. The thesis closes by drawing together the overall conclusions emanating from this research.

In summary, this research aims to address the concern raised by HMIC about targeting repeat and prolific perpetrators of abuse, but does so in a way that draws on evidence rather than an assumption the answer lies simply with targeting those involved in the highest number of incidents. Whilst the offending history of perpetrators is examined by police on a case-by-case basis, there has not been (up until now) systematic analysis of a full population of offenders. This research contributes to gaps in the existing literature through longitudinal analysis of often overlooked police data to produce results that the police can act upon. In addition, the research offers further insight into emerging research which challenges commonly accepted theories about the extent and nature of partner abuse.

## **Chapter 2: Literature Review**

### **2.1. Introduction**

No matter where it has taken place, research shows abuse between intimate partners to be a widespread phenomenon crossing geographic boundaries and affecting society regardless of social class, age, race and sexual orientation (Groves and Thomas 2014). However, the complexity of the existing research findings makes it difficult for agencies, such as the police, to target resources for the purpose of tackling partner abuse. Almost all of the existing research focuses exclusively on acts of violence, leaving a gap in our understanding of the true extent and impact of non-violent abuse on abuse between partners.

This chapter begins with a discussion of research reporting on the prevalence and incidence of partner abuse before considering studies examining whether there is evidence of escalation in severity of abuse from one incident to another. In doing so, attention is paid to the way in which the methodological approach to research concerning partner abuse has an impact on the findings. This chapter goes on to explore how police data could be used more effectively to develop a targeting strategy to reduce the harm caused by perpetrators of this sort of crime. The final section of this chapter examines how crime can be measured using an index of harm rather than a simple count of incidents to make distinctions between the severity of offences.

### **2.2. The extent of abuse between intimate partners**

In 2013, the World Health Organisation (WHO) conducted the first global systematic review of data on the prevalence of partner abuse against women in low, middle and high income countries. The research found that, globally, the majority of violence experienced by women was committed by intimate partners, with 30% of all women who had ever been in a relationship suffering physical or sexual violence (Garcia-Moreno and Pallitto 2013). Although the reach of the research was limited by the availability of data and/or its quality in

some parts of the world, the authors concluded violence against women is not an isolated problem in a few countries, but a public health issue of “epidemic proportions” (Garcia-Moreno and Pallitto 2013, p. 3).

Although the WHO data originated from large, representative population based studies, the research was only conducted once so cannot measure how the prevalence of abuse does (or does not) change over time. In the United States, Straus and Gelles (1986) carried out the National Family Violence Surveys (NFVS) in 1975 and then again in 1985. Although the 1985 survey was not a follow up with respondents from the 1975 survey preventing comparison between the same individuals over 10 years, the rate of domestic violence per 1,000 couples was almost the same with 160 reporting such violence in 1975 compared with 158 in 1985. Translated to the population as a whole, Straus and Gelles (1986; 1990) estimated that between 1.6 and 1.8 million women were victims of violence each year in the United States.

In their further analysis of the NFVS data, Straus and Gelles (1987) found remarkable levels of symmetry in the violence reported by men and women. The 1975 and 1985 studies identified that 11% to 12% of married/cohabiting women and 12% of married/cohabiting men were assaulted by their intimate partner over a one year period. Although other studies have found similarities between violence reported by men and women, the results show less consistency in the overall prevalence of violence amongst those interviewed. Despite using similar behaviourally-specific questions to screen participants for physical assault victimisation as the NFVS, the National Violence Against Women (NVAW) survey in the United States found that only 1.3% of women and 0.9% of men were assaulted by a current or former partner over the course of one year (Tjaden and Thoennes 2000). Both the NFVS and NVAW surveys were completed some time ago and relate to partner abuse in the United States. The research presented in this thesis uses recent data from a full population of incidents reported to a police force in England and Wales.



The prevalence of partner abuse is measured in England and Wales by the annual Crime Survey for England and Wales (CSEW), formerly known as the British Crime Survey (BCS). The survey is one of the largest social research surveys carried out in England and Wales and was first conducted in 1981. The survey uses a stratified, random sampling method in order to select a nationally representative sample of the population in England and Wales aged over 16 years (ONS 2015). In the year ending March 2015 the survey found that 6.5% of women and 2.8% of men reported suffering partner abuse in the previous year. This equates to an estimated 1.1 million female victims and 500,000 male victims of this type of abuse (ONS 2016).

The CSEW figures include the responses to questions about non-violent emotional and financial abuse as well as physical violence. This definition is therefore wider than the one used in the WHO research, NFVS and NVAW surveys where the focus is on violence only. The CSEW found women and men were more likely to report non-physical abuse than force or threats in the survey, underscoring the importance of using a wider definition to understand the prevalence of abuse. This thesis uses a wide definition of abuse including violent and non-violent criminality, as well as incidents reported to the police where a crime has not been committed in order to gain a wider understanding of the extent of reported partner abuse. These incidents are referred to as 'non-crime incidents' and are described in detail in the following chapter.

Analysis of data from the CSEW has shown a decline in the number of victims of domestic abuse for all types of relationship (not just intimate partners) between 2005 and 2009. Although the decline in the number of victims has halted in more recent years, Woodhouse and Dempsey (2016) point to an overall reduction of 27% in reported domestic abuse of all types in the CSEW from 2.7 million victims in 2005 to just under 2 million in 2015. In contrast, the number of domestic abuse incidents recorded by the police in England and Wales has increased year on year since 2007. Whilst the statistics presented draw on

different units of analysis (the CSEW figures represent a count of victims, police data a record of incidents), by 2015 the number of domestic abuse incidents recorded by the police rose by 43% compared with 2007/2008 to a total of 943,628 (Woodhouse and Dempsey 2016). So, although the number of victims who self-report domestic abuse has fallen since 2005, the police are facing a sharp increase in demand for response to cases of domestic abuse.

Two reasons have been cited to explain the increase in the number of domestic abuse incidents recorded in police data. Firstly, victims and partner agencies have greater confidence in reporting such cases to the police (Groves and Thomas 2014). The second reason is improvements made by the police in accurately recording crime (Groves and Thomas 2014; HMIC 2014a).

### **2.3. Repeated patterns of abuse**

An important consideration in understanding why the number of victims has reduced, whilst recorded incidents have increased, is the literature pointing to the high frequency with which abuse is repeated. Research explaining the repetition of partner abuse also draws attention to what Sherman (2007) calls the “power few” in which high volumes of incidents are concentrated amongst a small proportion of units; in this case victims and offenders. Morley and Mullender (1994) go as far as to say “domestic violence is almost always a multiple victimisation crime; that is, attacks by the same assailant are almost always repeated” (p. 5).

It is widely accepted (but largely untested) within policing in England and Wales that by the time a victim makes a report to the police, they have invariably experienced a pattern of abuse (Richards et al. 2008). This view is well illustrated by the frequently cited claim that those victims who report an incident of domestic abuse to the police in England and Wales will have already suffered an average of 35 unreported incidents. However, the veracity of this claim has been challenged by Strang et al. (2014), who traced the origins of this figure to research carried out in 1979 in a small Canadian city. The number 35 was calculated on the

basis of just 53 interviews with women who said they had been the victim of a prior incident before the police became involved. The results also excluded data from 15 interviews where the victims did not report any prior incidents preceding police involvement. As such, the study suffers from both low statistical power (with a response rate of just 24% on a sample size of 222 victims) and a lack of external validity (Strang et al. 2014).

The CSEW asks respondents about the number of times they have experienced violent and non-violent abuse from an intimate partner. Over 12 months ending in March 2015, 14% of men and 16% of women said they had suffered abuse by their partner more than once. However, these figures need to be treated with some caution because 70% of respondents either said they did not know or refused to give an answer. A subset of respondents was asked further questions about the number of victimisations they had suffered from their partner. The results show 70% suffered 1 victimisation, 14% of victims experienced 2 victimisations and 16% experienced 3 or more incidents of violent or non-violent abuse. Repeat victims were found to have experienced 60% of all incidents (ONS 2016). In interpreting these figures it is important to note the CSEW also has other limitations in capturing the true extent of domestic abuse. The survey only allows respondents to report a maximum of five crimes, leaving potential for abuse to be underestimated (Farrell and Pease 2007). The sample is also drawn from the population of individuals living in their own homes, which excludes those who live in refuge (Groves and Thomas 2014).

Using 36,000 police records of all domestic abuse (not just between intimate partners) reported to Suffolk Constabulary, Bland and Ariel (2015) found the majority of 'dyads' (76%) made only 1 report over a 3 year period. A smaller number of victims, just 11%, reported suffering 3 or more incidents. Bland and Ariel (2015) also found repeat offending was more prevalent than victimisation, with perpetrators committing offences against numerous victims to a greater extent than victims suffered at the hands of multiple offenders. A total of 29.5% of victims were victimised by more than one offender whilst 47.6% of all repeat

offenders perpetrated against multiple victims. This thesis will examine whether there is evidence of such serial offending in the specific context of abuse against intimate partners.

A limitation of using police data is that they do not represent all domestic abuse, including repeat incidents, because of under reporting of this type of crime (Bland and Ariel 2015). Whilst official police data can mask a large amount of unreported abuse, it can be used by the police to understand the demand for resources and in developing a strategy for targeting perpetrators of abuse.

## **2.4. Escalation**

Closely related with research drawing attention to the recurrent nature of partner abuse, are studies that suggest it escalates in severity. Interest in both incidence and escalation is well demonstrated by the unequivocal position taken by Pagelow (1981) who asserted “one of the few things about which almost all researchers agree is that batterings escalate in frequency and intensity over time” (p. 45).

Some research concerning escalation in partner abuse indicates that abusive relationships follow a cyclical pattern. Walker (2006) conducted interviews in the late 1970s with women who had been assaulted by their partners and identified a three phase pattern which followed initial courtship. In the first phase, known as ‘tension building’, women said their partners became increasingly verbally abusive and tried to socially isolate them. In response, the women described trying to appease their partners. However, despite their efforts to keep the situation calm, the tension continued to build leading to the ‘battering’ phase characterised by physical assault. Walker (2006) found such violence could be a single episode or last for days or even weeks. The third phase is marked by a period of ‘contrition’ where the perpetrator seeks forgiveness.

Other studies have reported a far more complicated picture of escalation in severity. Piquero et al. (2006) used victim interview data from the Minneapolis Domestic Violence Experiment as well as replications of the study to examine escalation in violence against the

same victim. Escalation was measured by comparing the level of injury reported at the point police intervened (and either made an arrest, separated the couple or offered advice) with new assaults reported in subsequent interviews.

Piquero et al. (2006) found evidence of groups whose offending escalated and de-escalated as well as individuals who perpetrated both stable low level aggression and consistently high levels of aggression. Piquero et al. (2006) concluded that not all men escalate their abuse, but suggest that men who are most severely violent initially are likely to continue their violence over time. However, the research is limited by missing survey data, low response rates and a focus on less serious assaults where the police could use discretion in their response. Nevertheless, the research challenges established views on escalation while highlighting the need for further longitudinal research. This thesis will be a direct contribution to this identified need.

In their study of police data from Suffolk, Bland and Ariel (2015) did not find any evidence for statistically significant escalation in the severity of harm inflicted against victims of all domestic abuse. Using a crime harm index to attach a numerical score to the degree of harm caused by each offence (described in more detail below), the authors were able to measure any escalation in the severity of offending. Whilst analysis of the first 10 calls made by a victim to the police showed an upward trend of escalating harm, this was due to the high levels of harm present for those experiencing more than 3 events. Because most dyads did not experience any repeat incidents (let alone 3), Bland and Ariel (2015) argue that the majority of couples do not experience escalation in levels of harm. Amongst the 76 couples who experienced 80% of all harm, Bland and Ariel (2015) did not find any evidence of consistency in escalation over the course of each subsequent event. However, as the authors acknowledge themselves, this represents a low proportion of dyads and is a small sample for trajectory analysis (Bland and Ariel 2015). The findings add further evidence against the claim that abuse always gets worse.

## **2.5. Breaking down partner abuse: intimate terrorism and situational couple violence**

Bland and Ariel's (2015) analysis suggests there are different patterns of abuse amongst dyads. Johnson (2008) argues there are two distinct types of intimate partner violence: 'intimate terrorism' and 'situational couple violence'.

Intimate terrorism is almost exclusively perpetrated by men against women and is rooted in patriarchal traditions of men having the right to 'control their women'. Kelly and Johnson (2008) describe this pattern of power and control as 'coercive controlling violence'. They argue perpetrators use a combination of tactics including financial abuse, threats and social isolation, as well as violence, to exert power and control over their partner. The selection of tactics is dependent on what works for the abuser, which does not necessarily mean violence. However, as Tanha et al. (2010) found, coercive control can be a motivator for physical violence where control of the victim has not been achieved using other means. This finding illustrates the importance of including non-violent offending and incidents that do not necessarily constitute a crime in this thesis.

By contrast, there is no attempt to exert control over the relationship in cases of situational couple violence. Instead, Johnson (2008) suggests that conflict within couples sometimes escalates to one or more acts of violence. This violence could be minor or chronic with either party resorting to minor or severe violence.

Johnson's (2008) typology is salient because the difference between these two types of violence is also offered as an explanation for the reason feminist scholars have found the victims of partner abuse are mostly women at the hands of men, whilst family violence researchers have found greater symmetry in partner abuse between the sexes. Johnson (1995; 2006) explains the two sets of researchers use different sampling strategies, these sampling strategies identify different types of violence between partners and these types of violence differ in relation to gender.

Johnson (1995; 2006) found that studies showing predominantly male violence used data from agencies such as the police, courts and refuges. According to Johnson (2008), these sources are more likely to identify partner violence that is more frequent, more severe, have a greater likelihood of escalating and almost exclusively perpetrated by men seeking to exert power and control: intimate terrorism. Meanwhile, family violence researchers examined violence in a wider range of relationships including between parents and their children, siblings as well as intimate partners. These studies are large scale, representative surveys such as the NFVS, where the quantitative results of interviews suggest offending rates between the sexes are more symmetrical (Johnson 2008). Johnson (2008) argues these surveys uncover mostly situational couple violence.

However, both sampling strategies contain bias (Johnson 2008). Agency samples are drawn from lists of individuals who access a particular service and not only reflect the behaviour of offenders and victims, but also the recording practices of those organisations (Johnson 2008). Although the samples drawn for social surveys are representative, Johnson (2008) argues the final sample is not so because of the high rate of refusals. These refusals are likely to include a large number of couples who experience intimate terrorism on the basis that victims are too fearful of the consequences of participation, whilst offenders are concerned about the possibility of intervention by the police or another agency. If the distinction between intimate terrorism and situational couple violence is real then this research will uncover mostly intimate terrorism.

## **2.6. Measuring partner abuse: utilising the concept of harm**

Dobash and Dobash (2004) highlight further methodological challenges associated with the definition and measurement of 'violence' and 'abuse' in intimate relationships. They highlight the widespread use of an 'act based' approach in which violence, conflict and other abuse are listed and scored to make assessments about violence and non-violence. The most

commonly used example of this is the Conflict Tactics Scale (CTS) developed by Straus (1979).

The CTS was developed from face to face interviews to identify tactics used by respondents in family disputes based on three modes of dealing with conflict: reasoning which involves rational discussion, verbal aggression and violence (Straus 1979). Although there is evidence attesting to the reliability and validity of the CTS (Straus 2007), it does not use any system of weighting to distinguish between the nature and consequences of the acts which make up the three modes. Furthermore, the scale only requires that one act of violence is reported to classify an individual as violent. This classification means those responsible for repeated violent attacks (no matter how serious) and those who perpetrate one act (no matter how minor) are all labelled as violent (Dobash and Dobash 2004).

As the CTS recognises, not all partner abuse is violent, yet much of the existing literature cited thus far focuses on this aspect of abusive relationships. One of the reasons research has not examined non-violence is the challenge presented by defining behaviour described as 'psychological' and 'emotional' abuse (Dobash and Dobash 2004). These methodological challenges raise fundamental questions about how accurately existing research measures violence and non-violence generally as well as escalation in severity. The research presented in this thesis includes violence and non-violence as reported to the police but uses the legal framework to distinguish between the two categories rather than researcher led definitions.

Other methods for measuring severity have focused on the concept of 'harm', which developed as a more meaningful way of reporting crime than traditional counts. The problem of traditional counts of crime is that every offence carries the same weight when reported in official statistics. For example, an incident of theft carries the same weight as sexual assault when, by any standard of interpretation, they are clearly not equal in their gravitas. Sherman et al. (2016) argue in favour of an index based approach yielding a single bottom line of value.



Whilst the concept of crime harm is not new, it has hitherto failed to gain any traction in its operationalisation.

Sellin and Wolfgang (1964) and Wolfgang et al. (1985) tested public opinion using panel and public surveys in which they asked respondents to rank the seriousness of a range of crimes to create a severity index. Their research found general agreement amongst those surveyed when ranking seriousness. This approach is severely limited because the rank ordering does not distinguish how much more serious (or harmful) one offence is over another. In the UK, Ignatans and Pease (2016) suggest this could be achieved by asking respondents to the annual CSEW for their judgements of crime seriousness. There are limitations in using any victimisation surveys for the purposes of creating an index of harm. Firstly, they do not capture the most serious events such as murder (Sherman et al. 2016) and, secondly, changes in public opinion would make long term comparisons unstable (Sherman et al. 2014).

Equally fluid are estimates of the average financial costs of individual crime types which require annual readjustment (Ratcliffe 2015; Sherman et al. 2014). In England and Wales, Dubourg and Hamed (2005) calculated the costs of each crime type according to the physical and emotional consequences to the individual as well as the costs to a range of public services. These calculations are so complex that costs are provided for very broad offence categories that do not take account of the variations between crime types (Ratcliffe 2015; Sherman et al. 2014).

This last point has been addressed by scholars who have used court sentencing as a metric for an index. In Canada, a Crime Severity Index was developed with each offence being assigned a seriousness 'weight' determined by the actual sentence handed down by the court (Wallace et al. 2009). This method, however, also fails to provide a consistent baseline. Sentencing is a more complicated decision made on the basis of a number of factors, including the prior conviction history of the defendant, point at which they were convicted

and any mitigation, rather than the harm caused by the offence (Sherman et al. 2016). Ratcliffe (2015) proposed the use of offence gravity scores provided to judges across Pennsylvania. This method is independent of the police and allows the weighting of specific categories of offence. However, Ratcliffe's (2015) proposal is based on a very narrow score ranging from 1 for a misdemeanour to 14 for murder. This ordinal scale does not address the need to have a consistent ratio that measures the difference in harm between the various offences.

Sherman et al. (2014; 2016) propose an alternative index using the sentencing starting point for an offender convicted for the first time. Each offence is given a value equivalent to the number of days imprisonment imposed on offenders with no prior criminal history. This is referred to as the Cambridge Crime Harm Index (CHI). Using the sentence starting point has the advantage of avoiding the consideration of other factors when sentencing. However, Ignatans and Pease (2016) argue this approach is limited in that it removes judgements about severity from the victims of crime because the guidelines are prepared by a group of experts with experience of higher courts and detected crimes. Ignatans and Pease (2016) also suggests that sentence starting points might not be a true reflection of harm if the judiciary exercise their power to routinely adjust sentence length according to aggravating and mitigating factors.

Nevertheless, the Cambridge CHI is the only method capable of being translated into practice quickly and is applied in this thesis. The Cambridge CHI is democratic in the sense that UK Parliament passes the decision on sentencing to a Council of judges and other experts, reliable in providing a consistent measure and can be utilised without additional funding (Sherman et al. 2016). Furthermore, this thesis is concerned with incidents reported to the police and with demonstrating the harm caused by intimate partner abuse rather than a simple count of the crimes that have been reported. In applying the Cambridge CHI, the

reported levels of harm are based on an objective measure using a consistent ratio that measures the difference in harm between the various offences.

## **2.7. Summary**

This chapter has drawn on research from the UK and elsewhere to demonstrate the widespread nature of intimate partner abuse. However, beyond this most basic understanding of the extent of partner abuse, there is wide variation in the estimates of the prevalence and incidence of the abuse reported as well as challenge to the notion that abuse escalates in severity. The review of the literature demonstrates that the choice of research methodology goes some way in explaining the different findings of existing research.

Although the literature reveals some noticeable gaps between self-reported and police recorded data concerning domestic abuse, finding better ways of examining police information could enable the police to target harm more effectively. This examination of police information also needs to adopt an approach that distinguishes between the severity of different types of crime rather than rely on a count of offences. This thesis applies the Cambridge CHI to a study of intimate partner abuse with a focus on perpetrators that examines repeat offending against both the same and different partners. It does so by using both violent and non-violent incidents, which is absent in much research but particularly important in the context of research examining coercive control. Ultimately, the aim of this thesis is to establish whether the police can identify opportunities to target perpetrators of partner abuse using police data.

## Chapter 3: Methodology

### 3.1. Introduction

This chapter describes the methods used to answer the research questions. It begins by explaining the source of the data used for this research, its limitations, but also a justification for the decision to use official police data. This chapter goes on to set out the definitions applied in this research. The nature and quality of the data extracted from the TVP crime recording system, known as NICHE RMS (Records Management System), is explored.

### 3.2. Using official police data: The source for this research

Data for the study was taken from NICHE covering the period 1<sup>st</sup> January 2010 - 1<sup>st</sup> January 2016. In total there were 192,173 incidents contained within the initial dataset. As the previous chapter identified, there are some limitations associated with the use of official statistics for measuring domestic abuse. These problems include the under reporting of incidents to the police as well as the recording practices of the organisation (Bachman and Schutt 2013). Whilst there are cases of partner abuse that are not reported to the police, it is very difficult to know exactly how much is hidden because there is no data available to show what is being missed. As Payne and Gainey (2002) argue, there is no single best data collection strategy for the study of domestic abuse as each has its own strengths and limitations. But the importance of using official data is underlined by Johnson (1995) who says:

“If the arguments [concerning the limitations of using large scale surveys]... are correct, random sample surveys cannot produce estimates of the prevalence of patriarchal terrorism. We must develop methods of collecting and extrapolating effectively from shelter, hospital, police and court data” (p. 292).

Given this research is concerned with targeting perpetrators known to the police, the use of a police dataset is the most appropriate approach. The procedures TVP has in place for

the systematic collection and auditing of information, particularly in dealing with reports of domestic abuse strengthens the justification for using police data.

This systematic data collection for incidents of domestic abuse begins at the point of a call for service. Although calls to TVP are initially logged in a different system known as 'Command and Control', an officer must attend every report of domestic abuse in person to ascertain what happened, who was involved and complete a risk assessment whether a crime has been reported or not. Even before an officer attends a skeletal NICHE report is generated and flagged as domestic abuse. This flag can be used as a search criterion to allow for the extraction of incidents specifically identified as cases of domestic abuse. After an officer has attended, further information is relayed to a police enquiry centre to finalise the NICHE report. If there is a crime, the appropriate offence is recorded. However, if there is not a crime, a NICHE record is still completed and classified as non-recordable incident. The content of non-crime incidents mirrors the information included in incidents recorded as a crime. As well as helping to ensure cases of domestic abuse are recorded consistently and ethically, this means TVP hold a large amount of data concerning domestic abuse in one system.

NICHE reports also undergo a review by police supervisors and subsequently a team of auditors to ensure compliance with the National Crime Recording Standards (NCRS) and Home Office Counting Rules (HOCR). The NCRS is victim focussed and seeks consistency in recording across police forces in England and Wales by applying legal definitions of crime to reports made. The HOCR specifies what type and how many offences should be recorded by the police for each incident. These procedures ensure there is a universal standard to the recording of crime in England and Wales.

### **3.3. Key definitions applied in this research**

#### **3.3.1. Partner abuse**

Definitions of what constitutes domestic abuse abound in both the academic literature and professional practice (Groves and Thomas 2014). The specific definition of partner abuse used in this research is:

‘Any incident or pattern of incidents of controlling, coercive, threatening behaviour, violence or abuse between those aged 18 or over who are, or have been, intimate partners regardless of gender or sexuality. The abuse can encompass, but is not limited to psychological, physical, sexual, financial and emotional.’ (Home Office definition [adapted], 2013)

This definition follows the UK cross-government classification of domestic abuse<sup>1</sup> but excludes abuse between non-intimate family members. Although more narrowly focused, it captures a wide pattern of behaviour associated with incidents of partner abuse whether they are criminal or non-criminal. Across the period 1<sup>st</sup> January 2010 – 1<sup>st</sup> January 2016, a total of 235,918 incidents of domestic abuse (including non-intimate family members) were recorded by TVP. Of these incidents, 162,258 (68%) were classified as cases involving intimate partners.

Including a broad range of behaviours is important since perpetrators make use of multiple control tactics to control their partners, not just violence (Johnson 1995). Payne and Gainey (2002) argue it is better for definitions of family violence to be inclusive rather than exclusive. The definition applied in this research also incorporates those who live apart as well as together, regardless of whether they are still in a relationship or separated, and is gender neutral and inclusive of same-sex relationships. The UK cross government definition is used by TVP to determine which incidents are classified on the crime recording system as cases of domestic abuse. Using the same definition not only ensures that both violent and

---

<sup>1</sup> This definition changed in 2012 to include 16 and 17 year olds. The new definition also makes explicit reference to patterns of controlling, coercive or threatening behaviour. An offence of coercive control was created in 2015 but not enforceable until 31/12/15.

non-violent abuse are included, but also provides consistency of measurement between what is recorded by TVP and included in this research. The only difference is this research examines only intimate partner abuse, but these cases are easy to isolate since TVP records the relationship between victim and suspect on the crime recording system.

The UK cross government definition changed in 2012 to include those aged 16 and 17 years. In order to ensure the analysis is consistent, any incidents where the victim or perpetrator was under 18 years were excluded from the data extracted from the crime recording system.

### **3.3.2. Victim and suspect**

The TVP crime recording system requires that every individual listed in a NICHE report is assigned a role. Although an individual can be assigned more than one role, for the purposes of this research the important designations are 'victim' and 'suspect'. These terms are common parlance in policing and distinguish between the person who appears to have suffered some form of harm (victim) and the person responsible for causing harm (suspect). Whilst the status of suspect does not imply guilt, using recorded offences as the measure of offending and recidivism avoids more conservative estimates of actual behaviour implicit in measures that use charges or convictions (Hanson et al. 2014). Very few cases of domestic abuse result in a prosecution so relying on convictions would eliminate a large number of incidents. Excluding these cases would almost certainly bias the results because prosecuted cases (let alone those leading to conviction) are likely to be quite different from those that are not.

### **3.3.3. Repeat offending**

In this research the definition of a repeat offender is an individual identified as a suspect in two or more incidents, whether this amounts to a criminal offence or not. In this research where the two year follow up period is used, a repeat offence (if there is one) will be identified using a period of two years (731 days) from the date of the first incident appearing

in the dataset<sup>2</sup>. Although it could be argued that this follow up period is limited, especially where a perpetrator is given a long sentence of imprisonment, it is worth noting that of all domestic abuse incidents reported to TVP between 1<sup>st</sup> May 2015 and 30<sup>th</sup> April 2016, just 7% of cases were prosecuted by charging the perpetrator to court<sup>3</sup>. Data from the Crown Prosecution Service<sup>4</sup> (2016) shows that of all domestic abuse cases sent to court in England and Wales in the financial year 2014 - 2015, 26% did not result in conviction. As such hardly any perpetrators will have been imprisoned at all. The problem of using a longer follow up period is that the statutory and crime recording landscape has changed so much in recent years that to go further back in time would not be comparable today. The 731 day follow up will therefore enable examination of what happens in the immediate aftermath of an incident and the medium term, which is important for the purposes of targeting resources.

### **3.4. The dataset, issues and limitations**

The variables added to the dataset included offence classification; date and time the incident was reported; date and time of the incident. Demographic details relating to victims and suspects including age at the time of the incident, sex and self-defined ethnicity were also part of the dataset. There were four issues identified with the 192,173 incidents included in the initial dataset which had to be addressed before carrying out any analysis.

#### **3.4.1. Issue 1: Relationship of suspect to victim**

One of the key variables used to generate the dataset required to answer the research questions was the relationship of the suspect to the victim. The original dataset included the full population of incidents where the relationship was identified as an intimate partner, but also those where this field was blank. As the study focuses on partner abuse, only incidents

---

<sup>2</sup> The follow up period is 731 days because dataset includes figures from a leap year in 2012.

<sup>3</sup> Includes recorded crimes and non-crime incidents. Although it is impossible to charge a non-crime incident, it is pertinent to use the overall number of incidents as the base figure because individuals identified as perpetrators in non-crime incidents will be included in this research.

<sup>4</sup> The Crown Prosecution Service (CPS) is the principal prosecuting authority in England and Wales. They decide every domestic abuse case where a charge is being considered.



where this relationship was recorded are included in the analysis to ensure the findings are reliable.

Table 1 : Records where relationship not recorded

Year	Blank records	Total incidents	% blank
2010	1,920	30,254	6.3
2011	1,988	30,337	6.6
2012	2,097	31,058	6.8
2013	2,144	31,676	6.8
2014	9,234	33,066	27.9
2015	12,532	35,782	35.0
<b>Total</b>	<b>29,915</b>	<b>192,173</b>	<b>16.0</b>

As Table 1 shows, the relationship status was blank in a relatively small number of cases between 2010 and 2013. However, in 2014 and 2015, the number of incidents where the relationship of the suspect to the victim was not recorded is much higher (27.9% and 35.0% respectively). This change coincided with the introduction of NICHE RMS from a crime recording system known as CEDAR on 29<sup>th</sup> April 2014. The new system did not initially require staff to complete the relationship status field at the point the incident was created. The only way to correct this would be to manually check each of the 29,915 incidents to establish the nature of the relationship. This was not feasible so all were excluded from analysis.

Upon further examination of the cases where relationship was missing, it was established the majority of cases were non-crime incidents. Non-crime incidents have been included in the study because they are numerous and require the deployment of police resources. However, as there is no sanction imposed against the named suspect they are attributed a harm score of 0.1 days, representing the lowest score possible in the Cambridge CHI.

Table 2 : Non-crime incidents where relationship field blank

Year	Non-crime incidents	Total blank records	%	Total score for missing harm
2010	1,302	1,920	67.8	130
2011	1,364	1,988	68.6	136
2012	1,430	2,097	68.2	143
2013	1,511	2,144	70.5	151
2014	7,427	9,234	80.4	743
2015	10,731	12,532	86.0	1073
<b>Total</b>	<b>23,765</b>	<b>29,915</b>	<b>79.0</b>	<b>2,377</b>

As Table 2 shows non-crime incidents make up 79% of the cases where the relationship status is blank. Although in 2014 and 2015 a large number of incidents were excluded from analysis, the total amount of harm removed from the dataset scores just 2,377 days out of a total harm score of 3,407,372 days (0.07%) in the whole dataset. These incidents also include cases that involve familial relationships other than intimate partner, so the overall loss would be smaller than this total.

### 3.4.2. Issue 2: Perpetrator details

A second key variable required for the analysis was the inclusion of perpetrator details. Although data were converted from the previous crime recording system into NICHE, the details of individuals were not consolidated. This meant that some individuals had two unique identifiers from the two separate systems. In addition, a visual inspection indicated that in some cases the same person was given a different unique identifier because of an error in the spelling of their name or their date of birth. This was corrected by identifying those with multiple identifiers based on their PNCID<sup>5</sup> to create a single unique identifier. However, as not all suspects were arrested, a further check was required using date of birth, surname and first initial to find a match and allocate a single unique identifier. A degree of tolerance was allowed for date of birth in case the day and month were entered the wrong way around. Although this approach is not flawless, the only alternative would have been to

<sup>5</sup> A PNCID is generated whenever someone is arrested for the first time. A suspect will only ever have one record created which is checked using biometric data each time they are arrested.

manually match the individual records. Within the initial dataset there also were incidents where no perpetrator details were recorded at all.

Table 3 : Incidents where no perpetrator listed

Year	Incidents with no perpetrator	Total incidents	% with no perpetrator
2010	1,360	28,334	4.8
2011	1,217	28,349	4.3
2012	1,325	28,961	4.6
2013	1,507	29,532	5.1
2014	10,016	23,832	42.0
2015	4,719	23,250	20.3
<b>Total</b>	<b>20,144</b>	<b>162,258</b>	<b>12.4</b>

As Table 3 shows, a large amount of data is missing for 2014 and 2015 compared with previous years which is the result of the change in crime recording system. Once again, further analysis showed that the majority of cases where this information was missing were non-crime incidents. In 2014, 8,285 cases (82.7% of all incidents in 2014 with no perpetrator) were non-crime incidents, representing a crime harm score of 829 days (0.02% of the total crime harm score in the dataset). In 2015, the number of non-crime incidents was 3,889 (82.4% of all incidents in 2015 with no perpetrator), which is a total crime harm score of 472 days (0.01% of the total crime harm score in the dataset). As the research focuses on tracking perpetrators over time, all 20,144 cases where the details of an offender were not recorded were excluded.

### 3.4.3. Issue 3: No-crimes and non-personal crimes

The data also included incidents that were 'no crimed'. This term is different to the categorisation 'non-crime incident'. No crimes are cases initially reported as a crime but, following initial investigation, it is established no crime had been committed. These cases have been excluded because they include cases where there was not even a domestic dispute (for example, an allegation of theft where the property alleged to have been stolen is found). In addition, a number of offence classifications appeared in the dataset which by their very

nature cannot be domestic crimes (see Annex A). These incidents appear in the dataset because an officer has selected the domestic abuse flag on NICHE RMS. This can happen in error or because the offence was committed whilst an incident of domestic abuse was under investigation. These incidents have also been removed from the analysis.

Table 4 : Incidents where no crime occurred or was non-personal

Year	Blank records	Total incidents	%
2010	2	26,974	0.01
2011	4	27,132	0.01
2012	8	27,636	0.03
2013	4	28,025	0.01
2014	10	13,816	0.07
2015	26	18,531	0.14
<b>Total</b>	<b>54</b>	<b>142,114</b>	<b>0.04</b>

#### 3.4.4. Issue 4: Delayed reports

The dataset also included incidents reported to the police a considerable time after they had occurred. As this thesis is concerned with escalation in harm over a period of 731 days, any incidents that took place more than 90 days before being reported to the police were removed.

Table 5 : Incidents which occurred more than 90 days before date reported

Year	Older than 90 days	Total incidents	%
2010	148	26,972	0.55
2011	167	27,128	0.62
2012	132	27,628	0.48
2013	192	28,021	0.69
2014	144	13,806	1.04
2015	279	18,505	1.51
<b>Total</b>	<b>1,062</b>	<b>142,060</b>	<b>0.75</b>

### 3.4.5. Summary of dataset

The table presented below shows the final breakdown of the data.

Table 6 : Summary of all exclusions

Exclusion criteria	Number of incidents excluded at each stage	Cumulative number of incidents in data set	Cumulative %
	-	192,173	100
No relationship recorded	29,915	162,258	84.4
No perpetrator listed	20,144	142,114	74.0
Non-personal crime	54	142,060	73.9
Non-recent reports	1,062	140,998	73.4

The final dataset is therefore comprised of a total of 140,998 incidents.

Table 7 : Final number of incidents

Year	Total incidents
2010	26,824
2011	26,961
2012	27,496
2013	27,829
2014	13,662
2015	18,226
<b>Total</b>	<b>140,998</b>

### 3.5. Answering the research questions

Whilst there are gaps in the literature concerning domestic abuse, the previous chapter drew attention to the range of studies that contribute to greater understanding of the phenomenon. This provides a basis on which the variables that appeared important to this study were selected using a fixed research design (Robson 2011). This research is a descriptive study concerned with improving understanding of perpetrators of domestic abuse by answering the following research questions:

*(1) What is the frequency, demographic profile and year on year average crime harm value of partner abuse re-offending?*

The aim of this question is to gain an understanding of the extent of partner abuse re-offending in TVP, by describing how many times such incidents occur by counting the frequency of reports and measuring how much harm is caused. In order to find re-offending it is necessary to locate the first incident involving each unique perpetrator in the dataset and then track them over time. In the case of the 731 day follow up the latest first incident was recorded on 31<sup>st</sup> December 2013, leaving a full 2 years of data to locate subsequent offending.

In addition, key demographic data including age, sex and ethnicity are used to show the profile of repeat perpetrators of partner abuse. Using the Cambridge CHI developed by Sherman et al. (2016), each crime is given a score by reference to a lookup table for each offence type in the dataset (see Annex A). The CHI value is applied to each row of data based on the classification of the incident recorded by TVP. Adding a value allows for the average harm inflicted by all perpetrators of partner abuse in TVP to be calculated overall as well as for each subsequent incident within the follow up period.

*(2) Does partner abuse get worse or escalate over time?*

This question examines whether the repeated harm inflicted by perpetrators of partner abuse increases in seriousness over the course of the follow up period. Seriousness is measured using the Cambridge CHI, with an increased score indicating an escalation in harm. This elevated score can occur in two different ways. Firstly, by a perpetrator committing more serious offences or, secondly, increasing in frequency such that the cumulative score is higher than the first incident in the dataset. If multiple offences took place at the same time, the most serious offence is recorded (as per the NCRS guidelines issued to forces in England and Wales) and the crime harm score for the most serious offence applied. Using the index allows the CHI scores for every perpetrator of any partner abuse to be tracked across each separate incident in the follow up period.

The data will be examined in two different ways. Firstly, the top 50, 100 and 500 most harmful perpetrators from 2010 will be identified and their harm scores tracked across the subsequent five years of the dataset. Secondly, the first incident for all perpetrators (regardless of harm score) involved in an incident between 1<sup>st</sup> January 2010 and 31<sup>st</sup> December 2013 is identified and a fixed 731 day follow up period applied to measure the extent of subsequent crime harm. Using data from the 731 day follow up, the issue of whether abuse gets worse is also measured by examining how likely perpetrators are to be involved in further incidents using conditional probability analysis as well as how quickly, in days, repeat incidents occur.

*(3) How many unique victims do partner abuse offenders have?*

This question explores whether there is evidence of serial offending within the specific context of intimate partner relationships. As each row in the dataset represents an incident and each offender and victim has their own unique identifier, this can be achieved by cross tabulating each perpetrator against a count of each unique victim associated with them. This will be analysed for the dataset as a whole and for the 731 day follow up.

### **3.6. Conditional probability**

Conditional probability analysis will be undertaken to explore the conditional probability of incident (B) in relationship to incident (A) where the probability that incident (B) occurs given that incident (A) has already taken place. The probability of (B) given (A) is calculated using the following formula:

$$P(B|A) = \frac{P(A \text{ and } B)}{P(A)}$$

In this research this method is used to examine the probability of perpetrators being involved in further incidents as well as the likelihood of offenders having multiple victims.

## Chapter 4: Results

This chapter begins by examining the frequency of partner abuse and contrasts between crime count and harm. This is followed by exploration of the harm caused by unique perpetrators, with particular focus on a cohort of high harm offenders from 2010 to examine patterns of behaviour in the years that follow through to 2015. The final section of this chapter focusses on the analysis of re-offending using crime harm scores within a fixed follow up period of 2 years (731 days) from the initial incident.

### **4.1. Frequency of partner abuse overall: 2010 - 2015**

The 140,998 incidents which make up the data set for this research include both crime and non-crime incidents between intimate partners, reported to Thames Valley Police between 1<sup>st</sup> January 2010 - 1<sup>st</sup> January 2016. Incidents recorded as crimes are those cases where a criminal offence appears to have been committed. Non-crime incidents are cases where the police have been called to deal with a dispute between partners, but where no crime has taken place (such as a verbal argument between two individuals inside their home address). It is important to note these figures represent the distribution of incidents in the data set for this research, and do not contain all incidents of partner abuse reported to Thames Valley Police between 2010 and 2015. As noted in the previous chapter, a number of incidents had to be excluded from the research, particularly in the years 2014 and 2015, which is attributable to data quality issues related to a change in the crime recording system.



Figure 1 : All incidents 2010 - 2015

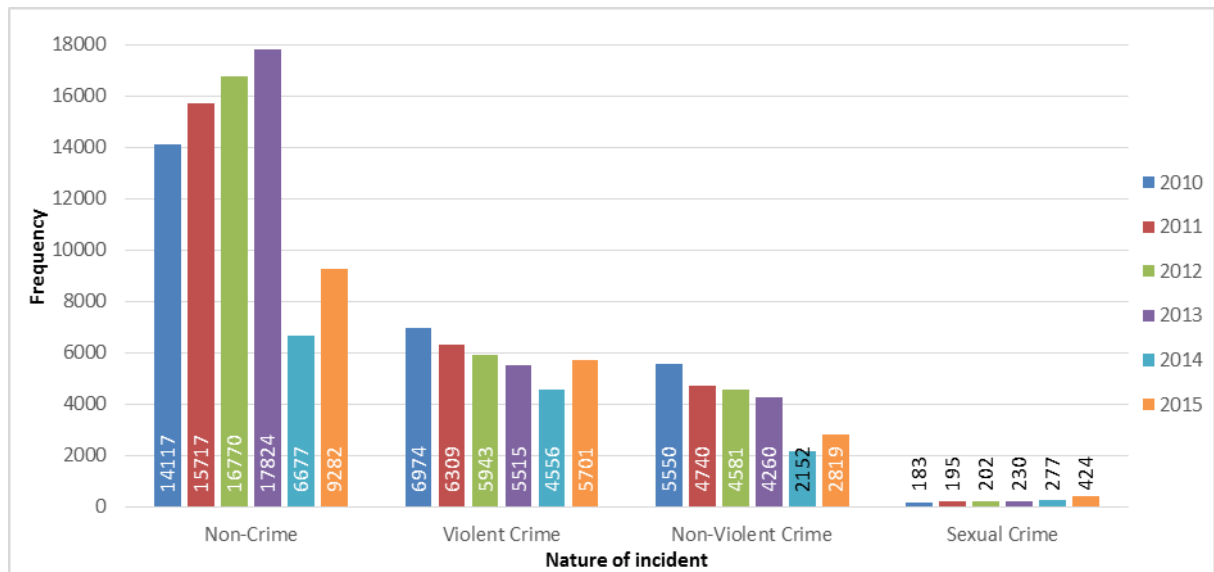
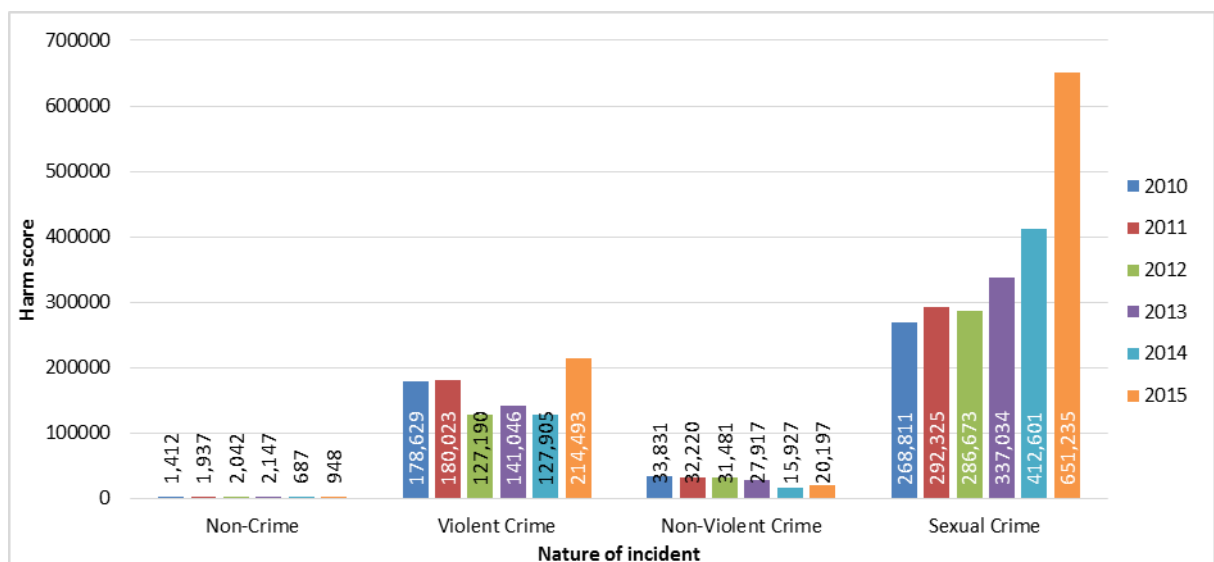


Figure 1 shows non-crime incidents, given a crime harm value of 0.1 days, account for 57% of the 140,998 incidents of partner abuse reported to TVP across the period 2010 - 2015. Non-violent crime accounts for 17% of all incidents contained within the dataset. Violent crimes make up 25% whilst sex crimes account for the smallest proportion of incidents at just 1%.

Figure 2 : Crime harm score for all incidents 2010 - 2015



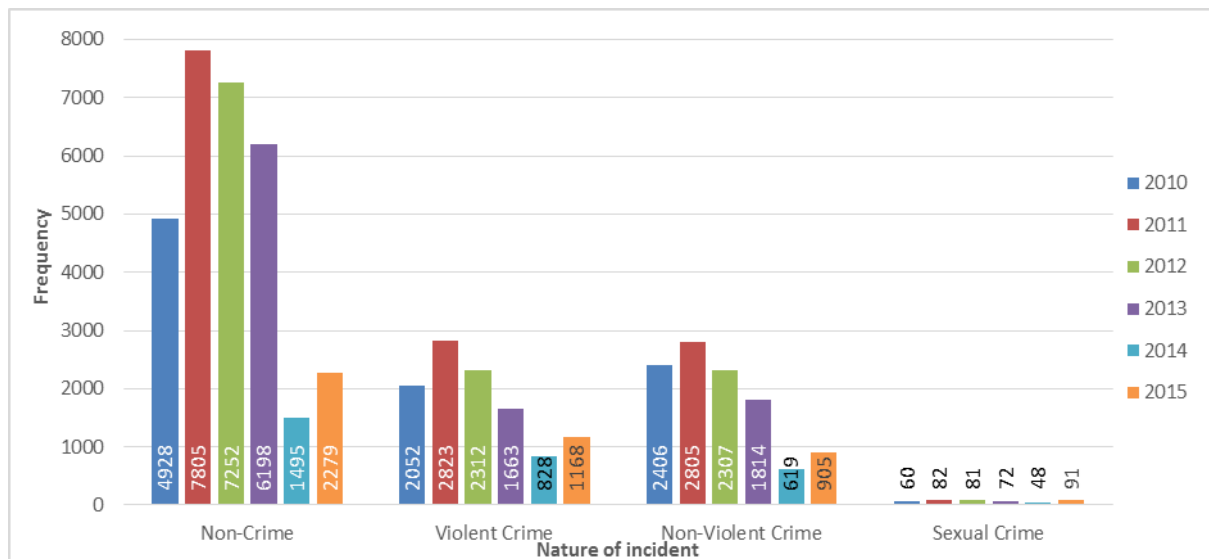
However, when the Cambridge CHI weighting is applied the distribution of incidents a strikingly different profile emerges. Figure 2 shows that 2,248,679 days out of a total of

3,407,372 days of crime harm (66%) are accounted for by sex crimes. Despite being high in frequency, non-crime incidents account for only 9,173 days of all crime harm (0.3%) between 2010 and 2015. Violent incidents represent 807,286 days (24%) of all harm and non-violent incidents account for 161,573 days (5%) of total harm over the research period.

#### 4.2. Frequency of repeat offending: 2010 - 2015

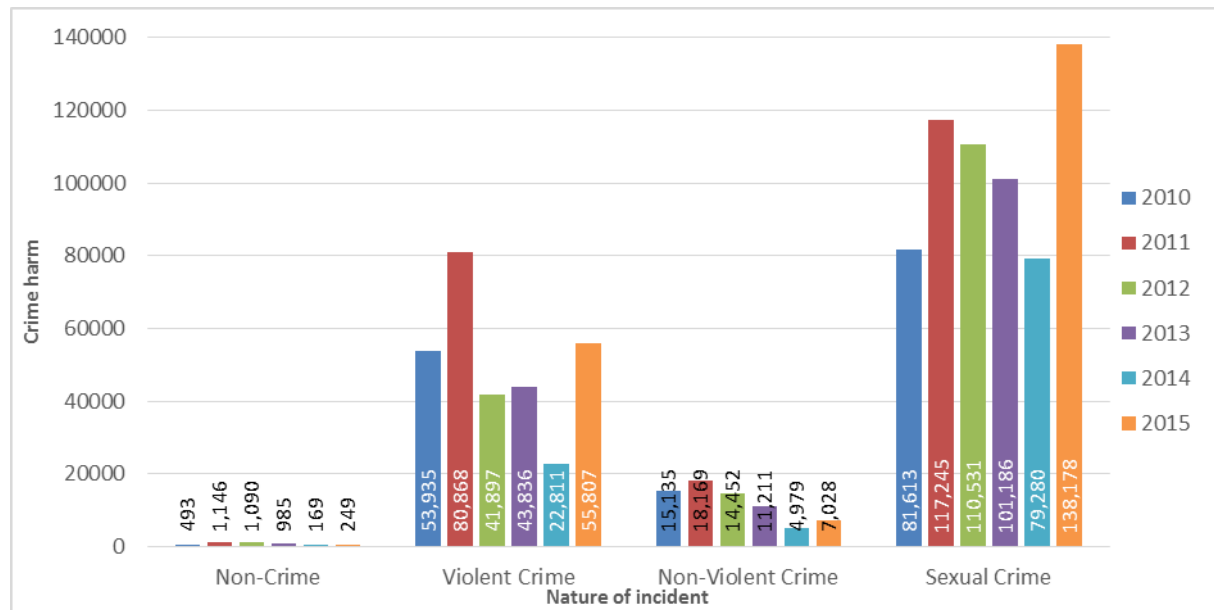
Of the 140,998 incidents included in the analysis, 52,093 (37%) were repeat incidents involving the same perpetrator. The other 88,905 incidents include the first time offending of the repeat offenders as well those who offended only once within the period 2010 – 2015.

Figure 3 : Repeat incidents 2010 - 2015



As Figure 3 shows, the distribution of repeat incidents of intimate partner abuse is very similar to the overall pattern of offending for intimate partner abuse as a whole. Of all repeat incidents between 2010 and 2015, non-crime incidents account for 29,957 incidents out of all 52,093 repeat incidents (58%). There were 10,856 non-violent repeat crimes (21%) within the data set. Violent repeat crimes total 10,846 (20%), whilst sex crimes are again the lowest in number with a total of 434 (1%) repeat crimes being sexual in nature.

Figure 4 : Crime harm score for repeat incidents 2010 - 2015



The application of the Cambridge CHI to the repeat cases again shows the contrast between the distribution of frequency and severity of harm. Figure 4 shows the majority of repeat crime harm, 628,032 days out of a total repeat harm score of 1,002,292 (62.6%), is accounted for by sex crimes. Non-crime incidents account for just 4,132 days of crime harm (0.4%) out of the total repeat crime harm score. Violent incidents total 299,154 days of crime harm (30%) and non-violent incidents account for 70,973 days (7%) of total repeat harm over the research period.

### 4.3. The profile of partner abuse repeat perpetrators in TVP: 2010 – 2015

Analysis of key demographic data (sex, age and ethnicity) provides contextual information about the spread of reported repeat partner abuse offending in the Thames Valley.

Table 8 : Demographic data from Office for National Statistics (ONS) Census 2011: Thames Valley and England & Wales

	Thames Valley	England & Wales
<b>Age</b>		
0-17	23%	21%
18 – 64	62%	62%
65+	15%	17%
<b>Sex</b>		
Male	49%	49%
Female	51%	51%
<b>Ethnicity</b>		
White	85%	86%
Black or minority ethnic group	15%	14%

Table 8 compares the population covered by TVP with England and Wales in respect of age, sex and ethnicity based on data from the ONS Census carried out in 2011. Table 8 shows the demographic profile of TVP is remarkably similar to that of England and Wales as a whole.

Table 9 : Perpetrator age and sex for repeat incidents 2010 - 2015

Age (at time of incident)	Male	Female	Not known	% Male	% within age band
18 – 27	13,480	2,492	-	84.4%	30.66%
28 – 37	14,057	2,390	6	85.4%	31.58%
38 – 47	11,099	1,939	2	85.1%	25.03%
48 – 57	4,254	732	4	85.2%	9.58%
58 – 67	1,157	149	-	88.5%	2.51%
68 – 77	201	41	-	83.1%	0.46%
78 – 87	70	7	-	90.9%	0.15%
88 – 97	7	6	-	53.6%	0.02%
<b>Total</b>	<b>44,325</b>	<b>7,756</b>	<b>12</b>	<b>85.0%</b>	<b>100%</b>

As Table 9 demonstrates, overall, the majority of repeat incidents (85%) are perpetrated by men. The proportion of male to female perpetrators varies little between the age groups with the lowest proportion of male offenders (other than the 88 – 97 age group where the number of incidents is only 13 and is therefore likely to produce unreliable measures) being 83.1% for those aged 68 – 77 years and the largest being 90.9% for those in the age category of 78 – 87 years.

Figure 5 : Perpetrator ethnicity for repeat incidents 2010 - 2015

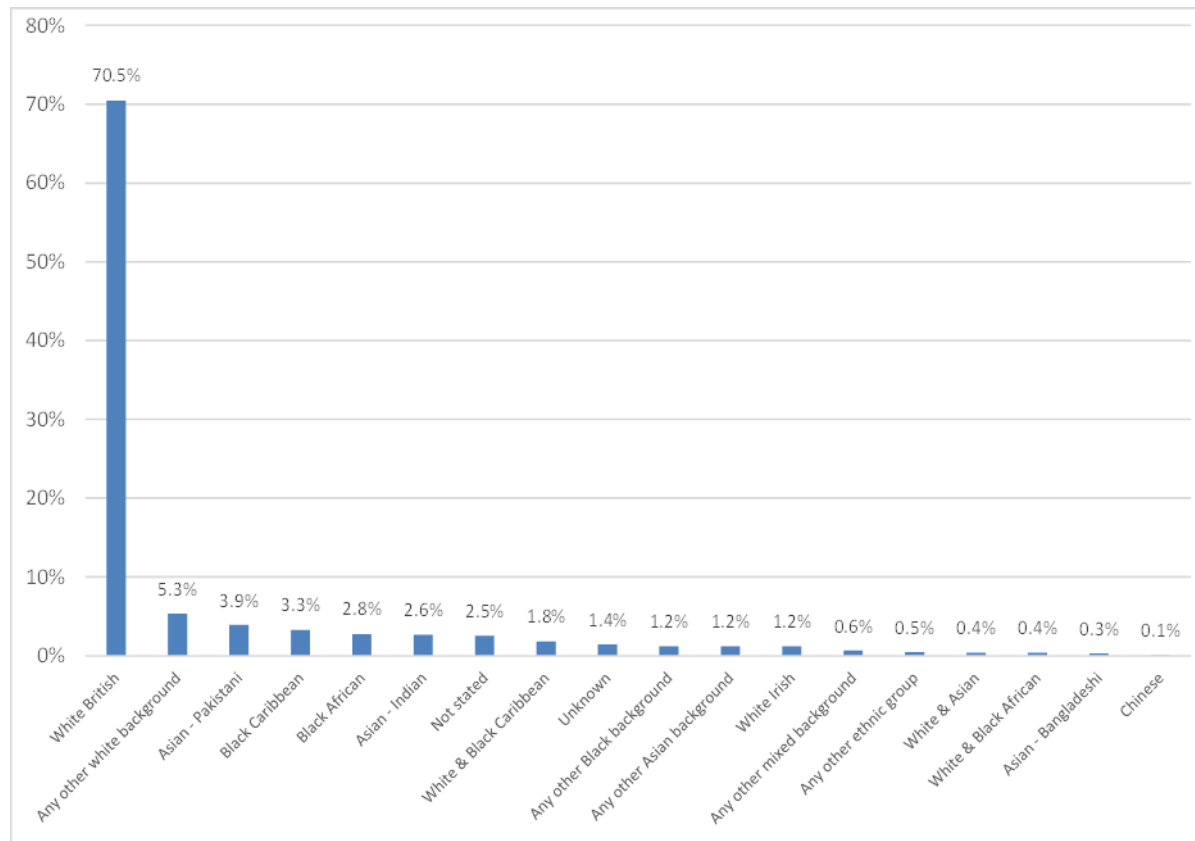


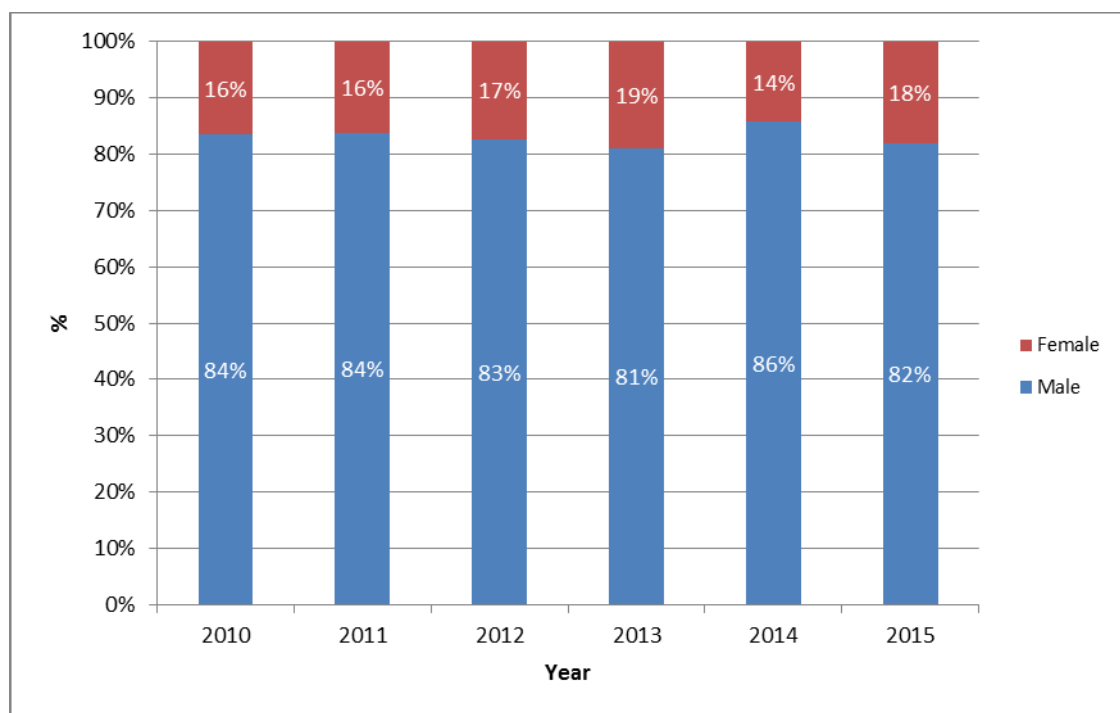
Figure 5 shows that most repeat perpetrators of intimate partner abuse in the Thames Valley are 'White' (75.8%), with 24.2% being from minority ethnic groups.

Whilst an examination of all repeat incidents provides contextual insight into the distribution of crime and harm amongst intimate partners, it does not enable analysis of patterns of behaviour amongst unique repeat perpetrators responsible for more than one incident.

Table 10 : Unique repeat perpetrators for all incidents<sup>6</sup>

	2010	2011	2012	2013	2014	2015
Male	4,003	5,798	5,504	4,417	1,842	2,220
Female	787	1,120	1,148	1,028	306	484
Unknown	-	1	2	3	-	1
<b>Total</b>	<b>4,790</b>	<b>6,919</b>	<b>6,654</b>	<b>5,448</b>	<b>2,148</b>	<b>2,705</b>

Figure 6: Unique repeat perpetrators by sex



As Table 10 indicates the majority of unique repeat perpetrators are men. Figure 6 shows the difference in the proportion of male and female repeat perpetrators and the consistency over the 6 years covered by the data. The proportion of male repeat offenders ranges between 81% and 86% of unique perpetrators.

<sup>6</sup> Each year is presented in isolation in this table. A unique offender is counted only once in each year, but the same perpetrator could appear in a different year.

#### 4.4. Average crime harm: 2010 - 2015

In this section the average crime harm scores of the 52,093 repeat incidents are presented alongside the average harm scores for all 140,998 incidents of intimate partner abuse reported to TVP between 2010 and 2015.

Figure 7: Unique perpetrator average crime harm scores

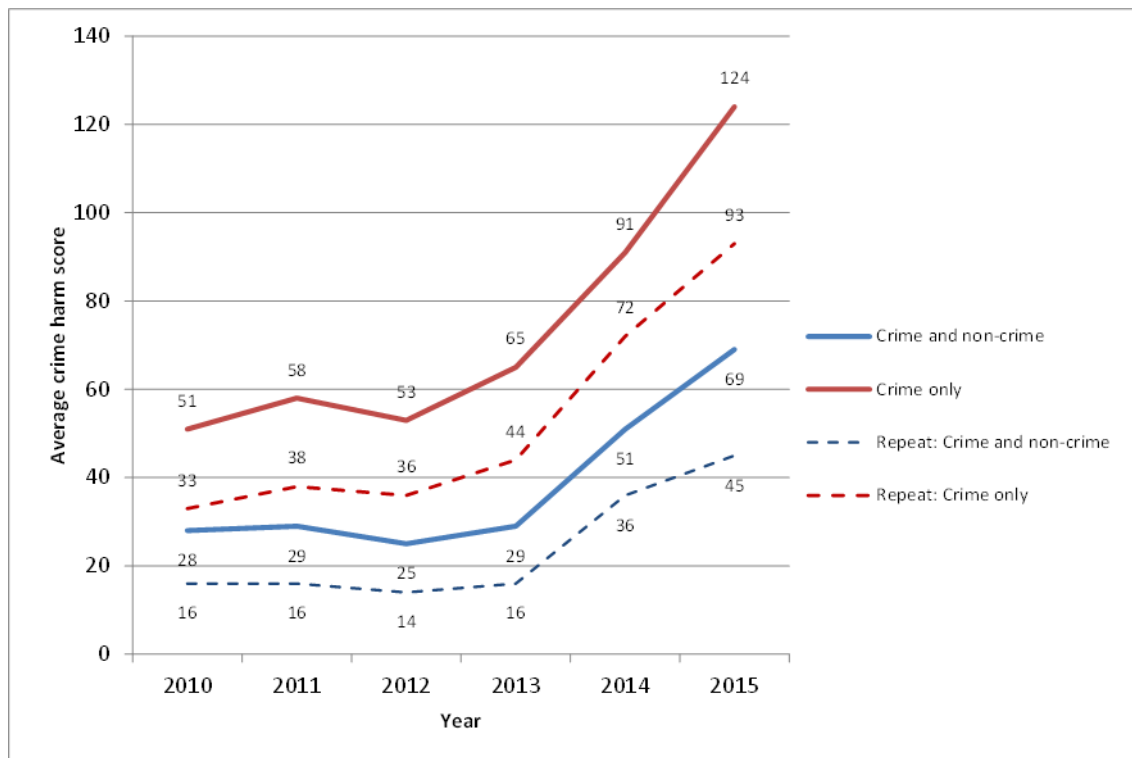


Figure 7 shows average crime harm scores were relatively stable between 2010 and 2012. However, in 2013 the average harm scores increased steeply and continued to rise through to 2015.

The average harm score for all crime and non-crime incidents increased by 138% from 29 days in 2013 to 69 days in 2015. In 2010 the average harm score was 28 days but by 2015 reached an average of 69 days, marking an increase of 146%. In the case of crime only incidents, they increased by 91% from an average of 65 days in 2013 to an average of 124 days in 2015. The average score of 124 days for crime only incidents in 2015 marks an increase of 143% from an average score of 51 days in 2010.



While the trend for all incidents shows a sharp increase in crime harm, a crucial sub-set of these values are those where the perpetrator has been involved in multiple instances of intimate partner abuse. In 2010 and 2013, the average crime harm score for repeat crime and non-crime incidents was 16 days. By 2015 this increased to an average of 45 days, which represents an increase of 181%. In 2013, the average crime harm score for crime only repeat incidents was 44 days but increased to an average of 93 days by 2015, denoting an increase of 111%. In 2010, the average crime harm score for crime only repeat incidents was 33 days. Therefore, the increase in 2015 compared with 2010 is 182%.

#### **4.5. Exploring high harm offenders**

Whilst these results show average crime harm has risen markedly over the period 2010 - 2015, closer examination of a cohort of perpetrators is needed to explore whether such a pattern exists amongst individual offenders over time. In order to identify whether there is evidence of escalating harm over time, the offending of the top 50, 100 and 500<sup>7</sup> perpetrators in 2010 was analysed through to 2015. These perpetrators were identified by totalling the crime harm score for each incident an offender was involved in during 2010.

---

<sup>7</sup> More than one perpetrator held equal 50<sup>th</sup> and 100<sup>th</sup> positions with the same crime harm score in 2010. The number of offenders making up the top 50 is 58 and in the top 100 the number is 155.

Figure 8 : Mean crime harm scores for top 50, 100 and 500 unique perpetrators in 2010

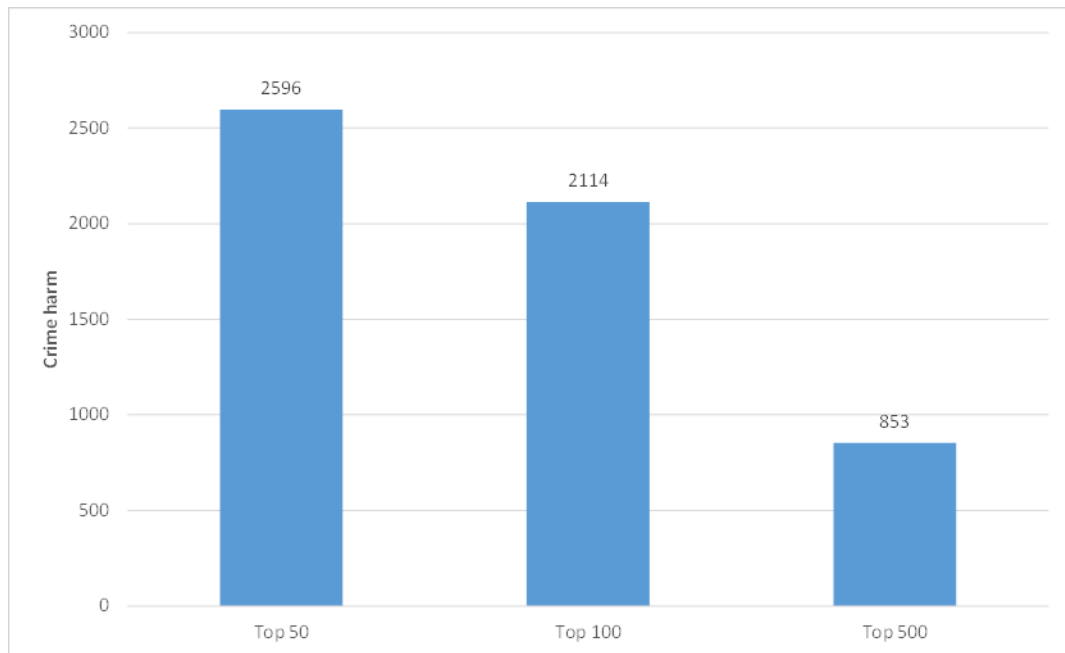


Figure 8 shows the difference in mean crime harm scores between the top 50 and top 100 is 482 days. The difference between the crime harm amongst the top 100 compared with the top 500 perpetrators is much wider at 1,261 days.

Figure 9 : Mean harm scores for the top 50 unique perpetrators

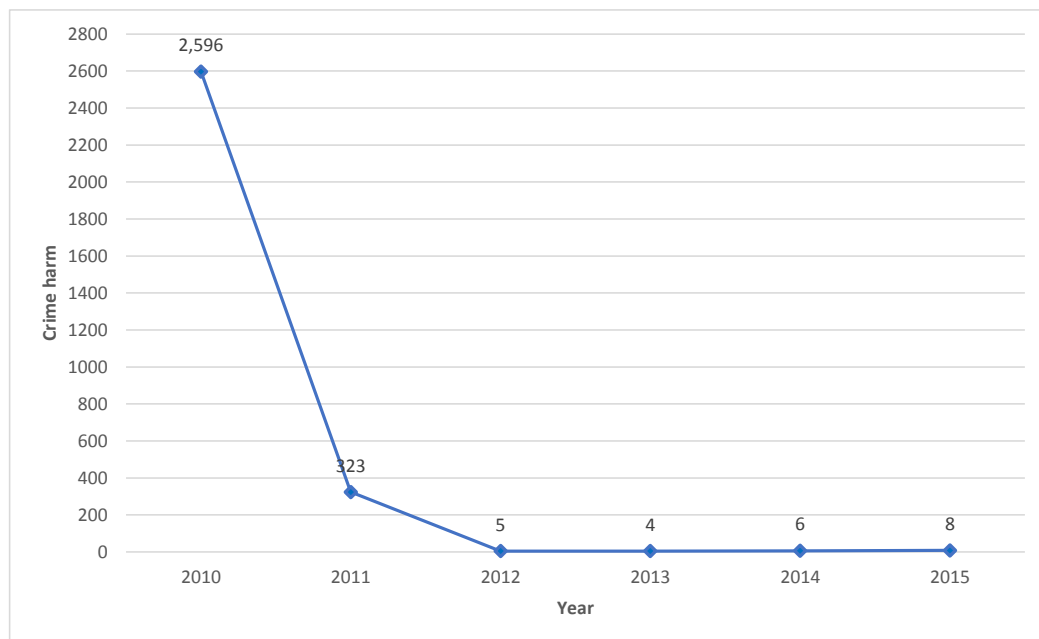


Figure 9 shows that amongst the top 50 perpetrators in 2010, the mean harm score was 2,596 days in that initial year. In 2011, the mean harm score is still elevated at an

average of 323 days. These results suggest that it is a small number of high harm perpetrators from 2010 who go on to inflict further high harm, albeit still noticeably lower than 2010, in the following year. Beyond 2011, the mean crime harm scores fall below 10 days.

Figure 10 : Mean crime harm scores for the top 100 unique perpetrators

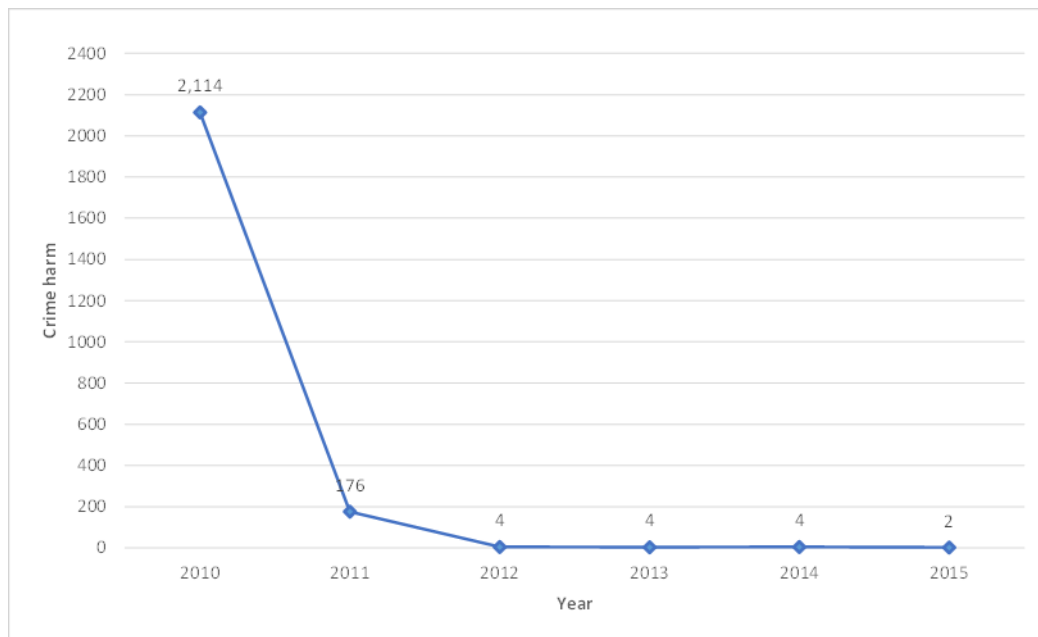


Figure 10 shows a similar pattern for the top 100 perpetrators compared with the top 50 offenders. The mean crime harm score for the top 100 perpetrators in 2010 was 2,114 days which drops sharply to 176 days in 2011. In 2012 onwards the mean crime harm scores fall below 5 days.

Figure 11 : Mean crime harm scores for the top 500 unique perpetrators

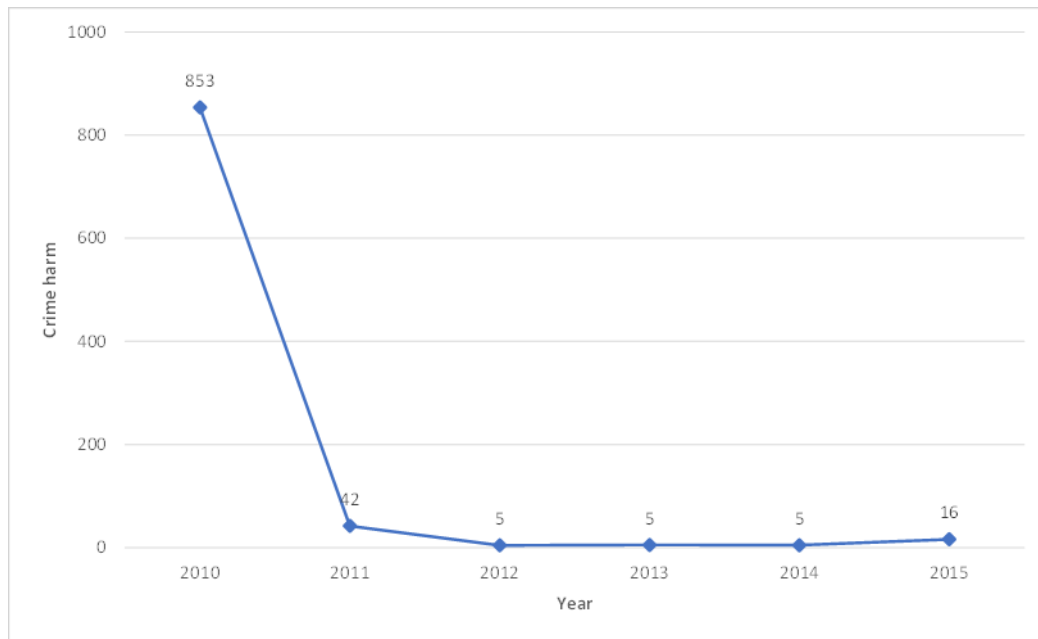


Figure 11 also shows a similar decline in mean crime harm scores amongst the top 500 perpetrators from 2010 to 2011. The 2011 mean crime harm score amongst this group is still elevated at 42 days.

In summary, these results show that in the five years after accruing a harm score that puts a perpetrator in the top 50, 100 or 500 most harmful offenders in 2010 they, at least on average, de-escalate rather than escalate in their offending.

Table 11 : Average change in rank amongst the top 50, 100 and 500 from 2010

Rank	2011	2012	2013	2014	2015
Top 50	-5,886	-6,845	-6,652	-4,354	-6,042
Top 100	-5,880	-7,208	-7,106	-4,936	-8,543
Top 500	-6,005	-6,149	-5,908	-3,524	-2,545

The overall decline in the harm caused by the top 50, 100 and 500 perpetrators is underscored by the average change in their position in the ranking of the most harmful offenders post 2010 as shown in Table 11. It is notable that, on average, all of the top 50, 100

and 500 perpetrators in 2010 fall way outside of the top 500 perpetrators in the years that follow.

Figure 12 : Proportion of perpetrators from the 2010 cohort who re-offend

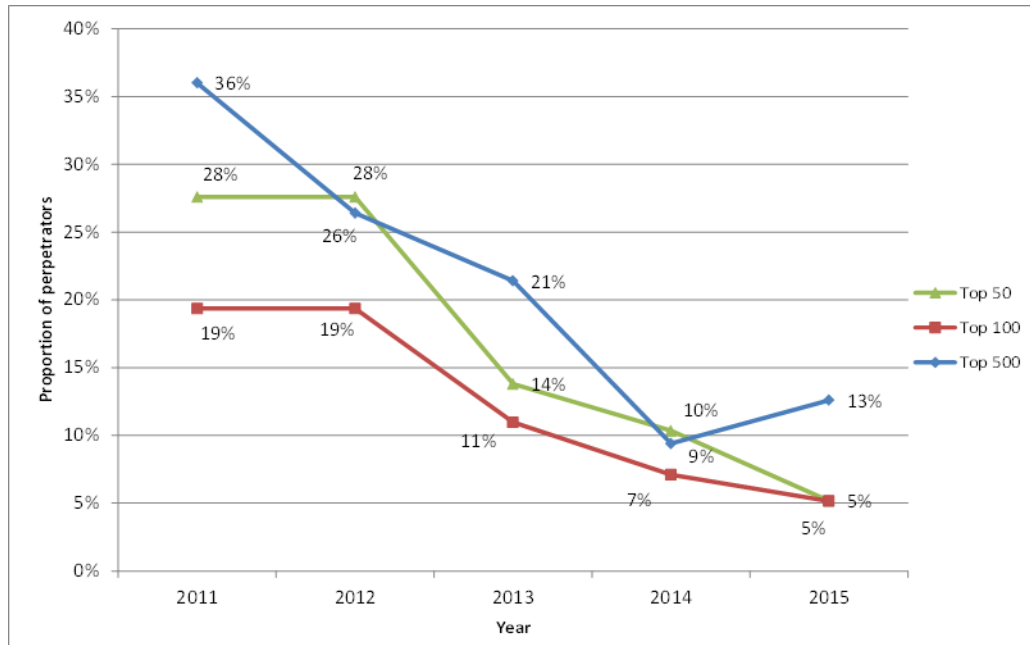


Figure 12, for the most part, shows the proportion of perpetrators from the top 50, 100 and 500 offenders in 2010 who go on to re-offend declines with each passing year. Overall, 43% of the top 50 re-offenders, 34% of the top 100 re-offenders and 54% of the top 500 re-offenders were responsible for a further incident during the following 5 years. This examination of the 2010 cohort of most harmful perpetrators indicates that amongst this group there is no evidence of escalation in offending, although there are a number of perpetrators who continue to be harmful in subsequent years.

#### 4.6. Re-offending: A two year follow up

Developing an understanding of patterns of offending amongst the most harmful perpetrators of intimate partner abuse is important, but it must be recognised they represent a small proportion of perpetrators of this type of abuse. Regardless of their crime harm score, this section of the analysis uses a fixed 731 day follow up period from the point that a perpetrator first appears in the data set between 1<sup>st</sup> January 2010 and 31<sup>st</sup> December 2013 to

provide further insight into patterns of re-offending. Including only those cases where there was a first incident up to 31<sup>st</sup> December 2013 enables the consistent application of a fixed 2 year follow up for every perpetrator in the period covered by the dataset.

#### 4.6.1. Incident crime harm

Figure 13 : Incident based crime harm scores in 2 year follow up (including first crime harm)

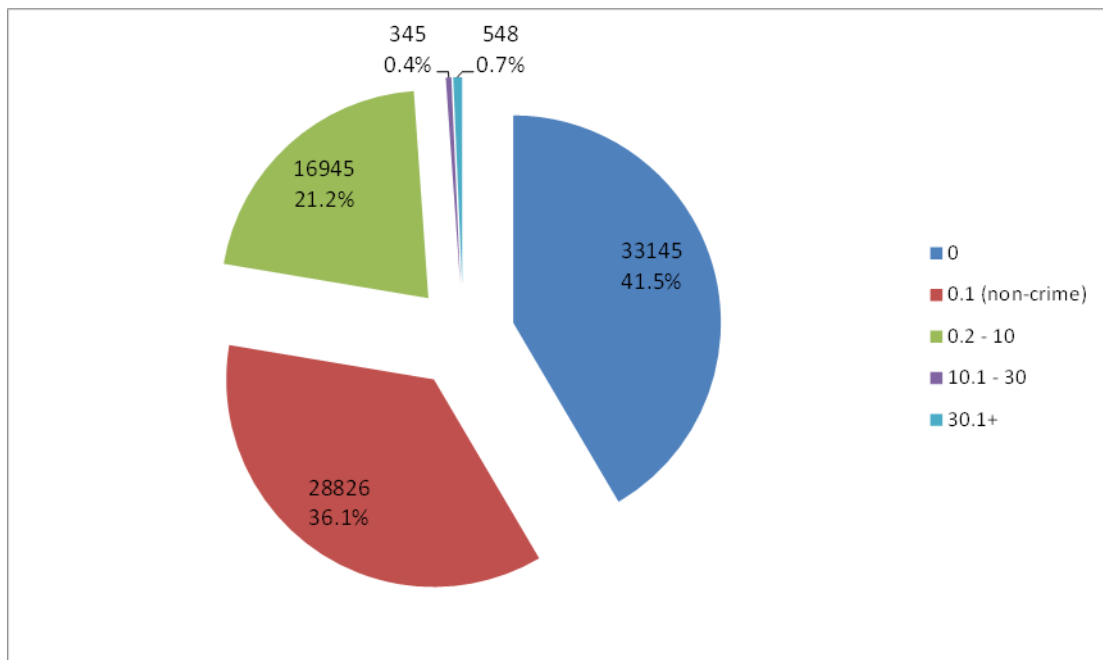
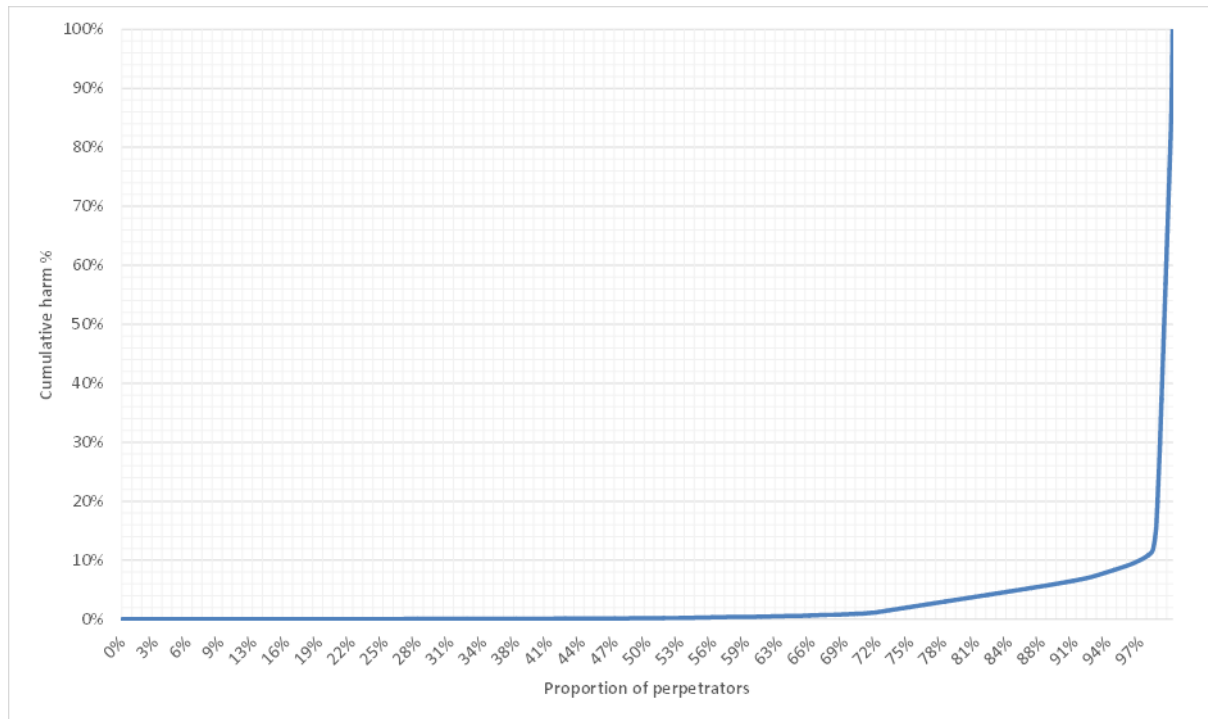


Figure 13 shows the total harm scores for all incidents which took place in the 731 day period to set the analysis of unique perpetrators in context. A score of 0 represents single incidents where there was no follow up incident, which occurred in 41.5% of cases. Figure 13 also shows that in 36.1% of follow up incidents the crime harm score was 0.1. This means that 77.6% of all incidents within the 731 day follow up period did not amount to a criminal offence at all. A total of 21.2% of incidents had a harm score between 0.2 and 10 days, leaving a smaller number of higher harm incidents scoring over 10.1 days of crime harm ( $n = 893$ ).

#### 4.6.2. Concentration of harm amongst unique perpetrators

Figure 14 : Cumulative harm: 2 year follow up



In total, there were 52,296 unique perpetrators identified between 1<sup>st</sup> January 2010 and 31<sup>st</sup> December 2013. Figure 14 shows that higher levels of harm are concentrated amongst a small number of perpetrators. Lower levels of harm were inflicted by 72% of the population of unique offenders in the 731 day follow up. Between 73% and 97% there is a noticeable increase in the level of harm inflicted up to 10%. However, there is a more dramatic spike in the levels of harm inflicted beyond this, with 3% of offenders responsible for 90% of the harm inflicted in the 731 day follow up.

#### 4.6.3. Repeat crime harm amongst re-offenders

Of these 52,296 unique perpetrators, 19,151 (37%) were involved in a repeat incident in the 731 day follow up period.

Figure 15 : Perpetrator repeat crime harm scores in 2 year follow up

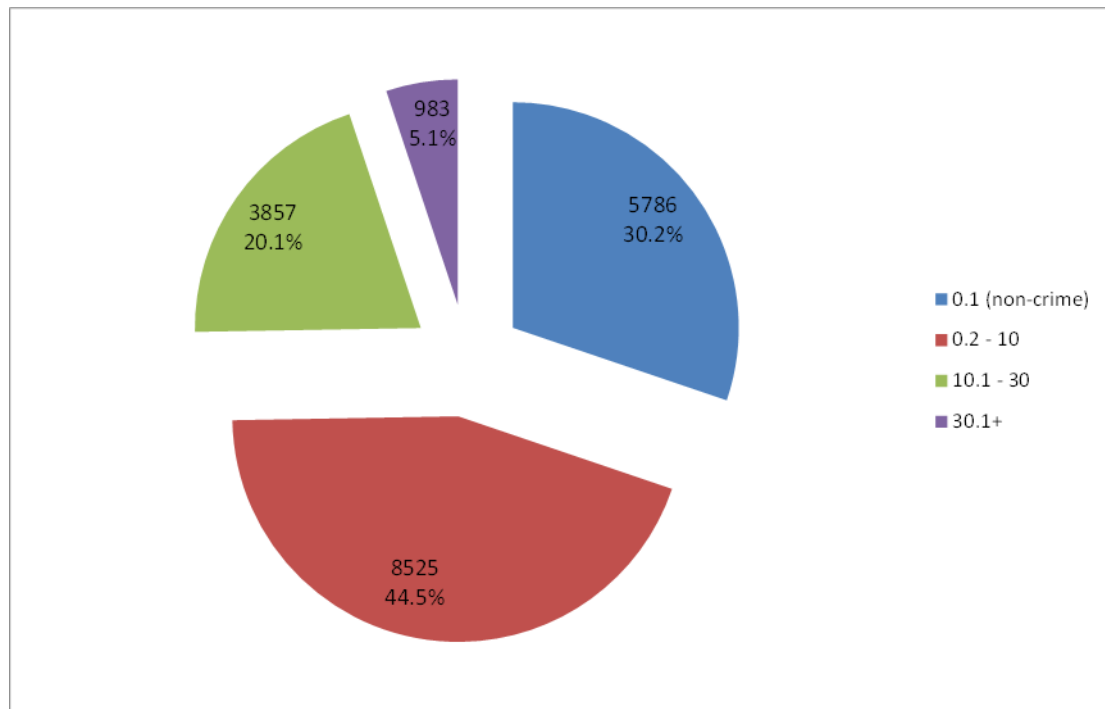


Figure 15 shows that 5,786 of the 19,151 perpetrators (30.2%) who had a repeat incident were involved in a single non-crime incident over the next 731 days. A further 8,525 perpetrators (44.5%) have a total harm score of between 0.2 days and 10 days in the 2 years after their first incident. A total of 3,857 perpetrators (20.1%) were responsible for repeat harm that scored 10.1 days or higher. A smaller number of perpetrators, 983 out of 19,151 (5.1%) were responsible for the highest harm totalling over 30.1 days in the follow up period.



#### 4.6.4. Conditional probability of repeat offending

Figure 16 : Conditional probability of repeat incident (all)

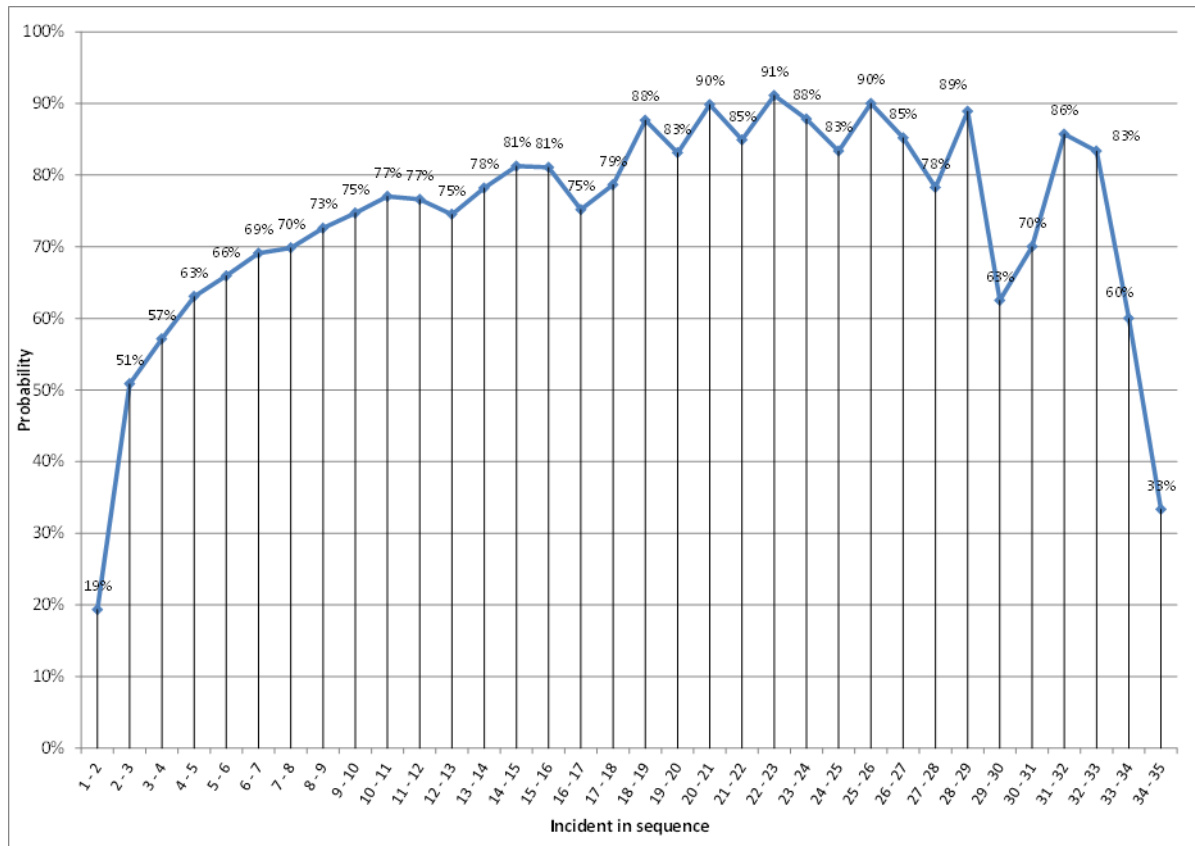


Figure 16 shows there is a 19% ( $n = 98,960$ ) probability of a perpetrator who is involved in one incident being involved in a second. Where a perpetrator has been involved in a second incident it becomes more likely than not (51%,  $n = 19,151$ ) they will go on to be involved in a further incident. This probability increases with each passing event reaching 81% ( $n = 169$ ) between incidents 15 - 16. At incident 18 - 19 and thereafter, the number of cases included in the analysis drops below 100 and likely becomes unstable.

Figure 17 : Conditional probability of repeat incident (crime)

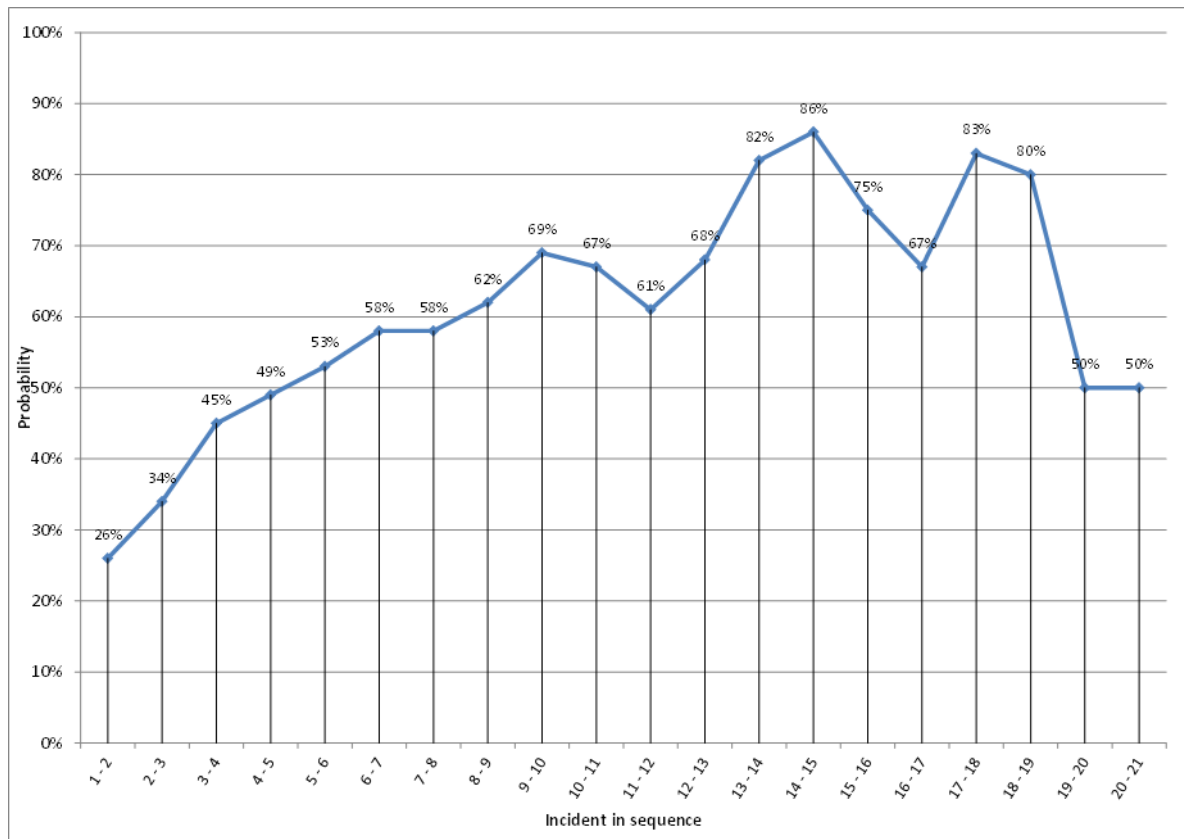


Figure 17 analyses only those cases where the first and subsequent incidents were crimes (thereby excluding non-crime incidents). The results show that where a crime is recorded there is a higher probability than in the analysis of all incidents that a perpetrator will go on to be involved in a second crime (26%,  $n = 41,350$ ). Again, the likelihood of involvement in further crimes increases as the number of crimes rises. A further crime becomes more likely than not where a perpetrator is involved in a fifth crime (53%,  $n = 795$ ). The probability peaks where a perpetrator involved in fourteen crimes is 86% likely to be involved in a fifteenth incident. However, at this point in the analysis there are just two cases with the number of cases falling below 100 between incidents 8 - 9. In summary, the conditional probability for crimes start out higher than when non-crime incidents are also included, but then increase at a slower rate than when crime and non-crime incidents are analysed.

#### 4.6.5. Time between repeat incidents

Another aspect of re-offending is the amount of time between further incidents.

Figure 18 : Average days between incidents

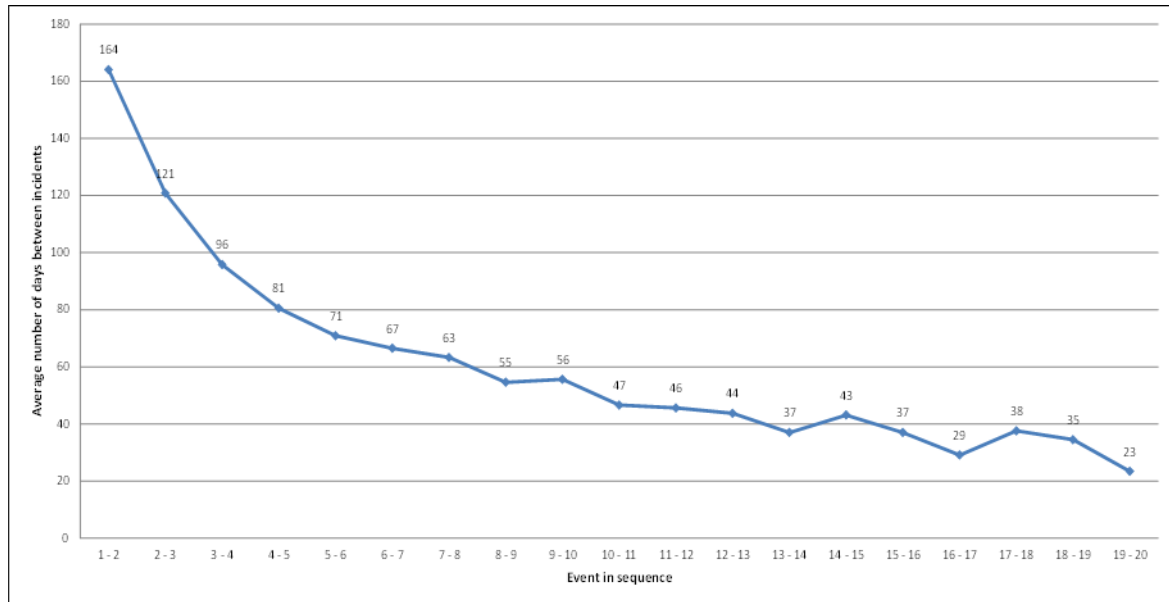
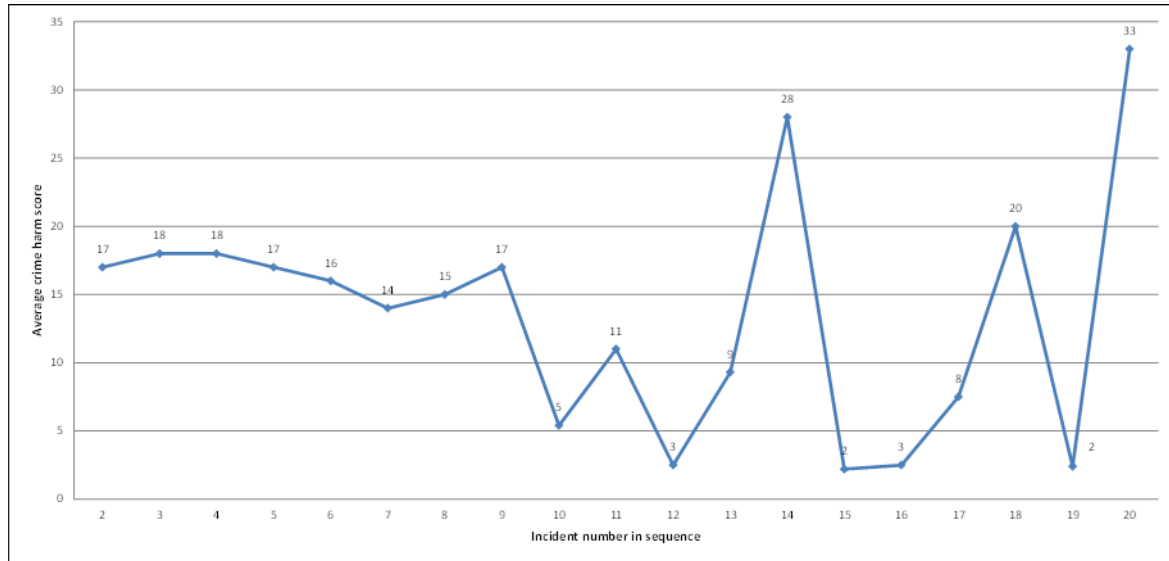


Figure 18 shows, overall, the average time between incidents gets progressively shorter as the number of incidents increases. The longest mean gap between incidents is between the first and second incident at an average of 164 days ( $n = 19,151$ ). By incident 8 - 9 the average number of days between incidents falls by 67% compared with incident 1 - 2 to an average of 55 days ( $n = 810$ ). The shortest average time between incidents is between incidents 19 - 20 with an average of 23 days ( $n = 59$ ).

#### 4.6.6. Repeat incident average crime harm scores

Figure 19 : Average crime harm scores for repeat incidents



The average crime harm scores also show an interesting pattern (Figure 19). Whilst the harm scores remain relatively stable between the second incident (the first repeat) and ninth incident (the eight repeat), they drop at incident ten to an average of 5 days ( $n = 605$ ). At incident 12 the average harm score falls to 3 days ( $n = 357$ ), but rises to 28 days for incident 14 ( $n = 208$ ). The average harm score peaks at 33 days for incident 20, but the number of cases analysed is 59 and may be too small to produce a reliable estimate. It is of note that the number of cases included in the analysis after incident 18 falls below 100.

These results demonstrate whilst the probability of a further incident increases and the time between incidents gets shorter as the number of repeat incidents rises, there is little variation in the average harm scores between the second incident and ninth incident. The average harm scores are lower for incidents 10, 11, 12 and 13 compared with those for incidents 2 - 9. Thereafter, the average scores become erratic as the sample sizes get smaller.

## 4.7. Victimisation

### 4.7.1. Overall extent of victimisation

Table 12 : Victimisation of multiple partners: 2010 – 2015

Number of unique victims	Number of perpetrators	%
1	63,018	89.86%
2	5,804	8.28%
3	1,001	1.43%
4	233	0.33%
5	47	0.07%
6	20	0.03%
7	5	0.01%
<b>Total</b>	<b>70,128</b>	<b>100%</b>

Another factor to consider in understanding re-offending is the extent to which each unique perpetrator victimises multiple partners. As Table 12 demonstrates, 89.86% of perpetrators have a single victim over the period 2010 to 2015. Although the number of perpetrators having multiple victims gets smaller as the number of victims increases, there are some offenders who abuse as many as 7 separate intimate partners. A total of 1,306 perpetrators are identified as having abused 3 or more different partners.

Figure 20 : Conditional probability: additional victims 2010 – 2015

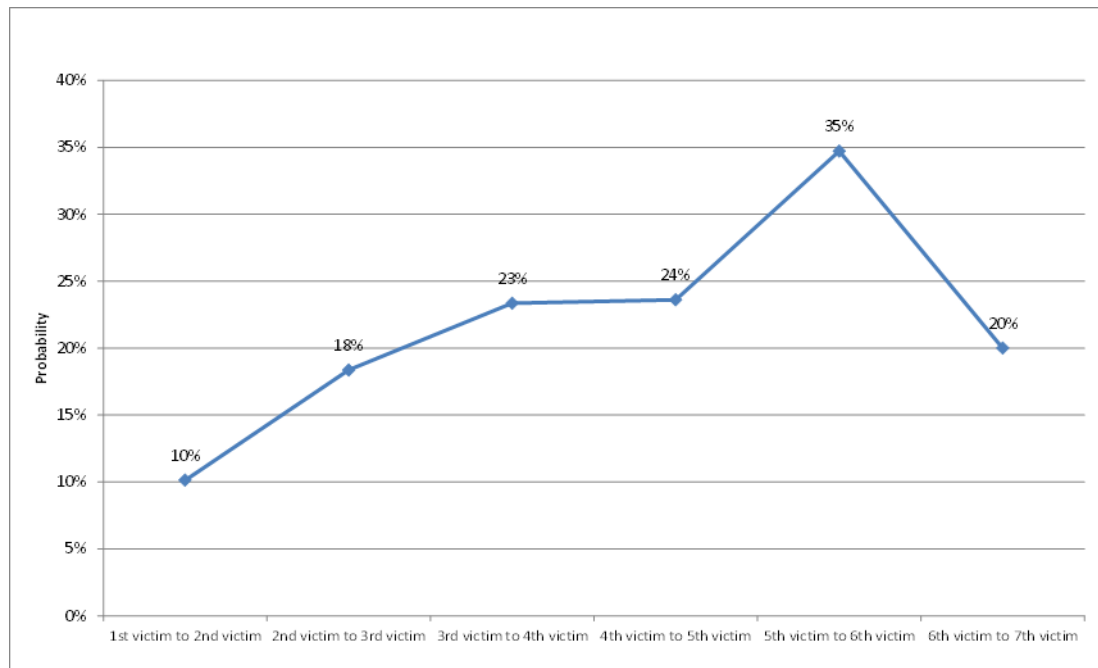


Figure 20 shows that with each additional victim the probability of a perpetrator abusing another different partner increases until the seventh victim when the numbers become too low to provide a reliable estimate (Table 12). There is a 10% probability that those with one victim will have a second victim, an 18% probability that if a perpetrator has a second victim they will have a third, a 23% probability if they had a third they will have a fourth and a 24% probability that if they have a fourth they will have a fifth victim. The probability peaks at 35% where a perpetrator who has five different victims will have a sixth victim. The probability of a perpetrator who has a sixth victim having a seventh victim drops to 20%. However, the number of cases where the perpetrator has 5 or more victims is too small to produce a reliable measure.

#### 4.7.2. Victimisation in the two year follow up

Table 13 : Victimisation of multiple partners: 2 year follow up

Number of unique victims	Number of perpetrators	%
1	47,611	91.04%
2	4,136	7.91%
3	481	0.92%
4	57	0.11%
5	9	0.02%
6	2	0.00%
<b>Total</b>	<b>52,296</b>	<b>100%</b>

As was the case with multiple victimisation across the full range of data (2010 - 2015), the results for the 731 day follow up show the overwhelming majority of perpetrators (91.04%) have one victim. However, even within this relatively short period of time, 7.91% have two victims and 549 individual perpetrators have 3 or more different victims.

Figure 21 : Conditional probability: additional victims: 2 year follow up

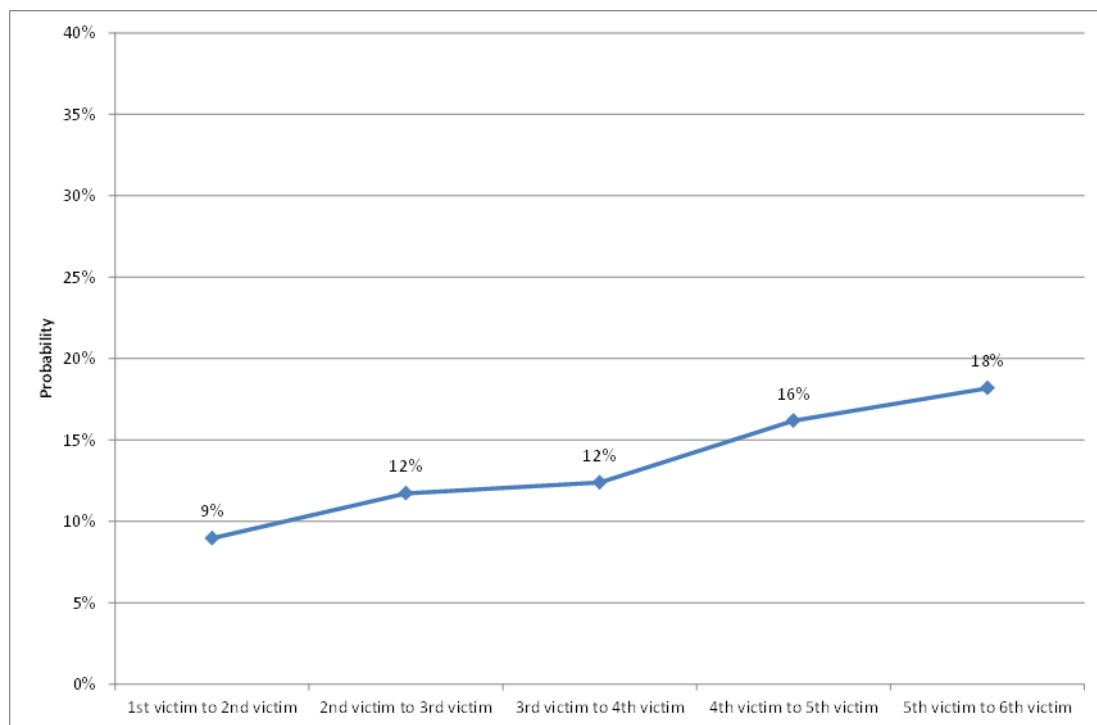


Figure 21 shows that with each additional victim in the 731 day follow up period, the probability of a perpetrator abusing another different partner increases. The probability of a perpetrator having a second victim is 9% rising to an 18% probability of a perpetrator having a fifth victim where there has been a fourth (although the number of cases beyond 4 victims becomes much smaller with only 2 perpetrators having 6 victims).

#### **4.8. Summary of results**

It is useful at this juncture to summarise these results against the key research questions.

*(1) What is the frequency, demographic profile and year on year average crime harm value of partner abuse re-offending?*

The results indicate a high proportion of repeat cases of partner abuse in the Thames Valley are accounted for by non-crime incidents (58%). A further 21% of incidents of partner abuse are non-violent, meaning that 79% of repeat incidents in the Thames Valley were not cases of violence. Application of the crime harm index shows that non-crime and non-violent incidents account for just 7.4% of all harm with sexual offences and violent incidents together representing 92.6% of the harm caused by repeat partner abuse between 2010 and 2015. The demographic data show the majority of repeat incidents are perpetrated by men (85%) with 87.28% of offenders being aged between 18 and 47 years. A total of 75.8% of offenders identified as 'White' with 24.2% being from black and minority ethnic groups.

Between 2010 and 2015 there has been a 146% increase in average harm scores from 28 days in 2010 and 69 in 2015, with a sharp increase in average harm from 2013 to 2015. Average harm scores between 2010 and 2015 for repeat incidents that constituted a crime increased from an average of 33 days in 2010 to 93 days in 2015, marking an increase of 182%. When all incidents are included, crime harm scores increased from an average of 16 days in 2010 to 45 days in 2015, an increase of 181%.



*(2) Does partner abuse get worse or escalate over time?*

Two sets of data were also used to examine this question. Firstly, analysis was carried out on the top 50, 100 and 500 perpetrators in 2010 to examine offending behaviour in subsequent years to 2015. Whilst average harm scores for these perpetrators remained relatively high in 2011, the results suggest this is a result of a small number of perpetrators being responsible for higher levels of harm. None of the offenders in the top 50, 100 or 500 went on to be responsible for harm that was more serious than in 2010, and none of them re-entered the top 500 perpetrators at any point in the 5 years which followed. However, a portion of the top 50, 100 and 500 perpetrators did go on to re-offend in each year from 2011 to 2015. In most cases, the proportion who re-offended became smaller.

Secondly, data from the fixed 731 day follow up period were used to examine patterns of offending across the data set. A total of 37% of unique perpetrators went on to re-offend within the follow up period. The results show that there was a 19% probability of perpetrators being involved in a second incident. Those who did re-offend had an increasingly probability of going on to be involved in further incidents. When only incidents recorded as criminal offences were examined, the probability of a repeat offence was 26%. The probability of further offending increased with each additional crime, albeit at a slower rate than the analysis of all incidents. The results show an increasing likelihood of re-offending as involvement in incidents increases. The data also show that the average amount of time between incidents decreases (or, in other words, re-offending accelerates) as the number of incidents increases. However, it did not follow that the severity of repeat incidents, on average, also increased in severity.

*(3) How many unique victims do partner abuse offenders have?*

The results show the overwhelming majority of perpetrators have one victim. However, some perpetrators had as many as 7 different victims over the period 2010 - 2015. Even within the follow up period of just 731 days, 549 perpetrators victimised 3 or more

different partners. The results show the probability of a perpetrator victimising a different partner increases with each additional victim. The probability of a perpetrator having a different victim was consistently higher in the analysis of the 2010 - 2015 data (ranging between 10% and 35%) compared with the 731 day follow up (ranging between 9% and 18%).

The next chapter considers the implications of these results on theory, policy and future research in the study of abuse by intimate partners.

## **Chapter 5: Discussion**

This chapter begins with a detailed discussion of the results from this study against the research questions, with a particular focus on the theoretical implications of this research. This chapter goes on to critically assess the current approach to police targeting of partner abuse and suggests how the findings could inform an alternative approach. The opportunities for further research are also set out. The chapter closes by reflecting on the strengths and limitations of this research as a contribution to the study of abuse between intimate partners.

### **5.1. Frequency, demographic profile and year on year average crime harm of partner abuse re-offending in the Thames Valley**

Considering the national strategic interest in the targeting of repeat and prolific perpetrators of domestic abuse (HMIC 2014a), the purpose of this question was to describe the extent of re-offending in the Thames Valley and describe the profile of these perpetrators.

#### **5.1.1. The importance of a broad definition for accurate measurement of partner abuse**

As the review of the literature set out, one of the weaknesses of existing research into partner abuse is the almost exclusive focus on violence, measured most often by surveys. Although the Crime Survey for England and Wales (CSEW) in 2015 asked particular questions about the extent to which respondents suffered violent and non-violent abuse from their partner, the validity of the results should be treated with some caution, given that only 30% of participants provided a response (ONS 2016).

In the present research, a total of 29,957 repeat incidents included in the analysis did not constitute a criminal offence. This represents 58% of all repeat incidents repeat as shown in Figure 3. A further 10,856 repeat incidents (21% of all repeat incidents) were not violent while still constituting criminal offences. As such, over three quarters (79%) of all repeat incidents included in this study were not acts of violence and most were not criminal offences

of any kind. These results attest to the importance of applying a broad definition of abuse, because research that does not do so risks seriously underestimating the frequency of partner abuse re-offending. A narrow focus on one type of offending runs contrary to research that provides a better understanding of the nature of partner abuse and the range of tactics perpetrators employ (Johnson 2008; Tanha et al. 2010).

### **5.1.2. Not just a number: Measurement of harm**

The results presented in the previous chapter also show the utility of applying a weighted crime harm index to complement a simple count of perpetrator involvement in partner abuse (Sherman et al. 2016). On a general level, the application of the Cambridge CHI in this research, compared with the frequency of this type of crime, uncovers some stark differences.

The results show a contrast between demand for police resources in terms of frequency of reporting versus the harm experienced by the population. This is most notable when considering the high frequency of non-crime incidents against the low levels of harm from such cases. Total harm from non-crime incidents is just 0.4% of all harm from partner abuse between 2010 and 2015 (Figure 4). The policing of these incidents takes up considerable resources involving a police officer personally visiting each victim and completing a DASH risk assessment, which is then further assessed by a specialist risk assessor before onward transmission to a detective for further work in cases graded as high and medium risk based on DASH. Whilst it is not suggested the police ignore such cases, since they afford an opportunity to provide support to victims, there may be other ways of handling these incidents which does not involve such a heavy commitment of resources. In contrast, sexual offences are low in frequency, but account for the most harm, which indicates there may be justification for allocating specialist resources to such offences.

### **5.1.3. The demographic profile of partner abuse re-offenders**

Analysis of demographic data illustrates how partner abuse is concentrated according to certain characteristics, which could be used by the police and partner agencies to target prevention efforts at particular groups.

The largest group of repeat perpetrators of partner abuse were aged between 28 and 37 years (31.58%, Table 9), with almost two thirds of the population being between 18 and 37 years of age (62%) in the Thames Valley. Whilst the majority of repeat perpetrators in the Thames Valley identify as 'White' (75.8%, Figure 5), they are slightly under-represented in comparison to the ethnic make-up of the Thames Valley where 85% of the population identify as 'White' (Table 8). This difference contrasts with an apparent over-representation of Black and Minority Ethnic repeat perpetrators in the data (24.2%) when compared with the population of the Thames Valley (15%). It was beyond the scope of this research to investigate the underlying reasons why these differences occur. However, it is an area which merits further study to understand why this might be the case in the Thames Valley, so the police can consider undertaking targeted initiatives within the communities concerned.

The literature review drew attention to the fierce debate concerning the gender of perpetrators and victims. This research identified that, year on year, the majority of perpetrators of intimate partner abuse are male (85%, Table 9). These results follow Johnson's (1995; 2006) conclusion that data from agencies such as the police would show predominantly male violence. But still 15% of repeat offenders were female. These cases warrant further exploration in terms of research addressing female offending in general as well as understanding whether different approaches are required to target male and female intimate partner abuse re-offending.

### **5.1.4. Average crime harm**

The average harm caused by intimate partner abuse in the Thames Valley highlights a steep increase in year on year average harm scores from 2013 onwards, for all offence types

as well as recorded crime only (see Figure 7). This upward trend was present for all incidents analysed, as well as those constituting a repeat incident. The review of the existing literature identified two possible reasons which could help explain this finding. The first is increasing confidence amongst victims and partner agencies to make reports to the police (Bland and Ariel 2015; Groves and Thomas 2014). The second emanates from greater concern in England and Wales to improve the trustworthiness of crime data (HMIC 2014a). Another possibility, and concern for public safety, is whether repeat offenders are actually becoming more harmful.

## **5.2. Escalation**

The notion that repeat perpetrators do become more harmful as time passes would support the theories of scholars who fervently argue that incidents escalate in frequency and severity over time (Pagelow 1981; Morley and Mullender 1994). However, as Piquero et al. (2006) and Bland and Ariel (2015) found, the issue of escalation is more nuanced. Escalation can be measured with reference to the number and severity of offending as well as intermittency involving the use of different units of analysis over various periods of time (Bland and Ariel 2015). This section of the discussion considers the results of this research and its contribution to this debate in two parts. The first considers the issue of escalating severity and the second examines the issue in terms of the frequency and speed at which repeat incidents occur.

### **5.2.1. Severity of harm**

The results of this research challenge the view that escalation in severity from one incident to the next is inevitable. This was shown in the analysis of the top 50, 100 and 500 most harmful perpetrators in 2010 as well as the 731 day follow up.

The 731 day analysis showed that in 41.5% (Figure 13) of cases there was no further incident within that period. In an additional 36.1% of cases, the harm score amounted to a non-crime incident of 0.1 days. Amongst unique perpetrators, a total of 37% re-offended in

the 731 days after their first incident (19,151 out of 52,296). Of those who did re-offend, 30.2% were involved in just one further non-crime incident ( $n = 5,786$ , Figure 15). Furthermore, the concentration of crime harm provides further evidence of the existence of a 'power few' (Sherman 2007) with a small number of perpetrators responsible for the majority of harm. In the 731 day analysis, 97% of offenders are responsible for 10% of harm with 3% responsible for 90% of all harm (Figure 14). When only re-offending is examined, just 5.1% ( $n = 983$ ) of repeat offenders had a total harm score of over 30.1 days (Figure 15).

Analysis of the top 50, 100 and 500 highest harm offenders in 2010 actually show declining rates of recidivism amongst these perpetrators between 2011 and 2015 (Figure 12). In 2011, 36% of perpetrators in the top 500, 28% in the top 50 and 19% in the top 100 re-offended. In other words, if the theory of escalation were true, and all of these highest-harm offenders were predicted to re-offend in the next five years, this would represent a false positive rate of 64% amongst the top 500, 72% amongst the top 50 and 81% amongst the top 100 highest harm offenders. Where there is evidence of re-offending, the average harm scores amongst this group of perpetrators in the following five years never exceeded the average score for 2010 (see Figures 9, 10 and 11). In fact, the year on year average crime harm scores amongst this cohort became very low by 2012 through to 2015 when compared with 2010. This reduction is further illustrated by their fall in rank ordering well outside the top 500 perpetrators (Table 11).

These results are not intended to minimise the harm caused by re-offending. As this is a descriptive study, it is not possible to explain why the majority of perpetrators apparently desisted. The reasons for this desistance could include a sentence of imprisonment, the end of the relationship or an intervention by the police or another agency. An avenue for further research would be to explore this group in detail to understand whether there are any patterns in the re-offending amongst this particular group of perpetrators. In themselves,

they could also represent a group of perpetrators who could be targeted through the testing and tracking of interventions.

### **5.2.2. Frequency and speed of re-offending**

Beyond the concept of escalation in crime harm, the results show intriguing evidence of escalation in terms of the likelihood of offenders being involved in further incidents once the sequence of re-offending begins. However, the results are less categorical than the claim by Morley and Mullender (1994) that further attacks by the same perpetrator are a near certainty.

In this research, repeat incidents represent just 37% of all the incidents included in the analysis. When all offence types are included in the 731 day follow up analysis, there is only a 19% probability that a perpetrator will go on to be involved in a repeat incident (Figure 16). For crime incidents, there is a slightly higher chance that a perpetrator will offend a second time (26% as shown in Figure 17). However, the results demonstrate that when a perpetrator has repeated once, the chances of a further incident increase with each passing incident. In the case of all offence types the chances of moving from a second incident to a third escalate to 51% (Figure 16) and continue to escalate where there is a 77% likelihood that a perpetrator who has been involved in an eleventh incident will have a twelfth. In the case of crime only, the likelihood of further offending also increases along with each passing event, albeit at a slower rate than when non-crime and crime incidents are combined. The chance of a further crime becomes more likely than not between incidents five and six (53% as shown in Figure 17).

The results also highlight an acceleration of offending as the average length of time between incidents decreases as the number of repeat incidents increases. There is an average of 164 days between the first and second incident, but the average number of days between a fourth and fifth incident is almost halved to just 80.5 (Figure 18). Yet this hastening of events does not correspond with any dramatic change in the average crime harm scores between



earlier incidents. The average harm scores between events 2 and 9 remain fairly similar with average harm scores between 14 and 18 days for incidents in this sequence. The average harm scores for incidents 9, 10, 11 and 12 are lower than the earlier incidents, but the average harm score between incident 13 and 14 increases to 28 days. Although there are still 208 cases in this group, the average score is susceptible to being skewed by a small number of high harm cases.

### **5.3. Unique victims**

In their study of domestic abuse cases, Bland and Ariel (2015) drew attention to a high prevalence of multiple victimisation. The results of the present research show that over the period 2010 to 2015 and in the 731 day follow up, the vast majority of perpetrators of partner abuse had only one victim (89.86% and 91.04% respectively, see Tables 12 and 13).

Although the results show the probability of a perpetrator having a further victim increases as the number of victimisations gets higher, the likelihood of this happening is relatively low. In the 2010 to 2015 data, the likelihood of a perpetrator having a second victim is just 10% (Figure 20) and peaks at 35% between the fifth and sixth victim (which is based on a small sample of only 20 cases, see Table 12). The data from the 731 day follow up shows that within that period there is a 9% probability that a perpetrator responsible for one incident will go on to be involved in a second (Figure 21). This increases to 12% between a second and third and third and fourth incident after which the number of cases falls below 100 (Table 13).

### **5.4. Implications for policy and practice in tackling partner abuse**

In common with the majority of police forces in England and Wales, TVP currently use a model of risk assessment for partner abuse known as “DASH” (Domestic Abuse, Stalking and Harassment) to target perpetrators. The use of DASH has been criticised as flawed in its logic and methodology by using hindsight rather than foresight (Sherman 1992; Sherman and Strang 1996). This current practice generates a large number of false positives (where

risk of serious harm or homicide is identified but does not come to pass) as well as false negatives (where serious harm was not predicted but did occur) (Chalkley 2015; Thornton 2011). These forecasting errors lead to the misdirection of police resources whose aim is to prevent further harm.

The DASH consists of a list of questions (risk indicators) put to a victim of domestic abuse by the attending officer. The information collected is used to assign a grading of standard, medium or high risk of serious harm or homicide in each case, which determines the nature and priority of the police response. A great deal of emphasis is placed on identifying cases that appear to be getting more serious and frequent as indicators of elevated risk. However, the results of this research indicate higher levels of de-escalation than escalation, decreasing recidivism amongst the highest harm perpetrators and large numbers who do not re-offend at all or are involved in only a non-crime incident. Whilst the time between repeat incidents gets shorter on average and the likelihood of re-offending increases with each passing incident, there is no corresponding increase in levels of average harm.

In operational terms, police assessments of risk and harm have tended to focus on acts of violence and the severity of injury rather than patterns of abusive behaviour that may or may not result in physical harm (Myhill and Hohl 2016). The application of the Cambridge CHI in this research has enabled clearer distinctions to be made between the severity of harm inflicted by partner abuse re-offenders.

In doing so, this research identifies the presence of a high number of lower harm re-offenders. Indeed, the present research identifies different patterns of re-offending: (1) those who do not re-offend; (2) those whose subsequent involvement with the police is through a non-crime incident; (3) offenders whose follow up crime harm score was between 0.2 and 10 days and (4) a smaller number who perpetrated more serious abuse totalling over 10.1 days of crime harm. This finding contradicts Johnson's (2008) hypothesis that agency data is more

likely to uncover the more harmful cases of 'intimate terrorism' than 'situational couple violence'. More recent research suggests that cases involving 'coercive control' have a higher likelihood of resulting in serious harm or homicide than instances which involve the use of violence (Stark 2007; Myhill and Hohl 2016). Coercive control involves the use of oppressive conduct that is characterised by frequent but low level physical abuse and sexual coercion, combined with tactics intended to intimidate, degrade, isolate and control victims (Stark 2013). As such, the importance of low level offending cannot be underestimated when considering threat, harm and risk. Given this research uncovers a high volume of low level re-offending, there is a need for police to consider how these low harm incidents are factored in to the assessment and targeting of perpetrators to prevent future harm.

### **5.5. Research implications**

The most ambitious and promising extension of this research would be to use the results to inform the development of a forecasting model using the 'random forests' statistical method. Although development of this method would require further research in order to identify additional variables and sources of data for inclusion in the prediction model to make predictions, statistically validated forecasts have consistently been shown to be more accurate or at least as good as clinical predictions such as DASH (Barnes and Hyatt 2012; Berk et al 2009; Sherman 2012; Sherman 2013).

A model could be built to enable police, as well as other agencies, to identify whether an offender is at high risk (predicted to commit a serious offence), moderate risk (predicted to commit a non-serious offence) or low risk (not predicted to commit *any* offence) over a particular period of time. Such an approach would provide an opportunity to identify whether there is a risk of repeat offending as well as make a distinction between serious and non-serious harm. If successful, the use of a statistical model could be used by the police to identify risk which would inform the allocation of resources and interventions to provide an output that maximises the safety of victims and reduces false positives and false negatives.

More importantly, such an approach would enable police to allocate scarce resources to those offenders most likely to perpetrate further harm.

## **5.6. Strengths and limitations of this research**

### **5.6.1. The data**

Although this research was able to draw on a full population of 140,998 incidents of partner abuse between 2010 and 2015, the data was drawn from official police data. There are limitations associated with using police data which include the under reporting of such a sensitive issue and the recording practices of the organisation. However, this research has also highlighted the limitations of surveys in tracking this type of offending. It would be remiss of agencies such as the police not to analyse the detailed information they collect to try to understand the nature of the problem and seek to reduce the harm caused by this type of crime.

This research has exposed some difficulties in analysing data that are specific to TVP. The change to a new crime recording system in 2014 led to the exclusion of a large number of incidents from 2014 and 2015. Although previous records were converted on to the new system, the standard of recording on the new system was less rigorous. Whilst most of the excluded incidents were not crime related and had limited impact on the crime harm scores, this issue has shown the importance of consistent and reliable measurement. The change in crime recording system also had an impact on tracking individual offenders. Although perpetrators were assigned unique identification numbers, these were not consolidated when the systems changed. This problem was exacerbated by the number of duplicates within the data, caused by manual errors in recording names and dates of birth. As explained in the methodology, these errors were corrected using an automated system. However, it is likely a number of matches will not have been made, as strict criteria for linking victims and perpetrators were used to minimise inaccurate attribution of incidents to individuals.

Notwithstanding some of the challenges associated with police data, there is a universal standard for the recording of crime in TVP. The records entered onto the crime recording system are reviewed to ensure compliance with the National Crime Recording Standards (NCRS) and Home Office Counting Rules (HOCR), which apply to all police forces in England and Wales. In more recent years there has been increased scrutiny of crime recording standards by HMIC in a drive to improve the accuracy and reliability of crime data, with each force being subjected to an independent inspection (HMIC 2014a; 2014b).

### **5.6.2. External validity**

The data used in this study comes from just one of the forty three forces that make up the police service of England and Wales, so it cannot be assumed the results are generalisable to other organisations. However, data compiled by the Office for National Statistics Census, carried out in 2011, shows TVP's population is very similar to the wider population of England and Wales (Table 8). Although national statistics are not available in England and Wales for domestic abuse, let alone abuse between intimate partners (Bland and Ariel 2015), HMIC (2014) reports that nationally domestic abuse accounts for between 2% and 7% of calls for service to the police and 8% of total crime. In TVP, 5% of all calls for service are related to domestic abuse and 7% of all recorded crime which is closely aligned to the England and Wales average.

Other forces would need to replicate this research to understand their unique domestic abuse perpetrator profile, but the similarity of TVP to population statistics for England and Wales as well as in the volume of incidents of domestic abuse handled by the force suggest there are reasons to be optimistic that the results of this research are relevant to other forces.

The following chapter draws this discussion together with existing research to consider the way in which this present research contributes to the evidence base concerning intimate partner abuse. The next chapter also draws on the findings from this thesis to make summarise how knowledge of intimate partner abuse can be advanced further.

## Chapter 6: Conclusion

The characterisation of domestic abuse as a phenomenon that takes place behind closed doors without being subject to intervention, is being consigned to history. Regardless of the context in which it has taken place, academic studies and reports consistently reach the conclusion that abuse between intimate partners is widespread and absent of any boundaries. As cited in the opening chapter of this research, HMIC have described the extent of abuse generally as “shocking” (2014a, p. 5). This sentiment has been accompanied by a call for police forces to do more to target perpetrators of abuse. However, ideas about how this could be achieved are limited to an assumption that targeting the most frequent offenders using interventions that have worked in other areas of policing will apply equally to domestic abuse. This thesis has argued that, before even considering what interventions could be tested, there is a need to better understand the extent and nature of partner abuse re-offending.

As the literature review highlights, there is variation in estimates of the prevalence and incidence of reported abuse (Payne and Gainey 2002; Tjaden and Thoennes 2000). The literature review provided two principal reasons to explain the variation in findings of current research. Firstly, the majority of research examining intimate partner abuse has focused solely on acts of violence which, as well as underestimating the overall frequency of abuse, also fails to recognise the range of tactics perpetrators utilise to abuse their partners. Secondly, the methodological approach taken by existing research has been shown to have an impact on the results of that research. Surveys have been found to identify greater symmetry between the sexes as perpetrators, which is mostly described as situational couple violence. However, these studies are hampered by low response rates. On the other hand, studies showing predominantly male violence use agency data and identify partner violence that is more frequent, more severe and more likely to escalate (Johnson 1995; 2008). Yet the

limitations of agency data are well documented. The review of existing research also highlights difficulties associated with making consistent distinctions between the severity of incidents. Through a critical assessment of scholarly attempts to develop a system of measurement that is consistent and sustainable, the literature review identified the recently-developed Cambridge Crime Harm Index (CHI) (Sherman et al. 2016) as the most promising way of distinguishing between the severity of incidents.

This research sought to address the problems of interpreting results by profiling the extent of partner abuse re-offending based on what is known to the police and focused on identifying patterns of offending to target future police-known partner abuse. There is no data available to know (with any confidence) how many hidden cases there are, so the police need to concentrate effort on what is available. The analysis of 140,998 incidents of partner abuse reported to TVP between 1<sup>st</sup> January 2010 and 1<sup>st</sup> January 2016 produced findings that are capable of being operationalised by the police to target perpetrators, but also add to the evidence base which challenges previously accepted wisdom about the extent and nature of intimate partner abuse.

The research found large amounts of low harm re-offending (79% of all repeat incidents were non-crime incidents or non-violent offences, Figure 3). Not only does this contradict Johnson's (1995; 2008) hypothesis that agency data is more likely to find evidence of abuse that escalates in severity, but also highlights the need for scholars and practitioners to consider the impact of non-violent offending. This is underlined by more recent research indicating cases involving coercive control have a higher likelihood of resulting in serious harm or homicide than instances which involve the use of violence (Stark 2007; Myhill and Hohl 2016).

An important focus of this thesis was the issue of escalation in frequency and severity. Theories of escalation have been a prominent feature of existing research into intimate partner abuse with identification of this phenomenon forming a critical part of current police

attempts to target cases of partner abuse to prevent further harm. Whilst the research identified evidence of increasing overall average levels of harm in the Thames Valley annually between 2013 and 2015, examination of repeat offenders did not show evidence of escalation in severity.

Analysis of the offending patterns amongst the top 500, 100 and 50 most harmful perpetrators from 2010, showed decreasing levels of harm and recidivism over the following 5 years. Data from the 2 year fixed follow up showed that 41.5% of incidents were not repeated whilst a further 36.1% of incidents were recorded as a non-crime (Figure 13). Amongst unique perpetrators, 37% re-offended but of those who did 30.2% were only involved in one further non-crime incident in the 731 day follow up (Figure 15). The results did show some escalation in frequency amongst those who do re-offend as the number of repeat incidents increases. However, re-offending was very far from certain. In the 2 year follow up, where all incidents were included, there was a 19% chance that a perpetrator who was involved in one incident would go on to be involved in a second incident (Figure 16). Where only criminal offences were analysed, the probability of being involved in a second crime was slightly elevated (but still quite unlikely) at 26% (Figure 17). There was also evidence that, as the number of repeat incidents increased, the time between those incidents decreased. However, the average harm scores did not show an increase in severity between the first and thirteenth incident.

It was beyond the scope of this research to try to explain the reasons behind these findings and what impact changes in circumstances or deliberate intervention had on the events that followed. This study was carried out in just one of the forty three forces in England and Wales and further research is required in different contexts to see if the findings hold elsewhere. The Thames Valley is an area which is demographically similar to the rest of England and Wales. It would be interesting to see what results are found in areas that have a very different demographic profile.



The results highlight the importance of using a consistent measure of harm not only to understand the issue of escalation, but also to provide a counterpoint to a common focus on frequency that can inform decisions about how to target resources. More importantly, the results call for further consideration of the way in which the police currently target cases of partner abuse. Whilst the results of this study can be factored in to considerations about how to deal with re-offending immediately, they could also be used to inform the development of a forecasting model to better predict the harm caused by partner abuse re-offenders.

## References

- Bachman, R. and Schutt, R. K (2013) *The Practice of Research in Criminology and Criminal Justice*, 5<sup>th</sup> edition, Thousand Oaks, California: Sage.
- Barnes, G. C. and Hyatt, J. M. (2012) *Classifying adult probationers by forecasting future offending: Final technical report*, United States Department of Justice.
- Berk, R., Sherman, L. W., Barnes, G. C., Kurtz, E. and Ahlman, L. (2009) 'Forecasting murder within a population of probationers and parolees: a high stakes application of statistical learning', *Journal of the Royal Statistical Society*, 172, part 1: 191 – 211.
- Bland, M. and Ariel, B. (2015) 'Targeting escalation in reported domestic abuse: Evidence from 36,000 callouts', *International Criminal Justice Review*, Vol. 25(1): 30 – 53.
- Chalkley, R. (2015) 'Predicting serious domestic assaults and murder in Dorset', (Unpublished M.St. thesis in Applied Criminology and Police Management, Institute of Criminology, University of Cambridge).
- Crown Prosecution Service (n.d.) 'CPS domestic abuse prosecution outcomes 2008-2015', [Online] accessed 27<sup>th</sup> July 2016. Available from: <https://data.gov.uk/dataset/crown-prosecution-service-violence-against-women-and-girls-annual-report-2014-2015-data/resource/0eb4d50c-b172-4d16-83dd-8e6ebc9dd04e>
- Dobash, R. P. and Dobash, R. E. (2004) 'Women's violence to men in intimate relationships: Working on a puzzle', *British Journal of Criminology*, Vol. 44: 324 – 349.
- Dubourg, R. and Hamed, J. (2005) 'Estimates of the economic and social costs of crime in England and Wales: Costs of crime against individuals and households, 2003/04', [Online] Home Office Online Report 30/05 accessed 2<sup>nd</sup> April 2016. Available from: <http://webarchive.nationalarchives.gov.uk/20100413151441/http://www.homeoffice.gov.uk/rds/pdfs05/rdsolr3005.pdf>

- Farell, G. and Pease, K. (2007) 'The sting in the tail of the British Crime Survey: Multiple victims' in Maxfield, M. and Hough, M., *Surveying Crime in the 21st Century: Crime Prevention Studies*, 22, Collumpton: Willan: 33 – 53.
- Feld, S. L. and Straus, M. (1989) 'Escalation and desistance of wife assault in marriage', *Criminology*, Vol. 27: 141 – 161.
- Garcia-Moreno, C. and Pallitto, C. (2013) 'Global and regional estimates of violence against women: Prevalence and health effects of intimate partner violence and non-partner sexual violence', World Health Organisation, Department of Reproductive Health and Research, London School of Hygiene and Tropical Medicine, South African Medical Research Council, [Online] accessed on 24<sup>th</sup> April 2016. Available from <http://www.who.int/reproductivehealth/publications/violence/9789241564625/en/>
- Groves, N. and Thomas, T. (2014) *Domestic Violence and Criminal Justice*, London: Routledge.
- Hanson, R. K., Harris, A. J. R., Helmus, L. and Thornton, D. (2014) 'High-risk sex offenders' may not be high risk forever', *Journal of Interpersonal Violence*, Vol. 29 (15): 2792 – 2813.
- Her Majesty's Inspectorate of Constabulary (2013) 'Crime recording: A matter of fact – An interim report of the inspection of crime data integrity in police forces in England and Wales', [Online] accessed 2<sup>nd</sup> November 2016. Available from: <http://www.justiceinspectors.gov.uk/hmic/wp-content/uploads/2014/05/crime-data-integrity-interim-report.pdf>
- Her Majesty's Inspectorate of Constabulary (2014a) 'Everyone's Business: Improving Police Response to Domestic Abuse', [Online] accessed 11<sup>th</sup> April 2016. Available from <http://www.hmic.gov.uk/publication/improving-the-police-response-to-domestic-abuse/>
- Her Majesty's Inspectorate of Constabulary (2014b) *Crime data integrity: Inspection of Thames Valley Police*, [Online] accessed 23<sup>rd</sup> July 2016. Available from [www.justiceinspectors.gov.uk/hmic/](http://www.justiceinspectors.gov.uk/hmic/); ISBN: 978-1-78246-551-5.

- Home Office (2013) 'Find out about domestic violence and abuse, coercive control, disclosure scheme, protection notices, domestic homicide reviews and advisers', [Online] accessed 11<sup>th</sup> April 2016. Available from <https://www.gov.uk/guidance/domestic-violence-and-abuse#domestic-violence-and-abuse-new-definition>
- Home Office (2014) 'New law that will help protect thousands of potential victims' [Online] accessed 14<sup>th</sup> November 2016. Available from <https://www.gov.uk/government/news/forced-marriage-now-a-crime>
- Home Office (2015) 'Controlling or coercive behaviour in an intimate or family relationship: Statutory guidance framework' [Online] accessed 14<sup>th</sup> November 2016. Available from [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/482528/Controlling\\_or\\_coercive\\_behaviour\\_-\\_statutory\\_guidance.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/482528/Controlling_or_coercive_behaviour_-_statutory_guidance.pdf)
- Ignatans, D and Pease, K. (2016) 'Taking crime seriously: Playing the weighting game', *Policing*, Vol. 10 (3): 184 – 193.
- Johnson, M (1995) 'Patriarchal terrorism and Common Couple Violence: Two forms of violence against women', *Journal of Family and Marriage*, Vol. 57 (2): 283 – 294.
- Johnson, M. (2006) 'Conflict and Control: Gender symmetry and asymmetry in domestic violence', *Violence Against Women*, Vol. 12 (11): 1003 – 1018.
- Johnson, M. (2008) *A typology of domestic violence: Intimate terrorism, violent resistance, and situational couple violence*, Lebanon, New Hampshire: Northeastern University Press.
- Kelly, J. B. and Johnson, M. (2008) 'Differentiation among types of intimate partner violence: Research update and implications for interventions', *Family Court Review*, Vol. 46 (3): 476 – 499.
- Morley, R. and Mullender, A. (1994) 'Preventing domestic violence to women', *Police Research Group Crime Prevention Unit Series*, Paper No. 4, London: Home Office.

- Myhill, A. and Hohl, K. (2016) 'The "Golden Thread": Coercive Control and risk assessment for domestic violence', *Journal of Interpersonal Violence*, Published online 1<sup>st</sup> November 2016, available from <http://jiv.sagepub.com> : 1 – 26.
- Office for National Statistics (2011), '2011 Census: Aggregate data (England and Wales) [computer file]'. UK Data Service Census Support. Downloaded from: <http://infuse.mimas.ac.uk>
- Office for National Statistics (2015), 'Focus on Violent Crime and Sexual Offences 2013/14: Findings from the 2013/14 Crime Survey for England and Wales and police recorded crime over the same period on violent crime and sexual offences' [Online] accessed 24<sup>th</sup> April 2016. Available from:  
<http://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/compendium/focusonviolentcrimeandsexualoffences/2015-02-12>
- Office for National Statistics (2015) 'Focus on Violent Crime and Sexual Offences, year ending March 2015 statistical bulletin on the Crime Survey for England and Wales and police recorded crime' [Online] accessed 21<sup>st</sup> May 2016. Available from:  
<http://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/compendium/focusonviolentcrimeandsexualoffences/yearendingmarch2015/chapter4intimatepersonalviolenceandpartnerabuse#toc>
- Office for National Statistics (2015) 'Crime Survey for England and Wales: Technical Report 2014/15 Volume One', [Online] accessed 7<sup>th</sup> August 2016. Available from:  
<https://www.ons.gov.uk/.../crimeandjusticemethodology/pdf>
- Pagelow, M. D. (1981) *Woman Battering: Victims and their experiences*, Beverley Hills, CA: Sage.
- Payne, B. K. and Gainey, R. R. (2002), *Family Violence & Criminal Justice: A Life-Course Approach*, 1<sup>st</sup> edition, New Providence, New Jersey: Anderson Publishing.
- Piquero, A. R., Brame, R., Fagan, J., and Moffitt, T. E. (2006). Assessing the offending activity of criminal domestic violence suspects: offense specialization, escalation, and de-escalation evidence from the Spouse Assault Replication Program, *Public Health Reports*, Vol. 121 (4), 409 – 418.

- Richards, L., Lethcford, S. and Stratton, S. (2008) *Policing Domestic Violence*, Oxford: Oxford University Press.
- Robson, C. (2011) *Real World Research*, 3<sup>rd</sup> edition, Chichester, West Sussex: Wiley.
- SafeLives (2015), Getting it right first time: policy report, Bristol: SafeLives. Accessed 24<sup>th</sup> April 2016.  
Available from: <http://safelives.org.uk/policy-evidence/getting-it-right-first-time>
- Sellin, T and Wolfgang, M. E. (1964) *The Measurement of Delinquency*, New York: Wiley.
- Sherman, L. W. (1992) *Policing Domestic Violence: Experiments and Dilemmas*, The Free Press: New York.
- Sherman, L. W. (2007) 'The power few: experimental criminology and the reduction of harm', *Journal of Experimental Criminology*, Vol. 3: 299 – 321.
- Sherman, L. W. (2009) 'An introduction to experimental criminology' in Weisburd, D. and Piquero, A. (eds), *Handbook of Quantitative Criminology*, New York, NY: Springer.
- Sherman, L. W. (2013) *The Rise of Evidence-Based Policing: Targeting, Testing and Tracking*, Chicago: The University of Chicago.
- Sherman, L. W. and Strang, H. (1996) 'Policing domestic violence: The problem-solving paradigm' (Unpublished paper presented at the conference 'Problem Solving Policing as Crime Prevention', Stockholm).
- Sherman, L. W., Neyroud, P. and Neyroud, E. (2016) 'The Cambridge Crime Harm Index (CHI): Measuring total harm from crime based on sentencing guidelines', *Policing*, Vol. 10 (3): 171 – 183.
- Stark, E. (2007) *Coercive Control: How men entrap women in personal life*, Oxford, UK: Oxford University Press.

- Stark, E. (2013) 'The dangers of dangerousness assessment', *Family and Intimate Partner Violence Quarterly*, Vol. 6 (2): 13 – 22.
- Straus, M. A. (1979) 'Measuring intra family conflict and violence: The Conflict Tactics (CT) Scales', *Journal of Marriage and the Family*, Vol. 41: 75 – 88.
- Straus, M. A. (2007) 'Conflict Tactics Scales' in *Encyclopaedia of Domestic Violence*, N. A. Jackson. New York: Routledge: Taylor & Francis Group: 190 – 197.
- Straus, M. and Gelles, R. (1987) 'Societal change and change in family violence from 1975 to 1985 as revealed by two national surveys', *Journal of Marriage and the Family*, Vol. 48: 465 – 479.
- Thames Valley Police (2016) 'Total number of domestic occurrences in the Thames Valley Police area between 1st May 2015 and 30th April 2016', Freedom of Information Act request published 24<sup>th</sup> May 2016, [Online] accessed 27<sup>th</sup> July 2016. Available from: <http://www.thamesvalley.police.uk/aboutus/aboutus-depts/aboutus-depts-infman/aboutus-depts-foi/aboutus-depts-foi-disclosure-log/aboutus-depts-foi-disclosure-log-crimestats/aboutus-depts-foi-disclosure-log-item.htm?id=334679>
- Thornton, S. D. (2011) 'Predicting serious domestic assaults in the Thames Valley' (Unpublished M.St. thesis in Applied Criminology and Police Management, Institute of Criminology, University of Cambridge).
- Walby, S. (2009) *The cost of domestic violence: Update 2009*, Lancaster: Lancaster University.
- Walker, L. E. A. (2006) 'Battered Woman Syndrome: Empirical findings', *Annals New York Academy of Sciences*, Vol. 1087: 142 – 157.
- Wallace, M, Turner, J., Matarazzo, A. and Babyak, C. (2009) 'Measuring crime in Canada: Introducing the Crime Severity Index and improvements to the Uniform Crime Reporting Survey', Catalogue No. 85-004-X, Ottawa: Minister of Industry, Statistics Canada.

Wolfgang, M. E., Figlio, R. M., Tracy, P. E. and Singer, S. I. (1985) *The National Survey of Crime Severity*, Washington DC: US Department of Justice, Bureau of Justice Statistics.

Woodhouse, J. and Dempsey, N. (2016) *Domestic violence in England and Wales*, Briefing Paper 6337, [Online] accessed 6th May 2016. Available from: <http://researchbriefings.files.parliament.uk/documents/SN06337/SN06337.pdf>



## Annex A: Offence classifications and crime harm scores

Incident/offence classification	CHI score applied	Non-personal crime	Nature of incident
Absent Person	0	X	Non-Crime
Abstract / use without authority electricity	1		Non-Violent
Abuse of Trust	0	X	Non-Crime
Act of outraging public decency - common law	10		Sexual
Act of outraging public decency - common law	10		Sexual
Administer poison with intent to endanger life / inflict grievous bodily harm	2190		Violent
Administering drugs or using instruments to procure abortion	1460		Violent
Adult Protection - Non-crime Occurrence	0.1		Non-Crime
Adult Protection (non-crime incident)	0.1		Non-Crime
Aggravated burglary - dwelling	365		Non-Violent
Aggravated vehicle taking - ( initial taker ) and dangerous driving	126		Non-Violent
Aggravated vehicle taking - vehicle and property damage under £5000	10		Non-Violent
Aiding Suicide	1460		Violent
All TEW offences except S10, 78 to 82, 92 to 95 Railway Transport Safety Act 2003	10		Non-Violent
Arrange / facilitate travel of a person within the United Kingdom for exploitation	182.5		Sexual
Arson - not endangering life	18.75		Violent
Arson with intent to endanger life	2190		Violent
Articles connected with computer misuse	2		Non-Violent
ASB non-crime - Medium risk	0	X	Non-Crime
ASB non-crime related	0	X	Non-Crime
Assault - S18 - GBH cause grievous bodily harm with intent to resist / prevent arrest	1460		Violent
Assault - S18 - GBH grievous bodily harm with intent	1460		Violent
Assault - S20 - GBH Grievous bodily harm without intent	18.75		Violent
Assault - S39 - Common assault	1		Violent
Assault - S47 - AOABH assault occasioning actual bodily harm	10		Violent
Assault Of A Person Assisting A Constable (Sec 38)	0	X	Non-Crime
Assault on constable police act 1996	0	X	Non-Crime
Assault with Injury	1		Violent
Assault with intent to commit robbery - business	365		Violent
Assault Without Injury On Constable	0	X	Non-Crime
Assaults an officer of Revenue or Customs	0	X	Non-Crime
Attempt murder - victim aged 1 year or over	3285		Violent
Bail Offences	1		Non-Violent
Bigamy	14		Non-Violent
Blackmail	365		Non-Violent
Bomb hoax - communicate false information	10		Non-Violent
Breach a non-molestation order - Family Law Act 1996	5		Non-Violent
Breach licence requirement contravention S161	0	X	Non-Crime
Breach of a Restraining Order issued on acquittal	3		Non-Violent
Breach of an anti-social behaviour order	5		Non-Violent
Breach of criminal behaviour order	5		Non-Violent
Breach of sex offender order	42		Non-Violent
Bring / throw / convey a List ' A ' prohibited article into / out of a prison - Prison Act 1952	18.75	X	Non-Violent
Burglary dwelling - Distraction with intent to steal	365		Non-Violent
Burglary dwelling - Stealing	18.75		Non-Violent
Burglary dwelling - With intent to steal	18.75		Non-Violent
Burglary non dwelling - Theft only	10		Non-Violent

Incident/offence classification	CHI score applied	Non-personal crime	Nature of incident
Burglary non dwelling - with intent to commit or with the commission of an offence	10		Non-Violent
Burglary non dwelling (Attempts Only) - with intent to steal	10		Non-Violent
Burglary other than dwelling - With intent to inflict GBH	730		Violent
Burglary Other Than In A Dwelling (Attempts Only)	10		Non-Violent
Burglary Other Than In A Dwelling (Excluding Attempts)	10		Non-Violent
Care worker ill-treat / wilfully neglect an individual	84		Non-Violent
Cause administer poison with intent to injure / aggrieve / annoy	182.5		Violent
Cause bodily harm by wanton / furious driving	10		Violent
Causing danger to road users	1.5		Non-Violent
Causing serious injury by dangerous driving	547.5		Violent
Child abduction - other person	548		Non-Violent
Child abduction - parent	273		Non-Violent
Child Destruction	365		Violent
Child Protection (Non-crime Incident)	0.1		Non-Crime
Conspire to murder	1460		Violent
Contaminate / Interfere with goods	18.75		Violent
Contempt of Court	0	X	Non-Crime
Criminal damage	2		Non-Violent
Criminal damage other - value over £5000	84		Non-Violent
Criminal damage other - value under £5000	2		Non-Violent
Criminal damage to a building other than a dwelling	2		Non-Violent
Criminal damage to a building other than a dwelling - endangering life	730		Violent
Criminal damage to a dwelling	2		Non-Violent
Criminal damage to a dwelling - endangering life	730		Violent
Criminal damage to a dwelling - value over £5000	84		Non-Violent
Criminal damage to a vehicle - value over £5000	84		Non-Violent
Criminal damage to a vehicle - value under £5000	2		Non-Violent
Disablist Incident (Non Recordable Crime)	0.1		Non-Crime
Disclose private sexual images to cause distress (Inc Photos / Films)	10		Non-Violent
Disclosure Scheme - Non-crime Occurrence	0	X	Non-Crime
Distribute an indecent photograph / pseudo-photograph of a child	91		Sexual
Do an act which harmed a witness / juror	126		Violent
Dog causing injury in a private place	2		Non-Violent
Domestic Incident (non-crime incident)	0.1		Non-Crime
Drive a motor vehicle dangerously	10		Non-Violent
Drug Possession - Cannabis	0	X	Non-Crime
Drug Possession - Excluding Cannabis	0	X	Non-Crime
Drug Supplying (Incl. Possession W/I To Supply)/Production/Cultivation	0	X	Non-Crime
Drugs wef 26/1/09 Possession of cannabis class B	0	X	Non-Crime
Drugs wef 26/1/09 Production of cannabis class B	0	X	Non-Crime
Engage in controlling / coercive behaviour in an intimate / family relationship	182.5		Non-Violent
Failure to comply with regulations	0	X	Non-Crime
False imprisonment - common law	548		Violent
False oral / written unsworn statement	91		Non-Violent
Firearms - Firearm - possession with intent to cause fear of violence	1825		Violent
Firearms - Possess imitation firearm - committing Schedule 1 offence	1095		Violent
Firearms - Possession of imitation firearm with intent to cause fear of violence	1825		Violent
Forced Marriage Offences	548		Non-Violent
Fraud by abuse of position - Fraud Act 2006	252		Non-Violent
Fraud by false representation - Cheque, card and online banking	10		Non-Violent
Fraud by false representation - Other methods	10		Non-Violent
Handling controlled waste without reasonable measure	0	X	Non-Crime
Harassment (First Single Incident) Non Recordable Crime	0.1		Non-Violent

Incident/offence classification	CHI score applied	Non-personal crime	Nature of incident
Harassment etc of a person in his home	5		Non-Violent
Hold person in slavery or servitude	365		Violent
Honour Based Violence - non recordable crime	0.1		Non-Crime
Immigration Offences	0	X	Non-Crime
Interfere with a motor vehicle / trailer / cycle - endanger road user	3		Non-Violent
Intimidate a witness / juror	42		Non-Violent
Kidnap - common law	548		Violent
Linked Investigation	0	X	Non-Crime
Make / cause / permit display of indecent matter	91		Non-Violent
Make indecent photograph / pseudo-photograph of a child	547.5		Sexual
Manslaughter	1095		Violent
Missing Person	0	X	Non-Crime
Murder - victim one year of age or older	5475		Violent
N100 - Reported Rape: Credible evidence to the contrary exists	0	X	Non-Crime
N100 - Reported Rape: Victim (or third party acting on their behalf) has not confirmed the offence or cannot be traced	0	X	Non-Crime
Notifiable Offences not classified elsewhere	10		Non-Crime
Obstruct the course of public justice - Common Law	42		Non-Violent
Other burglary in a building other than a dwelling	10		Non-Violent
Other criminal damage	2		Non-Violent
Perjury	91		Non-Violent
Person who provides immigration advice or services in contravention with legislation or restraining order	0	X	Non-Crime
Possess an offensive weapon	18.75		Violent
Possession of a controlled drug GBL/14BD	0	X	Non-Crime
Proceeds of Crime - conceal / disguised / converted / transferred / removed criminal property	5		Non-Violent
Procuring Illegal Abortion	1460		Violent
Public Health Offences (historic)	0	X	Non-Crime
Public nuisance - common law	1		Non-Violent
Public Order - S2 Harassment without violence	10		Non-Violent
Public Order - S2 Violent disorder	10		Violent
Public Order - S3 Affray	5		Violent
Public Order - S3 Harassment - breach of civil injunction	5		Non-Violent
Public Order - S4 Harassment - put in fear of violence	42		Violent
Public Order - S4A words / behaviour to cause harassment / alarm / distress	5		Non-Violent
Public Order - S5 Harassment - breach of restraining order	5		Non-Violent
Public Order - S5 Use threatening words / behaviour to cause harassment alarm or distress	1		Non-Crime
Publish an obscene article	10		Sexual
Racially / religiously aggravated assault occasioning ABH	182		Violent
Racially / religiously aggravated common assault	10		Violent
Racially / religiously aggravated harassment / alarm / distress	42		Non-Violent
Racially / religiously aggravated harassment with fear of violence	126		Violent
Racially / religiously aggravated wounding / GBH without intent	547.5		Violent
Racist Incident (Non Recordable Crime)	0.1		Non-Crime
Resisting or wilfully obstructing a designated or accredited person in the execution of their duty	0	X	Non-Crime
Road Traffic (Non-crime Incident)	0	X	Non-Crime
Robbery	365		Violent
Section 136 Mental Health Act - non-crime incident	0	X	Non-Crime
Sending letters etc with intent to cause distress or anxiety (Malicious Comms Act)	10		Non-Violent
Sex - Administer a substance with intent - SOA 2003	730		Sexual
Sex - Adult abuse of position of trust - cause / incite sexual activity with boy 13 - 17 - SOA 2003	10		Sexual
Sex - Adult abuse position of trust - cause child 13 - 17 watch a sexual act - SOA 2003	10		Sexual

Incident/offence classification	CHI score applied	Non-personal crime	Nature of incident
Sex - Adult incite sexual activity with a boy under 13 family member - penetration - SOA 2003	2190		Sexual
Sex - Adult incite sexual activity with a family member - victim girl 13 to 17 - no penetration - SOA 2003	10		Sexual
Sex - Adult incite sexual activity with a family member - victim girl 13 to 17 - penetration - SOA 2003	1277.5		Sexual
Sex - Adult meet girl under 16 following sexual grooming - SOA 2003	547.5		Sexual
Sex - Adult sexual activity with a girl 13 - 17 family member - penetration - SOA 2003	1277.5		Sexual
Sex - Adult sexual activity with a girl under 13 family member - no penetration - SOA 2003	10		Sexual
Sex - Assault a boy under 13 by penetration with a part of your body / a thing - SOA 2003	1460		Sexual
Sex - Assault a boy under 13 by touching - SOA 2003	182		Sexual
Sex - Assault a girl under 13 by penetration with a part of your body / a thing - SOA 2003	1460		Sexual
Sex - Assault a girl under 13 by touching - SOA 2003	182		Sexual
Sex - Attempt to rape a woman 16 or over - SOA 2003	1825		Sexual
Sex - Attempted rape of a female under 16	1825		Sexual
Sex - Care worker cause / incite sexual activity with mental disordered person - penetration - SOA 2003	1825		Sexual
Sex - Care worker cause / incite sexual activity with mentally disordered person - no penetration - SOA 2003	182		Sexual
Sex - Care worker engage in sexual activity with mentally disordered male - no penetration - SOA 2003	182		Sexual
Sex - Cause / allow sexual penetration per vagina / anus of a female person by a living animal - SOA 2003	182.5		Sexual
Sex - Cause a female 13 or over to engage in a non penetrative sexual activity - SOA 2003	18.75		Sexual
Sex - Cause a female 13 or over to engage in a penetrative sexual activity - SOA 2003	730		Sexual
Sex - Cause a male 13 or over to engage in a penetrative sexual activity - SOA 2003	730		Sexual
Sex - Exposure - SOA 2003	10		Sexual
Sex - Offender 18 or over cause a child under 13 to watch / look at an image of sexual activity - SOA 2003	10		Sexual
Sex - Rape a boy under 13 - SOA 2003	1825		Sexual
Sex - Rape a girl aged 13 / 14 / 15 - SOA 2003	1825		Sexual
Sex - Rape a girl under 13 - SOA 2003	1825		Sexual
Sex - Rape a male under 16	1825		Sexual
Sex - Rape a man 16 or over - SOA 2003	1825		Sexual
Sex - Rape a woman 16 years of age or over - SOA 2003	1825		Sexual
Sex - Sexual assault on a female - SOA 2003	18.75		Sexual
Sex - Sexual assault on a male - SOA 2003	18.75		Sexual
Sex - Solicit a person or persons for the purposes of prostitution in a public place	0.1		Sexual
Sex - Trafficking persons into the United Kingdom for sexual exploitation - SOA 2003	182		Sexual
Sex - Voyeurism - recording a private act - SOA 2003	10		Sexual
Sex activity with a female child under 16 no penetration offender under 18	10		Sexual
Sex activity with a female child under 16 penetration offender under 18	10		Sexual
Sex activity with a male child under 13 no penetration offender under 18	10		Sexual
Shoplifting	0	X	Non-Crime
Stalking - Involving fear of violence	182.5		Violent
Stalking - Involving serious alarm / distress	182.5		Non-Violent
Stalking - Pursue a course of conduct	42		Non-Violent
Supply or offering to supply a controlled drug Other class A	0	X	Non-Violent
Suspected Cse - Non-crime Incident	0	X	Non-Crime
Take a conveyance (not motor vehicle / pedal cycle) without consent	5		Non-Violent
Take a motor vehicle without the owners consent	5		Non-Violent
Taking a pedal cycle without consent	2		Non-Violent

Incident/offence classification	CHI score applied	Non-personal crime	Nature of incident
Theft - other - including theft by finding	2		Non-Violent
Theft by employee	5		Non-Violent
Theft from meter or automatic machine	2		Non-Violent
Theft from motor vehicle	2		Non-Violent
Theft from the person of another	2		Non-Violent
Theft in dwelling other than auto machine or meter	2		Non-Violent
Theft of conveyance other than motor vehicle or pedal cycle	2		Non-Violent
Theft of mail bag / postal packet	2		Non-Violent
Theft of motor vehicle	5		Non-Violent
Theft of pedal cycle	2		Non-Violent
Threaten with an offensive weapon in a public place	182.5		Violent
Threats To Kill	10		Violent
Unexplained Death (CRI)	0	X	Non-Crime
Unlawful harassment of occupier	5		Non-Violent
Use of noxious substances or things to cause harm and intimidate	182.5		Violent
Vehicle interference - motor vehicle	3		Non-Violent
Warrants Management	0	X	Non-Crime
Wasting Police Time PND - CRI	0	X	Non-Crime