Is Domestic Violence Violent Crime?

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This thesis is submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy

Declaration of Work

I declare that this thesis is my own work and has not been submitted elsewhere for the award of a higher degree.

Elouise Davies

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Abstract

This thesis analyses domestic violence as a form of violent crime to examine if (and how) violence by domestic perpetrators differs to violence by strangers and acquaintances. Violence by domestic perpetrators has been argued to differ from violence by other perpetrators in several ways, including sex (of the victim and of the perpetrator), repetition, and severity (Bachman 1994; Walby, Towers and Francis 2014). This thesis compares these key factors associated with different forms of violence (sex, repetition, and severity) using a large quantitative dataset of violent crimes compiled from the Crime Survey for England and Wales (CSEW) to determine whether domestic violence is significantly different to other forms of violent crime and thus should remain distinct and separate in its analysis, policymaking, and practices, or whether domestic violent crime should be integrated into "violent crime". The concept of 'harm' has been operationalised to test the comparative differences / similarities. The findings of this thesis suggest: the harms from violent crime increase as the distance to the perpetrator decreases for overall harm, emotional harm and physical harm (i.e. violence from domestic relations is more harmful to the victim than violence from strangers); the gendered aspects of violence are important for understanding the harms experienced by victims (VAW is more harmful when perpetrated by a male domestic perpetrator than violence by female domestic perpetrators, against male victims); and including emotional harms shows how violence without injury is still 'harmful'.

The overall conclusion is that DVC should be mainstreamed in analysis of violent crime, but victim-perpetrator relationship should be disaggregated to highlight patterns and differences. While domestic violence is different to violence perpetrated by strangers or acquaintances on the above dimensions, it does not make sense to exclude it from discussions of violent crime.

Abbreviations

CSEW	Crime Survey for England and Wales
PRC	Police Recorded Crime
VAW	Violence Against Women
CV	Changing Violence
ONS	Office For National Statistics
DVC	Domestic Violent Crime
CTS	Conflict Tactics Scale
CHI	Cambridge Harm Index
SES	Socio-Economic Status

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1. Introduction

This PhD takes a comparative approach to violent crime, exploring the similarities and differences between domestic violent crime and other forms of violent crime to assess whether, going forward, they should be combined and considered as "violet crime" or whether domestic violent crime needs to be considered separately from other forms of violent crime. This will contribute to answering the title questions of this thesis: 'Is domestic violence violent crime?'.

In Criminology, traditionally, violence is researched as violence perpetrated by male strangers against male victims, with the main theorisations of violence discussing the role society and in particular inequality have on the perpetration of violence. This puts the perpetrator in the socially and economically disadvantaged position in the victim-perpetrator dyad, and the victim being socially or economically more advantaged than the perpetrator (Merton, 1938; Young 1999; Ray, 2018). However, these theorisations of violence are not well suited to situations where violence is perpetrated against women. Violence against women is often perpetrated by men who are known to the victim (Dobash and Dobash, 1992; Walby and Towers, 2018b) and where the victim is socially and economically disadvantaged compared to the perpetrator (Towers, 2015; Walby and Allen, 2004; Renzetti, 2011). This observation has led to a separate field of study emerging that considers violence against women specifically (Walklate, 2004).

The separation of different forms of violence, evident in criminological research is also reflected in contemporary discussions of violence in public discourse, with, for example, reports of violence against women also being found separate from reports of general violence in the media. Violence against women by strangers regularly makes the headlines in the UK. A recent example being the Sarah Everard case. Even though the evidence shows women are most at risk by known offenders (Bachman, 1994; Walby, 2005), the public are often presented with the narrative of 'stranger danger'. In this narrative, male violence against women is presented as a shocking and uncommon event which can result in collective grief and anger by the public (Merken and James, 2018; Morgan and Simons, 2017). Thus, we see the separation of different forms of violence within criminology and within specialist fields. Not only has violence against women become a distinct sub-category of violence, but a similar process has also occurred with knife crime in the UK, whereby knife crime has come to mean gang related violence with a bladed weapon by male youths, excluding for example domestic knife crime (Haylock et al. 2020; Cook and Walklate, 2020).

This separation of violence into distinct areas is also evident in relation to the COVID19 pandemic. Globally, the COVID 19 pandemic resulted in a rise in domestic violence and domestic homicide (Bradbury-Jones and Isham, 2020; Donagh, 2020; Usher et al. 2021; Usher et al. 2020). During the pandemic, violence was expected to decrease; specifically, violence in the night-time economy impacted by the implementation of lockdown measures during 2020 in the UK, which is one of the key foci of traditional criminology. However, as victims of domestic violence were "locked down" at home with their abusers, the number of violent incidents increased. This led to a series of both research studies and police interventions around Domestic Violence and Abuse during the pandemic – which also helped reemphasised the separation of violence into specialist fields for analysis, policy, and practice.

The Violence Against Women (VAW) field centres on gendered analyses of violence, emphasising the interaction between sex of the victim and sex of the perpetrator and how this influences the nature and outcomes of violence. Conversely, traditional criminology does not routinely disaggregate by sex, so this feature is particularly relevant when studies of domestic violence are considered. Violence by domestic perpetrators has been argued to differ from violence by other perpetrators through sex (of the victim and perpetrator), repetitions, and severity (Bachman 1994; Walby, Towers and Francis 2014). Studies which focus on comparing violence by these factors are uncommon, not least because of the separation of different forms of violence into these distinct fields. This thesis has directly compared the key factors associated with different forms of violence (sex, repetition, and severity) using a large quantitative dataset compiled from the Crime Survey for England and Wales (CSEW) of violent crimes in England and Wales over 11 years to analyse whether domestic violence is significantly different to other forms of violent crime and thus should remain distinct and separate in its analysis, policy-making and practices, or whether domestic violent crime is essentially the same as other forms of violence and thus should be integrated into the analysis, policy-making and practices for "violent crime". To do this, first, violent crime has been categorised by perpetrator (domestic, acquaintance or stranger). Second, a focus on "harm" has been utilised to test the comparative differences / similarities.

This thesis compares violent crime events across the three relationship groups, demonstrating the importance of including violence by all perpetrators into a unified theory of violent crime. By investigating the nature and outcomes of violent crime, this thesis demonstrates how even relatively 'simple' questions cannot be answered without a comparative approach; utilising such an approach here, this thesis suggests: the harms from

violent crime increase as the distance to the perpetrator decreases, for overall harm, emotional harm and physical harm; the gendered aspects of violence are important for understanding the harms experienced by victims; and including emotional harms shows how violence without injury is still harmful.

1.1 Contributions of the Thesis

This thesis is focused on comparing the nature and the outcomes of violence by domestic relations with violence by acquaintances and strangers. This thesis demonstrates the value of approaching domestic violence and violence with a comparative approach, thus mainstreaming domestic violence into the analysis of violence (Walby, Towers and Francis, 2014). This thesis will contribute to debates within academia, with methodological and theoretical contributions to theorisations of domestic violence and violent crime. This thesis will also have methodological contributions outside of academia. The contributions of this thesis are outlined in this section.

The theoretical contributions of this thesis will add to debates within the VAW field of criminology. There are debates within this field over the gendered nature of domestic violence (gender symmetry vs. gender asymmetry), whether repetitions are part of the experiences of female victims of violence who are more likely to be victimised known perpetrators, and whether the consequences are more severe when the perpetrator is a domestic relation. This will be investigated by comparing violence by domestic relations to violence by strangers and acquaintances to identify; the gendered nature of the violence (sex of the victim and perpetrator), whether the violence is repeated, and the type of violence experienced by victims. Debates within theories of domestic violence often discuss the importance of coercive and controlling techniques in increasing the severity of the violence experienced by victims (Stark, 2007). This thesis will approach the debates around the physicality of violence from a different angle. The differences in emotional and physical harm are compared when the perpetrator is a domestic relation, and the victim is female to when the perpetrator is acquaintance or stranger, and the victim is male.

A specific analysis within this thesis will go beyond the current criminological approach to violence as being "one crime, one perpetrator and one victim" assessing violence by multiple perpetrators and the different victimisation experiences of one victim (Walby, Towers and Francis, 2017:15). This analysis found that there were a significant minority of instances where violence is perpetrated against one victim by a group of perpetrators. This is

more common for stranger violence and acquaintance violence than for violence by domestic relations. Therefore, by going beyond current criminological research, and looking at instances where there is more than one perpetrator (sometimes in more than one discrete event), another difference was found in the nature of violence when perpetrated by domestic relations to strangers or acquaintances.

This thesis will also have a methodological contribution. This thesis will experiment with creating a measure for harm using binary factor analysis. This will contribute to identifying the harms experienced by different subsets of victims. This is more statistically appropriate for measuring the range of harms experienced by different victims than using only an exploratory approach to determining the harms (i.e., what proportion of victims have experienced which harms). Harm indices have been used to improve policing, sentencing guidelines and public safety by focusing resources on reducing harm and reducing violence in specific 'high crime' or 'high severity' areas (Sherman et al. 2016).

As well as the use of harm indices, this thesis will provide a methodological contribution to the use of quantitative methodologies in criminology. As mentioned already, this thesis uses a comparative approach by including all violence into a single analysis mainstreaming gender, and domestic violence, into the analysis. This thesis will use a large dataset of violence in England and Wales and hopes to demonstrate the usefulness of this approach to analysing violence. This thesis uses three stages of quantitative methodology which increase in sophistication. Each stage of the analysis provides useful findings which add to theoretical debates within criminology and VAW. This thesis hopes to demonstrate the effectiveness of quantitative techniques when using large and robust datasets.

1.2 Thesis Structure

Previous research looks at domestic violence separately from violence by other perpetrators and highlights several key differences in violent crime. The nature of violent crime is said to differ when the perpetrator is a domestic relation by; the repetition, type of violence, sex of the victim and perpetrator dyad, and severity of the violence (defined using the act and the consequence of the act). This is summarised in the Literature Review (chapter 2). This chapter outlines theorisations of violence which focus on the perpetrator, and theorisations of domestic violence which focuses on the victim. This specifically focuses on the aspects of violence which are said to differ when violent crime is compared to domestic violence. This shows that although discussions suggest that violence differs depending on who perpetrates the violence,

direct empirical comparisons within the literature are lacking. The research questions of the thesis are set out at the end of Chapter 2.

The third chapter of the thesis is a discussion of the data and methodology. This chapter will start by outlining the research design of the thesis. This chapter will then critically assess other possible data sources that could have been used for this thesis, while demonstrating why the CSEW was the most appropriate. This chapter will then include an in-depth summary of the CSEW (sample size, structure etc.). This section will cover how violent crime and domestic violence are operationalised in the context of the survey and which types of harms are recorded in the data. A section of this chapter will summarise the merged dataset of CSEW data that will be utilised for this thesis. This will include how it was created and the characteristics of the data (size, variables, data cleaning). Finally, there will be a descriptive analysis of the Changing Violence (CV) dataset to present the demographics of the victims, the violent crimes, and domestic violent crimes. This will demonstrate how violence and harms will be operationalised.

Chapters 4 and 5 are exploratory investigations of the data, with the analysis increasing in sophistication in Chapters 6 and 7. Chapter 4 will explore the nature of violent crimes in the CV dataset. This will start by exploring the nature of domestic violence. This includes examining the data on violence by domestic perpetrators by sex of the victim, sex of the perpetrator, types of violent offence and whether the violence is repeated. The results of this are then compared to violence by acquaintances and violence by strangers. This chapter is used to get an initial answer to whether violence by domestic perpetrators differs to violence by strangers and acquaintances. Chapter 5 will involve a similar analysis, but with a focus on harms. This chapter will compare violence by domestic relations, acquaintances, and strangers in relation to the emotional and physical harms experienced by the victims. This will determine whether violence by different perpetrators have noticeably different harms to the victims.

Chapter 6 will use binary logistic regression to determine whether the odds of a crime report recording a type of harm is increased when the violence is perpetrated by a domestic relation. The regressions analysis will use binary variables as the response variable, one which records whether an injury occurred and one which records whether an emotional reaction occurred because of the violent crime. Some of the predictor variables will include sex of the victim, sex of the perpetrator and whether the violence is repeated. This will therefore

determine whether victim-perpetrator relationship is more important in its effect on the harms experience by victims of violence or if something else might be more important.

The fourth findings chapter will measure harm from violent crime by constructing three harm indices. Binary factor analysis will be used to construct indices for overall harm, physical harm, and emotional harm. This chapter will expand on the results of the previous findings chapters to assess whether the amount of harm experienced in crime reports in the CV Dataset differs for subsets of victims. This will give each individual case in the dataset its own score based on the positive responses to each harm variable. The mean scores for subgroups of crime reports will be reported, including for crime reports perpetrated by domestic relations, acquaintances, and strangers.

The thesis will end with a Discussion chapter (Chapter 8) and a Conclusion chapter (Chapter 9). Chapter 8 will involve evaluating the results of Chapters 4 to 7 in relation to the literature review. This will form answers to the research questions of the thesis. This chapter will demonstrate how the results and analysis in this thesis contributes to methodological and academic debates in criminology. This chapter will clarify the main findings of the thesis and the implications of this, in practice, policy and theory. The conclusion will summarise the discussion and will present any limitations of the thesis and possible areas for future work.

2. Literature Review

2.1 Introduction

This chapter will focus on three areas of criminological research: violence, domestic violence, and the personal harms of violence. The purpose of this chapter is to outline the current research in the field to position this thesis. Criminological research on violence often focuses on the causes and the perpetrators of the violence. Common theories of violence include cultural strain theories, rational choice theory, routine activities approach, self-control theories and the theory of criminal careers. These theories all focus on the idea that violence is perpetrated by the disadvantaged, usually male, against those with more power or high socio-economic status. Therefore, these theories are not applicable to violence where the perpetrator is the powerful/advantaged and the victim is disadvantaged (VAW, hate crime and state violence).

The absence of discussions of gender in studies within mainstream criminology has led to the emergence of the VAW field, where the focus is on the victims of violence and the gendered relationships between the victim (usually female) and perpetrator (usually male). The VAW field identifies various dimensions of violence that differs when the perpetrator is domestic when compared to violence by strangers (or acquaintances). These dimensions include repetitions, sex of the victim and sex of the perpetrator (and the interaction between the two), type of violence and severity (Dobash and Dobash, 1992; Walby and Towers, 2018; Kelly and Westmarland, 2016). These five aspects of violence will be summarised throughout this literature review.

This chapter will summarise mainstream criminological approaches to violence, then compare these to theorisations of domestic violence to discuss the five aspects of violence that may differ when the perpetrator is a domestic relation. The first discussion combines sex of the victim and sex of the perpetrator. This shows how sex of the perpetrator and sex of the victim is debated through ideas of gender symmetry vs gender asymmetry within the domestic violence research. Next, repetitions are discussed as a distinct aspect of violence by known perpetrators. Stranger violence is more often considered to be single event violence. Whereas domestic violence is usually considered to be a course of repeated physical and non-physical acts which create a pattern of abuse (Dobash et al. 1992). This is continued in the following section which discusses the role of threats in domestic violence research, as well as acknowledges theorisations of coercive control (Stark, 2007).

The three subsections mentioned above will lead into a discussion of severity and harms from violent crimes. This will discuss how harm is conceptualised in domestic violence literature, and in sociology-psychology research of victimisation.

The research questions of this thesis will be presented in relation to the literature review. This will include an overview of the 'domestic violent crime' (DVC) framework and a section defining key terms. These terms include 'violence' and 'harm'. This PhD will analyse violent crime by disaggregating by victim-perpetrator relationship and comparing the nature and outcomes of the violence.

2.2 Criminological Theorisations of Interpersonal Violence

This section will outline criminological theories of interpersonal violence. The most common of these theories include cultural strain theory, rational choice theory, routine activities approach, self-control theories and the theory of criminal careers. These theories differ in their considerations of the causes of violence, but they have two key dimensions in common. The first, is that violence is linked to inequality, with those who are most marginalised being the perpetrators of violence. The second is that there is a focus on the causes of violence and the perpetrators of interpersonal violence which excludes discussions of violence against women. These theorisations of interpersonal violence assume that violence is stranger violence perpetrated against men. This assumption excludes domestic violence, hate crime and other instances where it is the marginalised which are the victims, not the perpetrators, of violence (Iganski, 2008; Walby, Towers and Francis, 2014).

Theories of interpersonal violence often start with Merton's cultural strain theory. Merton (1938) theorises that interpersonal violence and crime is a product of socioeconomic inequalities. Cultural strain theory presents the idea that crime occurs when people cannot achieve cultural goals through legitimate means. Merton (1938: 672) argues that "some social structures exert a definite pressure upon certain persons in society to engage in nonconformist rather than conformist conduct", such as committing crime. This means that people who are from lower socio-economic classes perceive that goals are unattainable to them except through crime. This is due to their position in the class system, real or perceived lack of opportunity, or lack of resources (Ray, 2018). Merton (1938) uses cultural strain theory to explain interpersonal violence as well as crime. According to him, perpetrators of violence are also unable to achieve cultural goals due to socio-economic inequality, which causes expressions of violence. Rather than perpetrating crime as a method to obtain what they feel is unavailable to them, these

perpetrators will use violence as an expression of rebellion against what they cannot have. Therefore, inequality is the cause of violence.

Agnew's general strain theory of violence shows similarities to Merton's ideas. Agnew (1992: 47) identified three types of strain "1) strain as the 'actual or anticipated failure to achieve positively valued goals', 2) strain as actual or anticipated removal of positively valued stimuli and 3) strain as the actual or anticipated presentation of negatively valued stimuli". General strain theory is written at the social-psychological level which focuses on the immediate social environment of individuals. Agnew's theory explains the perpetration interpersonal violence and delinquency as the result of an individual's negative social relationships. These relationships are what stops the individual from achieving positively valued goals, which results in anger and the desire for retaliation. He also focuses on lower class individuals who may be blocked from achieving monetary success or a higher-class status. According to Agnew, these individuals will blame their situation on others and will react through retaliation and revenge. Therefore, this aggression can sometimes result in violence.

Merton (1938) and Agnew's (1992) theories are often used as an explanation of delinquency in male youths. According the cultural strain theory, male individuals are subjected to different strains than females and are often subject to lower levels of parental supervision as youths. Agnew's general strain theory presents multiple conditions that must be met that creates the environment for crime and delinquency to occur. He identifies these conditions as; harsh parental discipline, negative school experiences, criminal victimization, and homelessness (Agnew, 1992; Ray, 2018). He uses this to explain the differences in male and female offending rates, as males are most likely to experience the types of strain that lead to perpetrating crime or violence.

Both general strain and cultural strain theories present violence as being perpetrated by the disadvantaged towards those who have cultural capital (the advantaged). However, Walby, Towers and Francis, (2014:187) argue that these theories allow some victims of crime to remain "invisible". These theories position crime as a result of strain between "culturally defined aspirations and class-based inequalities in the means to fulfil them" which positions crime at the level of social structure (Walby, Towers and Francis, 2014:192). By omitting the sex of the victim as well as sex of the perpetrator, Merton does not acknowledge instances where it is those that have the 'power' who perpetrate violence against the disadvantaged. This is often the case within domestic violence. Other criticisms of these theories are that they; do not

explain the nature of middle-class criminality, place too much focus on monetary success and the attainment of middle-class status and neglect barriers to achieving goals other than social class (Ray, 2018; Cohen, 1955).

Merton was one of many sociologists to theorise violence as a product of socio-economic inequalities (Walby, Towers and Francis, 2014). However, Becker (1968) rejects the idea that crime is caused by socio-economic inequalities or poor socialisation. According to Becker, there are little difference between those who choose to commit crime and those who do not. The individuals who commit crime are not part of a subculture that influences their choice to commit crime. Instead, he presents the rational choice theory. This is the idea that people make a rational choice to participate in criminal activity. Rational choice theory is presented as the idea that a person's choice to commit crime is influenced by their perceptions of the cost and the benefits. Therefore, a person will commit crime when the benefits of doing so outweigh the risks. People will try to maximise their advantages (financial well-being or social recognition) through criminal acts (Mehlkop and Graeff, 2010).

Becker's rational choice theory has influenced theories of crime including those by Cohen and Felson (1979) and Gottfredson and Hirschi (1990). Cohen and Felson (1979) adapted the rational choice theory of crime into a macro-theory that includes the activities of the perpetrator and the victim into the routine activity's theory of crime. Routine activities refer to set patterns of behaviour within the spatial environment of the perpetrators of crime and those victimised by crime. The structure of these routine behaviours in everyday life can influence criminal opportunity. Cohen and Felson (1979:589) refer to violent crimes as "predatory violations" which they define using as illegal acts in which "someone definitely and intentionally takes or damages the person or property of another" (Glaser, 1971:4 cited in Cohen and Felson, 1979). The routine activity's approach to crime suggest that multiple spatial-social components must converge for a crime to be successfully completed. This relies on three components: (1) motivated offenders, (2) suitable targets, and (3) the absence of capable guardians against a violation (Cohen and Felson, 1979). If even one of these components is absent, then the crime will not be committed successfully. The motivated offender is someone with both criminal inclinations and the ability to carry out those criminal inclinations. The suitable target is a person or object who is a target for the offender and the guardian is someone who can stop the offence from occurring, for example, the police, private security, or a member of the public. The routine activity approach to violence is popular as it moves the attention

away from just the offender and looks at the wider context of victims, perpetrators and agents of crime control ("guardians").

Gottfredson and Hirschi (1990) argue that self-control is a key component of an individual's character that prevents or influences their offending practice. Self-control is the ability to resist actions that result in immediate gains in favour of delaying this for the opportunity of long-term interests. They argued that an individual's levels of self-control are influenced by family and early life. An individual's self-control stabilises by the time they reach adolescence (around aged 10). Gottfredson and Hirschi's self-control paradigm focuses on the impact of socialisation on an individual tendency to commit criminal acts. Higher levels of self-control in children can be associated with educational success in school and positive social relationships, this results in a higher income and better health in adulthood. Therefore, a child's level of self-control can predict their offending as they get older. They argue that these differences in self-control across members of a population are stable and the causes do not change over time.

Therefore, Gottfredson and Hirschi (1983; 1990) correlate criminal behaviour with age. They refer to the age/crime curve which implies that an individual's criminal activity increases until adolescence and will start to decline in adulthood. Therefore, people who tend to repeatedly commit crime will reduce their offending as they get older. Relating this specifically to violence, Gottfredson (2007) argue that a correlation can be found between misconduct in childhood and violent tendencies in adulthood. Violence is explained in the self-control paradigm in a similar way to other criminal behaviour. This is that violence can bring immediate satisfaction for an individual for example, ending a dispute. Therefore, people with lower levels of self-control will be more likely to use violence. Gottfredson (2007) explains that individuals who use violent behaviour are also likely to have other forms of delinquent and problem behaviours. So, individuals with tendencies to commit crime do not specialise in either violent or non-violent behaviours but are likely to use both.

However, theories of the criminal career have criticised Gottfredson and Hirschi's idea that the tendency to commit crime does not change throughout an individual's life course (Piquero et al, 2003; Farrington, 1994; Blumstein et al, 1988a). Blumstein et al. (1988a:12) defines a criminal career as the "characterization of the longitudinal sequence of crimes committed by an individual offender". Therefore, an individual's entry into a criminal career is focused on when or before the first crime is committed and the desistance of their career is

when or after their last offence is committed. The primary critique of the self-control paradigm is that the idea of the age/crime curve identifies one pattern of offending over time, but it does not account for different, individual trajectories for different groups of offenders.

The criminal career theorisation of crime presents the idea that individuals will begin committing crime at a certain age, will continue offending at an individual rate, will commit various types of crime and will eventually end their offending. This focuses on the onset of offending, the reasons behind the repeated offending, the variations in crime committed and explanations for the desistance of criminal behaviours. The criminal career paradigm also investigates whether there are escalations in the patterns of crimes committed over time by an individual. Unlike Gottfredson and Hirschi, Piquero et al. (2003) found that while offenders engage in a range of crime types, they are likely to repeat almost the same offence in the same type of crime, for example, violence. Blumstein et al. (1988a) also found evidence that offences in an offender's criminal career escalate and some offenders will show specialisations within their criminal career.

The above theorisations of violence differ in their ideas of causality and methods of research, they have some aspects in common. Mainstream criminological theories of violence often directly or indirectly link the causation of violence to socio-economic inequalities. There is often the assumption that the disadvantaged are more violent than the powerful (Walby, 2012; Walby, Towers and Francis, 2014). These theories of violence focus on the perpetrators and often omit the victims, they fail to account for instances of violence where it is the advantaged that perpetrate the crime. Specifically, the theories above do not account for gendered violence "despite gender relations being deeply structured by inequalities" (Walby, Towers and Francis, 2014: 192). The traditional criminological paradigm, leaves gender out of the analysis of violence on the grounds that it is not important because violence is generally considered to be perpetrated by men to men (Merton, 1938). Analyses of violence often exclude violence by domestic perpetrators and violence with a sexual motive with little or no justification (Ganpat et al. 2020). Women as the victims of violence by men are rarely included in mainstream criminology and are reserved for the VAW field. Therefore, absence of gender in these schools of thought has led to the appearance of a separate field of study which brings gender to the forefront of the analysis (Walby, Towers and Francis, 2015 and 2014; Walby and Towers, 2018b). This thesis will investigate the implications of studying domestic violence with violence in relation to possible similarities and differences to answer the thesis title

question ‘Is Domestic Violence Violent Crime?’. Theorisations of Domestic Violence are discussed in the following section.

2.3 Theorisations of Domestic Violence

The lack of inclusion of violence against women in mainstream criminology led to a field to emerge which raised awareness of gender-based violence against women (Kelly, 1988; García-Moreno et al, 2005). This focused on studying domestic violence separately from other analysis as a distinctive type of violence (Walby, Towers and Francis, 2014). This section will outline the debates within the field of VAW, including debates around who perpetrates violence within the family. The two sides of the debate find contradictory results around who perpetrates violence and the consequences of this violence. Straus (1979) found family violence to be gender symmetrical with just as many female perpetrators as male perpetrators. However, feminist theories of domestic violence argue the opposite. Violence is instead rooted in men’s control of women (Dobash et al, 1992). Johnson (1995) attempts to adjudicate this debate with the theorisation of a dualistic typology of domestic violence where one type of domestic violence is serious, exhibits coercive control and is gender asymmetrical and the other is less serious, not coercive and is gender symmetrical.

This field of study means that several new concepts and debates have emerged. The focus on gender inequality has resulted in the development of concepts of ‘abuse’ and ‘coercive control’, which includes a range of non-violent, non-physical acts which are used alongside (and sometimes in absence of) physical violence. The concept of ‘coercive control’ was developed within the debate about the “nature, extent and distribution of domestic violence” (Walby and Towers, 2018b:8). Therefore, as well as debates within the VAW field, this section will summarise debates between mainstream criminology theories and VAW theories of violence. This section will situate these debates by comparing the various conclusions about domestic violence to the conclusions about violence by other perpetrators. This will focus on five main aspects of the violence which are said to differ depending on who perpetrates (domestic or non-domestic); repetitions, sex of the victim and sex of the perpetrator (and the interaction between the two), type of violence and severity (act and consequence) (Dobash and Dobash, 1992; Walby and Towers, 2018; Kelly and Westmarland, 2016).

2.3.1 Sex of the Victim and Sex of the Perpetrator

Studies of violence within the family has some debates around sex of the perpetrator and sex of the victim. This dyad is said to differ when the perpetrator is domestic compared to when

the perpetrator is unknown to the victim. Traditionally, mainstream criminology presents the perpetrators as (young) males (Merton, 1938, Agnew, 1992) and the victims as male (Young, 1999). However, when the perpetrator is a domestic relation, the perpetrator is still usually male (Dobash and Dobash, 1992), but the victim is female (Walby and Towers, 2018). The dynamic of male perpetrator, female victim impacts the consequences of the violence which can often be more severe than when the violence is male to male.

According to mainstream criminological theories, men are more likely to be violent than women due to being subject to different strains and lower levels of parental supervision as youths (Agnew, 1992; Ray 2018). Therefore, men are more likely to experience strains which lead to the perpetration of violence. Gottfredson and Hirschi (1990) agree that there is a 'gender gap' in the perpetration of crime and violence and they attribute this to the opportunity to commit crime. Gottfredson and Hirschi argue that self-control is established while the individual is young (by aged 10) and therefore, because females are subject to more extensive supervision by parents and other agencies of self-control, they are much less likely to become criminal. They also argue that opportunity to commit crime is sometimes overstated, and the "substantial self-control difference between the sexes" is also a significant contributor to the gender gap in crime (Gottfredson and Hirschi, 1990:147). However, while there are some discussions of why men are consistently more likely to perpetrate any crime, including violence, there is little discussion of the victim. Victims of violence are usually expected to be someone of a higher social position to the perpetrator (who is socio-economically deprived). The victim is either assumed to be male (Merton, 1938, Young 1999) or the sex of the victim is not mentioned (Agnew, 1992).

While mainstream criminology agrees that violence is usually perpetrated by men (and often against other men), some VAW theorists debate the perpetrators of violence in the family setting. This debate is well-known and is attributed to the results of Straus's CTS measurement of family violence. Straus (1979) devised a method of measuring the conflict within families to assess where there is an unacceptable resolution of conflict, which results in the use of physical violence. The family is widely considered to be a social group devoid of violence, but Straus argues that conflict within the family is universal and so focus should be as much on this as on stranger violence (1973, 1980). Conflict tactics are a set of discrete acts that are used to resolve disagreements within the family. They can be separated into three modes: reasoning (the use of rational discussion), verbal aggression (use of threats) and violence (use of physical force), (1979). These start with acts that are the least coercive and increase in coerciveness and

aggressiveness towards the end of the scale. Straus separates non-physical acts as being separate from violence and determines that they are a more adequate method of solving disputes. Straus operationalises ideas of conflicts through the Conflict Tactics Scale (CTS), a measurement methodology to determine the level of conflict within relationship dynamics. This utilises the three modes of conflict above and asks respondents to identify which they have experienced, thus creating a score. According to Straus (1980), most of the violence within families is "normal" such as pushing and shoving or throwing things, with few families disclosing severe violence in their interactions. Straus's (1979; 1980) theory of family violence is that a normal amount of aggression results in a release of tension and if this is not released in appropriate ways then the result is more severe violence.

Straus (1979) argues that the act should be studied separate from the context and motivations as they would introduce too many variables into a measurement instrument and would therefore create a complicated CTS. For this reason, Straus measure single acts in isolation so that a score can be built (based on the acts that respondents 'check') which distinguishes 'low conflict' families from 'high conflict'. When this measurement is applied to domestic violence, by assessing couples rather than families, it is determined that violence is gender symmetrical (1979, 1980). He argued that his results showed that violence was just as prevalent with women perpetrating as with men and that the same proportion of wives attack non-violent husbands and therefore, family violence should be viewed under a theory of gender symmetry.

Straus's conceptualisation, and the resulting argument that domestic violence is gender symmetrical, is controversial. VAW theorists argue strongly against Straus's concepts. Dobash et al. (1992) argue that violence against wives is persistent and severe, being made up of repeated attacks and continuous intimidation and coercion. They call Straus's view of sexual symmetry a "myth" in the title of their article, while arguing that the use of violence by men and women differs greatly. They examine how Straus came to determine that violence shows gender symmetry by criticising the methodology behind the CTS. One of their main criticisms is that the CTS focuses too much on single, discrete acts and ignores the perpetrators motivations and intentions (Dobash et al. 1992; Walby and Allen, 2004). Therefore, critics of the CTS argue that this may cause the scale to confuse events such as self-defence or play as victimisation of violence (Haylock et al. 2020; Ackerman, 2018). This can misrepresent the violence. Dobash et al. (1992) explain that through examining the acts in isolation from the context this produces figures that suggest that men and women use violence equally. Gender

symmetry is also found through the exclusion of gendered violence, such as coercion and sexual assault. While Straus acknowledged some of the criticisms that come from feminist theorist with a revised CTS2 which included scales on sexual coercion and injuries, some issues regarding context, motivations and consequences remain. The CTS and CTS2 fail to show sequences of events nor do they record a full range of possible events which could make up a "constellation of abuse" (Dobash and Dobash, 2004:328).

Dobash et al. (1992) explain that as well as producing misleading conclusions about violence against women, Straus's operationalisation of his definition of violence using single, discrete acts causes other problems. The use of one act determines that the person is a perpetrator of violence regardless of the context or the meaning to those involved. Acts have vague definitions such as "slap", which could be viewed as assaultive or chastising to the receiver. As a result, the acts are always viewed as equal regardless of whether the victim views the act as abusive, whether it caused an injury and whether it was a repeated or a 'one-off' incident. This is also the case whether the perpetrator is male or female, with an act by a man being equivalent to the same act by a woman, failing to provide a measurement for the consequences of the act. This shows how Straus's theorisation of domestic violence ignores the gendered power imbalances that exists within intimate partnerships which is due to excluding the underlying motivations and consequences of violence acts. Dobash and Dobash theorise violence against women as having four main sources of conflict. These are "men's possessiveness and jealousy, men's expectations concerning women's domestic work, men's sense of the right to punish 'their' women for perceived wrongdoing, and the importance to men of maintaining or exercising their position of authority" (1992:4). This need to control and regulate is not seen in incidents where women are violent to men (*ibid*). Therefore, to get an accurate view of the experiences of victims of domestic violence is it important to include the intention and the consequences of the violence.

However, Johnson (1995) argues that there are two typologies of domestic violence which differ in who perpetrate and who is victimised by the violence. He agrees with Straus's argument that violence can be commonplace in family settings and says that many families will suffer from occasional outbursts of violence from the sides of both the male and the female. However, there are also other families that are victims of systematic male violence which stems from patriarchal control. Therefore, different research methods may capture the experiences of one of these two groups. Johnson accounts for both symmetry and asymmetry within these typologies (Mennicke and Kulkarni, 2016). The first typology is common couple violence,

which is discussed by Straus and other family violence theorists and is not a product of gendered processes. This occurs as a response to 'normal' conflicts within personal relationships with the violence being a result of a situation that 'gets out of hand' (Johnson, 1995:285). This violence is often minor and rarely escalates and is more likely to be gender neutral. This type of violence is often analysed from survey data, like that used by Straus (1979), whereas agency data supplies information on victims of severe violence.

The second typology is gendered. Patriarchal terrorism follows a definition of violence that is more often adopted by feminist theorist, such as Dobash and Dobash (1979; 1992). Violence in this typology is rooted in patriarchal traditions and is used by men as a tactic to control women. This type of violence encompasses more than minor physical acts. It involves a systematic use of violence which can involve physical violence (which is usually more severe than that used in common couple violence), but also includes economic subordination, threats, isolation and other control tactics. Therefore, Johnson discusses distinct definitions for two forms of couple violence, one which is gender neutral and consists of 'fights' as a resolution to common conflict within the family setting, and a second which is physical and coercive in its methods for control. Violence in Johnson's definition is "not a unitary phenomenon" and can differ in its relationship to gender, its causes, and its consequences (2006:1004). Not all violence involves the pattern of control that occurs with patriarchal terrorism.

Johnson later expanded his typologies to include an additional two types of violence (2008): violent resistance and mutual violent control. Violent resistance involves one partner using violence and control tactics, and the other partner resisting this attempt for control by using violence of their own. Violence used by the second party is defensive and is not used with the intention to control the other. The second additional typology, mutual violent control, involves both partners using violence in attempts to exert control over the other. The majority of couple violence (three out of four of the typologies; violent resistance, patriarchal terrorism, mutual violent control) emerges as attempts to exert or resist control. Therefore, Johnson (2008) argues that coercive control is the key to understanding differences between the types of couple violence. Violence where coercive (patriarchal) control is the aim, is gendered.

Overall, theories of violent crime and domestic violence both often attribute the violence to male perpetrators. Mainstream criminologists attribute the violence to male perpetrators. Rational choice theory, self-control theories and cultural strain theories of violence all agree that men are most likely to be perpetrators of violence (Merton, 1938;

Gottfredson and Hirschi, 1980; Becker, 1968). However, there are debates within VAW where one side of the debate argues that violence within the family is perpetrated by women as much as men (Straus, 1979; Johnson, 1995, 2008). Johnson argues that 'fights' in the family can be gender symmetrical, with women also participating in violent acts against men. However, more severe, and coercive violence is used as a technique of patriarchal control, where violence is gender asymmetrical, and women are victimised by male perpetrators. The gendered nature of violent crime can only be fully investigated when all violence is considered together, in one analysis. The differences in the characteristics in sex of the victim and sex of the perpetrator when violence is perpetrated by someone known or unknown to the victim (and how this interaction affects the outcomes of the violence) can only be identified when a comparative analysis of all violence is conducted.

2.3.2 Repetitions

The repetition of the violence is another area of violence that may differ when disaggregated by victim-perpetrator relationship. Violence by strangers, discussed in mainstream criminological theories of violence are usually discussed under the framework of one perpetrator, one crime, one victim (Walby and Towers, 2017). However, when the perpetrator is known to the victim, there is the opportunity for the perpetrator to repeat violence against the victim. Therefore, VAW theorists usually emphasises the repeated nature of the violence which can be linked to increased severity and worse consequences of the act, both in terms of physical injury and harm to mental wellbeing (see Section 2.3.4). This section will summarise where the repetitions of domestic violence are debated in the literature to show how this is said to differ to violence by strangers, against men. The repeated nature of domestic violence will also be mentioned throughout the literature review as it is significant in conceptualising coercive control (see Section 2.3.3) and the severity of the violence (see Section 2.3.4).

Straus's (1979) CTS is often criticised for its focus on discrete acts. The CTS record the acts without the context, which means that the pattern of acts and the repetition of acts is not accurately measured (Dobash et al. 1992). The exclusion of the repetition of the violence can misrepresent the number of acts perpetrated within the family. Whereas VAW theories of domestic violence identify the importance of considering repeated incidents of violence. Dobash et al (1992) attribute some severity of domestic violence to the repeated nature of the violence, arguing that the repetitions are persistent and coercive. Repeated acts of violence

could also escalate in severity over time, meaning that the victim is subjected to more injurious and serious violence the longer that they are in the relationship (Walby and Tower, 2018).

Stark (2007) places importance on the impact that repeated, non-physical acts have on predominantly female victims of domestic violence. Stark's conceptualisation of coercive control is that it involves multiple types of control tactics (such as intimidation, isolation from friends, financial control, restricting food etc) which are used continuously within the relationship to stop the victim of the violence from leaving. Therefore, for coercive control to be successful for the perpetrator, it relies on repetition of a variety of tactics which impact both the physical well-being of the victim (violent acts) and the mental well-being of the victim (controlling acts). Stark (2007) discards relatively minor violence from the analysis and refers to this as 'fights'. For Stark, the harm of domestic violence comes from the repetition of the non-physical coercive acts which stops the victim from exiting the relationship and allows them to be subject to more physical violence and control. Repeated incidents of violence can act as a reminder of previous violence and a threat of more severe violence in the future (Kelly, 1988).

As mentioned in the previous section, Johnson (1995) argues that there are multiple typologies of domestic violence. These typologies show different patterns of repetition. In instances of common couple violence, the violence involves occasional outbursts of relatively minor acts. This is usually from both partners and does not often involve a pattern of acts which intend to control a partner. This type of violence rarely escalates into more serious events. However, patriarchal terrorism follows a definition of violence that is more often adopted by VAW theorists, such as Dobash and Dobash (1979; 1992). Violence in this typology is rooted in patriarchal traditions and is used by men as a tactic to control 'their' woman. This type of violence encompasses more than minor physical acts. It involves a systematic use of violence which can involve physical violence (which is usually more severe than that used in common couple violence), but also includes economic subordination, threats, isolation, and other control tactics. Therefore, where Johnson's common couple violence isn't defined by its repetitions. However, the typology of patriarchal terrorism is defined by the repetition of multiple physical and non-physical techniques of control.

Repetition of violence is not often discussed in relation to violence by strangers. Stranger violence is usually assumed to be single event violence (Tseloni et al. 2010; Walby and Towers, 2017). However, repetitions in relation to domestic violence are important as they form a pattern of abuse that can become more emotionally and physically harmful over time

(Stark, 2007; Walby and Tower, 2018). This thesis will first investigate the repetitive nature of domestic violence compared to violence by acquaintances and strangers. This will then become a key consideration throughout the analysis of harms, to assess whether repetitive violence is more harmful than single event violence.

2.3.3 Type of Violence: Is the Violence Physical or Non-Physical?

The separation of VAW into a separate field with a separate aetiology has resulted in the emergence of the concept of coercive control. This expands the definition of violence beyond physical acts to include various non-physical techniques of intimidation and control. Stark (2007) discusses coercive control with reference to Johnson's (1995) typologies of domestic violence. Stark's conceptualisation of coercive control relates to Johnson's patriarchal terrorism. He agrees that control tactics are almost exclusively used by men against women, does not usually involve violence on both sides of the relationship. However, his conceptualisation differs from Johnson (1995), as he rejects the terms "couple" and "intimate", arguing that many assaults and control tactics occur when couples are no longer in a relationship. Like in Dobash and Dobash (1992), the context of the incident is deemed to be important. This includes information on previous and subsequent incidents and how tactics are used in combination with each other to form a pattern of abuse. This pattern of abuse can include physical violence used with three methods for control; intimidation, isolation, and control (example of these include restricting food, threats and stopping partner from communicating with friends or family). Therefore, Stark's (2007) theorisation of domestic violence is that it involves a variety of tactics including physical and (non-physical) coercive control. The primary viewpoint from Stark is that the main harm that men inflict on women is political and not physical.

Stark's (2007, 2010) theorisation of domestic violence utilises ideas of gender inequality. It differs from Straus (1979) and Johnson's (1995) ideas of gender symmetry and criticises an incident specific approach to violence. Coercion makes the gender dynamics of domestic violence visible as coercion itself is gendered (Stark, 2007). Whereas, using an approach that focuses on violent acts disregards the history, motive, and context of the couple as well as the meaning to those involved. He argues that the argument of gender asymmetry/symmetry cannot be resolved while the incident is adopted as a unit of analysis. The experiences of victims, other than those who experience situational violence ('fights'), is ongoing and persistent, with variations of control tactics, severe violence and frequent, low

level assaults. From this, the outcomes of the experiences should be assessed as a cumulation of a range of harms and consequences which go beyond the identification of injury (2010).

Stark's ideas reflect some from Kelly (1988) within his conceptualisation of coercive control. She explains how there are a range of behaviours that men use to oppress women. These "extend beyond physical force, beyond the home and beyond the duration of the relationship" (Sharp-Jeffs, Kelly and Klein, 2018:164) and include control tactics and coercive methods. These methods are perpetrated when patriarchy is reproduced within the family (1988). Force is defined as the "overt use of coercive power by the dominant group as a resource of the last resort" (1988:22). Therefore, coercive behaviours are used to maintain male control within relationships with females, and violence is used only when coercive behaviours fail to stop resistance. Kelly argues that physical violence acts to reinforce coercive methods and arises out of women's resistance to male power. This idea is mirrored in Stark (2010). Minor violence acts as a threating tool to remind women of the risk of more severe violence (for example, women who have been victims of sexual harassment have more awareness of the threat of being raped). So, a woman's level of entrapment could be increased by their perception of what might happen in the future, based on their past experiences. Coercive control, combined with minor and/or frequent violence, becomes more effective for the perpetrator as the victim is less likely to resist abuse.

Myhill (2015) also discusses the recent developments of the concept of coercive control within definitions of domestic violence, specifically those involving intimate partners. He takes Johnson's (1995) typologies and agrees with Stark's assessment that situational violence is gender symmetrical but coercive and controlling behaviour is highly gendered, with women making up the majority of the victims. As well as adopting Johnson's separation of 'types' of intimate partner violence, Myhill (2015) also separates the concepts of violence and control, with both typologies involving varying levels of physical violence, but only intimate terrorism involving control tactics. Myhill (2015) argues that to get a true picture of the gender dimension of intimate partner violence, it is important to analyse the acts and the behaviours as well as the duration and the impact of the abuse. This is consistent with previous literature (Dobash and Dobash, 1992, Dobash et al. 1992) which argues that an act-based approach to violence (Straus 1979) hides incidents of intimate terrorism and results in a gender symmetrical view of domestic violence. Myhill (2015) also notes that while women can also commit controlling acts, it is much more difficult for them to achieve the same level of dominance of coercive control. This is because coercive control is routed in patriarchal power, where women's sexual

inequality is exploited to oppress them further (Stark, 2007). Coercive control relies on this existing inequality to be effective.

Myhill (2015:360) also differs between controlling actions and the "state of coercive control". Though acts can be defined as controlling (such as certain contextual uses of violence, threats and other non-violent tactics), the determination of whether they are coercive comes from the impacts and perceptions of the actions by those involved. This state of coercive control has been said to include varying types of violence and non-violence by different theorists of domestic violence and intimate partner violence. Here, Myhill (2015) argues that coercive control is demonstrated by feelings of fear and denigration. Stark (2007:5) argues that coercive control can include escalating physical violence, as well as frequent minor violence with a range of control tactics to "humiliate, intimidate, exploit, isolate and dominate" a victim. Walby and Towers (2018) would argue that any act that modifies a person's behaviour for the benefit of the perpetrator could be considered coercive. The relationship between actions and their consequences is discussed in more detail in the next section.

However, expanding the definition of violence to include non-physical acts has been criticised. Stark (2007) can be interpreted as discounting the physical violence to prioritise the non-physical. For Stark (2007, 2010), coercive control, which results in the entrapment of women, is more harmful than injurious physical violence. Though, Stark (2010) outlines how coercive control can be reinforced using frequent and minor violence, to warn victims of what can happen when they attempt to resist the control of their partners, coercive control does not require physical violence. Walby and Towers (2018) argue that physical violence can also have a coercive impact on victims. They argue that stretching the concept of violence to include all aspects of power and harm can be counterproductive as this restricts the analysis of how the concepts of physical violence and control interact. This determines that violence and non-violence should not be included within one broad definition but should be comparable in their measurement frameworks.

Straus (1979) used the CTS to identify discrete acts of violence. This resulted in the conclusion that violence within the family is as likely to be perpetrated by female family members as males (see Section 2.3.1). This was a hugely controversial view and is disputed by feminist violence theorists (Dobash and Dobash, 1992). The main criticisms involved the simplicity of using acts without the motivations or interpretations of those involved which can result in misleading results. Female violence towards their partners has often been determined

to be retaliation for previous acts against them (Dobash and Dobash, 2004) and acts by men against women are more serious than the same act from a female perpetrator towards a male victim (Walby and Towers, 2018). Johnson (1995) and Stark (2007) mediated this debate with typologies of domestic violence and the identification of coercive and controlling techniques which separates non-serious 'fights' from patriarchal violence. This has led to an aversion of an incident specific approach to domestic violence, with a preference towards theorisations of 'abuse' and the continuation of violence through a wider experience within a woman's life. This is discussed further in the next section.

Therefore, this thesis will approach the coercive control debates from a different angle. The data source used for this thesis does not record enough information on controlling and coercive tactics (e.g., financial control) which are often attributed to domestic violence perpetrators. But this thesis will investigate the physicality of violence, by comparing the harms of physical violent offences, attempted violent offences and threats of violence. This will investigate the type of violent offences experienced by victims of violence by domestic, acquaintances and stranger perpetrators. It will also analyse the emotional harms, and where appropriate physical harms, to contribute to the discussion of the physicality of domestic violence when compared to violence by other perpetrators.

2.3.4 Severity (Act and Consequences)

This section will outline another aspect of the violence which is said to differ between violence by domestic perpetrators and violence by other perpetrators. This aspect is the severity of the violence. Severity is usually measured by the type of act perpetrated and the consequence of the act. This is a central concept within studies of VAW, and theorisations (or measurements) of violence that ignore the severity of the act are criticised. This is discussed here.

The gendered differences of violence against women when compared to other types of violent crime (by strangers or acquaintances) are apparent when the outcomes of the violence are considered. As discussed earlier, Straus's (1979) concept of violence produced an act-based approach. This was designed as a simplistic method of analysing the prevalence of violence within family units and was not specifically designed with violence against women in mind. He operationalised his concept of violence within the CTS, a method which involves identifying acts of "reasoning", "verbal aggression" and "violence" (1979:77). The members of the family (or couple) are asked to identify any acts that they have experienced or perpetrated from a list and a score for each family is produced by summing up the items that have been

selected. The ordering of the questions is designed so that the first acts are 'appropriate' solutions to disputes. This becomes more "coercive and aggressive" towards the end. This suggests that Straus (1979) associates escalating physical violence with coercion and does not consider the outcomes of the acts. For Straus (1979), the acts are coercive because the violence is more severe and because this is an inappropriate method to solve conflicts. This led to the conclusion that women are as violent as men within families.

However, Straus (1979), with his act-based approach, ignores the sequences of events that preceded and followed the violence. The CTS considers each violent incident in isolation from possible other incidents and the context in which it occurs. This has been widely criticised as hiding the extent of gender-dynamics, especially within domestic violence. Straus (1980), while arguing that many wives cast the first hit, acknowledges that the violence by men is usually more damaging. Despite this, all acts in the CTS are treated as equal, with a hit by a man and woman achieving the same weighting in the final violence score for the family. This is also the same for the consequence of the act. The CTS makes no reference to the injury or emotional impact that the act may have on the victim, thus injurious acts are scored equally to non-injurious acts and there is no measurement of fear or any other adverse emotional affect. Therefore, there is no way to assess the seriousness of the event, other than by the acts itself (for example, whether it is physical, or a weapon was used). According to Straus (1990) violence should be separated from the context to allow for a simple and easily replicated method of identifying violence acts. Including context variables would make the CTS instrument very complex. However, only acknowledging the act ignores the full experience of a violent act. It leaves an ambiguity over the intention and the result of the act which allows for misunderstandings and the assumption that the act was intended as violence.

Dobash and Dobash (1992) also point out that ignoring the surrounding contextual factors of a violent act means that the conclusion of gender symmetry is made. This concept is misleading as it hides how much of female violence is retaliatory or self-defensive and a result of previous assaults by their male partner (2004). It also fails to assess the consequences of the act where women are more likely to experience injury than men, and their injury is more likely to be serious (Dobash et al.1992). Dobash and Dobash (2004:328) also argue that it is important to assess acts in relation to each other, measuring a "constellation of abuse" rather than discrete acts. This allows the full severity, frequency, and consequences to be identified. They also argue that this would make visible the wide range of acts that women experience at the hands of their male partners. These intimidating and controlling acts result in physical injuries and

emotional or economic consequences. Using an act-based approach, like Straus, would make these experiences invisible and hide the inequality within domestic violence, where men seek to control and regulate, and women act in self-defence. Using Straus's method, both parties would be labelled as 'violent'.

Dobash et al. (1992) also highly criticise Straus's CTS for its operationalisation of the concept of severity. Defining the severity of the act is difficult without considering the outcome, for example, murder is unanimously the most severe violent act because the result is death. However, Straus's (1979) CTS scale labels a person a perpetrator of violence if one incident is disclosed. This does not matter whether this incident is an attempt or a threat (e.g. "threatened with a knife"). In some instances, Dobash et al. (1992) point out that incomplete acts are ranked as more severe than actual physical violence. For example, "slapped" is defined as being a minor act of violence but "tried to hit with something" or "threatened with a knife" make the person a perpetrator of severe violence. Therefore, one act of violence can label someone a perpetrator of severe violence as the outcome, repetition and motive are not considered.

Therefore, the action, intention and harm are all necessary to understand a violent event. This means that a measure of violence which only considers an isolated act is inadequate. The intention to perform a violent action that will cause harm is part of the action (Walby et al. 2017). Therefore, Straus's measure which excludes the context and the 'perpetrator's' intention with the action may not always be measuring violence. Overall, it is agreed in much of the literature on VAW that forms of measurement which do not consider intention, action and harm should be rejected. When the harms of the violence are included in the measurement of violence, the gender disparities are made more evident.

Johnson (1995) uses concepts of acts and consequences to situate himself in the middle of the debate between family violence and feminist scholars. He argues that Straus's incident-specific framework of domestic violence would make it difficult to identify more severe instances. The violence that Straus (1979) is identifying are mostly 'fights', where a dispute has escalated to minor violence. This can be a one-off incident and a response to existing conflicts between those involved. It is more likely to be reciprocated by the other party and is therefore gender symmetrical. 'Fights' according to Johnson, are limited to the occasional violent outburst, they are usually minor and result in little injury and involve no element of control. However, Johnson's second typology, 'intimate terrorism', is an example of where

violence is seen as systematic. It is a result of patriarchy and the existence of sexual inequality. Johnson (1995) discusses intimate terrorism in relation to physical and non-physical acts that are used as control tactics on the victim who is usually female. In this case, Johnson (1995) argues that the violence has escalated and is more severe than the cases identified as situational couple violence ('fights'). The main goal of this form of violence is to gain control over the other party with the use of multiple tactics other than violence. Johnson (2008) argues that using Straus's incident-based approach would miss the pattern of power and control involved in intimate terrorism as it does not ask about the variety of possible control tactics that can be used within a relationship. To identify where violence is a response to specific conflicts (Straus, 1979) and where it is a method of oppression, it is necessary to know if violence occurred and under what specific context. This will allow for the decision of whether the violence is coercive or not.

Therefore, Johnson's assessment of acts and consequences when looking at domestic violence differs according to his typologies. There are some cases where an incident-based approach would capture the extent of the violence as it is occasional and gender symmetrical. This type of violence rarely results in injury and is used as a response to specific conflicts within the couple dyad. An incident-based approach would be successful here because the violence is not repeated to a high frequency and has little adverse consequences (it is a method to solve or end conflicts, though it is not discussed as an 'appropriate' method). However, for intimate terrorism an approach is required that takes context into consideration. This type of domestic violence utilised coercive and controlling techniques which would be missed if questions surrounding motive, context and outcomes were not asked. So, if an approach that focuses on incidents is used without addressing contextual circumstances, then more severe forms of domestic violence would not be captured to their full extent. In order to distinguish between Johnson's (1995) two typologies we need to look at context and identify any patterns. This involves looking at the interactions between violence and coercion and answering the question of whether the victim feels there would be adverse consequences if they attempted to resist violence. Threats and intimidation are common to ensure the person 'obeys' even though they do not want to.

For Straus (1979), Dobash (Dobash and Dobash, 1992; 2004, Dobash et al. 1992) and Johnson (1995), the severity of the violence is linked to the act and/or its physical outcome on the victim. The more severe the act and resulting injury then the worse the violence. This is where Dobash et al. (1992) can argue that the same act by a woman against a male partner is

not as severe as the act by a man towards a female partner. This is also how Johnson (1995) separates his typologies, with one being minor and infrequent violence and the other involving severe and frequent violence that is more likely to result in injury. Another measure of domestic violence is its level of control (as discussed above in relation to intimate terrorism). This also influences Johnson's assessment of intimate terrorism as being a more serious form of domestic violence. This moves beyond the physical and introduces methods that result in intimidation and the fear of negative consequences for non-compliance.

However, where Johnson (1995) discusses coercion and control as an addition to violence, Stark (2007) explains that coercion can be used in the absence of violence and still cause damaging effects to the victim. Where the physical violence is only minor, the abuse may not be (Stark, 2010). According to Stark, coercive and controlling techniques are what makes the abuse harmful, more so than physical violence. This what makes it difficult for women to leave and allows for the violence to become more frequent and severe. The cumulative effect of this abuse leads to more negative consequences for the victim as they are entrapped in the situations and so are more likely to experience more coercion and physical violence. There is a fear of what will happen when the abuser is not obeyed and this is reinforced by frequent and minor violence, Stark calls this the "'or else' proviso" (2010:203). For Stark (2007), coercion is used as a patriarchal technique to ensure that power hierarchies within the relationship remain, showing the gender inequalities within personal relationships and violence. Therefore, he argues that the primary harm abusive men inflict is political and not physical. So, only when coercion is studied can the effects of domestic violence on the victim be determined (Kuennen, 2007). But it is important not to discount the impact of physical violence, as this can remind the victim that the threat of subsequent violence exists (Kelly, 1988). Stark (2007) argues that physical acts without coercion are 'fights' and are a normal level of violence within the family. He also ignores that physical violence can also be coercive, as all types of violence change the behaviours of the victim (Walby, Towers and Francis, 2018).

Walby, Towers and Francis (2018) agree with Stark (2007) that violence and control should be kept separate, though the relationships between the two are important. Walby, Towers and Francis (2016) argue that the harms from violence are unevenly distributed, with violence against women having much greater consequences than violence against men. The actions and the harms are therefore "necessary" to define violence (2016:32). The same action from a man to a woman is typically more injurious than the same act from a woman to a man. The consequence of violence against women, by men, is to reinforce gender inequality. Therefore,

the act, intention and consequence are all important, but should not be conflated or assumed. To achieve this, a measurement framework is required for coercion which is comparable to violence, so that the relationship between the two can be compared, without merging violence and nonviolence. Typically, criminal law has a hierarchy that puts the non-physical forms of coercion at the bottom, and treats the physical as more harmful (Walby, Towers and Francis, 2018). Stark (2007) argues the opposite, that coercion is more harmful than physical violence and Johnson (1995) argues that it is some combination of the physical and coercive techniques that creates serious violence.

Kelly and Westmarland (2016) argue that to assess the impacts of intimate partner violence there needs to be the inclusion of the physical and non-physical, to identify the web of abuse. It is the repetition of power and control that entraps women in abusive relationships, where they can be victims of escalating physical violence (Pence and Paymar, 1993). Therefore, as Stark (2007) argued, Kelly and Westmarland (2016) argue that to accurately report on intimate partner violence, an approach other than an 'incident-based' approach is needed. They argue that framing domestic violence in terms of discrete incidents reflects how a perpetrator would view the violence, and not how it is experienced by the victim. In the reality of a victim's experience, they describe ongoing micromanagement of their everyday behaviours in which the perpetrator controls; what they wear, where they go, who they see, childcare etc. Many of these incidents are not crimes, nor are they violent. Therefore, Kelly and Westmarland would argue that we need to conceptualise domestic violence (particularly IPV) as a pattern of coercive control. Therefore, the repetitions and sequences of events are important, as well as the variations of events.

Since 2013, the concept of coercive and controlling behaviours has been included in the UK Government's definition of domestic abuse (and became a criminal offence in 2015 when used within family or intimate relationships) (Robinson, Myhill and Wire, 2018). This applies when there is a continuous pattern of behaviour that results in a serious effect on the victim. In Robinson, Myhill and Wire (2018:30), a serious effect is defined as "causing the victim to fear violence on two or more occasions or causing 'serious alarm or distress' that has a 'substantial adverse effect' on the victim's usual day to day activities". Therefore, when looking at the coercive impacts of domestic 'abuse' or 'violence', if physical acts can be coercive (as in Walby and Tower, 2018a; 2018b), the consequences studied are usually non-physical and ignores possible injury when violence is inflicted along with (or as) controlling techniques.

However, this could be because coercive control is often studied to emphasise the gender inequalities within domestic violence. Women can use physical violence against men (usually as a retaliatory act), but they are much less likely, and able, to use coercive techniques (Stark, 2007). This means that the results from the controlling behaviour of women differs in its ability to exert power, induce fear and control the other partner. Women who are victims of threats, experience fear or ongoing degradation, were more likely to have injuries, emotional impacts and more repetitions of physical assaults (Myhill, 2015). However, including the consequences of the act alongside the action makes gendered and relational effects of physical violence visible. The CTS developed by Straus (1979) is concerned with actions only and excludes harm and thus shows gender symmetry. But, including harms that the harms of violence are not evenly distributed. Therefore, an act by a man to a woman is more likely to cause physical injury than the same act from a woman to a man (Walby and Towers, 2018a; 2018b).

2.4 Defining Violence and Domestic Violence: Using the Framework of 'Domestic Violent Crime'

The definition of violence is contested throughout criminology. It has been used to theorise violence by states and inter-state war (Bauman, 2000; Zisek, 2009; Pinker, 2011), as well as interpersonal violence (Merton, 1938; Agnew, 1992; Gottfredson and Hirschi, 1990 etc.). Within feminist theories of domestic violence, it has been expanding to include non-physical forms of 'abuse' and 'coercion' (Stark, 2007; Myhill, 2015). Walby and Towers (2018b: 8), argue that it is better to restrict the concept of violence to a narrower definition. A definition of 'violence' should therefore relate to intended "physical acts that cause harm". Theorisations of interpersonal violence used in mainstream criminology focus on what causes a perpetrator to be violent and does not account for the importance of gendered dimensions of violence. Walby, Towers and Francis (2014) suggest that criminology often uses a definition of violence that restricts theorisations to violence by men against men. They discuss the implications of extending the definition of violence to include domestic and sexual violence. This would make the gender disadvantage in gender-based violence visible in mainstream criminology. This would also demonstrate that a significant proportion of all violence in England and Wales is perpetrated against women. This would contradict the view that much violence is perpetrated by the disadvantaged, against advantaged. Whereas, in analysis of violence against women, this is often committed by those seen as advantaged (men) and is directed towards the disadvantaged (women). Currently, mainstream criminological theorisations of interpersonal

violence cannot be used to explain violence against women, including domestic violence, where women are the disadvantaged and yet are largely the victims, and not the perpetrators. This thesis will adopt the theoretical framework of 'domestic violent crime'.

This PhD will use the concepts of 'violent crime' and 'domestic violence crime' to conceptualise violence. In the UK, most violence (other than self-defence), is illegal. Therefore "'violence' can be defined as 'violent crime' without limiting the range of violence included" (Walby and Towers, 2018b: 12). The definition of violence outlined in this section can be operationalised using the data in this thesis. This definition of violence as violent crime can include homicide; assault with injury; assault without injury; sexual violence and threats to commit violence. Therefore, DVC would include any of these offences perpetrated by a domestic relation (intimate or ex intimate partner or other family member). Walby and Towers (2018b) argue that victim-perpetrator relationship should be mainstreamed into the analysis of violent crime because domestic violence crime is a sub-set of violent crime and not a separate type of crime.

Therefore, DVC involves mainstreaming gender (sex of the victim, sex of the perpetrator and victim-perpetrator relationship) into discussions of violence by disaggregating by gender and revising categories to allow gender dimensions to be fully included. This involves including domestic violence and violence with a sexual motive into discussions of violent crime. Therefore, a definition of violence is needed that can show gendered aspects and be used to compare violence across different perpetrators and violence against different victims. Therefore, this thesis will use a definition of violence which includes acts which are deemed to be crimes. This limits the measurement to intentional violent acts against a person. 'Violence' in this thesis will include acts of violence that are intended, physical contact by the perpetrator to the victim. It includes incidents where a weapon is involved. Walby et al (2017) emphasise the importance of the intention of the violence by the perpetrator. Therefore, the definition of violence used in this thesis will also include indirect and incomplete incidents of violence. This follows the definition used in Walby et al (2017:42) where "Incomplete action are included within the concept of violence because of the significance of intention". The operationalisation of this definition of violence can be found in Section 3.5 of Chapter 3.

Using the framework of DVC means that non-physical techniques of coercive control (Stark, 2007) will not be included in the definition of violence. This is because theorisations of DVC means that all physical violence is considered as coercive (Walby and

Towers, 2018b). This framework for domestic violence will be used for this thesis as it provides a definition of domestic violence that is easily comparable to that of violence by other perpetrators (strangers or acquaintances). Using this definition of DVC will allow the research questions of this thesis to be answered by comparing domestic violence and other violence using the same definition (including physical and incomplete physical acts of violence, including violence with a sexual motive and excluding non-physical acts of control). This definition is also easily operationalised using the CSEW and the CV dataset. This data source includes data on criminal violent acts by strangers, acquaintances and domestic relations and includes information on the victim, perpetrator and harms experienced as a result of the violence. Therefore, providing the relevant information for using this definition of violence.

2.4.1 Including Threats into the Definition of Violence

Threats will be included in the definition of violence considered for this thesis. Discussion of coercive control and domestic violence often consider threats as a control tactic (Kelly, 1988; Stark 2007). Threats are coercive and can change a person's behaviour so that they comply with the perpetrator's demands. Kelly (1988) discusses how frequent threats can be as coercive as physical violence in keeping the victim in a violent relationship. Threats of violence are credible to the victim due to their past experiences of physical violence perpetrated by the partner. Therefore, threats are coercive and convincing to the victim. However, it is not just in discussion of domestic violence where threats are emphasised as an important aspect of violence. This narrative is also found in literature on terrorism and human trafficking. This justifies the inclusion of threats as violence in this thesis as threats can cause serious emotional harm and can coerce victims into acting in a way that benefits the perpetrator.

The notion of threats is included in multiple definitions of terrorism. The narrative of 'threats' can often refer to the risk of terror incidents occurring and the overarching 'threat' to society. But, threats are also considered in their coercive nature in the definition of terrorism (Brown, 2020; Cohen-Louck, 2019). For example, an act of terrorism does not always require an act to occur which results in the loss of human life. Ganor (2005) defines terrorism as "the intentional use, or threat of use, of violence against civilian targets, to attain political aim". Gailbulloey et al (2013:136) defined terrorism as "the premeditated use of violence or threat by individuals or subnational groups in order to obtain a political or social objective through the intimidation of a large audience beyond that of the immediate victim". And Tilly (2004) defines terrorism as the "asymmetrical deployment of threats and violence against enemies

using means that fall outside the forms of political struggle routinely operating within some current regime". Therefore, threats are used by terrorists as a key tactic to instil fear and intimidation into as many people as possible. This goes beyond the immediate victims of that act.

There are many studies that explore the psychological impacts of terrorism on victims and people who perceive themselves to be at risk (Cohen-Louck, 2019). Terrorism and the threat of terrorism causes feelings of loss of control, helplessness, fear, anxiety and personal lack of security. This is partly due to the perceived threat of terrorism and the vagueness and unpredictability of the threat (*ibid*). The ultimate goal of terrorist acts is not just to harm or kill direct victims but to reach broader circles of the population by inciting fear and anxiety. Terrorism is therefore a somewhat unique form of threat which relies on its unpredictability and uncertainty to increase the impact of the act.

Overall, threats are an "essential part of terrorists' coercive tool kit' (Brown, 2020:1527). The purpose of the violence is to add credibility to future threats which will increase leverage and social control. There are several 'types' of threat outlined in Brown (2020). These are immediate and true (warnings and hoaxes) or prospective and false (pledges and bluffs). The threat of terrorism can alter the amount of damage that occurs from the attack. The threat can determine the physical and political consequences of the terrorism. The decision to threaten terrorism is "as important as the choice of weapons, timing and target" (Brown, 2020:1528). Therefore, threats are a key part of a terrorist's tactical plan and can influence the amount of damage that occurs and the amount of coercion that is achieved. In some respects, the threats are as important as the attacks and are not entirely distinct from each other (*ibid*).

Similarly, threat is included in the definition of human trafficking. Obokata (2006) and Walby et al (2016) define human trafficking using the EU Directive as "the recruitment, transportation, transfer, harbouring, or receipt of persons, by means of threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation". Threats are an important type of violence used alongside (or, in the absence of) physical violence to reduce the chances of female victims of sexual exploitation from seeking help to exit prostitution (Walby et al, 2016).

Therefore, the use of threats is an important aspect in the coercive effects of violence. Threat offences can occur alongside and in the absence of physical violence. Threats rely on the credibility of the threat, which mean the victim believes that the threat is truthful to achieve the most coercive result. Threats are considered to be important in relation to domestic violence, terrorism and human trafficking. This is especially in the impact to the victim's mental state by inciting fear, intimidation and anxiety. So, this thesis will include threats as a violent offence.

2.5 Defining Harms

Despite growing concern for victims of crime among the general public, policy makers and academics (Spalek 2006; Walklate 2007), neither criminology nor the adjacent social sciences have made a serious effort to systematically identify, evaluate or compare the harms associated with different crimes. Crime is often perceived as the 'harm' in its own right by policy makers and other academics. An example of this is the Cambridge Harm Index (CHI) (Sherman et al. 2016). The CHI, developed in 2016, has been taken and adapted worldwide and is considered an effective, easily implemented and cost-effective method of measuring crime (House and Neyroud, 2018; Anderson and Mueller-Johnson, 2018; Karrholm et al. 2020; Mitchell, 2019). This method weights types of crime by the lowest sentence suggested in UK sentencing guidelines, ranking the harm of the crimes by the possible custodial sentence associated to that crime. It uses police and court data to gain a quantity of offences for a certain time period, where the count of each crime is then multiplied by the number of days the offender would receive in prison should they receive the lowest sentence for that crime. However, there are several reasons why using sentencing guidelines for this purpose may not be the most effective measure of harm. With this method judgements of crime are constrained within offence categories, which means that all crimes within a crime type will be scored the same, e.g., assaults occasioning actual bodily harm will be scored alike despite how the harm of the crime is perceived by the victim (example in Ignatans and Pease, 2016). In this way, crime measurements created using legal categorisations will not be accurate and could produce misleading results (*ibid*). Therefore, it would be useful to experiment with creating a crime harm measure that uses harms experienced by the victim as the victim is often considered to be the most reliable person to gain information from, other than the perpetrator themselves (Brennan, 2016; Pease, 1988).

Similarly, the CTS, developed by Straus (1979) and discussed earlier in the Literature Review, uses the act as a measure for the harm without including the consequences of the act into the measure. As mentioned in relation to the CHI, this assumed that a specific act leads to the same level of harm. The CTS also potentially includes non-intentional and non-criminal actions where causing harm was not the purpose (Ackerman, 2016; Malbon et al. 2018).

In law, criminal violent offences are considered in terms of both the action and the harm for the action to be defined as violence (Walby and Tower, 2018). The potential for more serious harm (for example in offences categorised as serious wounding) means that the severity of the offence is considered to be greater than offences with less perceived potential for harm (for example, common assault). Therefore, the severity of a violent offence is often categorised by its potential and resulting injury to the victim which is usually captured in the offence type (Francis et al. 2001). A specific action can result in a range of harmful consequences of varying seriousness. Therefore, the action and harm should always be considered together. This section of the Literature review will consider some conceptualisations of harm in criminological research and how these have informed the definition of harm used for this thesis. The operationalisation of harm in relation to the data can be found in the Methodology chapter.

Brennan (2016) defines harm as the "perceived unjustness of the incident". He explored incident harm in three ways; physical, emotional and potential for harm (whether there was a weapon involved). He looked at why victims of violence may not regard what happened to them as a crime and what factors influence labelling events as criminal – including the harm resulting from the offence. He also used data from the CSEW and identified that victim-offender relational distance predicted labelling but frequency of the victimisation and victim initiation of the incident predicted discounting. Brennan favours the term 'impact' to harm as he looks at the extent to which an incident can affect the victim immediately and prospectively. As suggested by Ruback et al. (1984), victim perceptions of the seriousness of a crime are likely to be informed by the incident's harmfulness (injury, weapon use and emotional harm), its perceived injustice (unjustness of the incident, number of offenders, victim initiation of the incident and attribution of reason for the incident) and the victim's subsequent feelings of vulnerability. Overall, Brennan (2016) found that respondents in the CSEW were as likely to discount violence by friends, neighbours and work colleagues (well-known acquaintances) as they were to discount violence by family member or intimate partners (domestic). But respondents were twice as likely to label violence by strangers and acquaintances they knew less compared to violence by domestic relations.

Harm is sometimes considered in terms of physical injury only (see offence types in the CSEW; ONS, 2020; Sivarajasingam et al. 2003; Iganski and Lagou, 2014; Warner, 2009). The severity of the offence type is also extremely correlated to the level of injury experienced by the victim, and the motivations of the offence itself (sexual or non-sexual). This is explored in more detail in the Findings chapters of my thesis. Walby et al. (2017) argues that the harms of violence are most likely to be physical injury but can also include a detrimental effect on the victim's mental or psychological wellbeing (Grenfield and Paoli, 2013). However, there is a field of research in criminology and psychology which focuses on the emotional and mental health impacts of victimisation. Research into the detrimental effect of victimisation on mental health has become popular due to it being often ignored within law and court settings (Shepherd et al. 1990; Shen, 2013). The law often considers the right to bodily integrity but not to mental integrity (Bublitz and Reinhard, 2014). It is often thought that the mental states, thoughts and feelings of a victim of crime are hidden from view as they are regarded as "intangible, evanescent, too elusive for the law to handle" (*ibid*: 52). People are therefore protected against physical harm of crime, but emotional harm is seen as a "second class citizen" (Grey 2011: 203). This thesis hopes to investigate the impact of including emotional harms into the concept of personal harms of victims, along with injury to gain the full picture of the victim experiences of violence. This can then be used to form a comparison between different types of violent crime, by different perpetrators.

Where emotional harm is considered, it is often agreed that victimisation has a detrimental impact on the feelings of victims (Koss 1990; Grey 2011; Herman 2003). However, it is agreed that female victims of violence will experience this differently to male victims. Violence against women differs in important ways such as the duration of the abuse and the severity of the impact (Koss, 1990). Interpersonal violence involves direct physical harm to the victim with the "specific intent to injure or control, and all occur in social context in which women have yet to attain equal status and power" (*ibid*: 374). Due to the qualitative differences in violence against women, where the perpetrator is often known in some way, and violence against men, where the perpetrator is often a stranger, emotional responses after the victimisation differs. According to Koss (1990), most victims will experience an "immediate distress response" post-victimisation. The core features of this are often fear, avoidance, disturbances of self-concept and sexual dysfunction. Female victims, who are often repeatedly victimised in violent victimisation experience feelings of vulnerability, loss of their own self-confidence or own worth and are more likely to accept victimisation as part of being female

(Herman, 1981). Therefore, it is often agreed that violence against women results in different emotional harm than violence against men. This thesis will investigate this further, to discover how much of the emotional harm experienced by women is a result of being victimised by a domestic relation, as opposed to a stranger or acquaintance.

Like Koss (1990), Johnson (2009) also looks at the harms specific to victims of violence against women, more specifically the harms of domestic violence. She argues that all forms of abuse are interrelated including psychological, emotional, economic and physical into a broad definition of harm. Johnson (2009) argues that domestic violence should be recentred around these multiple forms of harm which are encompassed in systemic oppression and subordination, rather than merely physical violence. Therefore, it is equally important to label domestic violence as criminal, physical violence, and include the labels of emotional, psychological, and economic abuse which would separate it from other violent categories of crime. Therefore, Johnson (2009) advocates for the focus of violence to move away from including only physical acts. This would be relevant for all violence, though is arguably more important for domestic violence where patterns of abuse may last longer, and the offences may be repeated over time.

Iganski and Lagou (2014) also consider the post victimisation distress of victims, specifically those who experience hate crimes. They analysed data from the CSEW on racially motivated crime. They discovered that not every victim of hate crime experiences the same emotional distress after their victimisation. There are some victims who do not record being affected emotionally by the incident at all. Craig-Henderson and Sloan (2003: 482) argued that the negative emotions experienced by victims of racist crime were "qualitatively distinct" from the emotional reactions of victims of similar crimes that were not racially motivated. Iganski and Lagou (2014) focus on the range of emotional responses recorded by victims of hate crime and argue that current literation obscures the diversity of impacts experienced by victims of hate crime. They concluded that it is not acceptable to penalise all hate crime more harshly than other crimes based on the perceived higher level of emotional impact. Instead, a practice is needed that reviews each incident individually.

Similarly, Shapland and Hall (2007) used the emotional reaction responses of victims in the CSEW to assess the effects of crime on victims. They agree that there are often variations in the experiences of victims and that is it difficult to predict which individual victim will experience which effects from their victimisation, and to what extent. Maguire (1980) found

that a victim's domestic circumstances and specific life events affect the severity of reaction to victimisation. Shapland and Hall (2007) used the emotional affects in the Crime Survey and compared them to the proportion of victims of violence who also experienced injury. They found that the majority of violence does not result in physical injury and that which does is usually minor (minor bruising or black eye). This means that a significant proportion of victims who do record that they are emotionally affected by the incident have not experience injury. Therefore, there are more victims who will experience emotional affects from crime than who will experience physical (violence) or financial (property) effects of crime. While Shapland and Hall (2007) emphasise the importance of including emotional effects of crime into an analysis of victim harms, they do not suggest that the emotional affects are more important, nor do they suggest that they should be considered in isolation (from physical injury). Instead, they argue that physical and emotional effects are experienced together as part of a complex process. The intention of their study was to "suggest possible elements of effects… which would be used to produce a set of inter-related scales or a set of scenarios which people could be asked to evaluate" (*ibid*: 204).

Ignatans and Pease (2019) further analysed the emotional reactions of victims of crime using the Crime Survey for England and Wales. They identified that the most common emotional reactions in the Crime Survey were anger and annoyance. These were experience more often than fear (*ibid*). The dichotomy of anger and fear is discussed in relation to "flight vs. fight" responses (Teatero and Penney, 2015; Ignatans and Pease, 2019; Roach, Cartwright and Pease, 2020). Fear is often considered to be more widely felt by victims of crime, when in fact Ignatans and Pease (2019) found it to be only the fifth most common response recorded in the CSEW. Roach, Cartwright, and Pease (2020) discuss this in relation to terrorism, finding that anger is also the more common response when compared to fear. However, fear is often the most written about in academic discussions (Ditton et al., 1998; Farrall et al., 1997; Gilchrist et al., 1998; Teatero and Penney, 2015). Ignatans and Pease (2019) argue that while there is clearly a well-established literature on the fear of crime, the literature on anger is sparse.

Davis and Friedman (1985) looked at the emotional aftermath of violent crime and discovered key differences between victims and non-victims of violence. They reported that around 45% of victims reported answered that indicated emotional distress when this was defined as nervousness, anger, anxiety or shame. This increased to 75% when difficulty sleeping was added. Victims were significantly more anxious, fearful, suspicious and confused than non-victims of violence. This was often the case even when there had been no contact

with the offender (non-violent crimes). There are studies that compared the harms of victims of violence to non-victims of violence (Benier, 2017; Leung, 2004; Pease, 1988; Ignatans and Pease, 2016), but little that compared victims of different types of violence either by offence (Rose et al 2006), motivation (Iganski and Lagou, 2014) or victim-perpetrator relationship (which is the aim of this thesis).

There is a body of literature (Walby, 2004, Brand and Price, 2000; Langton and Truman, 2014; Walby and Olive, 2014, etc.) which considers the economic impacts of violence. However, the economic impacts of violence are usually conceptualised in relation to the societal effects rather than the harm to the victim. This PhD is specifically interested in victim harms of violent crime and will not include the economic costs of violence in the definition of harm. As with the definition of violence used in this thesis, the definition of harm needed to be comparable for all violent offences. This also justified excluding financial harm from the analysis. Financial harm is usually considered in relation to coercive control (Stark, 2007) and is specific to instances with domestic perpetrators. Therefore, the definition of harm used in this thesis will specifically focus on the physical and emotional impacts of violence on victims. 'Harm' is the result of the violent act, which is detrimental to either, the physical or emotional (or both) wellbeing of the victim.

Overall, this thesis will focus on the physical and emotional harms to the victim. This will create a definition of harm that is comparable across different types of violence regardless of who perpetrated it (male/female, domestic, stranger or acquaintance). This means that some aspects of harms are not included in this analysis. This analysis will not consider the personal financial impact of crime which is often associated with coercive control (where the perpetrator may take control of the family's finances in a way to control their partner), or wider economic costs to society.

2.7 Positioning the Thesis Question in Policy

The debates around separating violence into specialist fields of criminology are also evident in current proposals for new policy in the UK. There are currently two debates ongoing – one which suggests that misogyny should be classified as a hate crime, and another which would include domestic violence into policy on serious violent crime. Current discussions can be positioned on the two sides of the answer to the question 'Is Domestic Violence Violent Crime?'. On one hand, there are suggestions that misogyny could become a hate crime in the

UK, which would further separate violence against women by including sex as a protected characteristic in Hate Crime Law in the UK (Law Commission, 2021a; 2021b).

Calls for sex and gender to be included as protected characteristics have been raised for years (UK Parliament, 2021). Hate crime laws have developed in England and Wales to address concerns about the disproportionate criminal targeting (and additional harm caused to) certain groups (*ibid*). Current protected characteristics in hate crime laws include race, religion, sexual orientation, disability, and transgender identity. But, including sex as a protected characteristic in hate crime law has been disputed. It has been argued that these laws are unjust because they result in the law treating criminal offending differently depending on the characteristics of the victim (Law Commission, 2021). However, hate crime laws are used to justify enhanced sentences as there has been evidence that hate crime can result in more harm, fear, and anxiety for the victim (*ibid*). The Law Commission's final report indicated that while there are suggestions that violence against women results in more harm, there are unique concerns for including sex as a protected characteristic. First, that women make up half of the UK population, which means that they are not a small subgroup (such as religious groups or ethnic minority groups). Second, that sex offences and domestic violence are particularly problematic. This is because these two offences are also difficult to prosecute, thus adding an extra layer of proof and complexity could make it even more difficult. There are also aspects to both which may not be captured in new hate crime laws, such as coercion and control in the context of intimate partnerships and much public sexual harassment. Women's groups such as Women's Place UK (2021) argue that aggravated offences would are not effective if the crimes concerned (domestic violence, sexual violence) are not already adequately policed, investigated, or prosecuted. This thesis contributes to this debate by demonstrating that the separation of domestic violence into specialist fields, and specialist laws, would not benefit the reduction or understanding of violence (especially violence against women).

Current policy debates include the discussion of including domestic abuse and VAW as serious violent crime in the new Policing, Crime, Sentencing and Courts Bill which "includes a new statutory duty that offers an opportunity to tackle the root causes of crime" (Domestic Abuse Commissioner, 2021). Initially, this Bill did not include domestic abuse in the definition of serious violence. This is despite a significant proportion of offences against the person and homicides that are perpetrated by domestic relations each year. One third of all violence recorded by police is domestic abuse related and half of all female homicides are

domestic homicides (8% of male homicides), (*ibid*). Domestic abuse was included after the publication of the report by the Domestic Abuse Commissioner.

Including domestic abuse and VAW as serious violent crime would mean that domestic violence is included in discussions of violent crime in the UK, rather than being included in specialised areas. The new Policing, Crime, Sentencing and Courts Bill includes the proposed Serious Violence Prevention Duty, which will require public bodies (such as, the police, health authorities, schools, and other criminal justice agencies) working together to reduce, tackle and prevent serious violence (Domestic Abuse Commissioner, 2021). Serious violent crime is a policy field with access to resources and including domestic abuse and VAW as serious violent crime would mean that domestic violence is included in discussions of serious violent crime in the UK, treating it as "as seriously as knife crime and homicide" (Home Office, 2021). This thesis will contribute to policy discussions in both Hate Crime and Serious Violent Crime.

2.6 Summary: Situating the Research Questions

The chapter outlined the current literature in the fields of Criminology and VAW. This first section covered classical criminological theories of violence which usually attribute violence to socio-economic inequalities and male perpetrators. This section included an overview of several main theories of violence which included cultural strain theory, rational choice theory, routine activities approach, self-control theories and the theory of criminal careers. Not only do these criminological theories of violence often ignore the victims of violence (assuming that the victims are the socio-economically advantaged in society) but they also ignore gender and instances where violence is perpetrated by the powerful against the less powerful. This is the case for violence against women, hate crime and often state violence. These theories of violence often do not translate to events of violence by domestic perpetrators and instead focus on violence by strangers and acquaintances. The result of this is the exclusion of domestic violence from the studies of violence and violent crime (see Ganpat et al. 2020; Tseloni et al. 2010; Farrell et al., 2014).

Because classical theories of criminology do not make violence against women visible, this has led to the emergence of a separate field of criminology which focuses on feminist theories of violence. This brings violence against women to the forefront of the analysis. These theories often imply that violence against women is different to other violence due to the nature and consequences of the violence. The VAW field looks at domestic violence and sexual violence in isolation from violence against men (Stark, 2007; Johnson, 1995 etc.). The field

focuses on the importance of including motivation, intention, and outcomes into an analysis of violence (Walby et al., 2017) to fully understand the gendered inequalities in violent crime. The review of this literature identified five areas of the violence which are said to differ. These are sex of the victim, sex of the perpetrator, type of violent offence, whether the violence is repeated and the severity (act + harm). This established the overarching research question of this thesis; Does violence by domestic relations and its outcomes differ to violence by strangers or acquaintances? This question will be answered by answering three sub questions relating to the possible differences listed above. These questions are 1) Is domestic more harmful than other (acquaintance and stranger) violence? 2) Is repetitive (series) violent crime more harmful than single violent crimes? And 3) Is (male) violence against women more harmful than (male) violence against men?

These questions cannot be answered by approaching the analysis using mainstream criminological theories of violence. Nor can it be answered using the approach of the VAW field, where domestic violence is separated and studied away from violence by strangers. Instead, this thesis will take the approach of 'DVC'. This aims to mainstream gender into an analysis of violence, to compare the nature and outcomes of different types of violent crime. This is achieved by combining all violence into a single definition of 'violent crime' irrespective of the perpetrator or the victim. The gendered dimensions of the violence can then be disaggregated and compared in relation to; sex of the victim, sex of the perpetrator and victim-perpetrator relationship. To do this, a definition of violence is needed that includes violence by domestic relations, strangers, and acquaintances into one definition. Therefore, this thesis will define violence as 'a criminal physical (complete or incomplete) act intended to harm the victim'. Harm will be defined as 'the detrimental physical injury or emotional harm experienced by the victim of violent crime'. Coercive control (as discussed in Stark, 2007) is specific to violence by domestic relations and is not applicable to violence by strangers, where a repeated conduct of violence is not common. Therefore, some acts and consequences (such as 'coercive control' and financial harm/economic control) will be excluded from the definition of violence and harm to ensure that the definitions are applicable no matter who perpetrated the violence. The operationalisation of these definitions in relation to the data available for this thesis is discussed in the following *Methodology* Chapter.

3. Methodology

3.1 Introduction:

This chapter considers the research design, data and methodology of the thesis. This chapter starts by summarising the main purposes of the thesis, along with a reminder of the research questions and a summary of the data and chosen analyses. The research design discusses the current literature in criminology. This literature has separated mainstream criminology, which focuses on violence (usually by strangers or acquaintances) and the VAW field which covers research on domestic violence. This informed the main research question of the thesis which is: does violence by domestic perpetrators differ from violence by strangers or acquaintances? An examination of the literature found that the aspects of domestic violence which are said to differ from other types of violence are: the sex of the victim, the repetition of the violence and the harms caused to the victim by the violence. This thesis will operationalise the differences of domestic violence from violence by other perpetrators by focusing on harms to the victim which will include physical injury and emotional reactions to the violent event. This will determine whether domestic violence is more harmful than violence by strangers or acquaintances and whether this harm can be attributed to victim-perpetrator relationship or another dimension of violence (repetition or sex of victim/sex of perpetrator).

After the summary of the thesis, this chapter will discuss in detail which possible data sources were considered. These possible data sources are described and compared to the CSEW. The benefits and limitations of victimisation surveys and police recorded crime (PRC) data are discussed. This section ends with a detailed overview of the CSEW, including its sample size and survey structure to demonstrate why this was the most suitable data source for the analysis of violent crime. Once the CSEW is established as the data source for this thesis, three detailed sections show the quality of the CSEW data on violence, domestic violence and harms. These sections cover the definitions of violence that will be used for this thesis, including the three victim-perpetrator relationship types (domestic, acquaintance and stranger) included in the CSEW data. This discussion of the CSEW will end with an acknowledgement of its limitations. Overall, the quality of victimisation survey data is recognised and therefore, this source of data has been chosen as the most suitable for the purposes of this thesis.

This chapter will also describe the chosen data source, which is the CV dataset (Walby, et al., 2022). The CV dataset is a merged dataset of violent crime from the CSEW. The dataset contains 11 sweeps of CSEW data from 2006/7 to 2016/17, which includes data from both the

main questionnaire and the victim form modules of the survey. Following an explanation of the CSEW, this chapter includes an overview of the CV dataset, including its construction, sample size, the victim socio-demographic variables and an explanation of the types of violence recorded in the data and harm variables. The quality of the data in the CV dataset, is examined in three sections headed: violence, domestic violence, and harms.

Finally, a discussion of multiple perpetrators demonstrates further differences between violence by domestic perpetrators and violence by strangers or acquaintances. The CV dataset shows that violence is sometimes repeated against one victim by different types of perpetrators over time, and/or perpetrated against a victim by more than one offender during the same violent event. This analysis demonstrates complexities within the CV dataset. This complexity allows for an analysis to be conducted that goes beyond current criminological literature, which traditionally focuses on 'one crime, one victim and one perpetrator'. However, it also introduces a complication that suggests that that using three discrete types of violence, based on victim-perpetrator relationship types, is sometimes too simplistic. In some cases, victim-perpetrator relationships can include more than one type of violence when victims are victimised by multiple perpetrators from across relationship types. This is also addressed in this analysis.

3.2 Research Design

Traditionally domestic violence has been separated from other forms of violent crime in Criminological research. Domestic violence is often studied in the field of VAW. However, when we compare violence by victim-perpetrator relationship we can get more information about the nature of violence (Walby and Towers, 2017). The nature of domestic violence has been argued to differ to violent crime through gender, repetitions, and severity (Backman 1994; Walby, Towers and Francis 2014). In this thesis, violence will be compared across the three victim-perpetrator relationship categories (domestic relations; strangers; acquaintances) to answer the research questions: Is domestic violence violent crime? And does violence by domestic relations differ to violence by strangers or acquaintances?

Whether there is a significant difference in violence when separated and compared by type of perpetrator is a big question that could be approached in many ways. For this thesis this is approached in two way. First, the characteristics of violent crime (gendered aspects of the violence, repeated nature of the violence, type of violent offence) will be compared when the perpetrator is a domestic relation, acquaintance or stranger. This is to assess

whether domestic violence is different from 'other' violent crime, and whether it should remain separate in analyses. Or, whether domestic violence should be integrated into "violent crime". Second, the outcome (harm) of the violence will be used as an additional operationalisation of the possible differences in violence between the three types of perpetrator/victim relationship. Harm will be used to test the comparative differences / similarities. The concept of harm in this thesis will include physical injury and emotional harm. Each emotional reaction included in the data is an adverse reaction to the incident, for example, fear, depression, or crying/tears. Most victims will have experienced at least one emotional reaction. So, more of the overall experience of harm will be included in the analysis by including emotional reactions and physical injury rather than physical injury alone. Violent events will include physical acts of violence towards the victim such as wounding, assault and sexual violence (including rape and indecent assault). However, violence will also include threats of violence made towards the victim, about the victim.

3.2.1 Research Questions:

1. Does violence (and its outcomes) by domestic relations differ to violence by strangers or acquaintances?

This thesis aims to answer the 'big' research question of whether violence by domestic perpetrators differs from violence by other perpetrators. This question is separated into two parts. First, a comparison of the characteristics of the violence, and then a comparison of the harms of violence. Both parts of this will aim to identify similarities and differences in violence perpetrated by domestic relations, strangers and acquaintances.

The exploration of the data in Section 3.5 of this chapter identified that there are some occasions where one crime report, with one perpetrator is too simplistic. This resulted in the formation of Questions 2 and 3 (listed below). These two questions explore two new areas where violence by domestic perpetrators may differ from violence by strangers or acquaintances. Thus, investigating whether victims of violence by domestic relations also experience other types of violence, recorded in different crime reports (by "different perpetrators") and whether victims of domestic perpetrators are victims of "multiple perpetrators" in the same offence, recorded in the same crime report. An analysis of "different" and "multiple" perpetrators can be found in the next chapter, Section 4.6. In summary,

2. Are victims of domestic violence more likely to be victims of violence by different perpetrators than victims of strangers or acquaintances?

3. Are victims of domestic violence more likely to be victims of multiple perpetrators than victims of strangers or acquaintances?

Throughout the thesis Question 1 has been separated into multiple other sub-questions which are easier to operationalise. The process to reach these questions is developed throughout the four findings chapters of the thesis. These sub-questions will be imperative to answering the main research questions of the thesis. They are listed below:

4. Is domestic more harmful than other (acquaintance and stranger) violence on average?
    a. *Is violence by domestic perpetrators more harmful overall than violence by other perpetrators on average?*
    b. *Is violence by domestic perpetrators more emotionally harmful than violence by other perpetrators on average?*
    c. *Is violence by domestic perpetrators more physically harmful than violence by other perpetrators on average?*

5. Is (male) violence against women more harmful than (male) violence against men on average?
    a. *Is violence against female victims more harmful overall than violence against male victims on average?*
    b. *Is violence against female victims more emotionally harmful than violence against male victims on average?*
    c. *Is violence against female victims more physically harmful than violence against male victims on average?*

6. Is repetitive (series) violent crime more harmful than single violent crimes on average?
    a. *Is series violence more harmful overall than single-event violence on average?*
    b. *Is series violence more emotionally harmful than single-event violence on average?*
    c. *Is series violence more physically harmful than single-event violence on average?*

The notion that repetitive violence produces more harm is a complex one. Theories of common couple violence (Johnson, 1995) argues that repetitive violence is often minor and less serious than single event violence (which may occur alongside coercive techniques). However, Stark (2007) and Kelly (1988) argue that repeated acts of violence (even when minor) can have significant and emotionally harmful impacts on the victims. This is because repeated acts can reinforce the believability of the threats and create an environment where the perpetrators coercive control is more effective. This thesis will take the notion of repetition (using whether the crime report is single or series) to investigate whether the victim is more likely to report that an injury occurred and whether they are more likely to report emotional impacts. The repetition does not necessarily mean that the same harms are recorded for each incident of the violence, but the victim is asked to refer to the most recent event. With this, it could be assumed that the emotional harm recorded is a cumulation of the multiple events. However, the injuries recorded could represent some indication of escalation of violence (that the injuries recorded in series crime reports are more severe when compared to injuries recorded in single crime reports), or that repeated violence is often minor physical acts which have a more serious emotional impact (somewhat supporting Stark and Kelly above). The criminological discussions of repetition are presented in more detail in Section 2.3.2 of the Literature Review. The concept of "harm" is defined in Section 2.5 of the Literature Review.

3.2.2 The Analysis

The main research question 'does violence by domestic relations differ to violence by strangers or acquaintances?' will be approached in three ways. The first is a comparison of each type of violent crime. This will involve investigating the nature of violence such as sex of the victim, sex of the perpetrator and repetitions of the event. This will determine whether distinguishing domestic violence from other forms violent crime is appropriate. One part of this will involve a comparison of stranger and acquaintance to demonstrate that separating violence into the three categories of stranger, acquaintance or domestic perpetrated is needed for a deeper analysis of violence. This analysis will highlight the complexity of whether violence can be separated by relationship and the implications of this. In some cases, the violent crime is perpetrated by multiple people. So, these victims can be victims of more than one type of violence if the perpetrators are from different relationship categories. Therefore, victims of multiple perpetrators blur the separations between the types of violence. Separating violent crime into distinct groups is more complex when victims of multiple perpetrators are considered. As well as demonstrating this complexity, including victims of multiple

perpetrators into the analysis will be an addition to current literature that focuses on one victim, one crime and one perpetrator.

The second analysis will involve operationalising the difference between domestic violence and other violence through personal harms to the victim. This involves doing a similar comparison as the first analysis but with a focus on injury and emotional reactions for victims of domestic, stranger and acquaintance violence. The severity of violence has been identified in the literature as a possible difference between domestic violence and other violent crime (Bachman, 1994; Walby, Towers and Francis, 2014). Severity usually relates to the type of offence perpetrated against the victim and the outcome of this. For this thesis, the severity of the event will be operationalised through the harm to the victim (the outcome). Therefore, the harms to the victim will be used to assess whether domestic differs from stranger or acquaintance violence. This will first involve a comparison of the variables to assess where there may be obvious differences in victim injury and emotional reactions.

Finally, to answer whether domestic violence is more harmful than violence from other perpetrators, this thesis will use binary factor analysis to produce harm indices for each type of violent crimes, which will then determine whether domestic violence is most harmful. Therefore, this would also contribute to answering the 'big' question of whether domestic violence differs from other types of violent crime.

This will then investigate whether domestic violence is the most harmful type of violent crime.

3.2.3 The Data:

The PhD uses a merged dataset of data on violent crime from the CSEW. The CV dataset contains eleven sweeps of CSEW data. The CSEW includes detailed data on both the victims of violent crime and the crimes that they have experienced. The data has information on the type of crimes experienced, the perpetrator, socio-demographic information for the victim and injuries and emotional reactions that resulted from the crime. The data is collected relating to the specific event experienced and each victim can provide information on multiple discrete events. Specifically, the CSEW records the victim's harms relating to the event and they can record different harms if they have been victimised multiple times. This allows for domestic violence and its harms to be separated and compared to other types of violent crime.

The CSEW categorises violence according to three victim-perpetrator relationships. Domestic includes current and ex intimate partners, as well as other family members.

Acquaintance includes perpetrators who the victim knows in some way other than domestic. This includes anyone that the victim would recognise at least by sight. Finally, stranger is unknown and unrecognisable to the victim. These three categories will be used to distinguish domestic and other types of violence for the comparison.

3.3 Possible Data Sources

There were several different possible data sources that were considered for this study. This section will outline these data sources and why they were not used for this thesis. First is a discussion of police recorded crime data, which is also available through the Office for National Statistics (ONS). Other data options included data from other national victimisation surveys from other parts of the UK, or from the USA. Finally, there is a discussion of the data available from the CSEW self-completion modules, which have succeeded in recording higher numbers of previously under-reported crimes, such as sexual offences and crime by domestic perpetrators. This data source was also excluded, the justification for which is outlined here. This section will end with a justification of why the CSEW is the most appropriate source of data to provide the means to answer the research questions of my PhD.

3.3.1 Police Recorded Crime

Police recorded crime (PRC) data was considered as a data source for the PhD. PRC data is supplied to the ONS by the Home Office. The Home Office collates data supplied by 43 territorial police forces within England and Wales, as well as data from the British Transport Police. For crimes that are accurately recorded and well-reported to the police, PRC can be a reliable source of data (Home Office, 2016). It can inform on the prevalence of certain offence types, where resources are being used (such as police time and money) and the overall demands of the force. But for a significant number of crimes, police recorded data is not reliable and does not show the true extent of trends over time. PRC can only provide information on crimes that have come to the attention of the police, either by the victim reporting the offence or by some other means. There are two main routes that the public takes to report a crime to the police (ONS, 2015). One of these is directly to the force control room. An incident report is made and, at some point in the future, a crime record is made. The second is directly from the victim of the crime. They contact the police, and a call handler makes a crime record immediately and the victim receives a crime reference number. Crimes are recorded based on the victim's account of what has happened and should still be recorded when; the victim refused to disclose personal details, they don't wish to pursue the matter further and even when the

allegations cannot be proven (ONS, 2015). However, the victim must confirm that a criminal event occurred before it is recorded, for example, if a member of the public reports witnessing a robbery and the victim is not found, then a crime cannot be reported.

PRC relies on victims reporting their victimisations to the police. The CSEW data estimates there to be 60% more incidents of crime than recorded in police data, meaning the majority of crimes are never reported to the police. There are a number of factors that makes survey data a preferred choice. Victimisation surveys allow respondents to report crimes that they have not reported to the police. Therefore, the yearly data that the CSEW collects can inform on crime trends over the past 30 years more so than police data might, especially for the more common types of crime experience by the general population (ONS, 2019). It is also less dependent on changes in police administrative practices, such as changes in levels of reporting or police recording practices (Walby, Towers and Francis, 2016). So, police recorded data was not used in this thesis because survey data is generally considered to be more robust and reliable, recording more incidents of crime in more detail (ONS, 2019). This also explains why survey data is a popular source of data for academics and is often used as an alternative to PRC data.

The data is vulnerable to changes in recording practices and policy (Home Office, 2016). Changes in recording practice and policy also causes complications when considering how to compare data over time. To create a large dataset with multiple years of data the datasets need to be comparable over time. There were significant changes to recording policy in 2002. The National Crime Recording Standard was introduced and data before this period is not comparable to data after. This data is also vulnerable to police discretion. Crimes are not recorded if the police officer has decided that the incident is not criminal or should not be reported. Therefore, reported crime is not the same as recorded crime. When victims do decide to report their victimisation to the police, the police may not record this. Police under-recording usually affects victims of violence more than victims of other crime types (HMIC, 2014). Around 19% of all crimes reported to the police go unrecorded. For violence against the person 33% of incidents are unrecorded and for sexual offences 26% is unrecorded. In 2014, statistics based on data from PRC was assessed against the code of practice for official statistics. The UK Statistics Authority found that it did not meet the required standard for designation as national statistics (ONS, 2015).

PRC published data does not include information on the relationship between perpetrators or victims, though this is recorded by the police. The police 'flag' domestic violence offences when they are recorded. They also record substantial information about the incident itself, which is also not published in Crime Statistics. This means that PRC omits victim-perpetrator relationship and harms from the publications. The focus is on the number of offences for each offence type for each police force area. The main purpose of PRC is to provide a measure of trends in well-reported crimes (particularly homicide, which is not recorded in the CSEW). They can be used to indicate police workload as they provide the number of crimes by each police force area. They can also be used to assess trends in PRC over time (ONS, 2015).

For the reasons outlined above, the data from the CSEW is a more reliable source of crime data for the UK. The CSEW has National Statistics status from the UK Statistics Authority, whereas this status is only provided to PRC on homicides. PRC fails to record a large proportion of crime, with CSEW data estimating there to be 60% more crimes than PRC data suggests. The CSEW also provides easy access to data on harms and victim-perpetrator relationship, both of which are not available in PRC but are necessary for this thesis.

3.3.2 National Victimisation Surveys

Many countries have national victimisation surveys and they generally follow processes similar to the CSEW (Home Office, 2019). Victimisation surveys take a sample of people and interview them about their crime victimisation experiences during the reference period of that survey. Victimisation surveys record information on both victims and non-victims of crime. One aim of these surveys is to record the 'dark figure' of crime, that is, the crimes that are not reported to the police. Victimisation surveys can be conducted at either a local level (neighbourhood, police force area, etc.), a national level or an international level. Data from a national level survey was needed for this project due to the methodology and the requirement of a large sample size. There are multiple national victimisation surveys in the UK. The CSEW is the largest in the UK (recording data from England and Wales), however there are also surveys for Scotland (Scottish Crime and Justice Survey) and Northern Ireland (Northern Ireland Crime Survey). The American Crime Victimisation Survey has also been considered. However, while they may have similar aims, there is not a standardised methodology across surveys from different countries. The surveys differ in sample size, reference periods and variations in the questions asked (Home Office, 2019). This makes comparisons between them

difficult. Therefore, the option to merge the data from multiple victimisations surveys was discarded.

The Scottish Crime and Justice Survey has an identical structure to the CSEW and uses a main questionnaire, victimisation form and self-complete modules. The British Crime Survey included Scotland, England, and Wales into a national crime survey. However, the Scottish government commissioned an independent crime survey in 2006. This saw the BCS renamed to the CSEW. The Scottish survey has changed in its frequency over the years. From its start as the BCS until 2006, it was running on an annual basis. From the 2007/8 survey until 2011/12, it adjusted to an annual survey based on financial years (like the CSEW). Then from 2012/13, the Scottish survey was conducted biannually. 2014/15 was the final biennial survey, with it changing back to annual until now. It has also changed its sample size. From the 2012/13 survey to 2014/15, 12,000 people were interviewed every two years, however the latest surveys have been conducted yearly, with a reduced sample size of 6,000. The data has been made comparable to previous years, despite the change in sampling (Office for Statistics Regulation, 2017). Although the data is comparable across all years, the changes in time frame and the smaller sample sizes would mean that the dataset from this source would be much smaller than that of the CSEW even when using multiple years of data.

The Scottish Crime and Justice Survey records information on both physical and emotional harms. To record physical harms the survey asks the victims which injuries they may have experienced as a result of the crime. The list of injuries that respondents are asked to choose from matches the list from the CSEW, except for a few slight wording differences. For example, the CSEW asks about 'scratches' and 'cuts', whereas the Scottish Crime and Justice Survey asks about 'Severe cuts, gashes, tears or punctures to skin'. The Scottish survey also asks about emotional reactions, with a list that also matches the list in the CSEW victimisation module. However, although the survey follows a similar structure, with similar questions, merging the two datasets would be a challenge. The Scottish Crime and Justice Survey has not been running for consistent years for as long as the CSEW. This means that there are some years where there is no data from the Scottish survey. The difference in sample size also means that the sample over 10 sweeps of data would be much smaller than that from the CSEW. The CSEW covers the majority of the UK population by including England and Wales. Therefore, the CSEW was chosen over the Scottish Crime and Justice Survey.

The Northern Irish Crime Survey (NICS) also mirrors the structure of the CSEW, with the inclusion of a main survey, victimisation form and self-completion modules (Department of Justice, 2019). This survey was conducted on an ad hoc basis from 1994/5 but became an annual survey in 2005 (adjusting to record financial years from 2008/9). Like the Scottish Crime and Justice Survey, the NICS also has a significantly smaller sample size when compared to the CSEW at around 4,000 respondents. This means that there are some limitations. The number of topics recorded are fewer as the sample cannot be adequately split. This means that follow-up research cannot be done on subsections of the population. However, the primary reason why this data source was not used, is that the questionnaire asks only about physical injury as an indication of harm. There are no variables relating to mental health or emotional effects of crime. There are also no questions that ask the victim of the effect of the crime on them. Though, respondents are asked to rate different types of crime on a scale from 1 to 10. This means that only one aspect of victim harm is recorded (physical), which would restrict the analysis significantly by providing little to no insight on the emotional or mental health effects of crime. It is important to include non-physical harms from violence to answer the research questions of this thesis because most violent crime does not result in injury (Shapland and Hall, 2007).

The National Crime Victimisation Survey (NCVS) is an American victimisation survey. It is also similar in a lot of ways to the CSEW. The NCVS also uses screener questions to establish whether the respondent has experienced crime during the reference period. It also uses the victim form module structure (named 'incident report' here). This survey has a larger sample size of around 70,000, though it is designed to cover the whole of the US (which has a much larger population than the UK). The NCVS includes questions relating to the impacts of criminal events. The NCVS also asks questions on injury and whether the victimisation affected everyday life, such as through causing trouble with schoolwork, peers, co-workers or bosses, problems with family members etc. It records some information on emotional distress if this distress was experienced for longer than a month. The injuries discussed differ slightly to those recorded in the CSEW, including rape and attempted rape in the list of injuries. The NCVS also groups together 'Bruises, black eye, cuts, scratches, swelling, chipped teeth' into one injury category. This is separated in the CSEW as different levels of injury determine a different severity of violence. Therefore, although the NCVS is also a valuable source of data on crime victimisation, it was not merged with the CSEW for this thesis as there were too many substantive differences in the wording and choices of responses for questions.

This is similar for the emotional reactions (emotional distress in the NCVS). The NCVS includes only long-term mental health impacts with other emotions. For example, 'worried or anxious' are included together, as are 'sad or depressed'. In the CSEW, 'fear' is separated from 'anxiety/panic attacks' and 'crying/tears' is separated from 'depression'. This also allows for some disaggregation between severity for emotional harms. However, the CSEW also records 'instant' reactions to the event, and not just emotional distress that has been experienced for longer than a month. Also, like the CSEW, there is a question which asks the respondents to record the level of their distress, with the option of; mildly, moderately, or severely. The equivalent in the CSEW is the question regarding how affected the respondent was by the incident (see Table 3.4.1 in Section 3.4.3).

3.3.3 Summary

Overall, this thesis considered PRC and other victimisation surveys as possible data sources. However, data from the CSEW main questionnaire was deemed to be the most appropriate. PRC data was inappropriate for several reasons. The CSEW estimates there to be 60% more crime than recorded by the police. This is because a large proportion of crime goes unreported by the victim. This is also because of police discretion which means that some reported crimes are not recorded. Therefore, PRC would significantly underestimate the number of crimes, specifically violent offences. Also, information on victim-perpetrator relationship and harms from violent crime are not published in PRC data. This is because the main purposes of this data are to show police workload and trends in police crime data over time. For these reasons, the CSEW is generally considered to be a more reliable source of crime data.

National victimisation surveys are the best possible source of data to answer the research questions of this thesis. While there are multiple possible victimisation surveys in the UK and abroad, this thesis has decided on the CSEW. Other UK surveys could not be merged with the CSEW to create a data source that covers victims from the whole of the UK. The Scottish Crime and Justice survey roughly matches the CSEW in which harms are recorded for both injuries and emotional reactions. However, the main issue for merging the CSEW and the Scottish Crime and Justice survey together was the inconsistency of the years in which they ran. The Scottish Crime and Justice Survey particularly has not been conducted for the 11 sweeps provided in the merged dataset (discussed in Section 3.5). Therefore, data from this survey was excluded. The NICS could not be used because it does not record information on emotional harms from violent crime. This means that a significant proportion of the victim's

experience would be excluded for the analysis. Chapter 5 shows that more victims of violent crime will experience emotional reaction than physical injury. So, it is important to include both emotional and physical harm into the analysis.

Finally, the US National Crime Victimisation Survey was considered. While the NCVS was found to be a high-quality source of data, it covers victims of crime in the US. This could not be easily merged with the CSEW as it asks victims about different harms and emotional impacts. The NCVS group together harms which are listed as separate categories in the CSEW. The CSEW asks about instant reactions (shock, anger, fear) as well as long-term mental health impacts (anxiety/panic attacks, depression). The NCVS also requires that the emotions be experienced at least one month after the incident. The CSEW does not specify when the emotions were felt (just that they were a direct impact from the crime). Therefore, the CSEW was chosen as the data source for this thesis as it has a suitably large sample size and includes multiple outcomes for violent crime which include injuries and emotional reactions.

3.4 The CSEW

This PhD utilises data from the CSEW, using a merged dataset (outlined in Section 3.5). The CSEW, formerly the British Crime Survey, is a cross-sectional national victimisation survey funded by the Home Office and administered by ONS. The survey was first conducted in 1982 (recording crime from the previous year) and ran bi-annually for almost twenty years. Since 2001 the survey has been conducted on a yearly, rolling basis, with the results being released in quarterly publications. Around 50,000 households are invited to participate in the survey each year, of which around 70-75% respond. This gives a sample of 35,000 to 40,000 respondents per year. The sample is drawn from the small user's postcode address file, with every household having an equal chance of being chosen. This source of household samples is accepted as the best general population sampling frame in England and Wales (ONS, 2019). Though, this does mean that certain groups of the general population are outside the scope of the survey. The methodology for selecting households to survey means that people who are not permanent residents of an address are excluded (e.g. people in temporary accommodation). This excludes people who are living with friends or family for a short period of time, those in domestic violence refuges and those in care homes. This also excludes people who are homeless and students in halls of residence (ONS, 2019).

The structure of this survey is complex. It is comprised of several modules containing a specific set of questions. The main questionnaire is comprised of an electronic contact sheet,

which records some initial information about the address of the selected respondent and whether the call to the address was successful (i.e., the address is occupied, and the survey could take place). This is followed by the 'household box' which asks questions to collect the demographic information on the respondent and their household members (such as age, sex, how many children, how long they have been at the address, etc.). The respondents are then asked about their perceptions of crime, such as how safe they feel walking in their area alone in the dark, their fear of different crimes, and the impact of crime on their quality of life. This leads them onto the screener questionnaire which contains questions that identify if the respondent has been a victim of crime in the last 12 months. If the respondent discloses experiences of crime within the reference period, then they are referred to the victimisation module. The victimisation module contains a set of questions about the criminal events experienced. This is also referred to as a 'victim form'. The victim can answer these questions on multiple events if they have been victimised more than once during the survey reference period. This means that one victim can have multiple (up to six) victim forms, each referring to a discrete criminal event. As well as each victim having up to six forms that record multiple crimes, these forms can record information on either single or series crimes. A single event indicates when the crime was a 'one-off' incident. A series victim form is defined as "the same thing, done under the same circumstances and probably by the same people" (ONS, 2015:20). This means that repetitions of the same crime can be recorded in one victim form. These series incidents are recorded between 2 and 96 incidents, with the code, '97' referring to 'too many to count' and '98' referring to 'don't know/refused'. In the survey year ending March 2016, a new option was available which coded '96' as being '95 or more' and '97' remained as 'too many to count'. Therefore, multiple victimisations (different offences with different offenders) and repeat victimisations (the same offender and, sometimes, the same offence) are both recorded using the victim forms.

Structure of the Crime Survey for England and Wales Questionnaire
Based on the 2016/17 questionnaire

Figure 3.4.1: Diagram showing the structure of a typical survey for the Crime Survey for England and Wales.

The survey ends with a series of follow-up modules on the performance of the Criminal Justice System, experiences of the CJS and mobile phone crime (based on the 2016/17 survey questions). There are also some split sample follow-up modules which are conducted on a small sub-sample of respondents (which include attitudes to the Criminal Justice System, crime prevention and security, experiences of the police). The survey ends with a set of self-completion modules where respondents are asked to complete a module based on their adult (since the age of 16) experiences of crime. These modules can differ from year to year, but some examples are 'drug use and drinking', 'domestic violence, sexual victimisation and

stalking' and 'gangs and personal security'. The structure of the CSEW is shown in Figure 3.4.1.

The data for the main questionnaire is collected face-to-face, with the interviewer using Computer Assisted Personal Interviewing (CAPI). This has many advantages for the collection of data. It allows for consistency and logic checks when the answers are filled in, preventing the interviewer from passing that question if the answers have not been filled out correctly. This improves the data collection process and the overall quality of the data because the interviewer is not allowed to move to the following question until the discrepancy has been solved (ONS, 2015). The self-complete modules are conducted using Computer Assisted Self-Interviewing (CASI). This uses similar logic checks but allows the respondent to record their answers to the questions themselves, without having to verbally disclose them to the interviewer. This is designed to encourage a higher disclosure rate of sensitive topics and assist in the recording of usually under-reported crimes (such as, sexual assault). The uses of the CSEW data are many and include the development and monitoring of justice policy, judgements of public safety (and campaigns to raise awareness of any changes in safety) and academic research (ONS, 2019).

Overall, the CSEW provides the means for gathering information on crime prevalence, those groups who are likely to be victims of crime and where there may be elevated crime rates geographically, as well as providing robust trends for types of crime over time for the population that is covered (ONS, 2015). Due to these features, the Crime Survey has become a useful and popular source for academic analysis. For my PhD, only the main questionnaire will be used, which excludes the follow-up modules and the self-complete modules. The follow-up modules will be excluded because this PhD is interested in the victims of crime, specifically those victimised by violent offences. This also means that respondents in the main questionnaire who have not been a victim of violence during the 12 months prior to their survey will also be excluded. Only respondents who completed the victimisation module will be used for my analysis.

The self-completion modules are excluded from the analysis. The self-complete modules include 'Drug Use and Drinking', 'Domestic Violence, Sexual Victimisation and Stalking' and 'Gangs and Personal Security' (ONS, 2017). The self-compete questionnaires are offered to all respondents and ask about experiences of crime since the age of 16. These modules are completed on a laptop by the respondent. This allows for them to disclose

information on sensitive topic, which they may not feel comfortable to disclose face to face. The aim of the self-completion modules is to increase the disclosure of sensitive information by increasing confidence in the privacy and confidentiality of the survey (ONS, 2015). The self-completion module that was considered as a data source for this thesis is the Domestic Abuse, Sexual Victimisation and Stalking module. A version of the self-complete module on domestic abuse was first included in 1996, but the 2001 module was the first to include all the main forms of intimate violence (domestic violence, sexual assault, and stalking). However, these questions were only included on a comparable annual basis from 2004/5.

The aim of the Domestic Abuse, Sexual Victimisation and Stalking module is to improve estimates of domestic violence (Walby and Allen, 2004). The self-completion modules are a successful survey tool and have been proven to reveal previously unreported crimes (Walby, Towers and Francis, 2016). The ONS (2015) also reported that the prevalence of domestic violence was much higher in the self-complete. Only 12.2% of those who reported in the self-complete (during the 12-month reference period) had also reported in the main questionnaire. The Domestic Abuse, Sexual Assault and Stalking module includes any incident of domestic violence, stalking or sexual assault where the perpetrator was an intimate partner (current or former spouse/boyfriend/girlfriend) and records any incidents that have occurred since aged 16. The questions ask about both physical violence (use of force) and non-physical incidents of emotional or financial abuse (ONS, 2019). Therefore, this includes elements of coercive control as well as incidents of physical violence, such as isolation from friends and family, controlling how housework is done, threats and use of force (ONS, 2018a). However, certain details of the offences are not collected here. For example, the frequency (number of occurrences) and the harms that resulted. This module, unlike the main questionnaire, is not concerned with individual incidents and instead is focused on the prevalence of crime. This module has been included consistently since the 2004/5 survey.

Although the self-complete module on Domestic Abuse, Sexual Assault and Stalking records significantly higher numbers of victims than the main survey, only data from the main survey questionnaire was used for this thesis. The research questions of this thesis required specific information from the data. It required the sex of the respondent to be recorded, the relationship of the perpetrator to the victim and the number of incidents within a series. It would not be possible to compare the harms of single and repeat incidents within self-complete data as the number of incidents is not recorded here. The measurement used for the self-complete

on domestic violence is the number of victims rather than the number of incidents (ONS, 2015), focusing on the total experience of crime rather than specific crime incidents.

One of the other research questions for my thesis involve disaggregating between perpetrator relationship to victim to assess whether domestic violence is more harmful than other forms of violent crime. This will be conducted through a comparison of violence by domestic perpetrators and violence by other perpetrators. This also played a part in the decision to discard the data from the self-complete modules. Data from the self-complete does not match that from the main questionnaire. Different questions are asked and so, data is found in different variables. It is not impossible to merge the two sets of data, but it would be difficult to merge the victims in the self-complete module with those in the main questionnaire and to compare these with the victims of other violent crimes. Using only the main survey allows for this comparison with relative ease, whereas using the data from the self-complete would have added complexities. So, the information regarding relationship to perpetrator, sex of the victim and sex of the perpetrator (where possible) is all available from the main questionnaire for incidents of violent crime.

3.4.1 Violent Crime in the CSEW

There are several terms and definitions that are associated with the CSEW and its figures of violent crime. These definitions of violence are used to categorise the data into groups relating to types of violence. They are used when figures from the Crime Survey are published by the ONS in reports on 'Crime in England and Wales'. The 'Crime in England and Wales' publications rely on the data from the CSEW, as well as other police data. This section will outline these various definitions and categories to explain what the survey records as violence, and to explain which definition of violence is being used in this thesis. These definitions can relate to types of violence, repetitions, severity and relationship between the victim and the perpetrator(s).

The CSEW data separates violence against the person into three categories. The first is wounding. This includes incidents that result in severe or less serious physical injury, with the examples of; cuts, severe bruising, bruising or scratches (and any other more serious injury). This is separated from the other, less serious categories by its need for medical attention (ONS, 2018c). The second is assault with minor injury. This includes incidents where the victim is physically assaulted (e.g., pushed, slapped, picked, punched) and a minor injury occurred, such as scratches or bruises. In this instance, no medical attention was required. The third category

used here is violence without injury, this includes any incidents where violence was used (or attempted) but a physical injury did not occur.

Sexual offences are also recorded in the CSEW. The offence codes for sexual violence include rape, serious wounding with a sexual motive, other wounding with sexual motive, attempted rape, and indecent assault. However, the main victimisation survey captures very few cases of sexual violence, therefore the figures here are deemed too unreliable to report. Sexual offences are therefore not included in the ONS published figures of violence. The exceptions to this are "serious wounding with a sexual motive" and "other wounding with sexual motive" which are included in the offence type of "wounding" (ONS, 2020:42). The ONS instead report on sexual assault, which is defined as "rape or assault by penetration (including attempts), and indecent exposure or unwanted touching" (*ibid*). They are measured as part of the self-completion module on domestic abuse, sexual assault, and stalking, which provide a better methodology for encouraging disclosure of victimisation of intimate violence. However, the sexual offences from the main questionnaire were included in the definition of violence for this thesis but the number of cases this includes over the eleven sweeps of data is small (671 cases).

The CSEW also records information on the perpetrators of violence. This is limited, as it relies on the information that the victim may know. This information often includes the relationship of the respondent to the perpetrator and the perpetrator's sex. In an instance where there is more than one perpetrator of an offence, the relationship is recorded as the one closest to the respondent. Relationship groups in the CSEW can be broad, or more specific. The broad categories of relationship are stranger, acquaintance and domestic. Stranger violence includes incidents of violence against the person where the victim did not have any information about the offenders. In this case, the victim does not know or has never seen the offender before the incident took place. Acquaintance violence is defined as incidents of violence against the person where the victim knew the offender (or at least one of the offenders). This covers any person the victim knows by sight and includes but is not limited to; colleagues and people met through work, neighbours, and friends of family members. Domestic violence would include violence against the person that involves partners, ex-partners or any family or household member.

There is also a variable in the CSEW datasets that provides disaggregated information on these categories. Stranger does not require any other detail (as the victim won't be able to

provide any). Therefore, the offender relationship variable provides detailed categories of the acquaintance and domestic offender groups. These relationships include (ex) husband/wife/partner, (ex)boyfriend/girlfriend, son/daughter (in law), other household member, other relative, workmate/colleague, member of the public met through work, friend, neighbour, tradesmen/builder/contractor, and young people from the local area. These relationship variables are derived from a combination of questions within the survey that ask the respondent to specify how they know the offenders. They are asked if they have ever seen the perpetrator(s) before, and if so, how well they know them. This helps to determine whether the relationship should be classified as acquaintance or stranger (for example, if the victim has seen the perpetrator(s) before and knows them by sight, even without knowing their name(s), then this should be categorised as acquaintance). This becomes slightly more complicated when multiple offenders are considered. Multiple offenders can mean that the offence is 'double counted' in the dataset. For example, if a person is victimised by their brother and his friend, the brother would be counted as domestic while the brother's friend would be counted as either an acquaintance or stranger.

Crimes recorded in the CSEW are all victim-based. Data on crime is derived from the survey which asks victims of their own experiences of crime. Therefore, the crime must have a victim to be recorded (ONS, 2020). Generally, violent crime can cover a range of offence types from threats of violence to minor assaults (pushing, shoving, acts that result in no physical harm) to murder. Homicides are not included in the CSEW (as there is no live victim to account their experience). So, PRC provides figures for murder in publications of data on violence by the ONS. Published crime statistics by the ONS includes incidents where "the victim was threatened with violence, whether or not there is any injury" (2020:41). It is important to note that the data from the CSEW is specifically designed to capture crimes, and especially those crimes that have not been reported to the police. So, the acts that are recorded in this data have all passed the criminal threshold.

Therefore, the definition of violence used in this thesis includes all violence against the person, including sexual offences, attempted violence, and threats of violence. Due to the nature of the CSEW, all violence used for this thesis has crossed the criminal threshold. It includes threats of violence and attempts, but the main questionnaire does not include control tactics or other non-physical acts. The definition of violence is also separated into three 'types' of violence which are provided by the CSEW. These types separate violence by three victim-

perpetrator relationship categories. Violence will be compared between domestic and stranger but also between domestic and acquaintance. This definition is operationalised in section 3.5.3.

3.4.2 Domestic Violence in the CSEW

This section will outline the definitions of domestic violence used in the CSEW. It will discuss which offences are included in the survey definitions and by agencies who use and publish data from the survey. This will be compared the differences between domestic violence and domestic abuse. The section will end with an explanation of the definition used for this thesis.

The CSEW records information on both physical acts of domestic violence and non-physical acts that are sometimes accompanied by violence. The main questionnaire questions which cover only physical acts of domestic violence and threats of violence. This is defined specifically as "wounding and assaults that involve partners, ex-partners, other relatives or household members" (2020:42). But the Home Office publishes reports on domestic abuse, which widens the definition of domestic violence to include non-physical control tactics as well as physical acts of violence. This includes acts usually associated with coercive control, such as the control of finances, threats and isolating victims from friends and family. This is recorded in the Domestic Abuse, Sexual Assault and Stalking self-complete module, which uses the CASI method of collecting answers (using a laptop rather than answering and interviewer's questions face-to-face). Published figures on domestic abuse come from the self-completion module as disclosure rates are around five times higher than in the face-to-face victimisation module. It also contains questions tailored specifically for domestic abuse (ONS, 2017). Published figures on domestic violence, which excludes all non-physical abuse and threats, are based on the CSEW face-to-face module, but these figures are prone to under-reporting. This thesis focuses on domestic violence and excludes the self-completion module data.

The Crime Survey definition of domestic abuse matches the cross-government definition, but it does not completely manage to capture the new offence of coercive control. The cross-government definition of domestic abuse is: "any incident or pattern of incidents of controlling, coercive or threatening behaviour, violence or abuse between those aged 16 or over who are or have been intimate partners or family members regardless of gender or sexual orientation." (Home Office, 2015:22). This includes psychological, physical, sexual, financial, and emotional abuse into a broad definition that encompasses more than physical violence. This definition combines multiple different types of abuse, such as, non-sexual abuse by a partner or family member, which includes physical force, threats and emotional and financial

abuse. It also includes sexual assault by a partner or other family member. This includes "rape or assault by penetration (including attempts), or indecent exposure or unwanted touching carried out by a current or former partner or other family member" (ONS, 2017: 13) and stalking by a partner or other family member. Stalking requires two or more incidents that cause fear or alarm of "receiving obscene or threatening unwanted letters, e-mails, text messages or phone calls, having had obscene or threatening information about them placed on the internet, waiting or loitering around home or workplace, or following or watching by a current or former partner or family member" (*ibid*).

The cross-government definition of domestic abuse is not a legal definition. It contains elements of different crimes (physical violence, honour-based violence, FGM and coercive control). Victims are not confined to one gender or ethnic group (Home Office, 2015). However, a consultation in 2012 highlighted some issues with this definition. There were problems with the practical application of the definition. Often, domestic violence includes physical acts only and many organisations create their own definitions which do not match the cross-government definition (Home Office, 2012). There were concerns with implementing a broad definition of domestic violence. Introducing the inclusion of coercive control into the definition of domestic violence could weaken the definition as coercive control is seen as an abstract term (*ibid*). A broad definition is more difficult to police, results in a broader category of victim, can cause confusion over what does and does not constitute abuse, especially when a physical act of violence does not occur, and it could result in a person being labelled as violent when they are not (Home Office, 2012).

Coercive and Controlling behaviour was included as an offence as part of the Serious Crime Act in 2015. It is specific to intimate partner or family relationships and was designed to include aspects of domestic violence which are not already criminalised in law. Domestic violence is not in itself a criminal offence; however, it can involve several offences (such as, assault) which are used when prosecuting (Sentencing Council, 2018). Therefore, introducing an offence of controlling and coercive behaviour fills that gap that criminal law currently had by criminalising behaviours that are not physical. The Home Office (2015:3) justified the inclusion of this offence by explaining that it "sends a clear message that this form of abuse can constitute a serious offence". By highlighting that seriousness of other forms of abuse, especially as it occurs within relationships that often denote trust, the Home Office hoped to provide better protection to victims that experience continuous abuse.

Coercive and controlling behaviour are separated as two distinct concepts that relate to multiple acts of purposeful behaviour which takes place over time. Controlling behaviour is defined as; "a range of acts designed to make a person subordinate and/or dependent by isolating them from sources of support, exploiting their resources and capacities for personal gain, depriving them of the means needed for independence, resistance and escape and regulating their everyday behaviour" (Home Office 2015: 3). Coercive behaviour includes "a continuing act or a pattern of acts of assault, threats, humiliation and intimidation or other abuse that is used to harm, punish, or frighten their victim" (*ibid*). Though the two concepts are clearly related, coercion aims to encompass the interaction between the physical and the non-physical to incite fear into the victim.

The new law makes a distinction between the physical and the non-physical as coercive control is captured through psychological and emotional abuse that does not always cross the threshold into physical violence. The CSEW has measured some aspects of non-physical abuse since April 2004 in the Domestic Abuse, Sexual Victimisation and Stalking self-completion module, but this measure does not completely capture the new offence of coercive and controlling behaviour (ONS, 2018c). According to the new offence of coercive and controlling behaviour, there are certain criteria that must be met. The behaviour must take place repeatedly or continuously (on an ongoing basis). Any incident that happens once or twice are not included in this definition of coercive (Home Office, 2015). Other criteria for the law to be applied are a "serious effect" on the victim and that the victim and perpetrator must be personally connected when the events took place. A "serious effect" is defined as causing "either fear that violence will be used against them on at least two occasions, or they have been caused serious alarm or distress" (Home Office, 2015:5). Coercive control has been included in the cross-government definition of domestic violence, though this has led to some criticism. As discussed earlier, introducing coercive control into the definition of domestic violence, broadens the definition and can cause confusion when applying the definition practically. Respondents in the 2012 consultation argued that aspects of coercive behaviour were already covered in the definition with the inclusion of emotional and psychological abuse (Home Office, 2012).

As shown in this section, there are a range of terms and definitions used by the Crime Survey and related agencies to categorise domestic violence and domestic abuse. These two concepts are separated by the inclusion of non-physical, coercive acts in definitions of abuse. Where possible, this thesis will follow the definitions used by the CSEW of domestic violence and report using their terms to avoid confusion. The definition of domestic violence will be

used rather than the term domestic abuse. This thesis will focus on criminal acts that involve physical violence or the threat of physical violence and the resulting harms from these. This thesis utilises the data available from the main questionnaire and the face-to-face victimisation module which records on domestic violence rather than domestic abuse. This has therefore influenced the definitions chosen for this thesis. However, attempts will be made to conceptualise and study aspects of domestic violence that goes beyond physical injury. This will be made possible by the inclusion of threats offences and through analysing the emotional reactions as well as the physical harms of the violence.

3.4.3 Harm in the CSEW

To answer the question of whether domestic violence differs from violent crime, a comparison of harms for different types of violence will be conducted. This section will explore the types of harm recorded in the CSEW and their importance for the subsequent analysis. There will also be a summary of Shapland and Hall (2007) who have used the harm variables from the CSEW for their own analysis.

As mentioned earlier, the CSEW includes key information about each crime (or series crime) event. This information includes demographic and sociodemographic information of the victim, including their age, sex, how many children they have, their employment status, occupation, income and geographical location. There is also information recorded about the perpetrator, where possible, their relationship to the victim and their sex. The Crime Survey also records any resulting impacts of the incident. This allows the respondent to report any emotional reactions, physical injuries and lifestyle implications that were a direct result of the incident/s disclosed in the survey. The CSEW data contains thirteen impact variables, ten emotional reaction variables and sixteen variables relating to physical injury. As well as this, there is a variable where overall effect of the incident is scaled by the respondent. The question associated with this variable asks the respondent; 'how affected were you by the incident' with the options including 'a little', 'quite a lot' and 'very much'. These variables can be found in Table 3.4.1 and were utilised within this project. These variables will be useful in answering the question of whether domestic violence is 'different' to any other forms of violent crime by comparing which harms are more likely to be experienced for victims of violence. The scaling variable will be useful for score-building harms and will assist in answering whether domestic violence is more harmful than acquaintance or stranger violence.

Table 3.4.1: Variables relating to harms in the CSEW, along with the questions asked and possible responses

Variable	Question	Levels	Type of Harm
Whemot	Which reactions did you have?	**(multiple responses allowed)** a) Anger b) Shock c) Fear d) Depression e) Anxiety/panic attacks f) Loss of confidence/feeling vulnerable g) Difficulty sleeping h) Crying/tears i) Annoyance j) Other	Emotional
Howaff1	How much were you affected by the incident?	1) A little 2) Quite a lot 3) Very Much	Affect
Impact	What things happened as a result of the incident?	**(multiple responses allowed)** a) Financial loss b) Time off work c) Loss of employment d) Relationship breakdown e) Avoided social situations f) Inconvenience g) Moved house h) Took additional security precautions (e.g., installing a burglar alarm) i) Loss of trust in other people/ the public j) Time off from school/college/university k) Impact on heath l) Effect on personal confidence m) Other n) No Impact	Lifestyle implications
Whinju4	What sort of injuries did you receive?	**(multiple responses allowed)** a) Minor bruising/ black eye b) Severe bruising c) Scratches d) cuts e) Puncture/stab wounds f) Broken/Cracked/Fractured bones g) Nosebleed h) Broken/lost teeth i) Chipped teeth j) Dislocation of joints k) Concussion or loss of consciousness l) Internal injuries (e.g., internal bleeding or damage to internal organs) m) Facial/head injuries (no mention of bruising) n) Eye/facial injuries cause by acid, paint, sand etc. thrown in face o) Other	Physical

These variables are all recorded with multiple response questions (also included in Table 3.4.1). This allows the respondent to record more than one response to each of the harm questions. Though respondents are limited to a pre-set list of responses for many of the survey

questions, the inclusion of multiple response answers is a useful tool to combat the restrictions that are sometimes required for data such as this. Multiple responses means that the victims can choose all the answers that they feel apply to them. Table 3.4.1 shows the survey questions and responses asking about harm in the CSEW. These variables relate back to questions which ask about, emotional reactions, impacts, injury and long-term health problems.

There are a few studies relating to harm that utilise data from the Crime Survey. These include one by Ignatans and Pease (2016). They focused on victim judgements of crime seriousness, using the question 'how serious a crime do you think it was?'. They emphasise the importance of using victim's accounts when studying harm as they have the most reliable account of the criminal event. This question has an extremely high response rate, with almost all respondents answering this in their crime reports. Using responses like this from the crime survey is beneficial as the results are not constrained by the hierarchy of offence categories. Instead, each respondent has scaled their own crime from 1 to 10. However, Ignatans and Pease conflate ideas of seriousness and harm, as victim judgements of seriousness may not reflect the complete harm experienced by them from the event. This relies on the victim's idea of what crime is and so, answers to this question may be influenced by whether they regard what has happened to them as a crime or not. Therefore, this may reveal more about changes in attitudes over time, more than it reveals the harm experienced from certain events.

Little research has been done specifically using the harm variables listed in Table 3.4.1. Shapland and Hall (2007) are one of the few to use the emotional impact and physical injury variables, emphasising the importance of including emotional reactions into the analysis of harms. Emotional harm is often overlooked, as the focus tends to fall upon physical injury. However, Shapland and Hall explain that only a minority of victims will experience an injury, even when considering victims of violent crime. Whereas response rates for emotional reaction questions are consistently high year to year, with at least 80% of respondent experiencing one or more of these reactions. Therefore, using the emotional reaction variables will give a more rounded picture of the overall harm experienced by victims because physical harm is rare and emotional reactions are common. Emotional reactions also occur in instances where physical harm is not present, therefore including only physical harm in the discussion would mean that a significant amount of crime harms would be unaccounted for.

For this reason, both physical and emotional harms will be considered for this thesis. The CSEW variables will be used to construct harm scores to compare between domestic

violence and violent crime by other perpetrators. These scores will hopefully contain both physical and emotional harms into one harm score. This will account for attempted violence and threats, where a physical act may not have occurred. It will also measure harm for instances where no injury was present. This section presents the questions asked in the survey and the possible answers to these. The crime survey records data on emotional reactions, injury, lifestyle impacts and health impacts. These variables cover a wide spectrum of possible harms which aims to provide information on the victim's own experience of the crime. These variables are directly linked to specific violence events through the crime reports. Using these variables to measure the harm of the victim and to build scores for the harm of different types of violence will contribute to the question of whether domestic violence differs from violent crime. Specifically, whether domestic violence is more harmful than other types of violence.

3.4.4 Limitations of the CSEW

Despite its many uses, the data from the CSEW has some limitations. These limitations are discussed below. The main limitations relate to the populations that the sampling process misses. However, these limitations have been outweighed by the possible uses of the survey data, which provides a large sample of otherwise high-quality data.

The data provides a large, representative sample of the population of England and Wales. However, there are some populations that the survey is unable to interview. This means that the survey excludes; any person that does not have a permanent address such as students, people in care homes and people who are homeless. The survey also excludes women who are in refuges because of violence. The survey may therefore exclude some of the most severe cases of domestic violence. It is also important to acknowledge that the survey interviews adults aged 16 or older (there is a children's crime survey which surveys children who are under the age of 16). This means that the domestic violence captured in the survey will all involve adults and will not include any instances of violence against children.

However, the previous sections outline the quality of the information that the CSEW provides on the populations it does captures. The CSEW records 60% more incidents of domestic violence than PRC. It also provides extensive information on various aspects of an offence such as; information on the victim, information on the perpetrator, consequences of the crime and number of repetitions. It also records which services have been used after the offence (whether the victim had to go to hospital or informed the police). The CSEW also records information at the level of the offence, meaning that the victim can record multiple offences,

perpetrators and consequences. This will be essential for this thesis, where comparisons can be made between incidents of domestic violence and other violence even when the victim has been a victim of more than one type of violence.

Therefore, this PhD has considered the limitations of the data and has acknowledged the sub-populations of England and Wales that this survey fails to reach. However, few data sources would provide a dataset of this size and quality for the purposes of this thesis research. The data provides the relevant data to answer the research questions of this thesis. It has been chosen over other victimisation surveys and PRC data due to its relative success at recording violence and particularly domestic violence. There are multiple variables that relate to the harms experienced by victims which relates specifically to the offence discussed in the crime report (and not the victim's overall experiences of violence). There are also variables relating to emotional harm as well as injury, which allows victims of violence to record more of their harm than if injury alone was considered. Overall, the CSEW was determined to be the most suitable source of data to answer the research questions of this thesis.

3.5 The Changing Violence Dataset:

The previous section demonstrates that the CSEW contains high quality data on violent crime and its consequences to the victim. This PhD utilises data from the CV Dataset. The CV dataset contains all violent crime reports from eleven sweeps of CSEW data from 2006/7 to 2016/17. This dataset contains detailed information on the victim and the criminal event. The dataset contains variables that record information on the sociodemographic information of the respondent, the frequency of the crime, the sex of the victim and of the perpetrator. The dataset also contains variables relating to harms to the victim which include physical injuries and emotional reactions. These are the variables from the CSEW that are required to answer the research questions of this thesis.

The CV dataset was constructed as part of a wider research project into trends in violent crime over time. The project started in 2018 and is still ongoing, with the dataset also being used for this project. The construction of that dataset involved merging 11 sweeps of CSEW data, with two datasets for each year. The two datasets contain the separated demographic information for all respondents and the crime reports for those who are victims of crimes. The method used to merge the datasets mostly followed the methodology used in Walby, Towers and Francis (2016). The methodology for the construction of this dataset can be found in

Walby, et al. [working paper]. The merged dataset includes respondents from the CSEW who were victims of at least one violent crime.

The CSEW collects data on the respondent and the criminal event. The information on criminal events is recorded in a 'victim form'. The victim forms act as a crime report, recording the information for that event. However, a victim can have multiple victim forms (crime reports) in the data if they have been victimised more than once over the 12-month reference period. For clarity, within this thesis the crime reports will be referred to as crime reports. This is to more accurately indicate what is being discussed. The crime reports record information on each criminal event. Each victim can have up to six crime reports which relate to discrete criminal events that they have experienced during the reference period of the survey. These crime reports are being used as an intermediary level to gain access to the victim of violent crimes, and so where possible the analysis will be conducted at the victim level. Where this is not possible, the crime reports will be used instead. These two units differ as each victim in the survey can fill out multiple (up to six) crime reports, if they have been victimised more than once during the 12-month reference period of the survey.

3.5.1 Description of the Dataset:

This section will provide an overview of the CV Dataset. This will describe the sample size of the data, the types of violent crime it contains and the characteristics of the respondents (who are all victims of violent crime). The function of this chapter is to show that the CV dataset contains valuable data that will contribute to this analysis. Section 3.5.1 provides multiple tables to demonstrate this, in most tables there will be a number of missing values. Missing values are extremely common in survey data. The missing values in this data includes system missing values (where for some reason the respondent has not answered the question and it has been left blank), 'don't know' responses and 'refused' responses from the respondent. The analysis throughout this thesis do not consider these responses and excludes them as "missing". This is because the analysis requires the respondent to have answered the question and confirms they have or have not experienced certain events (or outcomes). Therefore, non-responses, 'don't knows' and 'refused' responses are excluded.

As discussed in the previous chapter, the dataset combines eleven sweeps of data from the CSEW from 2006/7 to 2016/17 and contains 23,547 crime reports across 1,272 variables on violent crime. This dataset contains variables on victim socio-demographics, perpetrator sex, number of incidents in a series (repetitions) and victim-perpetrator relationship, as well as

multiple variables on injuries and emotional reactions from the incident. Therefore, the dataset provides both information on the victim and information on the crime event itself. The dataset includes all respondents of the CSEW who disclosed that they had been a victim of violent crime and their crime reports. When this is compared to the number of crime reports in the corresponding years of the CSEW data, violent crime consistently makes up between 15 and 18% of offences recorded (Table 3.5.1). This is consistent with other users of the data, such as Walby, Towers and Francis (2014), who used one year of CSEW data that contained 17% violent crime.

Table 3.5.1: Observations per year

CV Dataset		**CSEW Raw Data**		
	Number of Crime Reports		Number of Crime Reports	Percent Violence
2006/07	2990	2006/07	18047	16.6
2007/08	2621	2007/08	16189	16.2
2008/09	2530	2008/09	16184	15.6
2009/10	2239	2009/10	14693	15.2
2010/11	2557	2010/11	15298	16.7
2011/12	2393	2011/12	14758	16.2
2012/13	1731	2012/13	10296	16.8
2013/14	1632	2013/14	9282	17.6
2014/15	1461	2014/15	8259	17.7
2015/16	1720	2015/16	10594	16.2
2016/17	1673	2016/17	11352	14.7
Total	23547	Total	144952	16.2

Table 3.5.1 shows the breakdown of number of crime reports per yearly sweep of the CV Dataset. The figures here are unweighted (not estimated for population or household) and only contain the raw numbers collected from the CSEW survey sample. Earlier years of the survey contain more crime reports related to violent crime. The peak of violent crime incidence was 1995, with the numbers of recorded violence slowly decreasing since then (ONS, 2018b). The larger decrease after the 2011/12 survey can be partly attributed to the decrease in sample size from 46,000 in the years up to 2011/12 to 35,000 in the years after. This was due to both "the abolition of central targets for police forces and the outcome of the Government's Comprehensive Spending Review (CSR)" (ONS, 2019:20). The years from 2006/7 to 2011/12 show no unreasonable fluctuations in the numbers of crime reports in the data. This is also the case for the years from 2012/13 to 2016/17. The CV Dataset contains a significant subset of the CSEW, with around 16-18% of each year's crime reports.

The CV dataset contains information on the victim (socio-demographics), the crime and the repetitions (single or series). The analysis for this PhD will consider these three levels and assess how they may contribute to the findings. This PhD is concerned with personal harms to the victims of violent crimes, so much of the analysis will be done on the level of the victim. The diagram below shows the interaction between the victim, the crime report, and the crimes. The crime report acts as an intermediary level which gives access to both the victim and the crime. Some analysis can be done on the victim level, for example, the analysis on victim demographics. However, much of the analysis on the crime will be provided by going through the crime report. As the diagram shows below, this is not the same as the crime. A crime report can record a single incident of one crime (shown for crime report 1 and 2). But it can also record a series incident of the same crime, where a crime has been repeated more than once to the victim (as shown in crime report 3). It is also important to consider than some victims will have been victimised more than once by different perpetrators and experience different offences. In this case, the victim will have answered multiple crime reports that each record a different crime (not a series of the same crime). This is also shown in the diagram as this victim has three crime reports. The possibility of multiple crime reports and multiple repetitions for the same victim will be considered for the analysis.

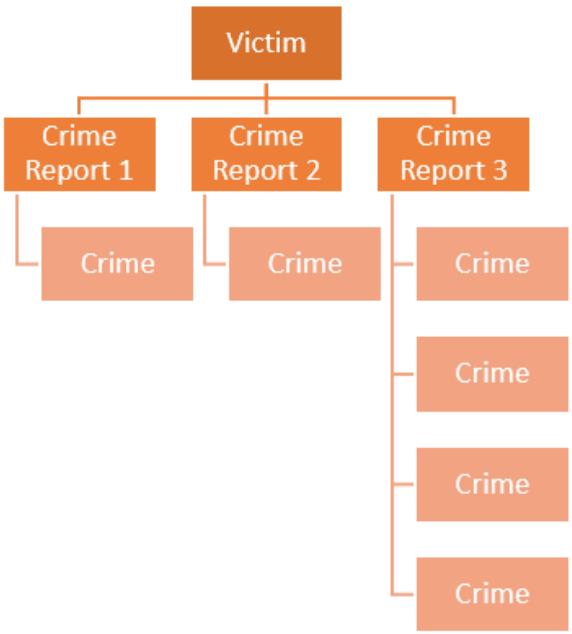

Figure 3.5.1: Diagram of the Levels within the Changing Violence Dataset, showing how the Victim, Crime Report and Crime are Linked

The Literature Review identified some key aspects of domestic violence that distinguishes it from other violent crime. These dimensions include: the sex of the victim, the

sex of the perpetrator, repetitions, and harm to mental well-being. The sex of the victim and perpetrator is key for feminist theorists who argue that domestic violence is largely perpetrated against female victims by males. However, family violence theorists, such as Straus (1979, 1980), argued that violence is just as prevalent within families with female offenders as male offenders. However, as the following chapter demonstrates, the results from the CV dataset show evidence that supports feminist theories of domestic violence. Repetitions have been identified as something that may differ across types of violence. Stranger violence is often a one-off event. Domestic violence is patriarchal violence that escalates (Johnson, 1995), is continuous (Dobash et al. 1992) and repetitious (Dobash and Dobash, 2004, Kelly and Westmarland, 2016). Repetitions are important as they allow a "constellation of abuse" to be revealed (Dobash and Dobash, 2004:328). The repetitions of events that are included in discussions of domestic violence often include physical violence and coercive control to encompass the variation of events that victims experience (Kelly and Westmarland, 2018).

Coercive control is often discussed as non-physical acts that create fear and humiliate the victim. Stark (2010) positioned coercive control as the most harmful aspect of domestic violence (abuse), because it involves controlling the every-day. Coercive control has an impact on a victim's mental wellbeing as it is enacted to ensure compliance through fear and intimidation (Dobash and Dobash, 2004). This is also discussed through the use of threats to instil the "or else proviso" (Stark, 2010:203). This is the idea that coercive control and minor physical violence are used as techniques by perpetrators of domestic violence to remind the victim of the possibility of more severe violence in the future (Kelly, 1988).

This PhD uses the data from the CV dataset. This is a merged dataset of data from the main questionnaire in the CSEW (discussed earlier in the chapter). This means that much of the data on coercive control (captured in the Domestic Abuse, Sexual Assault and Stalking Self-Completion Module) is not included. However, threats have been included in the CV Dataset, and in the definition of violence used in this thesis. The CV dataset also provide details of both physical harms (injury) and emotional harms. Which will be used to answer the question of whether domestic violence is more harmful than other types of violence in both injury and harm to mental wellbeing.

3.5.2 Victims:

The CV dataset combined 11 sweeps of victim demographics with the crime reports for those victims. This means that the demographics for each victim could be added for up to six crime

reports using a one-to-many merge. Therefore, to get an idea of the sample characteristics, a dataset containing one case per victim was needed. Otherwise, those victims with multiple victim forms would be overrepresented when analysing victim demographics.

While most of the analysis for this PhD will be done at the crime report level, using this as a way access the victim, it is also important to keep crime reports separate as they provide information on different crimes that the victim may experience in different ways. However, to compare victim characteristics, it makes sense to do this for the victim and not the crime reports. To create a victim dataset, the AGGREGATE function in SPSS was used to combine the demographic information from the crime reports for one victim. This dataset has less cases than the main dataset as victims can have multiple crime reports in the CV dataset. Therefore, the aggregate dataset of victims had 20,034 cases. Data on the victim level can provide socio-demographic information and some limited information on the crimes experienced. The experiences can differ across crime reports in cases where a victim has more than one crime report, and so merging some variables to the victim level is not possible.

Table 3.5.2: Victim Characteristics in the Changing Violence Dataset

	Number of Crime Reports	Percentage	M	SD
Respondent Age				
Range = 16 - 100			38.49	15.02
Respondent Sex				
Female	9942	49.6		
Male	10092	50.4		
Race/Ethnicity				
Missing	28	0.1		
White	18329	91.6		
Mixed/multiple ethnic groups	270	1.4		
Asian/Asian British	744	3.7		
Black/African/Caribbean/Black British	458	2.2		
Other	203	1.0		
Number of Children in Household				
Range= 0 – 9			0.65	1.01
Employment				
Missing	91	0.5		
Employed	13053	65.5		
Unemployed	1135	5.7		
Student	970	4.8		
Looking after family home	1343	6.7		
Long-term/temp sick/ill	1609	8.1		
Retired	1489	7.5		
Other	344	1.7		

Marital Status				
Missing	16	0.1		
Married/Civil Partnered	6017	30.1		
Cohabiting	2341	11.7		
Single	7791	38.9		
Separated	1061	5.3		
Divorced/Legally dissolved partnership	2318	11.6		
Widowed	490	2.4		
M=mean SD=standard deviation				

Table 3.5.2 provides a summary of the frequencies and descriptive statistics for the social demographic variables for victims in the CV dataset. This includes age, showing that there is a mean age of 38.5 for the victims in the dataset. The age of victims ranged from 16 (the youngest age for respondents in the adult survey) to 100. The code for 100 refers to those aged 100 or over. For sex of the victim at the victim level data, there were an almost equal percentage of male and female respondents, with only slightly more males (51.5%) than females (48.5%). This further contradicts the theories of violence that suggest it is experienced mainly by male victims.

We can also get information from the CV Dataset on respondents' ethnicity, employment, and marital status. The majority of victims (91.5%) were white, followed by Asian/Asian British (3.7%), Black/African/Caribbean/Black British (2.2%) and Mixed/multiple ethnic groups (1.4%). Most of the respondents were employed (65.5%). A small minority were unemployed (5.7%), long-term/temp sick/ill (8.1%), retired (7.5%), looking after family home (6.7%), student (4.8%) or economically inactive in some other way (1.7%). The marital status of the respondents varied. The most common response was single (38.9%). This is followed by married (30.1%), cohabiting (11.7%), divorced/legally dissolved partnership (11.6%). Separated and widowed had the smallest percentage of respondents with 5.3% and 2.4%. Each of these sociodemographic variables will be considered as a possible mediator for the level of harm experienced by victims of domestic violence and other violent crime. The possible effect of these on the results of the crime score will be considered.

3.5.3 Violent Offences:

Violent offences in this thesis will include all violence against the person, sexual offences, and threats of violence. The definition here has been extended slightly to encompass more than just

physical acts of violence. Attempted physical acts and threats of violence are also included. The analysis of the violent crimes for this thesis will focus on two aspects of violence. The offence code and the 'type' of violence, which will be separated into domestic, acquaintance and stranger. The violent offence codes that have been included in the CV dataset have been included in Table 3.5.3.

Table 3.5.3: Violence Against the Person and Sexual Offences Offence Codes

		Frequency	Percent
11	Serious wounding	777	6.5
12	Other wounding	2249	18.6
13	Common assault	7052	58.6
21	Attempted Assault	1288	10.7
31	Rape	152	1.2
32	Serious wounding with sexual motive	10	0.1
33	Other wounding with sexual motive	82	0.7
34	Attempted rape	73	0.6
35	Indecent assault	354	2.9
	Total	12037	100.0

These offence codes are used by ONS to produce estimates of violent crime from the CSEW. Attempts are included in the estimates with complete offences (ONS 2020). The use of these offence codes as a measure of violence follows the methodology of previous papers (Walby et al, 2014; 2016). Of the 23,547 victim forms within the CV dataset, 12,037 relate to violence against the person (Table 3.5.3) and 11,510 relate to threats offences (Table 3.5.4). The CSEW is known to be a reliable source of information for crimes that are often low harm and high frequency (e.g., common assault), but figures in crime statistics are notably less reliable for crimes that are high harm but relatively low in frequency (e.g., rape). This is reflected in the low numbers over the eleven sweeps of data (1.2% of violent crime).

Of the crime reports relating to violence offence codes, over half (58.6%) were categorised as common assault. 18.6% related to crime categorised as other wounding and 6.5% were serious wounding. A further 10.7% of crime reports were categorised as attempted assault. Therefore, only 6.6% of violent crime reports were categorised as sexual offences. 2.9% of these were categorised as indecent assault, 1.2% as rape, 0.7% as other wounding with a sexual motive, 0.6% as attempted rape and 0.1% as serious wounding with a sexual motive. The violence against the person offence codes do not include threats offences, (only offences

where physical or attempted physical violence occurred). These are shown separately in Table 3.5.4.

Table 3.5.4: Threats Offence Codes

		Frequency	Percent
91	Threat to kill/assault made against, but not necessarily to respondent	7831	68.0
92	Sexual threat made against, but not necessarily to respondent	144	1.3
93	Other threat or intimidation made against, but not necessarily to respondent	3368	29.3
94	Threats against others, made to the respondent	167	1.5
	Total	11510	100.0

Threats were included in the definition of violence for this thesis. Threats and intimidation are often seen as a significant aspect of domestic violence, used as a systematic tool to entrap women (Stark, 2007). However, the threats will only be included when they are made to the respondent, about the respondent, or to the respondent against someone they know. The CV dataset contains four offence codes relating to violent threat offences (Table 3.5.4). These include: threats to kill or assault, sexual threat, other threat and threats made against others (made to the respondent). The most common violent threat offence code is that of a threat to kill or assault, with 7,831 cases (68% of threats). Sexual threats, offence code 92, is the least common threat (1.3%). Other threat or intimidation made against, but not necessarily to the respondent has 29.3% of crime reports and threats against others, made to the respondent has 1.5% of threats crime reports. The inclusion of threats nearly doubles the number of violent crime reports in the dataset. Threats are last in the hierarchy of violent crime offence codes, meaning that an offence is only coded as a threat when no other violent offence has occurred. Therefore, the offence codes for threats will be used to assess harms when no physical act occurs.

There are also variables that consider violence based on its severity. These are shown in Table 3.5.5. Threats are not included in any of these categories, and so they have been included as a separate ‘type’ of violence in Table 3.5.5.

Table 3.5.5: Type of violent offence		
	Number of Crime Reports	Percent
Wounding	3118	13.2
Assault with injury	3044	12.9
Assault without injury	5296	22.5
Threats	11510	48.9
Missing	579	2.5
Total	23547	100.0

As well as specific offence codes, violent crime in the CV dataset is categorised by offence type and victim-offender relationships. The offence types are defined as: “

- wounding: the incident results in severe or less serious injury, for example, cuts, severe bruising, chipped teeth, bruising or scratches requiring medical attention or any more serious injuries
- assault with minor injury: an incident where the victim was punched, kicked, pushed or jostled and the incident resulted in minor injury to the victim, for example, scratches or bruises
- violence without injury: an incident (or attempt) where the victim was punched, kicked, pushed or jostled but resulted in no injury” (ONS, 2020:41)

Threats were added into this table as a fourth category of violence. They are not included in violence without injury, as no physical act takes place here. When threats are included, they make up almost half of the violent offences (49%). Assault without injury is 22.5% of violence, which means that the majority (71.2%) of violence in the CV Dataset does not result in a physical injury. However, assault with injury (12.9%) and wounding (13.2%) makes up a quarter of the offences, which shows that a significant minority of violent crime victims do experience injury as a consequence of the violence. This injury is separated by severity, with wounding involving severe injury that requires medical attention.

3.5.4 Domestic Violence in the Changing Violence Dataset:

The review of existing literature identified some key dimensions of domestic violence that are believed to differ to violent crime. These are the victim’s sex, the sex of the perpetrator, the number of repetitions and the harm to mental wellbeing. Information on all of these variables are available in the CV Dataset.

Violent crime in this thesis will be separated by victim-perpetrator relationship to compare domestic violence to stranger and acquaintance violence. This is necessary to answer the question of whether domestic violence differs to other types of violent crime. The CV dataset provides information on the relationship types with very little missing data. However, this variable was not derived for victims of threats offences. This is because the ONS does not include threats in their definition of violence. A new relationship variable was derived using the 'offrel3' variables which provide sixteen specific relationship types (Husband/wife/partner, Son/daughter (in law), Other household member, Current boyfriend/girlfriend, Former husband/wife/partner, Former boyfriend/girlfriend, Other relative, Workmate/colleague, Client/members of public contacted through work, Friend/acquaintance, Neighbour, Young people from local area, Tradesman/builder/contractor, (Ex) husband/wife/partner of someone else in household and Other). The first eight relate to domestic and the latter eight relate to acquaintance relationships. Stranger was derived if the victim indicated that they did not know the offender, had not seen the offender before or had indicated that the offender was a stranger. The methodology for deriving these variables follows the methodology used in Walby et al. [working paper]. However, the methodology in this paper follows ONS methodologies of coding to the closest relationship of there are multiple responses in one crime report. So, if there are multiple perpetrators with one acquaintance relationship and one stranger, the crime report would be coded as acquaintance. The variable I derived does not code to the closest relationship. Instead, it allows for multiple responses per crime report. This allows for all relationships to be recorded when there are multiple perpetrators. For this thesis, a domestic violence crime report will include crime reports with multiple offenders when at least one of these is domestic. This is discussed in more detail later on.

Repetitions can be measured through the inclusion of series crime reports. As mentioned earlier, series reports record the same event happening more than once. This is recorded in the same crime report within the variable 'ncrimes'. This was a derived variable, introduced into the CV dataset by summing the number of incidents across the four quarters of the 12-month reference period. This variable provides the total number of incidents within the series. The 'too many to count' (97) codes were recoded as 2 incidents to follow previous ONS methodologies. The code 998 refers to cases where a series incident was indicated but a number was not recorded. This was also coded to 2. There are 23,547 crime reports in the data and 20,034 victims. Using a sum of the 'ncrimes' variable, there are 51,338 incidents recorded in

total. This will be useful to assess whether the victims of domestic violence are victimised by the most incidents and whether other types of violent crime are also repeated.

3.5.5 Victims of More than One Perpetrator

The data used for this thesis has a number of complexities. One of these is the issue of multiple perpetrators. Not all victim's experiences of violent crime involve only one perpetrator. A small number of victims of violence are victimised by more than one perpetrator. This means that one victim can experience more than one type of violent crime as the perpetrators may be from different relationship categories. A victim can be victimised by two types of multiple perpetrator in the CV Dataset. A victim can be victimised by perpetrators either in the same crime report or across different crime reports and these perpetrators can sometimes be from different victim-perpetrator relationship categories. This is demonstrated in Figure 3.5.2. Figure 3.5.2 shows an example where a victim has had three experiences of crime, recorded in three separate crime reports. Crime Report 1 is a single incident crime report with three perpetrators. This crime report could have one perpetrator who is a domestic relation, one who is an acquaintance and one that is a stranger. This would mean that the victim has been victimised across all three types of violent crime in a single crime report. Crime Report 2 demonstrates a more typical crime report. This report has a single incident with one perpetrator. Finally, Crime Report 3 shows a series crime report, with multiple incidents of a crime with the same perpetrator.

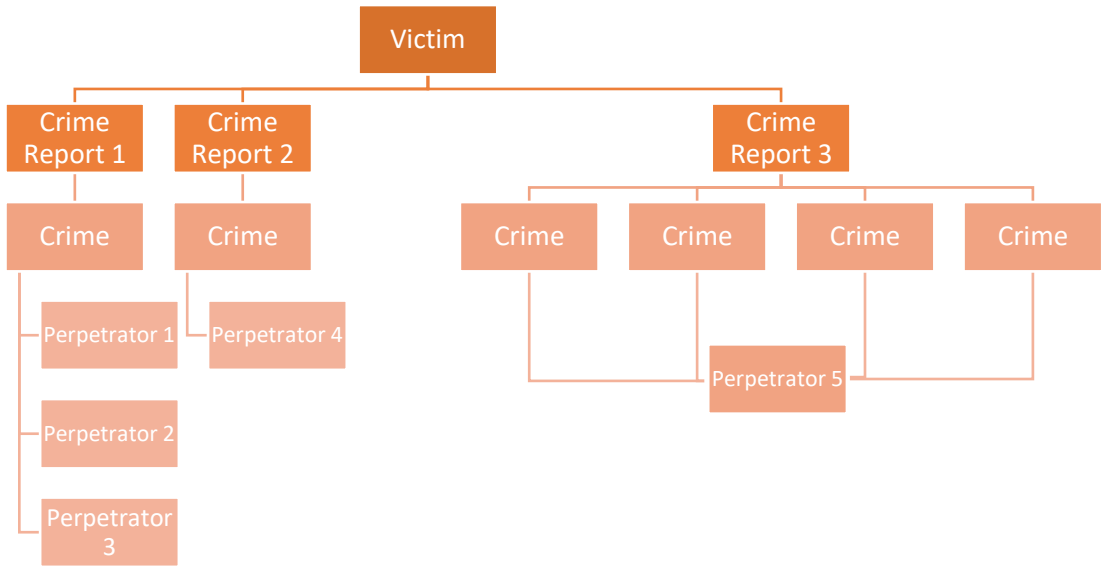

Figure 3.5.2: Diagram to Demonstrate Crime Reports with multiple perpetrators.

As well as demonstrating a case where the victim experiences one crime report with multiple perpetrators, Figure 3.5.2 also shows that a victim can experience crimes from different perpetrators. Each crime report in this example was perpetrated by a different perpetrator. This shows that some victims in the CV Dataset can be victimised by different perpetrators from different relationship categories due to multiple experiences of discrete crimes. These discrete crimes are recorded for one victim in multiple crime reports.

To summarise, multiple perpetrators can be recorded in two ways. The first, is where there are multiple perpetrators for the same offence, against the same victim. This is recorded in one crime report where the victim can disclose the number of perpetrators from '1' to 'more than 4'. For the discussion, this type of victim will be referred to as a victim of 'multiple perpetrators'. The second, is where there is one victim, but they have multiple crime reports which relate to different crimes with different perpetrators. Therefore, each discrete victimisation has a different perpetrator. For the discussion, this type of victim will be referred to as a victim of 'different perpetrators'. For victims of multiple perpetrators, the analysis was conducted with the crime report data, as the criminal event with multiple perpetrators was the focus. However, for those who were victims of different perpetrators, the victim aggregated dataset was used. This was to enable the relationships across crime reports for one victim to be identified. This will provide a comparison into the types of victimisation that one victim may experience whether they are a victim of stranger, acquaintance or domestic or some combination of the three and how this can affect the level of harm experienced.

Much of the literature on domestic violence and violent crime deals with one offender, one crime and one victim (Walby and Towers, 2017). However, the data from the CV dataset provides information that allows for full victimisation experiences to be analysed. This shows that a small number of victims experience violent crime perpetrated by multiple people (in one of the two ways discussed above). This means that victim-perpetrator relationship is not always as clear as domestic, acquaintance or stranger. In these cases, it is a combination of these types of violence. An analysis of victims of multiple perpetrators will show that victim-perpetrator relationship can be complex, but it can also provide a comparison across domestic, acquaintance and stranger that goes beyond other literature. This analysis will introduce two new sub-questions to the analysis; Are victims of domestic violence more likely to be victims of violence by different perpetrators than victims of strangers or acquaintances? Are victims of domestic violence more likely to be victims of multiple perpetrators than victims of strangers or acquaintances?

The analysis of victims of multiple perpetrators and victims of different perpetrators will contribute to answering the wider question of whether domestic violence is different to violence by stranger or acquaintances. This will be through the two sub-questions presented above. Victims of multiple and different perpetrators will be analysed to determine whether victims of domestic violence are likely to be victimised in this way and whether this is different than for acquaintance and stranger. This will therefore include another dimension of violence that goes beyond that which has been identified in the current literature.

3.5.6 Harm Variables in the Changing Violence Dataset

There are three types of harm variables that are recorded by the CSEW. These have been included in the CV dataset. These relate to physical injuries, emotional reactions and long-term impacts that all occur as outcomes of the violent event. These harms are recorded in each crime report and so relate to each (single or series) event, and not a victim's full experiences of violent crime. These were shown in Table 3.4.1. This section will present some information about these variables that have been included in the CV dataset and explains why the injury and emotional reaction variables will be used for the main analysis, but the long-term impact variables have not.

The CV Dataset contains data on both physical and emotional harms. The data contains information on whether an injury occurred. The data also asks the victim what kind of injury occurred where they can choose from a list of twelve types of injury, with two additional responses of 'don't know' and 'refused'. As well as information on injuries, the victim also discloses whether they have experienced an emotional reaction as a result of the violent crime. The respondent can choose from a list of 10 choices of emotional reactions, also with additional 'don't know' and 'refused' responses. The injury and emotional reaction data are recorded in multiple variables in the dataset and the victim can select multiple responses to each, which allows them to select all that they feel applied to their experience of violent crime. Chapter 5 will explore this data to identify what the overall experiences of violent crime victims are. This will include an analysis of the combinations of multiple responses recorded for different types of violent crime.

In the CV dataset just over half of crime reports on violent crime are threats offences. This means that there is no physical violent act. Therefore, there cannot be a physical injury experienced by the victim. In the victimisation module of the CSEW, victims of threats offences are not asked whether they experienced physical injuries. They are recorded as

'missing' in the injury variables. Of the crime reports which recorded physical violence (including sexual violence), over half (57.5%) experienced a physical injury of some kind and just under half did not (Table 3.5.6). Therefore, a significant proportion of all violent crime does not result in physical injuries to the victim. This means that if an analysis of the harm of violent crime was limited to physical injuries alone, it would be assumed that these victims were not harmed by their experienced of violent crime. This would exclude a significant amount of victim experiences.

Table 3.5.6: Whether an Injury Occurred (Physical Violence Offences)

	Number of Crime Reports	Percent of valid responses
Injury	6331	57.5
No Injury	4676	42.5
Total	10993	100.0
Missing	1044	-
Total	12037	-

Overall, there are 6331 crime reports where an injury has been recorded. The information in these crime reports has been used to produce the following two tables, revealing which injuries were experienced by victims of violent crime. The survey provides a list of 12 injuries that can be chosen by the victim (Table 3.5.2). Of the crime reports which recorded at least one injury, the majority have disclosed minor bruising or black eye (58.3%). A significant proportion recorded severe bruising (29%), cuts (25.2%) and scratches (21.5%). All other injuries, some of which are more severe, such as broken/cracked/fractured bones (4.9%), broken nose (3.1%), facial/head injuries (0.2%), are uncommon. Therefore, those victims who do experience injuries often experience less serious injuries (bruising or scratches), rather than severe injuries (broken bones and head injuries).

Table 3.5.7: Injuries that Occurred as a Result of the Violent Event

	Number of Crime Reports	Percent of valid responses
Minor bruising or black eye	3674	58.3
Severe bruising	1827	29.0
Scratches	1356	21.5
Cuts	1589	25.2
Broken/ cracked/ fractured bones	310	4.9
Broken nose	193	3.1
Broken/lost teeth	120	1.9
Chipped teeth	89	1.4
Concussion or loss of consciousness	313	5.0

Facial/head injuries (no mention of bruising)	152	2.4
Eye/face injuries due to acid, paint, etc. being thrown in face	13	0.2
Other	315	5.0
Missing	4	0.0
Total	9955	-
*These questions allow respondents to answer multiple responses, meaning that the percentages will exceed 100% and the number of responses will exceed the total number of crime reports.		

Table 3.5.8: Additional Injuries (added to 2012/13 Survey)

	Number of Crime Reports	Percent of valid responses
Puncture or stab wounds	37	0.6
Nose bleed	102	1.6
Dislocation of joints	14	0.2
Internal injuries	28	0.4
Total	181	2.8

The investigation into the injury variables revealed that there were also additional variables added to later years of the data. This is where questions in the CSEW have been adjusted to include more responses. There were an additional four injury variables that were added to the dataset from 2012/13 onwards (Table 3.5.8). Due to the missing data for the years these variables were not included and needed to be recoded. Therefore, for the subsequent analysis of victim harms, these have been merged into the 'other' category. This means that the responses for when these variables are included are not lost completely. Table 3.5.8 shows that even when looking at the valid responses in the data, there were few crime reports that reported experiencing these injuries. Merging these additional variables in the 'other' category also solves the issue of the high levels of missing data for the missing years of data.

Generally, a higher proportion of violent crime reports record an emotional impact from the crime than a physical impact (Table 3.5.9). Victims of threats offences are able to answer the question of how they were affected emotionally, as well as victims of physical violent crimes, such as wounding, assault and sexual violence. Most of the crime reports in the CV dataset (85.8%) recorded at least one emotional reaction from the violent event. 14.2% didn't record any emotional reactions from the event. Emotional reactions were included in the analysis of harms so that the victim's full experience of violence is included (Iganski and Lagou, 2014). All victims of violent crime can (and most do) experience an emotional reaction. Whereas, a much smaller number of victims will experience injury, especially serious injury.

This is true even when a physical act of violence occurs, as much of this can be non-injurious (for example; a shove).

Table 3.5.9: Whether there was an Emotional Reaction from the Violence

	Number of Crime Reports	Percent of valid responses
Emotional Reaction	19580	85.8
No Emotional Reaction	3245	14.2
Total	22825	100.0
Missing	722	-
Total	23457	100.0

There are 10 types of emotional reaction variables in the CV dataset, including 'other' (Table 3.5.10). These range from external emotional reactions such as anger, shock and annoyance, to internal emotional reactions such as depression, fear, anxiety/panic attacks and difficulty sleeping (Iganski and Lagou, 2014). For the crime reports in the dataset, victims tended to experience healthy emotional reactions which involved external emotions. Around half of crime reports recorded anger (53.6%), annoyance (47.7%) and shock (45.7%). A third of violent crime reports recorded fear (34.8%) and loss of confidence/ feeling vulnerable (29.5%). Fewer crime reports recorded crying/tears (19.7%) or mental health reactions such as depression (12.6%), anxiety/panic attacks (17.3%) and difficulty sleeping (16.2%). Crime reports can record multiple emotional reactions which means victims can record multiple reactions relating to the crime event. These will be analysed in more detail in Chapter 5. The emotional reactions variables are related to the specific and discrete crime event recorded in the crime report. This means that they do not measure the victim's experiences of violent crime as a whole (they may have multiple crime reports within the reference period or other victimisations outside of the scope of the survey). This means that separate harms (injury and emotional reactions) can be recorded for multiple crime events for one victim and for different types of violent crime.

Table 3.5.10: Emotional Reactions that Occurred as a Result of the Violent Event

	Number of Crime Reports	Percent of valid responses
Anger	10494	53.6
Shock	8951	45.7
Fear	6816	34.8
Depression	2463	12.6
Anxiety/panic attacks	3378	17.3

Loss of confidence/feeling vulnerable	5773	29.5
Difficulty sleeping	3170	16.2
Crying/tears	3859	19.7
Annoyance	9337	47.7
Other	580	3.0
Missing	12	0.0
Total	54833	-
*These questions allow respondents to answer multiple responses, meaning that the percentages will exceed 100% and the number of responses will exceed the total number of crime reports.		

As well as recording whether there was an injury or emotional reaction resulting from the violence crime event, the CV dataset also records the level of affect from that event. This variable becomes important for the building of the harm scales in later chapters of this thesis. The level of affect variable asks the victim to record how affected they felt by the event recorded in that specific crime report. Therefore, the level of affect also related the violent crime event and not the victim's total experience of crime. The victim is asked to scale the effects of the emotional impact(s) out of; very much, quite a lot or a little (Table 3.5.11). When all victims are considered, more victims record being affected 'a little' (41%) or 'quite a lot' (33%) than 'very much' (26%).

Table 3.5.11: How affected were the victims by the violent offence?

	Number of Crime Reports	Percent of valid responses
Very Much	5072	26.0
Quite a Lot	6467	33.0
A Little	8031	41.0
Total	19570	100.0
Missing	3987	-
Total	23547	-

Finally, there is also variables which include data on long-term impacts on violence. The long-term impacts include questions on whether the victim experienced any of the following impacts as a result of the violent event; financial loss, time off work, loss of employment, relationship breakdown, avoided social situations, inconvenience, moved house, took additional security precautions, loss of trust in other people/ the public, time off from school/college/university, impact on health, effect on personal confidence, other and no impact. These impacts were considered for the investigation of harms, but it was decided that they would not be included. The initial questions on impact were added to the survey in 2011/12,

with six additional variables (inconvenience, moved house, took additional security precautions, loss of trust in other people/the public, time off from school/college/university, impact on heath, effect on personal confidence) added in 2013/14. The result of this is multiple years of missing data in the CV dataset, where these questions were not included.

Table 3.5.12: Impacts that Occurred as a Result of the Violent Event

	Number of Crime Reports	Percent of valid responses	Percentage of all responses	Percentage of Missing Data
Financial loss	730	4.6	3.1	32.8
Time off work	906	5.7	3.8	32.8
Loss of employment	113	1.1	0.5	56.1
Relationship breakdown	844	8.2	3.6	56.1
Avoided social situations	1463	14.2	6.2	56.1
Inconvenience	2	0.0	0.0	73.2
Moved house	20	0.3	0.1	73.2
Took additional security precautions	0	0.0	0.0	73.2
Loss of trust in other people/ the public	8	0.1	0.0	73.2
Time off from school/college/university	11	0.2	0.0	73.2
Impact on health	30	0.5	0.1	73.2
Effect on personal confidence	45	0.7	0.2	73.2
Other	435	4.2	1.8	56.1
No impact	7356	71.2	31.2	56.1
Total	11963	-	-	-

*These questions allow respondents to answer multiple responses, meaning that the percentages will exceed 100% and the number of responses will exceed the total number of crime reports.

The impact variables and the missing data is shown in the table above (Table3.5.12). This shows that these questions were asked of between 26-45% of the total sample in the CV dataset. However, even considering only those who were asked about impacts, the response rate for this question is extremely low. The maximum proportion of 'yes' responses were found in the 'avoided social situations' category where 14.2% of crime reports recorded this impact. However, for many of the other impacts this is much lower. For example, loss of employment is recorded for 1.1% of valid responses, inconvenience is recorded in 2 crime reports and took additional security precautions has no 'yes' responses. Therefore, because of the high levels of missing data due to the later addition of this question (and the subsequent addition of more impact categories) to the survey and the low percentages of crime reports that record these impacts, the decision was made to exclude the impact variables from the analysis of harms. This means that the analysis of harms focuses on two aspects of harms from violent crimes. These are physical injury and emotional reaction.

Overall, there are three main aspects of harm that will be the focus of this analysis. These are physical harms (injuries), emotional reactions and the level of affect from the harms. This initial exploration of the aspects of harm established that injuries are not a common result from violent crime in the CV dataset. Therefore, both physical and emotional harms will be considered to capture a larger portion of victim's total harm than focusing on physical injury alone. For all the crime reports in the CV dataset it was found that half of victims do not experience injurious violence and those who do tend to experience minor injury. Most crime reports record at least one emotional reaction. These range from instant feelings of anger, fear and shock to more long-term mental health impacts such as anxiety/panic attacks and depression. For crime reports that record emotional reactions, victims in the CV dataset are more often affected 'a little' or 'quite a lot' rather than 'a lot'. This will be disaggregated and compared by victim-perpetrator relationship in the next sections. This will discover if the harms of violent crime differ for victims of domestic violence when compared to victims of violence perpetrated by strangers or acquaintances.

3.6 Summary

The focus of this thesis is a comparison of harms from different types violent crime. The thesis will compare the harms for stranger, acquaintance, and domestic violence to assess whether they differ for domestic compared to other forms of violence. This chapter constructs the research questions for this thesis, developed through the theoretical debates presented in Chapter 2. The over-arching research question for this thesis is; does domestic violence differ from other types of violent crime? This will be answered in two ways. First, with an analysis of what each of the three types of violence look like in the CV dataset. Second, by an analysis of victim harms from different violence offences by different types of perpetrator. This can be found in the next chapter.

This chapter prepares for the analysis by acknowledging other possible data sources for this thesis. These included PRC, other national victimisation surveys (the Scottish Crime and Justice Survey, NICS and NCVS). Overall, determining that the CSEW was the best source of data for this thesis due to its consistency over 11 years, recording of harms and injury and reaching more victims of harms by recording crimes that go unreported to the police. This thesis uses a pre-existing merged dataset of CSEW data. This dataset is used for this thesis as it contains all the relevant variables from the CSEW regarding victims and the harms of violent crime. The CV dataset contains 11 sweeps of CSEW data on violent crime and allows an

analysis on a large dataset of 23,547 crime reports. The description of the dataset provides evidence of the quality of the data available from this dataset. It also demonstrates how definitions of violence, taken from the CSEW, will be operationalised in this thesis. Violence will include sexual offences, threats of violence and attempts, as well as physical acts of violence. This dataset provides more than sufficient information to be able to answer the research questions of this thesis.

As well as contributing to debates within the VAW field about how domestic violence may differ from other violent crimes, the dataset can also provide additional information that goes beyond the literature. This is demonstrated through the description of multiple perpetrators. There are two distinct groups of victims of multiple perpetrators; those who are victimised more than once during the reference period. These victimisations are discrete from each other and are perpetrated by different offenders. The second group of victims are victimised once by more than one perpetrator. Much of the literature into violence and domestic violence focuses on single perpetrators and single incidents (in the case of domestic violence – repeated incidents by the same perpetrator). This will provide another dimension of domestic violence that differs from violent crime and this is explained in the following chapter. This will allow an additional question to be answered; whether victims of domestic violence are likely to be victimised by more than one type of perpetrator. An analysis of multiple perpetrators also demonstrates how complex victim-perpetrator relationships can be as perpetrators may come from multiple different relationship categories.

Overall, this chapter outlines the data sources considered for this thesis and the data that was ultimately chosen for this analysis. It shows the suitability of the data for answering the research questions and how the information available can also allow an analysis that goes beyond the existing research into domestic violence.

4. Comparing Domestic Violence with Violence by Other Perpetrators

4.1 Introduction:

This chapter investigates the characteristics and nature of violence when it is disaggregated and compared by victim-perpetrator relationship, comparing domestic, acquaintance and stranger violence to identify if there are significant differences between the three types of violence. This investigates whether types of violence differ by, sex of the victim, sex of the perpetrator, frequency of repetitions and type of violence (severity). These dimensions of domestic violence were identified in the literature which suggests that the repetitions, sex of the victim, sex of the perpetrator and the outcomes of the violence are different when the perpetrator is a domestic relation (Dobash and Dobash, 1992; Walby and Towers, 2018; Kelly and Westmarland, 2016).

To begin with, this chapter will present the nature of domestic violence in the CV Dataset through an analysis of the above key dimensions. Once this analysis has established the nature of domestic violence, stranger and acquaintance violence will be compared to each other using the same dimensions (type of offence, whether the violence is gendered and whether the violence is repeated). This establishes whether stranger and acquaintance violence also differ and should be disaggregated for subsequent analyses. Stranger and acquaintance were found to be significantly different on every analysis.

Once the analysis of stranger and acquaintance violence determined that separating them was appropriate, domestic violence was compared to each. First, domestic was compared to acquaintance to investigate whether the nature of domestic violence differs from acquaintance violence. This found that the types of violence and gendered aspects of the gendered aspects (sex of victim and sex of the perpetrator) were significantly different. Both domestic and acquaintance violence is repeated, though domestic is repeated at a larger extent. The comparison of domestic violence with stranger violence also found significant differences for each dimension. Specifically, offence type, sex of the victim and repetitions showed the largest differences. Overall, this analysis shows that domestic violence in the CV Dataset is statistically different from both stranger and acquaintance violence.

Additionally, two subgroups of victims who had been victimised by multiple perpetrators, in different ways were identified in the data. One group, by multiple perpetrators in one violent event (or series event). The other group had been victimised by different perpetrators across different events of violence during the 12-month reference period. This

analysis has discovered that separating the data into three distinct groups can be difficult. Two populations of victims have been identified who are victims of more than one perpetrator. In some cases, these perpetrators are from multiple relationship groups. Therefore, the definition of domestic violence is complicated by whether it is perpetrated by multiple perpetrators who include strangers or acquaintances. Two analyses were conducted on victims who experience violence from multiple perpetrators. This introduced two new questions; Are victims of domestic violence more likely to be victims of violence by different perpetrators than victims of strangers or acquaintances? Are victims of domestic violence more likely to be victims of multiple perpetrators than victims of strangers or acquaintances?

4.1.1 Unit of Measurement

The unit of measurement for the analyses of this thesis is predominantly the crime report. This is different to the victim, as victims can have multiple crime reports recorded in the data. However, using the crime report as the unit of measurement can hugely underestimate the true number of incidents recorded in the data, as each crime report can include up to 96 incidents (in the case of series reports). The reason that this thesis investigates violence at the crime report level, rather than the incident level is because previous research has already identified differences in violence by the number of incidents. For example, it is documented that violence is often repeated when the victim knows the perpetrator (domestic relation and acquaintance) (Farrell and Pease, 2007, 2010; Walby et al, 2014, Walby and Towers, 2017). Walby, Towers and Francis (2014) present findings which discovered that using uncapped incident numbers from CSEW data revealed 1.7 times more violence by domestic relations and twice as much violence by acquaintances. The crime report is used throughout this thesis as the comparator unit of measurement with which to compare domestic, stranger and acquaintance perpetrated violence. Therefore, chi-squared tests are included in the relevant tables (Sections 4.3, 4.4 and 4.5) and are reported in relation to the crime report, and not to incidents.

4.1.2 Missing Data

The data from the Changing Violence dataset has missing values that can fall into three categories. The responses for each question in the CSEW survey include “don’t know” and “refused” responses which do not provide information which will be relevant for this thesis. The survey also includes system missing responses where the question was not answered at all. This can be due to the questions itself (e.g. some questions are only asked to subgroups of respondents, for example Question B may be asked only to respondents who answered ‘1’ to

Question A). Data from the CSEW has been assess in terms of quality by its high response rate and relatively low item non-response rates (ONS, 2018). When crime estimates are produced from the CSEW the survey is weighted for non-response bias and to ensure the sample reflects the profile of the general population. However, this thesis uses the raw data and therefore it is important to note that some non-response bias will be present in that data due to some selected respondents refusing to take part or who drop out part-way through the survey. This is especially an issue when response rates are lower than 70% (the CSEW aims for a response rate of between 70-80%). For the analysis in this thesis, the missing data has been deleted using the pairwise deletion method. This means that data is only removed when missingness exists in the variables of interest. The case would be included in other analyses if it contains all the necessary information to be included. Pairwise deletion allows for more of the data to be used without having to impute data.

4.2 The Nature of Domestic Violence in the Changing Violence Dataset:

The nature of domestic violence was determined in the literature as being gendered and repeated (Stark, 2007; Johnson, 1995). This section will first identify the domestic violence in the CV Dataset to determine the amount of violence perpetrated by domestic perpetrators and who perpetrated the violence. The nature of domestic violence will be investigated through an analysis of the characteristics of domestic violence in the CV dataset. For this analysis, domestic violence was categorised as any crime report with at least one domestic perpetrator. This follows ONS practice of categorising crime reports based on the closest relationship to the victim. Responses which could not be used to determine a respondent answer to a question ('refused' and 'don't know' responses), as well as system missing cases were categorised as "missing" in this data. 'Don't know' and 'refused' responses were excluded as missing values as this analysis is interested in respondent's victimisation experiences and the outcomes of the victimisation. Therefore, they could not be included as either the perpetrator or outcome could not be determined.

The CV dataset contains 3,357 crime reports that are perpetrated by domestic relations. These can be disaggregated by relationship categories which include intimate and non-intimate domestic relationships (Table 4.2.1). For the CV dataset, victims of domestic perpetrators are more likely to be intimate domestic (69.3%) than non-intimate domestic (30.7%). For intimate domestic, the most common domestic relationship is husband/wife/partner (28.6%). This is followed by former husband/wife/partner (18.4%) and former boyfriend/girlfriend (17.2%).

For non-intimate domestic, the most common is son/daughter (in law) (10.4%), followed by other relative (15.7%) and other household member (4.7%). There are slightly more crime reports recorded in Table 4.2.1 (3366) than in overall numbers of domestic (3357), which may be due to a small number of crime reports involving multiple domestic perpetrators. For this thesis, the definition of domestic violence will encompass both intimate and non-intimate into a broad category of domestic violence which will then be compared to the categories of 'stranger' and 'acquaintance'.

Table 4.2.1: Number of Crime Reports for Victim-perpetrator relationship disaggregated by domestic relationships

	Number of Crime Reports	Percentage of Domestic Violence Crime Reports	Percentage of All Violent Crime Reports
Intimate Relationship	**2332**	**69.3**	**9.9**
Husband/wife/partner	959	28.6	4.1
Current boyfriend/girlfriend	180	5.4	0.8
Former husband/wife/partner	617	18.4	2.6
Former boyfriend/girlfriend	576	17.2	2.4
Non-Intimate Relationship	**1034**	**30.7**	**4.4**
Son/daughter (in law)	350	10.4	1.5
Other household member	158	4.7	0.7
Other relative	526	15.7	2.2
Total	3366	100.0	14.3

Domestic violence is often considered to be a highly gendered type of violence (Dobash and Dobash, 1992). This is the case for domestic violence in the CV Dataset (Table 4.2.2). Almost 80% of domestic crime reports related to female victims and 20% male. For many of the tables in this chapter (including Table 4.2.2 below), the total number of incidents recorded in crime reports has been included, alongside the number and proportion of crime reports for each category. This information is provided to contextualise the information provided at the crime report level. However, it is the unit for the crime report which is most important for this analysis. Table 4.2.2 shows that crime reports with male victims account for 13.3% of incidents and female crime reports account for the other 86.7%.

Table 4.2.2: Sex of the Victim for Crime Reports on Domestic Violence

	Number of Crime Reports	Percentage of Crime Reports	Number of Incidents	Percentage of Incidents
Male	680	20.3	2098	13.3
Female	2677	79.7	13696	86.7
Total	3357	100.0	15794	100.0

To further assess the gender dimensions of domestic violence, the sex of the perpetrator was identified (Table 4.2.3). To assess the sex of the perpetrator, the perpetrators of domestic violence in the CV dataset are categorised into three groups. These are male, female and people of both sexes. Therefore, events which are categorised as male include single perpetrators and multiple perpetrators when they are all males. This is similar for female (all perpetrators are female). When the crime report is categorised as perpetrated by people of both sexes, this captures crime reports with multiple perpetrators only (the response requires there to be more than one perpetrator), and the perpetrators were male and female. There were multiple variables recording the sex of the perpetrator, however, this was used because it had the least 'missing' responses.

Table 4.2.3 shows that the sex of domestic perpetrators in the CV dataset is also gendered. The perpetrators for domestic violence crime reports are usually male (77.4%). Almost 20% of perpetrators are female and 3.1% of crime reports involved perpetrators of both sexes. This means that a small number of domestic violence crime reports involve more than one perpetrator. This is discussed in more detail later.

Table 4.2.3: Sex of the Perpetrator(s) for Crime Reports on Domestic Violence

	Number of Crime Reports	Percent of valid responses	Number of Incidents	Percentage of Incidents
Male only	2536	77.4	12515	81.3
Female only	638	19.5	2275	14.8
Both sexes	102	3.1	606	3.9
Missing	81	-	398	-
Total	3357	100.0	15794	100.0

Another dimension of domestic violence that was identified is that it is repetitive in its nature (Dobash and Dobash, 1992; Kelly and Westmarland, 2016). This is considered to differ from other types of violent crime. This can be investigated in two ways. The first is whether the crime report is single and series. A single crime report is where one discrete event has occurred. A series form is where repeated incidents of the same offence has occurred to the same victim (and by the same perpetrator). In the CV dataset, victims of domestic perpetrators are often victims of repeated violence. Almost half (45.6%) of crime reports with a domestic perpetrator is a series crime report. Just over half (54.4%) of crime reports are single events (Table 4.2.4).

Table 4.2.4: Crime Reports on Domestic Violence by Whether They Are Single or Series Reports				
	Number of Crime Reports	Percentage of Crime Reports	Number of Incidents	Percentage of incidents
Single	1825	54.4	1825	11.6
Series	1532	45.6	13969	88.4
Total	3357	100.0	15794	100.0

For tables which consider single event crime reports and series crime reports (e.g Tables 4.2.4, 4.3.4, 4.4.5 and 4.5.5) the incidents are included to put the binary variable into context. Though series crime reports seem to represent a smaller proportion of crime reports (in relation to stranger and acquaintance perpetrated violence) and 54% of domestic perpetrated violence, the true number of incidents shows a much higher proportion. That is, 54.4% of crime reports represent over 88.4% of incidents for domestic violence. However, a significant difference based on the volume of incidents has already been proven (see Farrell and Pease, 2007, 2010; Walby et al, 2014, Walby and Towers, 2017). This thesis considers the notion of whether the crime report is repeated or not (and not necessarily the number of incidents) to compare violence by type of victim-perpetrator relationship. This does not involve comparing the volume of incidents, which has been established in previous research as being much higher when the perpetrator is known to the victim.

Another way that repetitions can be investigated is by the number of crime reports each victim completes in the dataset. This assesses whether victims have experienced multiple, separate victimisations within the previous 12 months. Therefore, the number of crime reports for one victim measures *discrete* acts of violence, often by different perpetrators. The CSEW (and CV dataset) does not record when it is the same perpetrator across multiple crime reports for one victim. For example, a victim could record experiences of violence in two crime reports which are both perpetrated by a domestic relation. But the victim may be victimised by multiple domestic perpetrators during the 12-month reference period. This means that it cannot be assumed that the crime reports for one victim have the same perpetrator. Table 4.2.5 also shows crime reports by other relationships (stranger and acquaintance), if at least one crime report per victim is domestic.

When the number of crime reports is considered, the analysis is conducted on a victim-level dataset. The CV dataset has been aggregated by victim ID to create a dataset with one observation per victim. This allowed for an analysis of the number of crime reports per victim

as the crime reports for one ID were summed (and this was useful for later analysis on different perpetrators in Section 4.6). In the CV dataset, most domestic violence victims completed one crime report (81.3%). 15.3% completed two crime reports and only 3.3% of domestic violence victims completed more than two crime reports (Table 4.2.5). This shows that the majority of victims of domestic perpetrators will be victimised in one (single or series) event, by the same perpetrator(s). However, a significant number will experience two separate victimisations recorded in two crime reports over the 12-month reference period. This will be compared to stranger and acquaintance violence in the following sections.

For the analyses in Chapters 5 and 6, whether the crime report is a single or series offence is used to indicate repetitions. This is because series crime reports are always perpetrated by the same perpetrators.

Table 4.2.5: Number of Crime Reports for Domestic Violence Victims

Number of Crime Reports	Number of Victims	Percentage of Victims
1	2434	81.3
2	457	15.3
3	64	2.1
4	25	.8
5	10	.3
6	4	.1
Total	2994	100.0

Overall, the CV dataset provides data that supports feminist theorisations of domestic violence. That is that this type of violence is gender asymmetrical, with (usually) male perpetrators and (usually) female victims. The gendering of domestic violence is often something that distinguishes this type of violence from stranger and acquaintance violence, and this will be investigated in the next section. This section also demonstrates that almost half of domestic violence is repeated. This provides evidence for the key dimensions of domestic violence that were identified in the current literature. These dimensions (sex of the perpetrator, sex of the victim, repetitions, and harm) will all be compared to stranger and acquaintance violence to determine whether domestic violence differs.

4.3 Does Acquaintance Violence differ from Stranger?

Domestic violence is often considered as a distinct type of violence, that is studied separately from other types of violence. This section will compare violence by acquaintances and strangers. This section will use the comparison of stranger and acquaintance to determine whether domestic, stranger and acquaintance should be discussed (and compared) as three substantively different types of violence. This section will compare stranger and acquaintance violence on the same dimensions that were identified in the literature as being key to the nature of domestic violence. Stranger and acquaintance violence were found to be significantly different on all dimensions considered in this analysis. For this reason, the subsequent analysis of violence will disaggregate by three sub-types of violence.

Table 4.3.1: Violence Against the Person, Threats and Sexual Offences Offence Codes for Crime Reports on Acquaintance and Stranger Violence

	Acquaintance Crime Reports	Stranger Crime Reports
Non-Sexual Violence	**4179 (44.3)**	**4787 (47.2)**
Serious wounding	283 (3.0)	312 (3.1)
Other wounding	818 (8.7)	839 (8.3)
Common assault	2570 (27.3)	2953 (29.1)
Attempted assault	508 (5.4)	683 (6.7)
Sexual Violence	**252 (2.7)**	**252 (2.5)**
Rape	58 (0.6)	26 (0.3)
Serious wounding with sexual motive	2 (0.0)	2 (0.0)
Other wounding with sexual motive	34 (0.4)	18 (0.2)
Attempted rape	27 (0.3)	24 (0.2)
Indecent assault	131 (1.4)	182 (1.8)
Threats	**4992 (53.0)**	**5107 (50.3)**
Threat to kill/assault made against, but not necessarily to respondent	3536 (37.5)	3319 (32.7)
Sexual threat made against, but not necessarily to respondent	40 (0.4)	84 (0.8)
Other threat or intimidation made against, but not necessarily to respondent	1324 (14.0)	1652 (16.3)
Threats against others, made to the respondent	92 (1.0)	52 (0.5)
Total	9423 (100.0)	10146 (100.0)

$X^2\ (12, N = 19667) = 150.75, p = 0.000$

First, violence by acquaintances and violence by strangers were compared on which offence types were perpetrated against victims. The offence types can be separated into three larger categories. These are non-sexual physical violence, sexual violence and threats of violence (Table 4.3.1). Victims of acquaintance violence are most likely to experience threats (53.0%), particularly threats to kill (37.5%). This is similar for victims of stranger violence (threats, 50.3%, threats to kill, 32.7%). Victims are also likely to experience less severe non-sexual violence, such as common assault for acquaintance (27.3%) and stranger (29.1%). Therefore, victims of stranger and acquaintance violence in the CV dataset are mostly likely to experience less severe violent offences such as threats offences and minor physical violence. It is less common for them to experience severe physical violence such as serious wounding (3% for acquaintance and 3.1% for stranger) or other wounding (8.7% for acquaintance and 8.3% for stranger). It is also uncommon for victims of these two types of violence to have experienced sexual violence (2.7% acquaintance and 2.5% stranger).

However, though there were little differences in the types of offences recorded by victims of stranger or acquaintance perpetrators, there were some differences in the gendered aspects of these types of violence. Sex of the victim (Table 4.3.2) showed that for acquaintance violence, there were (almost) equal numbers of reports for female victims (52.1%) as male victims (47.9%). Therefore, the victims of acquaintance violence are gender neutral in the CV Dataset. Though female victims were shown to experience 58% of incidents compared to 42% for male. Stranger violence is more gendered with most crime reports relation to male victims (64.9%) and the minority relating to female victims (35.1%). The number of incidents show a similar distribution of violence as using crime reports as the unit of count (37.7% for female victims and 62.3% for male).

Table 4.3.2: Sex of the Victim for Crime Reports on Acquaintance and Stranger Violence

	Acquaintance Crime Reports	Acquaintance Incidents	Stranger Crime Reports	Stranger Incidents
Male	4510 (47.9)	13016 (42.0)	6581 (64.9)	16411 (62.3)
Female	4913 (52.1)	18011 (58.0)	3565 (35.1)	9945 (37.7)
Total	9423 (100.0)	31027 (100.0)	10146 (100.0)	26356 (100.0)

$X^2\ (1, N = 19667) = 654.5\ p = 0.000$

The gendered aspects of stranger and acquaintance violence were also assessed through the sex of the perpetrator(s). Acquaintance violence and stranger violence are both perpetrated by men more than women (Table 4.3.3). However, this is to differing extents. For crime reports

with an acquaintance perpetrator, 19.7% of crime reports are perpetrated by a female. This is compared to 8.2% of stranger violence. This means that stranger violence is male violence perpetrated against male victims, but acquaintance violence is male violence perpetrated against male and female victims. There are a group of perpetrators who involve people of both sexes which occurs when there are multiple perpetrators for one offence. This will be investigated further later in that chapter, but this occurred in a similar proportion of crime reports by strangers and acquaintances. Assessing incidents made the biggest difference for perpetrators of both sexes. This increased from 9.2% of crime reports to 14.9% of incidents for violence by acquaintances and 7.7% of crime reports to 19.3% of incidents for stranger violence.

Table 4.3.3: Sex of the Perpetrator for Crime Reports on Acquaintance and Stranger Violence

	Acquaintance Crime Reports	Acquaintance Incidents	Stranger Crime Reports	Stranger Incidents
Male	6575 (71.1)	19565(63.7)	8235 (84.2)	19066 (73.8)
Female	1820 (19.7)	6573 (21.4)	799 (8.2)	1787 (6.9)
Both sexes	850 (9.2)	4561 (14.9)	750 (7.7)	4978 (19.3)
Missing	178 (-)	328 (-)	362 (-)	525 (-)
Total	9423 (100.0)	31027 (100.0)	10146 (100.0)	26356 (100.0)

$$X^2\ (2, N = 19127) = 749.07, p = 0.000$$

Finally, whether acquaintance and stranger violence are repetitious in their nature was also considered for this analysis. The repetitious nature of domestic violence is often considered as an aspect of violence by domestic perpetrators that justifies separating it from other types of violence. However, this analysis found that stranger and acquaintance violence also differ by repetitions. Stranger violence is rarely repeated, with 86.1% of crime reports containing single incidents. However, for acquaintance violence 30.3% is repeated, meaning events are recorded in a series crime report (Table 4.3.4). This shows that acquaintance violence differs from stranger violence because as well as the victim knowing the perpetrator, they are more likely to be a victim of repeated violence. For incidents, series crime reports with an acquaintance perpetrator accounted for 78.7% of incidents in this category. This was much less for strangers, where series crime reports accounted for 66.7% of incidents.

Table 4.3.4: Crime Reports on Acquaintance and Stranger Violence by Whether They Are Single or Series Reports

	Acquaintance Crime Reports	Acquaintance Incidents	Stranger Crime Reports	Stranger Incidents
Single	6568 (69.7)	6593 (21.3)	8734 (86.1)	8757 (33.3)
Series	2855 (30.3)	24434 (78.7)	1412 (13.9)	17597 (66.7)

Total	9423 (100.0)	31027 (100.0)	10146 (100.0)	26356 (100.0)
$X^2\ (1, N = 19667) = 554.09, p = 0.000$				

As well as recording information on whether the crime report relates to single or series incidents, the CV data also provides information on the number of incidents recorded in the series report. The data recorded the number of incidents from 1 to 95, with additional options to record 'more than 95' and 'too many to count' (Table 4.3.5). This showed that nearly a quarter (23.3%) of victims of acquaintance violence experienced 2 to 5 victimisations. Only 6.7% of victims of acquaintance experienced more than 5 victimisations. When this is compared to stranger violence, there are some differences. As shown in Table 4.3.5, a large majority crime reports with stranger perpetrators experience single event violence (86.3%). 10.9% of victims of stranger violence are victimised 2 to 5 times and only 2.7% of victims are victimised more than 5 times. It is rare for victims to experience more than 10 victimisations for either stranger or acquaintance violence. Overall, acquaintance violence and stranger violence are repeated to different extents. Acquaintance violence is more repeated than stranger violence, which is usually a one-off event.

Table 4.3.5: Number of incidents recorded in Crime Reports on Acquaintance and Stranger Violence

	Acquaintance Crime Reports	Stranger Crime Reports
1	6609 (70.1)	8760 (86.3)
2 to 5	2196 (23.3)	1104 (10.9)
6 to 10	297 (3.2)	141 (1.4)
11 to 15	74 (0.8)	44 (0.4)
16 to 20	51 (0.5)	13 (0.1)
21 to 95	139 (1.5)	61 (0.6)
More than 95	5 (0.1)	1 (0.0)
Too many to count	52 (0.6)	22 (0.2)
Total	9473 (100.0)	10146 (100.0)
$X^2\ (7, N = 19667) = 551.1, p = 0.000$		

As mentioned earlier, repetitions can also be analysed by the number of crime reports that the victim has completed. This can answer the question of whether victims of stranger or acquaintance violence are likely to victimised more than once during the survey reference period. Then, this can be used to compare with victims of domestic violence. There were few differences when looking at the aggregate victim data for stranger and acquaintance violence for the number of crime reports completed. It was most common for victims to record one

violent victimisation during the reference period (83.6% for acquaintance, 84.4% for stranger). Less than 5% of both groups of victims completed more than two crime reports. It is very rare for any victim of violence to have been victimised in multiple discrete events during the 12-month reference period.

Overall, this section demonstrates that stranger and acquaintance violence differ through the sex of the victim and whether it is repeated. However, stranger and acquaintance violence are both perpetrated by males and involve similar offences. It is uncommon for any victim of violence to experience multiple, independent victimisations. Though stranger and acquaintance violence may not differ to the same extent as they do to domestic violence, analysis of violence in this thesis will disaggregate by all three groups. Therefore, the subsequent analysis on harms will compare domestic violence to two types of violence: stranger and acquaintance.

4.4 Does Domestic Violence differ to Acquaintance Violence?:

Now that it has been determined that disaggregating violence into three groups; domestic, stranger and acquaintance, is appropriate this section will compare domestic violence with violence perpetrated by acquaintances. This will assess whether gender asymmetry, repetitions and severity are distinct to domestic violence. It could be suggested that acquaintance violence may more closely resemble domestic violence in patterns of repetition and harmful impacts than it resembles stranger violence. This raises the question of whether a victim knowing the perpetrator affects the nature of the violence. This will be investigated in relation to the sex of the victim, sex of the perpetrator and repetition.

Table 4.4.1: Number of Crime Reports for Victim-perpetrator relationship disaggregated by type of acquaintance relationships

	Number of Crime Reports	Percentage of Acquaintance Crime Reports	Percentage of Crime Reports
Workmate/colleague	538	5.7	2.3
Client/members of public contacted through work	1389	14.7	5.9
Friend/acquaintance	1878	19.9	8.1
Neighbour	2229	23.5	9.4
Young people from local area	1856	19.7	7.9
Tradesman/builder/contractor	123	1.3	0.5
(Ex) husband/wife/partner of someone else in household	430	4.6	1.9
Other	1069	11.3	4.6
Total	9473	100.0	40.2

Acquaintances are perpetrators who the victim knows in some way other than domestic. They must be recognisable at least by sight. Violence by acquaintances occurs more commonly in the dataset than domestic violence. In the CV dataset there are 9423 violent crime reports relating to offences perpetrated by acquaintances, which is 40% of violent crime reports. The CV dataset also provides disaggregated categories of acquaintance relationships (Table 4.4.1). For victims of acquaintance violence, the most common relationship is neighbour (23.5%). This is followed by friend/acquaintance (19.9%) and young people from the local area (19.7%). It is not as common for victims to be victimised by a tradesman/builder/contractor (1.3%), (ex) husband/wife/partner of someone else in household (4.6%) or a workmate/colleague (5.7%). There are slightly more cases (50) in Table 4.4.1 than discussed earlier. This could be due to multiple perpetrators where both are from different acquaintance groups. As discussed in relation to domestic violence, the analysis for this thesis will focus on the three, broad victim-perpetrator relationships. Though, it should be acknowledged that the disaggregated relationship categories could provide valuable information for future research.

The first comparison conducted on domestic violence and acquaintance violence was by offence type. Offence type can indicate the severity of the violence as it indicates whether physical violence took place (or a threat of violence) and in some cases whether an injury occurred (serious wounding suggests serious injury and attempted assault indicates no physical injury). The hierarchy within the CV dataset (from the CSEW) means that the most severe acts of violence are prioritised. So, if more than one offence type could be attributed to the event, the most serious is applied (BCS, 2010).

Table 4.4.2: Violence Against the Person, Threats and Sexual Offence Types for Crime Reports on Domestic and Acquaintance Violence

	Number of Crime Reports Domestic	Number of Crime Reports Acquaintance
Non-Sexual Violence	**2115 (63.0)**	**4179 (44.3)**
Serious wounding	146 (4.3)	283 (3.0)
Other wounding	527 (15.7)	818 (8.7)
Common assault	1368 (40.8)	2570 (27.3)
Attempted assault	74 (2.2)	508 (5.4)
Sexual Violence	**148 (4.4)**	**252 (2.7)**
Rape	63 (1.9)	58 (0.6)
Serious wounding with sexual motive	6 (0.2)	2 (0.0)
Other wounding with sexual motive	26 (0.8)	34 (0.4)
Attempted rape	21 (0.6)	27 (0.3)
Indecent assault	32 (1.0)	131 (1.4)
Threats	**1094 (32.6)**	**4992 (53.0)**

Threat to kill/assault made against, but not necessarily to respondent	797 (23.7)	3536 (37.5)
Sexual threat made against, but not necessarily to respondent	12 (0.4)	40 (0.4)
Other threat or intimidation made against, but not necessarily to respondent	271 (8.1)	1324 (14.0)
Threats against others, made to the respondent	14 (0.4)	92 (1.0)
Total	3357 (100.0)	9423 (100.0)
$X^2\ (12, N = 12780) = 620.91, p = 0.000$		

Crime reports that recorded domestic violence were more likely than crime reports on acquaintance violence to experience all types of physical violence (Table 4.4.2). This is the case for non-sexual and sexual offence types. Most noticeably, domestic violence crime reports are more likely to record victims of common assault (40.8%) and other wounding (15.7%). However, the most common offence type for crime reports on acquaintance perpetrators were threats to kill (37.5%) followed by common assault (27.3%). Crime reports with domestic perpetrators are also often victims of threats to kill (23.7%) but at a lower rate. Overall, domestic violence crime reports have a higher proportion of non-sexual violence and sexual violence offences than acquaintance violence. Acquaintance violence crime reports are more likely than domestic violence to experience threats of violence rather than physical violence.

Violence by domestic relations was then compared to acquaintance violence by sex of the victim (Table 4.4.3). As with the previous analyses, this is to determine if the gendered nature of these two types of violence is significantly different. Domestic violence is experienced mostly by female victims (79.7% of crime reports and 86.7% of incidents), with a minority of victims being male (20.3% of crime reports and 13.3% of incidents). But acquaintance violence is almost gender symmetrical with 47.8% of crime reports (42% of incidents) having male victims and 52.2% of crime reports (58% of incidents) having female victims. Women are disproportionately victimised by domestic perpetrators, whereas men are as likely as females to be victimised by acquaintances (Table 4.4.3).

Table 4.4.3: Sex of the Victim for Crime Reports on Domestic and Acquaintance Violence

	Domestic Crime Reports (%)	Domestic Incidents (%)	Acquaintance Crime Reports (%)	Acquaintance Incidents (%)
Male	680 (20.3)	2098 (13.3)	4510 (47.9)	13016 (42.0)
Female	2677 (79.7)	13696 (86.7)	4913 (52.1)	18011 (58.0)
Total	3357 (100.0)	15794 (100.0)	9423 (100.0)	31027 (100.0)

$$X^2\ (1, N = 12780) = 789.01, p = 0.000$$

However, the differences in the gendered nature of domestic and acquaintance violence are less distinct for perpetrators (Table 4.4.4). Violent crime is overwhelmingly perpetrated by males (ONS, 2018). Although, victims of acquaintance violence are almost gender neutral, this type of violence is still more often perpetrated by men. For acquaintance violence, 70.9% of crime reports and 63.7% of incidents are perpetrated by males only. 9.5% of crime reports and 14.9% of incidents are perpetrated by perpetrators of both sexes. Female perpetrators accounts for 19.6% of crime reports and 21.4% of incidents with acquaintance perpetrators. This is not dissimilar to perpetrators of domestic violence. For victims of domestic violence, most of the perpetrators are male (77.4% of crime reports and 81.3% of incidents), at a larger extent than acquaintance violence. This suggests that when there are female victims of domestic and acquaintance violence, it is almost always by perpetrated by men. But when men are victims of violence it is also often perpetrated by men.

Table 4.4.4: Sex of the Perpetrator for Crime Reports on Domestic and Acquaintance Violence

	Domestic Crime Reports	Domestic Incidents	Acquaintance Crime Reports	Acquaintance Incidents
Male	2536 (77.4)	12515 (81.3)	6575 (71.1)	19565(63.7)
Female	638 (19.5)	2275 (14.8)	1820 (19.7)	6573 (21.4)
Both sexes	102 (3.1)	606 (3.9)	850 (9.2)	4561 (14.9)
Missing	81	398 (-)	178	328 (-)
Total	3357 (100.0)	15794 (100.0)	9423 (100.0)	31027 (100.0)

$$X^2\ (2, N = 12521) = 186.03, p = 0.000$$

Next, domestic violence was compared to acquaintance violence on whether the violence is repeated. Both types of violence are repeated, however acquaintance violence is less likely to be repeated (series crime report) than domestic (Table 4.4.5). Almost half (45.6%) of crime reports with domestic perpetrators are recorded as a series report. Series crime reports account for 88.4% of the total number of incidents by domestic perpetrators. This is compared to almost a third (30.4%) of crime reports with acquaintance perpetrators (78.7% of incidents). It is not surprising that both types of violence are repeated as the victim often has contact with the perpetrator regularly (for example, they are a colleague at work, or they are a current intimate partner). Therefore, when the victim knows the perpetrator, the perpetrator has more opportunities to commit violence. The mean number of incidents for acquaintance violence is 3. For domestic violence the mean number of incidents is 4. Overall, domestic violence is more

often repeated than acquaintance violence. Though it cannot be ignored that almost a third of acquaintance violence is also repeated.

Table 4.4.5: Crime Reports on Domestic and Acquaintance Violence by Whether They Are Single or Series Reports

	Domestic Crime Reports	Domestic Incidents	Acquaintance Crime Reports	Acquaintance Incidents
Single	1825 (54.4)	1825 (11.6)	6568 (69.7)	6593 (21.3)
Series	1532 (45.6)	13969 (88.4)	2855 (30.3)	24434 (78.7)
Total	3357 (100.0)	15794 (100.0)	9423 (100.0)	31027 (100.0)

$X^2\ (1, N = 12780) = 250.16, p = 0.000$

Table 4.4.6: Number of incidents recorded in Crime Reports on Domestic and Acquaintance Violence

	Domestic Crime Reports	Acquaintance Crime Reports
1	1869 (55.7)	6609 (70.1)
2 to 5	1116 (33.2)	2196 (23.3)
6 to 10	194 (5.8)	297 (3.2)
11 to 15	36 (1.1)	74 (0.8)
16 to 20	33 (1.0)	51 (0.5)
21 to 95	74 (2.2)	139 (1.5)
More than 95	2 (0.1)	5 (0.1)
Too many to count	33(1.0)	52 (0.6)
Total	3357 (100.0)	9473 (100.0)

$X^2\ (7, N = 12780) = 233.67, p = 0.000$

Table 4.4.6 shows the number of repetitions recorded for both types of violence. The number of single (1) incidents in Table 4.4.6 differs slightly to Table 4.4.5. This is because respondents sometimes indicate a series event, but further questioning shows only one incident occurred during the scope of the survey. For crime reports with victims of domestic perpetrators, 33.2% are victimised between two and five times, compared to 23.3% of crime reports with victims of acquaintance perpetrators. 5.8% of domestic violence crime reports record between six and ten incidents, which is more than crime reports with acquaintance perpetrators (3.2%). It is uncommon for both victims of domestic and acquaintance violence to be victimised more than 10 times. 5.4% of crime reports for domestic violence victims and 3.5% of crime reports for acquaintance violence victims record more than 10 incidents in the series. Considering the frequency of repetitions shows that domestic violence is more likely to be repeated and is repeated at a higher frequency than for violence by acquaintances.

Though there are some differences in the repetitions within the crime reports, there is almost no difference in victimisations across multiple crime reports (Table 4.4.7). Whether a victim is victimised by an acquaintance or a domestic perpetrator, it is still extremely uncommon for victims to experience multiple discrete victimisations. Most victims (80%) will only disclose one victimisation in the 12-month reference period (either a single or series victimisation). Some victims (15.3% for domestic and 12% for acquaintance) will be victimised more than once over the 12-month reference period. This is analysed in more detail and the findings are explained in Section 4.6.

Table 4.4.7: Number of Victims of Domestic and Acquaintance Violence Disaggregated by Number of Crime Reports

	Number of Victims of Domestic	Number of Victims of Acquaintance
1	2434 (81.3)	7130 (83.6)
2	457 (15.3)	1020 (12.0)
3	64 (2.1)	241 (2.8)
4	25 (0.8)	74 (0.9)
5	10 (0.3)	33 (0.4)
6	4 (0.1)	31 (0.4)
Total	2994 (100.0)	8529 (100.0)

To summarise, for victims of domestic and acquaintance violence there are some differences. Domestic violence victims are more often female and more often the victims of repeated violence. Victims of domestic perpetrators are also more likely to experience physical violent offences and less likely to be victims of threats than those victimised by acquaintances. However, there are also some similarities. Both types of violence are perpetrated by males. Acquaintance violence is also repeated, but to a lesser extent. Finally, victims of violence are rarely victims of multiple discrete violent crimes over the 12-month reference period. The next section of this chapter will compare whether domestic violence is substantively different to stranger violence.

4.5 Does Domestic Violence differ to Stranger Violence?:

When violence is considered, this often only includes stranger violence (Walby, Towers and Francis, 2014) or stranger and acquaintance violence (Ganpat et al., 2020). However, the CV dataset reveals that stranger violence is not as common as it is sometimes assumed. When domestic and acquaintance violence are also included, stranger violence makes up less than half of violent crime (44.3%) in the CV dataset. This means that victims know at least one

perpetrator in some way (acquaintance or domestic) in 55.7% of violent crime reports (Table 4.5.1). This contradicts popular ideas that violent crime is male perpetrated stranger violence, against male victims. Though, there are significantly more crime reports relating to stranger violence (10146) than for domestic violence (3357).

Table 4.5.1: Number of Crime Reports for Each Victim-Perpetrator Relationship Type

	Number of Crime Reports	Percentage of Crime Reports
Stranger	10146	44.3
Domestic	3357	14.6
Acquaintance	9423	41.1
Missing	621	-
Total	23547	100.0

Domestic violence was compared to stranger violence in the same way as for violence perpetrated by acquaintances. First, domestic, and stranger perpetrated violence was compared based on the offence types recorded in crime reports (Table 4.5.2). Like acquaintance violence, victims of stranger violence are most likely to experience threats to kill (32.7% of crime reports) or common assault (29.1% of crime reports). For victims of domestic violence, they are most likely to experience common assault (40.8% of crime reports) and threats to kill (23.7% of crime reports). Crime reports recording victims of violence by domestic perpetrators are also more likely than those perpetrated by strangers record serious physical acts such as serious wounding (4.3%) and other wounding (15.7%) and all types of sexual violence. Especially, rape (1.9%, compared to 0.3%) and other wounding with a sexual motive (0.8%, compared to 0.2%).

Table 4.5.2: Violence Against the Person, Threats and Sexual Offences Offence Codes for Crime Reports on Domestic and Stranger Violence

	Domestic Crime Reports	Stranger Crime Reports
Non-Sexual Violence	**2115 (63.0)**	**4787 (47.2)**
Serious wounding	146 (4.3)	312 (3.1)
Other wounding	527 (15.7)	839 (8.3)
Common assault	1368 (40.8)	2953 (29.1)
Attempted assault	74 (2.2)	683 (6.7)
Sexual Violence	**148 (4.4)**	**252 (2.5)**
Rape	63 (1.9)	26 (0.3)
Serious wounding with sexual motive	6 (0.2)	2 (0.0)
Other wounding with sexual motive	26 (0.8)	18 (0.2)

Attempted rape	21 (0.6)	24 (0.2)
Indecent assault	32 (1.0)	182 (1.8)
Threats	**1094 (32.6)**	**5107 (50.3)**
Threat to kill/assault made against, but not necessarily to respondent	797 (23.7)	3319 (32.7)
Sexual threat made against, but not necessarily to respondent	12 (0.4)	84 (0.8)
Other threat or intimidation made against, but not necessarily to respondent	271 (8.1)	1652 (16.3)
Threats against others, made to the respondent	14 (0.4)	52 (0.5)
Total	3357 (100.0)	10146 (100.0)
$X^2\ (12, N = 15399) = 757.29, p = 0.000$		

Therefore, this comparison shows that victims of domestic violence are more likely than victims of stranger violence to experience physical violence. This is the case for both non-sexual and sexual physical violence. For victims of domestic violence, 63% of crime reports record non-sexual physical violence (Table 4.5.2). This is significantly less than for victims of stranger violence (47.2% of crime reports). Victims of stranger violence are most often victims of violent threats (50.3% of crime reports) and experience physical violence at a lesser extent than those victimised by domestic relations. This will also be investigated further by an analysis of the resulting harms from these offences to answer whether domestic violence is more harmful than stranger (or acquaintance) violence.

Also discussed in the previous analyses, the gendered nature of violent crime is expected to differ across victim-perpetrator relationship categories for domestic, stranger and acquaintance violence. The analysis showed that stranger violence is also gendered (Table 4.5.3). For stranger, the majority of crime reports are for male victims (64.9%) and these reports contain 62.3% of incidents perpetrated by strangers. A significant minority of crime reports with stranger perpetrators are for female victims (35.1% crime reports and 37.7% of incidents). Therefore, stranger violence disproportionately affects males. Domestic violence is also gendered on the victim, but in the opposite way to stranger violence. For domestic violence there are a much larger proportion of female victims (79.7% of crime reports, 86.7% of incidents) than male victims (20.3% of crime reports and 13.3% of incidents).

Table 4.5.3: Sex of the Victim for Crime Reports on Domestic and Stranger Violence				
	Domestic Crime Reports	Domestic Incidents	Stranger Crime Reports	Stranger Incidents
Male	680 (20.3)	2098 (13.3)	6581 (64.9)	16411 (62.3)
Female	2677 (79.7)	13696 (86.7)	3565 (35.1)	9945 (37.7)
Total	3557	15794 (100.0)	10146 (100.0)	26356 (100.0)
$X^2\ (1, N = 15399) = 2010.42, p = 0.000$				

To investigate the differences in the gendered nature of domestic and stranger violence, sex of the perpetrator was also considered. This revealed that for both types of violence, male perpetrators make up the largest proportion of offenders (Table 4.5.4). For domestic violence, 77.4% of perpetrators are male and 3.1% involve multiple perpetrators where at least one is male. This accounts for 81.3% of incidents (male perpetrators) and 3.1% of incidents (people of both sexes). For stranger violence, an even larger proportion is male (84.2% crime reports). A much smaller proportion of stranger perpetrators are female (8.2%) or perpetrated by multiple perpetrators where at least one is female (7.7%), than for domestic (19.5%, female; 3.1% both sexes). This suggests that female perpetrators are more likely to commit violence against people that they know in some way (either a domestic relation or an acquaintance), possibly as retaliation to previous violence (Dobash et al, 1992). This also confirms that stranger violence is male violence against male victims. All violent crime (domestic, stranger and acquaintance) in the CV dataset is perpetrated by males more than females.

Table 4.5.4: Sex of the Perpetrator for Crime Reports on Domestic and Stranger Violence				
	Domestic Crime Reports	Domestic Incidents	Stranger Crime Reports	Stranger Incidents
Male	2536 (77.4)	12515 (81.3)	8235 (84.2)	19066 (73.8)
Female	638 (19.5)	2275 (14.8)	799 (8.2)	1787 (6.9)
Both sexes	102 (3.1)	606 (3.9)	750 (7.7)	4978 (19.3)
Missing	81(-)	398 (-)	362 (-)	525 (-)
Total	3357 (100.0)	15794 (100.0)	10146 (100.0)	26356 (100.0)
$X^2\ (2, N = 14954) = 471.83, p = 0.000$				

Finally, the repetitive nature of domestic and stranger violence was also compared in this analysis. This is a key aspect of domestic violence that justifies its separation from stranger violence. Domestic violence is often repeated (Dobash and Dobash, 1992; Johnson, 1995; Walby and Towers, 2018) and stranger violence is usually considered to be a one-off event

(Walby and Towers, 2018; Walby and Towers, 2017). The analysis with data from the CV dataset shows that this is an accurate assumption (Table 4.5.5). A large majority of stranger crime reports relate to single incidents (86.1%). This shows that most violence by stranger perpetrators is not repeated. However, nearly half (45.6%) of domestic violence is repeated. When looking at incidents, this shows that the 45.6 % of crime reports which are series account for 88.4% of incidents perpetrated by domestic perpetrators. Single crime reports account for 11.6% of domestic incidents. For stranger, only 13.9% of crime reports are series, but these crime reports contain 66.7% of incidents perpetrated by strangers. This can be analysed further by looking at the number of repetitions experienced by victims of both types of violence (Table 4.5.6).

Table 4.5.5: Crime Reports on Domestic and Stranger Violence by Whether They Are Single or Series Reports

	Domestic Crime Reports	Domestic Incidents	Stranger Crime Reports	Stranger Incidents
Single	1825 (54.4)	1825 (11.6)	8734 (86.1)	8757 (33.3)
Series	1532 (45.6)	13969 (88.4)	1412 (13.9)	17597 (66.7)
Total	3357 (100.0)	15794 (100.0)	10146 (100.0)	26356 (100.0)

$X^2\ (1, N = 15399) = 1262.54, p = 0.000$

Table 4.5.6: Number of incidents recorded in Crime Reports on Domestic and Stranger Violence

	Domestic Crime Reports	Stranger Crime Reports
1	1869 (55.7)	8760 (86.3)
2 to 5	1116 (33.2)	1104 (10.9)
6 to 10	194 (5.8)	141 (1.4)
11 to 15	36 (1.1)	44 (0.4)
16 to 20	33 (1.0)	13 (0.1)
21 to 95	74 (2.2)	61 (0.6)
More than 95	2 (0.1)	1 (0.0)
Too many to count	33(1.0)	22 (0.2)
Total	3357 (100.0)	10146 (100.0)

$X^2\ (7, N = 15399) = 1213.97, p = 0.000$

Looking at the number of repetitions in the crime reports further emphasises the differences in repetitions for victims of domestic and stranger perpetrators. Table 4.5.6 shows the number of repetitions. As mentioned earlier, there are sometimes cases where a victim will disclose more than one incident of violence, but further questioning reveals that some incidents

occurred outside of the reference period. Overall, it was revealed that almost all (97.2%) victims of stranger perpetrators are victimised between one and five times (Table 4.5.6). This compared to domestic violence where victims experience one to five victimisations 88.9% of the time. It is more common for victims of domestic violence to experience more than five incidents. It is extremely rare for any victim of violence to experience more than 10 incidents, but this occurs for 5.4% victims of domestic violence and 1.3% of victims of stranger violence (assuming 'too many to count' is a number above 10). This shows that domestic violence is repeated at a much larger extent to stranger violence and more often at a higher frequency.

Table 4.5.7: Number of Victims of Domestic and Stranger Violence Disaggregated by Number of Crime Reports

	Number of Victims of Domestic	Number of Victims of Stranger
1	2434 (81.3)	7576 (84.4)
2	457 (15.3)	981 (10.9)
3	64 (2.1)	252 (2.8)
4	25 (0.8)	91 (1.0)
5	10 (0.3)	38 (0.4)
6	4 (0.1)	42 (0.5)
Total	2994 (100.0)	8980 (100.0)

Finally, the experiences of repeat victimisation are also evaluated through the comparison of the number of crime reports filled out by victims. There is no indication of whether perpetrators are the same across multiple crime reports, though it might be assumed that if the same stranger perpetrator was to perpetrate against the same victim, they would become an 'acquaintance' (known by sight) for any subsequent forms. What can be determined by looking at the number of crime reports is whether victims of domestic violence are more or less likely to experience multiple victimisations by different perpetrators. From Table 4.5.7, victims of domestic violence are slightly more likely to have more than one crime report (18.7% as opposed to 15.6%). For domestic violence, 15.3% of victims will complete two forms and for stranger violence it is 10.9%. However, it is not common for any victims of violence to complete more than one crime report for the CV Dataset.

Overall, when domestic violence is compared to stranger violence there are some key differences. Most victims for domestic violence are female, but the majority of victims for stranger violence are male. However, both types of violence are most often perpetrated by men. This suggests that domestic violence is comprised of mainly violence from men against women, but stranger violence is male violence against men. Domestic violence is also more

often repeated than stranger violence. This could also affect the level of harm inflicted from the violence as victims of domestic violence experience more violence than those victimised by strangers. This is also demonstrated through the offences committed, as domestic violence victims are more likely to experience non-sexual and sexual violence, whereas victims of stranger violence are more likely to experience threats or less severe non-sexual violence.

4.6 Victims of More than One Perpetrator

Earlier analysis revealed that there are two groups of victims who are victimised by more than one perpetrator. Most victims in the CV dataset will be victimised in one crime report that is either single or series, usually by one perpetrator. However, one group of victims are victimised by multiple perpetrators in one violent crime event. This means that although they have one crime report, they record an offence that was done to them by more than one person. This group will be referred to as 'crime reports with multiple perpetrators'. There is a second group of victims who are victimised more than once during the reference period of the data. If the victimisations are discrete crimes (not a series crime) then these victims will complete more than one crime report. Their crime reports can record crimes by different perpetrators, with different relationships to the victim. These victims will be referred to as 'victims of different perpetrators'.

While this analysis shows that separating victims of violent crime into three distinct groups based on victim-perpetrator relationship is complex, this analysis is conducted on a small subset of victims. Most victims of violent crime will be victimised once, by a single perpetrator. However, this analysis of multiple and different perpetrators introduces two new questions; Are victims of domestic violence more likely to be victims of violence by different perpetrators than victims of strangers or acquaintances? Are victims of domestic violence more likely to be victims of multiple perpetrators than victims of strangers or acquaintances?

Therefore, two analyses were conducted on victims who experience violence from more than one perpetrator. This investigated the combinations of victim-perpetrator relationships for the two groups of victims to answer the above questions. This found that victims of domestic violence were less likely than victims of violence by acquaintances or strangers to be victims of multiple perpetrators and different perpetrators. So, while victims of violence by domestic relations are most likely to be victims of repeated incidents of violence, they are often victimised by one perpetrator.

4.6.1 Crime Reports with Multiple Perpetrators

This section will identify the crime reports which record violence events with multiple perpetrators. This means that there is one crime report recording either a single or series event, but that there were multiple perpetrators involved in the event. The sex of the victim and the relationships between the victim and the multiple perpetrators were examined. This will consider events where there are multiple victim-perpetrator relationships for one violent crime event. Not all events with multiple perpetrators will have different victim-perpetrator relationships as the perpetrators could be all domestic relations, all strangers, or all acquaintances. However, in some cases the perpetrators include multiple relationship categories. For example, there could be an event perpetrated by someone unknown to the victim and an acquaintance (someone the victim knows, at least by sight).

For this analysis, victim-perpetrator relationship variables were derived to include multiple relationship categories. ONS practice is to code the crime report as the victim-perpetrator relationship that is closest to the victim. For example, if the perpetrator is stranger and acquaintance then the relationship would be coded as acquaintance. Therefore, new variables were derived to overcome this. Overall, there were very few victims who were victimised by multiple perpetrators where at least one perpetrator was a domestic relation. Therefore, this analysis discovered that while violent events being perpetrated by multiple perpetrators is not extremely common, it is much less likely that perpetrators who are domestic relations to the victim will commit violence with other perpetrators. For domestic violence, it is more common for the perpetrator to act alone than for stranger or acquaintance perpetrators.

Table 4.6.1: Whether the Event had a Single or Multiple Perpetrator(s)

	Number of Crime Reports	Percent
Single	15959	71.1
Multiple	6492	28.9
Missing	1096	
Total	23547	100.0

Table 4.6.2: The Number of Perpetrators for a Violent Event

	Number of Crime Reports	Percent
One	15959	71.1
Two	2336	10.4
Three	1190	5.3

Four or more	2966	13.2
Total	22451	100.0
Missing	1096	-
Total	23547	100.0

In the CV dataset, there were 6492 crime reports that contained information on violent offences committed by multiple perpetrators. This is just over a quarter of the dataset (28.9%). Therefore, there is a significant minority of the data that records information on crime reports with multiple perpetrators. However, most of the dataset (71.1%) records violence events that are perpetrated by a single perpetrator (Table 4.6.1), which upholds common belief that violent crime is perpetrated by one perpetrator and against one victim (Bachman, 1994). The CV dataset records the number of perpetrators from one to three, with the additional category of 'more than four'. When looking at the number of perpetrators in crime reports that are perpetrated by multiple perpetrators, there are 2966 crime reports (13.2%) that are perpetrated by four or more perpetrators (Table 4.6.2). There are also a larger proportion who are victimised by two perpetrators (10.4%) and a lower proportion (5.3%) which record violence by three perpetrators. There is some missing data where the victim is unable to provide any information on the perpetrators.

Once the crime reports with multiple perpetrators were identified, an analysis of these victims could be conducted. The subset of crime reports with more than one perpetrator were separated for this analysis, which means that those with only one perpetrator were excluded. This allows the analysis of crime reports with multiple perpetrators to be treated as a distinct 'type' of crime report which may differ from crime reports with one perpetrator. First, the victims of multiple perpetrators were disaggregated by the sex of the victim. This showed that male victims of violence were more likely to be victimised by multiple perpetrators than female victims of violence. Of the 6492 crime reports, Table 4.6.3 shows that 61.3% of crime reports were for male victims and 38.7% for female victims. This is compared to the total CV dataset which is almost equally male and female victims.

Table 4.6.3: Sex of the Victim in Crime Reports with Multiple Perpetrators

	Number of Crime Reports	Percent
Male	3979	61.3
Female	2513	38.7
Total	6492	100.0

The victims of multiple perpetrators were disaggregated by victim-perpetrator relationship(s). These are shown in Table 4.6.4. This shows that the most common victim-perpetrator relationship for crime reports with multiple perpetrators is stranger (58.3%). This means that in most crime reports with multiple perpetrators, all the perpetrators were unknown to the victim. The second most common victim-perpetrator relationship for crime reports with multiple perpetrators is stranger and acquaintance (19.7%). This is followed by crime reports where all of the perpetrators were acquaintances (19.1%). These three victim-perpetrator relationship groups make up 97.1% of crime reports with multiple perpetrators. Victims of multiple perpetrators that includes at least one domestic relation only occurs in 2.5% of crime reports. Multiple perpetrators are more often all domestic relations (1.3%) than domestic and another relationship type (domestic and stranger, 0.4%, domestic and acquaintance, 0.6% or domestic, stranger and acquaintances 0.2%). It is very uncommon for crime reports with multiple perpetrators to involve perpetrators of all three relationship types (stranger, acquaintance and domestic). This occurred only 10 times over eleven sweeps of data.

Table 4.6.4: Victim-Offender Relationships for Crime Reports with Multiple Perpetrators

	Number of Crime Reports	Percent
Stranger	3784	58.3
Acquaintance	1238	19.1
Domestic	83	1.3
Stranger and Acquaintance	1277	19.7
Domestic and Stranger	26	.4
Domestic and Acquaintance	40	.6
Domestic, Stranger, Acquaintance	10	.2
Missing (No relationship)	34	.5
Total	6492	100.0

Overall, 78.5% of crime reports with multiple perpetrators involved crimes where at least one perpetrator was a stranger, 39.5% involved at least one acquaintance and 2.4% involved at least one domestic perpetrator. This shows that multiple perpetrators involving domestic relations is extremely uncommon in the CV dataset. While crime reports relating to victims of multiple perpetrators are a subsample of the data (27.5% of the whole dataset), they show another possible difference in the comparison of domestic violence to violent crime by stranger or acquaintance perpetrators. Victims of domestic perpetrators are much less likely to be victimised by multiple perpetrators when compared to victims of stranger and acquaintance violence.

The combinations of possible victim-perpetrator relationships for crime reports with multiple perpetrators were also disaggregated by sex of the victim. This is shown in Table 4.6.5. This shows that the most common relationship for crime reports with multiple perpetrators is stranger for male (65.2%) and females (47.3%). For female victims, acquaintance only (27%) is the next most common relationship. For males, the next most common is acquaintance and stranger (19.1%). Females have a higher proportion of domestic multiple perpetrators (2.4%) than males (0.6%). Stranger is the most likely relationship for a victim to have with multiple perpetrators. But, for female victims over half knew at least one of the perpetrators in some way (usually as an acquaintance).

Table 4.6.5: Victim-Perpetrator Relationship by Sex of the Victim for Crime Reports with Multiple Perpetrators

	Male	Percentage	Female	Percentage	Total
Stranger	2595	65.2	1189	47.3	3784
Acquaintance	559	14.0	679	27.0	1238
Domestic	23	0.6	60	2.4	83
Stranger and Acquaintance	760	19.1	517	20.6	1277
Domestic and Stranger	11	0.3	15	0.6	26
Domestic and Acquaintance	17	0.4	23	0.6	40
Domestic, Stranger, Acquaintance	3	0.1	7	0.3	10
Missing (No relationship)	11	0.3	23	0.9	34
Total	3979	100.0	2513	100.0	6492

Overall, when there are multiple perpetrators in the same crime report, they are usually strangers and/or acquaintances. Over the eleven sweeps of data in the CV dataset, there are only 154 crime reports where at least one of the multiple perpetrators is domestic. This could suggest that domestic violence does differ from stranger and acquaintance violence as it is unlikely to be committed by multiple perpetrators, especially multiple perpetrators where there is a domestic perpetrator alongside a non-domestic perpetrator. Violent crime perpetrated by acquaintances or strangers is not often perpetrated by multiple perpetrators (in total crime reports with multiple offenders make up 27.5% of the dataset). This analysis shows that victims of domestic violence are not usually victims of multiple perpetrators and this differs than for victims of acquaintance and stranger violence.

4.6.2 Victims of Different Perpetrators

Victims of different perpetrators are victimised more than once during the 12-month reference period of the survey. Unlike victims with series crime reports, these victims experience multiple discrete events of violence and not repeated incidents of the same event. Therefore,

they record their experiences in different crime reports. It is likely that these crime reports are perpetrated by different perpetrators, and sometimes these perpetrators will be from different victim-perpetrator relationship categories. This means that each crime report may be perpetrated by different perpetrators, but some may also be perpetrated by the same perpetrator. There is no way to know for sure in the data. Therefore, a victim may be victimised across two crime reports which both involve a domestic relation that is a current or former intimate partner (husband/wife/partner, current boyfriend/girlfriend, former husband/wife/partner, or former boyfriend/girlfriend), but this could be the same intimate partner or two different intimate partners across the 12 months.

Victims of different perpetrators can be identified using the aggregated victim data from the CV dataset. This allows for the number of crime reports per victim to be identified and analysed for each victim. Those with more than one crime report were investigated for this analysis.

Table 4.6.6: Whether the Victim had a Single or Multiple Crime Reports

	Number of Victims	Percent
Single	17525	87.5
Multiple	2509	12.5
Total	20034	100.0

The CV Dataset contains 2509 victims who have multiple crime reports. This is 12.5% of all victims in the dataset (Table 4.6.6). Most victims (87.5%) in the CV Dataset are victimised once and only complete one crime report for the 12-month reference period. The victims can be victimised by perpetrators from different victim-perpetrator relationship categories. Therefore, derived relationship variables were used to establish the combinations of relationships across all crime reports for one victim. Victims of different perpetrators will be analysed using sex of the victim and victim-perpetrator relationship(s) to form an answer to the question; Are victims of domestic violence more likely to be victims of violence by different perpetrators than victims of strangers or acquaintances?

Table 4.6.7: The Number of Crime Reports for a Victim

	Number of Crime Reports	Percent
One	17525	87.5

Two	1900	9.5
Three	377	1.9
Four	125	0.6
Five	51	0.3
Six	56	0.3
Total	20034	100.0

Table 4.6.6 shows that only a small minority of victims will complete more than one crime report. This is investigated further in Table 4.6.7. Out of the victims with more than one crime report, the largest proportion (9.5%) complete two reports. It is much more uncommon to complete more than two reports, with 1.9% of victims completing three reports and less than 1% completing four, five or six reports.

The aggregated victim dataset is roughly half female (49.6%) and half male (50.4%). There were 2509 victims who had more than one crime report, which is 12.5% of victims. For these victims, 54.2% (1361) were male and 45.8% (1148) were female (Table 4.6.8). This shows male victims are slightly more likely than female victims to be victims of different perpetrators. Though this difference is not as pronounced as for crime reports with multiple perpetrators. The victims of different perpetrators were also disaggregated by the combinations of victim-perpetrator relationship types. These are shown in Table 4.6.9.

Table 4.6.8: Sex of the Victim for Victims of Different Perpetrators

	Number of victims	Percent
Male	1361	54.2
Female	1148	45.8
Total	2509	100.0

Table 4.6.9: Victim-Perpetrator Relationships for Victims of Different perpetrators

	Frequency of victims	Percent
Stranger	739	29.5
Acquaintance	440	17.5
Domestic	274	10.9
Stranger and Acquaintance	745	29.7
Domestic and Stranger	66	2.6
Domestic and Acquaintance	171	6.8
Domestic, Acquaintance and Stranger	49	2.0
Missing	25	1.0

Total	2509	100.0

The most common combinations are stranger and acquaintance (29.7%), and stranger (29.5%). 17.5% of victims with multiple crime reports are victimised by acquaintance only and 10.9% are victimised by domestic only. In these cases, it is important to note that it is not possible to know whether the perpetrator is the same for all crime reports for the same victim. For example, the victim could have been victimised by more than one domestic perpetrator in the 12-month reference period. However, if it is the same offender who repeats a similar offence, then this would be recorded in a series crime report, and not in separate reports. For stranger, we can assume that the multiple crime reports relate to different stranger perpetrators. This is presuming that if a person was victimised by the same stranger perpetrator, that perpetrator would become an acquaintance for subsequent events (they are now known by sight).

It is more common for the victim to know at least one of the perpetrators when the perpetrators are across different criminal events, rather than perpetrating the same criminal event (see multiple perpetrators in Table 4.6.4). Violent crime is often perpetrated by someone the victim knows and so this is also the case for victims of different perpetrators. 69.5% of victims of different perpetrators knew the perpetrator in at least one of the crime reports. However, it is also more common that the known perpetrators are acquaintance rather than domestic. Even across different crime reports, it is uncommon to be victimised by domestic along with another relationship group. Domestic occurs with stranger for 2.6% of victims. Domestic occurs with acquaintance for 6.8% of victims of different perpetrators. Only 2% of these victims were victimised by people from all three relationship categories, which shows that this is very uncommon. Victims of violence by domestic relations are less likely than victims of stranger or acquaintance perpetrators to have completed more than one crime report on different events. Victims of different perpetrators, who are victims of domestic perpetrators are also more likely to be victimised by domestic perpetrators in each of their crime reports, rather than perpetrators from more than one type of relationship (stranger or acquaintance).

Table 4.6.10: Victim-Offender Relationship by Sex of the Victim for Victims of Different Perpetrators

	Male	Percentage	Female	Percentage	Total
Stranger	529	38.9	210	18.3	739
Acquaintance	178	13.1	262	22.8	440
Domestic	40	2.9	234	20.4	274
Stranger and Acquaintance	509	37.4	236	20.6	745

Domestic and Stranger	23	1.7	43	3.7	66
Domestic and Acquaintance	54	4.0	117	10.2	171
Domestic, Acquaintance and Stranger	14	1.0	35	3.0	49
Missing	14	1.0	11	1.0	25
Total	1361	100	1148	100	2509

Table 4.6.10 shows the relationship variables disaggregated by victim sex for victims with multiple crime reports. For males with multiple crime reports, stranger is the most common perpetrator relationship with 38.9% of male victims. This is followed by stranger and acquaintance with 37.4%, then acquaintance alone with 13.1%. Only 2.9% of male victims were victims of domestic alone. 4% were victimised by a domestic and acquaintance and 1.7% by domestic and stranger. For female victims with multiple crime reports, 22.8% were victimised by acquaintances, 20.6% by acquaintance and stranger and 20.4% by domestic. Stranger was the perpetrator for 18.3% and domestic and acquaintance were the perpetrators for 10.2% of female victims. Domestic and stranger occurred for 3.7% and all three relationship groups were found in crime reports for 3% of female victims.

4.6.3 Summary of Victims of More than One Perpetrator

This analysis into the two groups of victims that experience violence by more than one perpetrator shows further differences for crime reports perpetrated by domestic relations and those perpetrated by stranger and acquaintances. For crime reports with multiple perpetrators, there are very few cases where the perpetrators are domestic relations. Multiple perpetrators are more likely to occur in crime reports where the perpetrators are acquaintance, stranger, or some combination of both. While events with multiple perpetrators are a significant minority of crime reports (around a quarter of reports), they show that domestic violence is much more likely to be perpetrated against a victim by a single offender. Crime reports with multiple perpetrators are more likely to involve offences against men by stranger and acquaintances.

This difference is also evident in victims of different perpetrators. Victims with multiple crime reports are less common than crime reports with multiple perpetrators. Victims of different perpetrators make up around 12.5% of all victims (in the aggregated victim dataset). Most victims of different perpetrators are victims of strangers, acquaintances, or a combination of both. When domestic relations are the perpetrators for a victim, it is more likely that a domestic relation perpetrated all other crime reports (10.9%). Though this does not necessarily mean that they are the same perpetrator for each crime report. It is much less common for a

victim of violence by a domestic relation to also experience other violence by an acquaintance or a stranger.

This analysis, while presenting further differences between violence by domestic relations, strangers, and acquaintances, also shows that there are complexities with using victim-perpetrator relationship to categorise violence. This analysis shows that there are a significant proportion of victims who do not fit into the common theorisations of violence as one crime, one perpetrator and one incident (Walby and Towers, 2017). In the CV dataset, it is more common to find a crime report with multiple perpetrators than for victims to be victimised multiple times (recorded in different crime reports). However, while showing that there are some complications with using victim-perpetrator relationship to disaggregate types of violence, this relates to a minority of victims. Most victims will experience violence by one perpetrator, in one crime report. This analysis contributes to this thesis as it presents another difference for victims of violence by domestic relations when compared to victims of other perpetrators. For crime reports with multiple perpetrators and victims of different perpetrators, it was less common for domestic violence than for stranger and acquaintance violence. Therefore, victims of domestic violence are not often victims of other types of violence in the 12-month reference period. They are also not often victims of multiple perpetrators.

4.7 Summary

The investigation of the nature of domestic violence in the CV dataset highlights some key dimensions of this type of violence. Domestic violence is usually physical (rather than threats of violence), gendered, in relation to the sex of the victim and the sex of the perpetrator, and is repeated. These dimensions of domestic violence were then used to compare to other types of violent crime. The results of this comparison are simplified in Table 4.7.1. This shows that crime reports on violence by domestic perpetrators differed from violence by strangers and acquaintances. Domestic violence differed from acquaintance by the type of violence experienced. Crime reports with acquaintance perpetrators related to more threat's offences than offences of physical violence. Crime reports with stranger perpetrators were almost half threats offences, with slightly more physical offence types (for example, wounding, assault, attempted assault, and sexual violence). Domestic violence also differed from violence by strangers and acquaintances by whether the victim is gendered. For victims of domestic violence, the victim is usually female. For violence by acquaintances, the victim is gender neutral (equally likely to be male or female), and for violence by strangers, the victim is usually

male. Violence by domestic relations is often repeated (46%), acquaintance violence is repeated in a third of cases, but stranger violence is rarely repeated.

However, though the three types of violence differed in three of the four dimensions identified, they do not differ in the sex of the perpetrator. For violence by domestic relations, acquaintances and strangers, the perpetrator is usually male. This is to slightly differing extents (there is a larger proportion of male perpetrators for domestic violence), however it is true for all three types of violence. Therefore, it is determined that violence by domestic relations is usually male violence against females, acquaintance violence is male violence against both males and females and stranger violence is male against males.

Table 4.7.1: Comparison of the Dimensions of Violence for Violence Perpetrated by Domestic Relations, Strangers or Acquaintances

	Domestic	Acquaintance	Stranger
Is the violence physical?	✓	✗	✓
Is the victim gendered?	✓ Female	✗	✓ Male
Is the perpetrator gendered?	✓ Male	✓ Male	✓ Male
Is the violence repeated?	✓	✓	✗

Table 4.7.1 also demonstrates how the initial analysis of the three types of violence also found differences between violence by strangers and acquaintances. Therefore, grouping these two types of violence into one single violence category is not appropriate for this data. For the subsequent analysis of violence crime, violence by domestic relations will be compared to violence by strangers and violence by acquaintances. This is instead of comparing domestic with 'other' violence.

Finally, there was analyses where there was more than one perpetrator. This happens in two instances. Some crime reports involve multiple perpetrators for one incident. Which means one victim can be victimised by perpetrators from multiple victim-perpetrator relationship categories (for example, a stranger and an acquaintance). Some victims will have multiple crime reports for the 12-month reference period of the survey. This means that they may have been victimised by more than one perpetrator over multiple violent events. This means that this victim can also be victims of multiple types of violence. Therefore, in these cases the violence

categorised into one of the three types that are based on victim-perpetrator relationship. However, instances with more than one perpetrator make up a small subset of the CV Dataset.

The analysis of multiple and different perpetrators also identified another dimension in which domestic violence differed from other types of violent crime. The analysis of multiple perpetrators showed that victims of domestic violence are much less likely to be victimised by multiple perpetrators. Therefore, domestic violence differs further from stranger and acquaintance as perpetrators are more likely to perpetrate alone. The analysis of different perpetrators showed a similar difference. When victims were analysed, victims of violence by domestic relations were not often victimised in separate events by acquaintances or strangers. Therefore, victims of violence by domestic relations often do not experience other types of violence. Though, it is extremely uncommon for any victim to experience more than one event of violent victimisation in the 12-month reference period of the data.

5. Comparing the Harms of Domestic Violence with the Harms of Violence by Other Perpetrators

5.1 Introduction

Harms will be operationalised to demonstrate the comparative differences between violence by domestic relations, acquaintances and strangers. An analysis of harms to the victim will be used to answer whether domestic violence is more harmful than stranger and acquaintance violence. Thus, demonstrating differences in the outcomes of violent crimes. This chapter will provide the initial analysis of the harm variables in the CV dataset. This will identify what proportion of victims of violence experience physical injury, and what proportion experience emotional reactions. Threats of violence have been included as violence in this thesis, but they do not involve a physical act and therefore cannot result in a physical injury. Excluding threats from the analyses of injury, injury occurs in only around half of violent incidents. Therefore, it is important to consider emotional (mental health) impacts of violent offences to capture the full experience of victims of violent crime.

Once the harms in the CV dataset have been identified, they will be compared across types of violent crime. This analysis will mirror the analysis in the previous chapter. First, harms will be analysed for domestic perpetrators to provide a picture of the experiences of domestic violence victims. Then, stranger and acquaintance will be compared to assess if there are substantive differences for victims. This will contribute to the analysis of violent crime as domestic violence is not distinct from 'other violence'. Rather, domestic, stranger and acquaintance violence are three subgroups of 'violent crime' that are not always distinct from each other (see Section 4.6 of Chapter 4). This will be investigated to see whether violence and the harms from violence differs due to the closeness of the relationship between the victim and the perpetrator.

5.2 Harms Experienced by Victims of Domestic Perpetrators

This section explores the harms for victims of domestic perpetrators. This will look at the injuries experienced, emotional reactions recorded, and the level of affect disclosed in crime reports with domestic perpetrators. This will be used to conduct a comparison with victims of stranger or acquaintance perpetrators to compare possible differences in victim harms. The previous chapter (Chapter 4) showed that victims of domestic perpetrators were more likely to experience non-sexual physical violence offences and sexual violence offences rather than

threats of violence. In the CV dataset, there are 3,357 crime reports that relate to violence by domestic perpetrators.

For crime reports that recorded violence by domestic perpetrators, a large proportion of victims experience injurious violence. 63.6% of crime reports with domestic perpetrators recorded at least one injury (Table 5.2.1). Just over a third of domestic violence in the CV dataset does not result in injury. Domestic violence is more likely to involve physical violence than other types of violent crime (stranger and acquaintance have larger proportions of threats offences). Domestic violence in the CV dataset is also often male violence against female victims. Therefore, it is not surprising that crime reports recording domestic violence recorded higher proportions of injury than overall violence (shown in Table 3.5.6).

Table 5.2.1: Whether there was an Injury caused by Domestic Violence

	Number of Crime Reports	Percent of valid responses
Injury	1496	63.6
No Injury	858	36.4
Total	2354	100.0
Missing	1003	-
Total	3357	100.0

When the injuries for victims in crime reports with domestic perpetrators are investigated further, the types of injuries can be examined. The majority of crime reports with domestic perpetrators where an injury is recorded disclose minor injuries (Table 5.2.2). These are; minor bruising or black eye (58.8%), severe bruising (34.5%) scratched (22.5%) and cuts (20.8%). All other injuries, most of which are more severe (broken/cracked/fractured bones, facial/head injuries, concussion or loss of consciousness etc), occurred in less than 5% of domestic violence crime reports. In later sections of this chapter, these injuries will be compared to crime reports perpetrated by strangers or acquaintances to assess if injuries differ across types of violence.

Table 5.2.2: Injuries that Occurred as a Result of the Domestic Violence Event

	Number of Crime Reports	Percent of valid responses	Percentage of all responses
Minor bruising or black eye	880	58.8	26.2
Severe bruising	516	34.5	15.4
Scratches	336	22.5	10.0
Cuts	311	20.8	9.3

Broken/ cracked/ fractured bones	70	4.7	2.1
Broken nose	40	2.7	1.2
Broken/lost teeth	14	0.9	0.4
Chipped teeth	12	0.8	0.4
Concussion or loss of consciousness	57	3.8	1.7
Facial/head injuries (no mention of bruising)	25	1.7	0.7
Eye/face injuries due to acid, paint, etc. being thrown in face	2	0.1	0.1
Other	98	5.2	2.9
Missing	2	0.1	0.0
Total	2363	-	-

*These questions allow respondents to answer multiple responses, meaning that the percentages will exceed 100% and the number of responses will exceed the total number of crime reports.

Table 3.5.9 showed that 85.8% of crime reports in the CV Dataset recorded an emotional reaction. When crime reports with domestic perpetrators are analysed alone, this raises to 92.5% recording emotional reactions (Table 5.2.3). This suggests that victims who complete crime reports relating to domestic violence events record more experiences of emotional reactions than victims of other types of violent crime. This will be investigated further in the following sections. This also reveals that victims of violence by domestic perpetrators are more likely to record emotional reactions (92.5%) than experience a physical injury (63.6% in Table 5.2.1). Therefore, although crime reports with domestic perpetrators experience more injury than crime reports for all violent crime, there is still a significant minority of victims who do not experience any injuries and there is still a higher proportion that experience emotional reactions.

Table 5.2.3: Whether there was an Emotional Reaction from the Domestic Violence

	Number of Crime Reports	Percent of valid responses
Emotional Reaction	3030	92.5
No Emotional Reaction	245	7.5
Total	3275	100.0
Missing	82	-
Total	3357	100.0

The emotional reaction variables were analysed for crime reports on victims of domestic perpetrators. This can be seen in Table 5.2.4. For crime reports on domestic violence, there are no emotional reactions with a small number of responses, except for 'other' (2.5%). Every emotional reaction is experience by a significant proportion of crime reports for victims of violence by domestic relations. The most common response to domestic violence events was anger (56%), followed by crying/tears (52.1%), shock (48.4%) and fear (47.1%). Significant proportions of domestic violence crime reports also report loss of confidence/feeling vulnerable (39.5%), annoyance (38.4%), difficulty sleeping (35.3%), anxiety/panic attacks (30.2%) and depression (29.2%). These will be compared to crime reports with stranger and acquaintance perpetrators to analysis whether there are differences in the emotional experiences of victims of different types of violent crime.

Table 5.2.4: Emotional Reactions that Occurred as a Result of the Domestic Violent Event

	Number of Domestic Crime Reports	Percent of valid responses
Anger	1696	56.0
Shock	1468	48.4
Fear	1426	47.1
Depression	885	29.2
Anxiety/panic attacks	914	30.2
Loss of confidence/feeling vulnerable	1197	39.5
Difficulty sleeping	1071	35.3
Crying/tears	1578	52.1
Annoyance	1165	38.4
Other	76	2.5
Missing	2	0.0
Total	11478	-

*These questions allow respondents to answer multiple responses, meaning that the percentages will exceed 100% and the number of responses will exceed the total number of crime reports.

Finally, the variable recording the level of affect was disaggregated for the analysis on crime reports with domestic perpetrators (Table 5.2.5). The question relating to this variable is asked in all crime reports that record an emotional reaction. This revealed that the largest proportion of crime reports recorded victims who felt 'very much' affected by the violent offence (45%). The smallest proportion of victims recorded in their crime reports feeling 'a little' affected by the violent offence (21.3%). This will also be compared to the other two

victim-perpetrator relationship to determine whether the victim's level of emotional affect from the violent incident differs when their relationship to the perpetrator is considered.

Table 5.2.5: How affected were the victims by the domestic violent offence?

	Number of Crime Reports	Percent of valid responses
Very Much	1362	45.0
Quite a Lot	1020	33.7
A Little	646	21.3
Total	3028	100.0
Missing	329	
Total	3357	-

Overall, crime reports for victims of domestic violence record injurious violence in two-thirds of cases. The majority of injuries are minor (bruising, scratches and cuts), and small numbers of crime reports record more serious injuries, such as broken bones or head injuries. As well as being injurious, the violence by domestic relation results in emotional reactions in almost all crime reports. Finally, violence by domestic relations causes victims to record a 'very much' affect in more cases than they record 'a little' or 'very much' affects. This suggests that a large proportion of crime reports relate to victims who are significantly affected by domestic violence. This analysis of harms resulting from violence by domestic relations is compared to violence by acquaintances and strangers in the next sections. This highlights any noticeable differences in harms by victim-perpetrator relationship which could inform the score building for victim harms in later analysis.

5.3 Do Harms Differ for Victims of Acquaintance Perpetrators Compared to Strangers?

The previous chapter shows that there are substantive differences in violence by acquaintances and violence by strangers. Violence by acquaintances and strangers differ by the type of violence experienced, the sex of the victim and whether the violence is repeated. This section will analyse the harms variables that have been identified in the CV Dataset. A comparison will be built for crime reports with perpetrators who are stranger or acquaintances to assess whether the differences in the violence are also present in the types of harms experienced. This section will look at the types of injury and emotional reactions that result from the violent events. The level of affect for the violence will also be compared to identify whether

acquaintance and stranger violence have a greater effect on the victim. Chi-square tests were conducted to highlight where the differences are significant.

Table 5.3.1: Comparison of Whether an Injury Occurred as a Result of Stranger or Acquaintance Violence

	Number of Stranger Crime Reports	Percentage of valid responses	Number of Acquaintance Crime Reports	Percentage of valid responses
Injury	2809	44.5	2352	48.6
No Injury	3497	55.5	2486	51.4
Total	6306	100.0	4838	100.0
Missing	5771	-	4635	-
Total	12081	100.0	9473	100.0

$X^2\ (1, N = 10186) = 15.361, p = 0.000$

The analysis of crime reports with perpetrators who are strangers or acquaintances followed the initial analysis of crime reports perpetrated by domestic relations. First, whether an injury occurred as a result of the violent crime event was compared. There are some small differences between crime reports perpetrated by strangers compared to those perpetrated by acquaintances. 48.6% of crime reports perpetrated by acquaintances resulted in injury (Table 5.3.1). This is slightly more than the 44.5% for strangers. Overall, just more than half of violent events perpetrated by strangers and acquaintances do not result in injury for the victim.

Table 5.3.2: Injuries that Occurred as a Result of the Stranger or Acquaintance Violent Event

	Number of Stranger Crime Reports	Percentage of valid responses	Number of Acquaintance Crime Reports	Percentage of valid responses
Minor bruising or black eye	1640	58.4	1358	57.7
Severe bruising	748	26.6	659	28.0
Scratches	573	20.4	532	22.6
Cuts*	806	28.7	569	24.2
Broken/ cracked/ fractured bones	148	5.3	110	4.7
Broken nose	92	3.3	77	3.3
Broken/lost teeth	69	2.5	44	1.9
Chipped teeth	54	1.9	34	1.4
Concussion or loss of consciousness*	159	5.7	109	4.6

Facial/head injuries (no mention of bruising)	71	2.5	65	2.8
Eye/face injuries due to acid, paint, etc. being thrown in face*	3	0.1	9	0.4
Other*	211	7.5	224	9.5
Missing	0	0.0	3	0.1
Total	4574	-	3793	-

* Chi-square test is significant (<0.05)

**These questions allow respondents to answer multiple responses, meaning that the percentages will exceed 100% and the number of responses will exceed the total number of crime reports.

This was investigated further by assessing which types of injuries were most likely to occur in crime reports perpetrated by strangers or acquaintances. Table 5.3.2 includes crime reports where the victims recorded 'yes' to whether they experienced an injury. The crime reports in Table 5.3.1 where an injury was not recorded were not included. For the possible injuries in Table 5.3.2, the majority showed no significant difference for crime reports with stranger perpetrators and acquaintance perpetrators. However, there was a significant difference in the crime reports that recorded 'cuts' by strangers (28.7%) compared to acquaintances (24.2%) and 'concussion or loss of confidence' as a result of violence by strangers (5.7%) compared to acquaintances (4.6%). There is also a significant difference for 'eye/face injuries due to acid, paint, etc. being thrown in face' and 'other'. The majority of crime reports for these two types of violence experience minor bruising/black eye, severe bruising, scratches and cuts. It is not common for crime reports to record violence that results in broken/cracked/fractured bones, broken nose, broken/lost teeth, chipped teeth, or head injuries of any kind.

Table 5.3.3: Whether there was an Emotional Reaction from Violence Perpetrated by Stranger and Acquaintance Relations.

	Number of Stranger Crime Reports	Percent of valid responses	Number of Acquaintance Crime Reports	Percent of valid responses
Emotional Reaction	9899	84.3	7982	85.9
No Emotional Reaction	1840	15.7	1315	14.1
Total	11739	100.0	9297	100.0

Missing	342	-	176	-
Total	12081	100.0	9473	100.0
$X^2\ (1, N = 19149) = 8.021, p = 0.005$				

Next, the emotional reactions recorded in crime reports for victims of violence by strangers and acquaintances were compared. This also showed some significant differences. First, Table 5.3.3 shows that slightly more crime reports with acquaintance perpetrators (85.9%) experience emotional reactions than crime reports with stranger perpetrators (84.3%). This is a small difference which the chi-square test identifies as significant. This means that around 15% of crime reports for both types of violence do not record any emotional reactions. Generally, more crime reports record emotional reactions to violence than record injury.

When this was analysed by the types of emotional reactions experienced, more differences were identified (Table 5.3.4). For shock and other there were little differences in the proportions of crime reports that record these for those perpetrated by acquaintances (45.7%/2.9%) compared to strangers (43.5%/3%). However, all other emotional reactions showed significant differences. Crime reports for violence by acquaintances record more anger (55,4%), fear (34.4%), depression (13.7%), anxiety/panic attacks (19%), loss of confidence/feeling vulnerable (30.6%), difficulty sleeping (18.3%) and crying/tears (19.3%) than crime reports for stranger violence. Crime reports that record violence by strangers record more annoyance (50.3%) than those perpetrated by acquaintances (48.3%). Overall, crime reports relating to violence perpetrated by acquaintances seem to record more emotional reactions than crime reports perpetrated by strangers. This is despite similar proportions of injury for these crime reports.

Table 5.3.4: Emotional Reactions that Occurred as a Result of the Stranger or Acquaintance Violent Event

	Number of Stranger Crime Reports	Percent of valid responses	Number of Acquaintance Crime Reports	Percent of valid responses
Anger*	5143	52.0	4420	55.4
Shock	4524	45.7	4506	43.5
Fear*	3090	31.2	2747	34.4
Depression*	615	6.2	1092	13.7
Anxiety/panic attacks*	1169	11.8	1514	19.0

Loss of confidence/feeling vulnerable*	2517	25.4	2446	30.6
Difficulty sleeping*	831	8.4	1458	18.3
Crying/tears*	902	9.1	1544	19.3
Annoyance*	4984	50.3	3852	48.3
Other	290	2.9	243	3.0
Missing	5	0.1	1	0.0
Total	24070	-	23823	-

* Chi-square test is significant (<0.05)

**These questions allow respondents to answer multiple responses, meaning that the percentages will exceed 100% and the number of responses will exceed the total number of crime reports.

Finally, the level of affect variable was assessed for significant differences for crime reports on stranger and acquaintance violence (Table 5.3.5). This also showed some differences for these two types of violence. For crime reports perpetrated by strangers, victims report that they were affected 'a little' in 50% of reports. Victim's report being affected 'quite a lot' in 31.3% of crime reports perpetrated by strangers. The smallest proportion of crime reports record that victims were affected 'very much' (18.7%). Therefore, the majority of crime reports involve victims who experience violence at the lowest affect level, and the smallest proportion experienced the highest level of affect. For acquaintance violence, the smallest proportion of crime reports also experience the smallest level of affect. However, this is a larger proportion than for stranger violence, with over a quarter of crime reports (27.5%). For violence by acquaintances, an almost equal proportion of crime reports record victims feeling 'quite a lot' affected (35.2%) and 'a little' affected (37.2%). Overall, crime reports for victims of violence by acquaintances record a higher level of affect by the violence than for crime reports perpetrated by strangers.

Table 5.3.5: How affected were the victims by the Stranger or acquaintance violent offence?

	Number of Stranger Crime Reports	Percent of valid responses	Number of Acquaintance Crime Reports	Percent of valid responses
Very Much	1852	18.7	2196	27.5
Quite a Lot	3097	31.3	2810	35.2
A Little	4944	50.0	2974	37.3
Total	9893	100.0	7980	100.0
Missing	2188	-	1493	-
Total	12081	100.0	9473	100.0

$$X^2\ (2, N = 16252) = 335.673, p = 0.000$$

The analysis of crime reports perpetrated by strangers and acquaintance found some difference in victim experiences of harm. The smallest differences were found in the proportions of victims who recorded injuries in their crime report(s). There were also little differences in the types of injury recorded. The largest differences were found in the recording of cuts, concussion/loss of consciousness and eye/face injuries due to acid or paint, etc being through in face. For these three injuries, crime reports perpetrated by strangers recorded slightly more. The largest differences were found in experiences of emotional reactions as a result of the violence. Almost every emotional reaction was experienced more by victims of acquaintance violence than victims of stranger violence (except for experiences of annoyance and shock). This was also confirmed when the level of affect was analysed as crime reports for violence by acquaintances reported higher proportions of 'very much' and 'quite a lot' levels of affect than for crime reports on violence perpetrated by strangers. This analysis confirms the separation of stranger and acquaintance crime reports into two subcategories of violence to compare to violence perpetrated by domestic relations. This demonstrates that as well as differences in the nature of the crime (shown in the previous chapter), there are also significant differences in the experiences of victim harms for these two categories of violence.

5.4 Do Harms Differ for Victims of Domestic Perpetrators Compared to Acquaintance?

The harms of victims of violence perpetrated by domestic relations are compared to the harms experienced by victims of acquaintances. This will use the same harm variables that have been analysed in the previous two sections. This will determine whether there are substantive differences in victim's experiences of harm when the victim-perpetrator relationship differs. This will contribute to the analysis of violent crime by determining if victim-perpetrator relationship changes the impacts of violent crime on a victim. This will assess whether there are differences in physical injury and emotional reactions from violent events by either acquaintances or domestic relations. This analysis is also repeated for a comparison of harms from domestic and stranger violence. This will result in an analysis that will inform on whether physical and emotional harms differ across different types of violent crimes.

Table 5.4.1: Comparison of Whether an Injury Occurred as a Result of Domestic or Acquaintance Violence

	Number of Domestic Crime Reports	Percentage of valid responses	Number of Acquaintance Crime Reports	Percentage of valid responses
Injury	1496	63.6	2352	48.6
No Injury	858	36.4	2486	51.4
Total	2354	100.0	4838	100.0
Missing	1003	-	4635	-
Total	3357	100.0	9473	100.0

$X^2\ (1, N = 12794) = 228.37, p = 0.000$

The first comparison was done on the injury variables in the CV dataset. This compared crime reports for victims of domestic violence with crime reports of violence perpetrated by acquaintances. This revealed that domestic violence is often more injurious than acquaintance violence (Table 5.4.1). For crime reports on violence by acquaintances, slightly more than half (51.4%) of crime reports do not record any injury from the violence. This is significantly more than for crime reports on victims of domestic violence, where only 36.4% recorded no injury. Therefore, where half of crime reports on acquaintance violence record injurious violence, two thirds of crime reports on violence by domestic perpetrators record injurious violence. The differences in injury for crime reports on victims of domestic and acquaintance violence were investigated further using the type of injury.

Victims of domestic violence often experience minor bruising or black eye (58.8%), severe bruising (34.5%) scratched (22.5%) and cuts (20.8%) in their crime reports. These are arguably minor injuries when compared to other possible injuries in this list (Table 5.4.2), such as broken/cracked/fractured bones, facial/head injuries, concussion or loss of consciousness etc. However, although crime reports recording violence by acquaintances are less likely than those perpetrated by domestic relations to result in injury, victims tend to experience similar injuries. For example, victims of acquaintance violence also record minor bruising or black eye (57.7%), severe bruising (28%) scratches (22.6%) and cuts (24.2%) as the most common injuries. However, crime reports on victims of acquaintance violence were more likely than crime reports on victims of domestic violence to experience more serious injury. For example, broken nose (3.3%), facial/head injuries (2.8%), concussion or loss of consciousness (4.6%), broken/lost teeth (1.9%) and chipped teeth (1.4%) were all experienced by more crime reports with acquaintance perpetrators than domestic (broken nose (2.7%), facial/head injuries (1.7%), concussion or loss of consciousness (3.8%), broken/lost teeth (0.9%) and chipped teeth

(0.8%)). But more serious injuries were only experienced by a small minority of victims for both types of violence.

For the categories of injury for crime reports on violence by domestic relations and acquaintances, five of them were significantly different. The significantly different injuries were severe bruising, cuts, broken/lost teeth, facial/head injuries and other. For these crime reports, the other injury categories were not significantly different (Table 5.4.2).

Table 5.4.2: Injuries that Occurred as a Result of the Domestic or Acquaintance Violent Event

	Number of Domestic Crime Reports	Percentage of valid responses	Number of Acquaintance Crime Reports	Percentage of valid responses
Minor bruising or black eye	880	58.8	1358	57.7
Severe bruising*	516	34.5	659	28.0
Scratches	336	22.5	532	22.6
Cuts*	311	20.8	569	24.2
Broken/ cracked/ fractured bones	70	4.7	110	4.7
Broken nose	40	2.7	77	3.3
Broken/lost teeth*	14	0.9	44	1.9
Chipped teeth	12	0.8	34	1.4
Concussion or loss of consciousness	57	3.8	109	4.6
Facial/head injuries (no mention of bruising)*	25	1.7	65	2.8
Eye/face injuries due to acid, paint, etc. being thrown in face	2	0.1	9	0.4
Other*	98	5.2	224	9.5
Missing	2	0.1	3	0.1
Total	2363	-	3793	-

* Chi-square test is significant (<0.05)

**These questions allow respondents to answer multiple responses, meaning that the percentages will exceed 100% and the number of responses will exceed the total number of crime reports.

Crime reports recording violence from domestic relations and acquaintances were also analysed to identify any differences in the experience of emotional reactions. Table 5.4.3 shows that crime reports for victims of acquaintance violence experience less emotional reactions than

those on violence by domestic relations. Crime reports on violence by acquaintances still record a large percentage of emotional reaction with 85.9% of crime reports recording at least one. However, this is less than for violence by domestic relations (92.5%). This means that victims of domestic violence in the CV dataset experience more injurious violence and record emotional reactions more often than those victimised by acquaintances.

Table 5.4.3: Whether there was an Emotional Reaction from Violence Perpetrated by Domestic and Acquaintance Relations.

	Number of Domestic Crime Reports	Percentage of valid responses	Number of Acquaintance Crime Reports	Percentage of valid responses
Emotional Reaction	3030	92.5	7982	85.9
No Emotional Reaction	245	7.5	1315	14.1
Total	3275	100.0	9297	100.0
Missing	82	-	176	-
Total	3357	100.0	9473	100.0

$X^2\ (1, N = 12522) = 96.972, p = 0.000$

This was explored further by analysing the types of emotional reactions (Table 5.4.4). The analysis of domestic violence in the CV Dataset showed that anger (56%), followed by crying/tears (52.1%), shock (48.4%) and fear (47.1%) were the most common reactions to violence by domestic relations. However, loss of confidence/feeling vulnerable (39.5%), annoyance (38.4%), difficulty sleeping (35.3%), anxiety/panic attacks (30.2%) and depression (29.2%) were also experienced in a significant proportion of crime reports for victims of domestic violence. Anger (55.4%), annoyance (48.3%) and shock (43.5%) are the most common emotional reactions for crime reports with acquaintance perpetrators, but annoyance is the only emotional reaction experienced for a higher proportion of acquaintance crime reports than domestic crime reports. For the emotional reaction categories, each reaction except for anger, other, don't know and refused showed significant differences. This shows that crime reports for victims of violence by domestic relations and acquaintance perpetrators differ more for the types of emotional reactions experiences than for injuries.

Table 5.4.4: Emotional Reactions that Occurred as a Result of the Domestic or Acquaintance Violent Event

	Number of Domestic Crime Reports	Percent of valid responses	Number of Acquaintance Crime Reports	Percent of valid responses
Anger	1696	56.0	4420	55.4
Shock*	1468	48.4	4506	43.5
Fear*	1426	47.1	2747	34.4
Depression*	885	29.2	1092	13.7
Anxiety/panic attacks*	914	30.2	1514	19.0
Loss of confidence/feeling vulnerable*	1197	39.5	2446	30.6
Difficulty sleeping*	1071	35.3	1458	18.3
Crying/tears*	1578	52.1	1544	19.3
Annoyance*	1165	38.4	3852	48.3
Other	76	2.5	243	3.0
Missing	2	0.0	1	0.0
Total	11472	-	23823	-

* Chi-square test is significant (<0.05)

**These questions allow respondents to answer multiple responses, meaning that the percentages will exceed 100% and the number of responses will exceed the total number of crime reports.

Iganski and Lagou (2014) argue that emotional reactions such as anger, annoyance and shock are external emotional reactions which are healthy reactions to victimisation as they are directed towards the perpetrator and/or event. These reactions make up the most common reactions for crime reports with acquaintance perpetrators. However, emotional reactions such as crying/tears, fear, loss of confidence/feeling vulnerable, anxiety/panic attacks or depression are reactions to victimisation that can result in more long-term and detrimental impacts from the violent event. These reactions are more often experienced by victims of domestic perpetrators in the CV dataset.

Table 5.4.5: How affected were the victims by the domestic or acquaintance violent offence?

	Number of Domestic Crime Reports	Percent of valid responses	Number of Acquaintance Crime Reports	Percent of valid responses
Very Much	1362	45.0	2196	27.5
Quite a Lot	1020	33.7	2810	35.2
A Little	646	21.3	2974	37.3
Total	3028	100.0	7980	100.0

Missing	329	-	1493	-
Total	3357	100.0	9473	100.0
$X^2\ (2, N = 11008) = 367.236, p = 0.000$				

Finally, crime reports with domestic and acquaintance perpetrators were compared by the levels of affect experienced by victims in the CV dataset. Crime reports with domestic and acquaintance perpetrators differ on the levels of affect (Table 5.3.5). For crime reports with acquaintance perpetrators, the highest proportion of victim's experience 'a little' affect from the violent event (37.5%), though a similar proportion record experiencing 'quite a lot' of an affect (35.2%). The smallest proportion of crime reports with acquaintance perpetrators record victims that experience a 'very much' affect (27.5%). However, this differs for crime reports with domestic perpetrators as the largest proportion of crime reports recorded victims who felt 'very much' affected (45%), followed by 'quite a lot' (33.7%). The smallest proportion of crime reports recorded victims who felt 'a little' affected by the violent offence (21.3%). Therefore, crime reports for victims of violence by domestic relations record a higher level of affect from the event than crime reports for victims of acquaintances.

For the comparison of crime reports with domestic perpetrators and acquaintance perpetrators, there were some noticeable differences. Victims of domestic violence in the CV dataset were more likely than victims of violence by acquaintances to experience injuries as a result of the event. However, of those who do experience violence that results in injury, there are little differences in the types of injury. Both are more likely to experience minor injuries such as minor bruising/black eye, severe bruising and cuts, rather than broken bones or head injuries. Crime reports with domestic perpetrators were also more likely to record emotional reactions than crime reports for victims of violence by acquaintances. Of the emotional reactions recorded, crime reports on victims of domestic perpetrators record much higher proportions of depression, anxiety/panic attacks and difficulty sleeping than victims of violence by acquaintances. However, both experienced shock and anger as two of the most common emotional reactions. Overall, using the level of affect, victims of domestic violence are affected at a higher level by the harms experienced than victims of acquaintance violence.

5.5 Do Harms Differ for Victims of Domestic Perpetrators Compared to Stranger?

This section mirrors the previous analysis on crime reports with domestic perpetrators and stranger perpetrators. This compares violent crime reports for these two types of violence to

assess whether there are substantive differences in the harms resulting from violence by domestic relations compared to violence by strangers. As with the previous analysis, this section analyses whether the violence resulted in injury and the types of injury experienced. This is repeats for emotional reactions and the types of emotional reactions experienced. This reinforces the importance of including physical harms and emotional harms into the analysis of victim experiences of violent crime. Finally, the level of affect from the violent event is also compared for the two types of violent crime. This compares whether there is a significant difference in how affected the victims feel by the violent event.

First, crime reports for victims of violence by domestic relations and strangers were compared by whether there are differences in the proportions of victims who are injured. This showed that over half (55.5%) of violence perpetrated by strangers does not result in physical injury (Table 5.5.1). This is compared to just over a third (36.4%) of domestic violence. Therefore, violence by domestic relations is the most injurious type of violent crime, resulting injury in 63.6% of crime reports, compared to around half of crime reports for victims of violence perpetrated by strangers or acquaintances. As with acquaintance violence, domestic violence is also compared to stranger by the types of injury recorded in crime reports.

Table 5.5.1: Comparison of Whether an Injury Occurred as a Result of Domestic or Stranger Violence

	Number of Domestic Crime Reports	Percentage of valid responses	Number of Stranger Crime Reports	Percentage of valid responses
Injury	1496	63.6	2809	44.5
No Injury	858	36.4	3497	55.5
Total	2354	100.0	6306	100.0
Missing	1003	-	5771	-
Total	3357	100.0	12081	100.0

$X^2\ (1, N = 8660) = 245.550, p = 0.000$

Table 5.5.2 shows the various injuries recorded in the crime reports in the CV Dataset. There are some differences, but also some similarities in the types of injuries experienced by the victims of both types of violence. For example, the proportions of crime reports that record severe bruising are higher for victims of violence by domestic relations (34.5%) than for victims of violence by strangers (26.6%). However, cuts are a result of violence by strangers (28.7%) more than violence by domestic relations (20.8%). This is also the case for some less

common injuries. For crime reports perpetrated by domestic relations and stranger perpetrator severe bruising, cute, broken/lost teeth, chipped teeth and concussion or loss of consciousness were all significantly different.

Table 5.5.2: Injuries that Occurred as a Result of the Domestic or Stranger Violent Event

	Number of Domestic Crime Reports	Percentage of valid responses	Number of Stranger Crime Reports	Percentage of valid responses
Minor bruising or black eye	880	58.8	1640	58.4
Severe bruising*	516	34.5	748	26.6
Scratches	336	22.5	573	20.4
Cuts*	311	20.8	806	28.7
Broken/ cracked/ fractured bones	70	4.7	148	5.3
Broken nose	40	2.7	92	3.3
Broken/lost teeth*	14	0.9	69	2.5
Chipped teeth*	12	0.8	54	1.9
Concussion or loss of consciousness*	57	3.8	159	5.7
Facial/head injuries (no mention of bruising)	25	1.7	71	2.5
Eye/face injuries due to acid, paint, etc. being thrown in face	2	0.1	3	0.1
Other	98	5.2	211	7.5
Missing	2	0.1	0	0.0
Total	2363	-	4574	-

* Chi-square test is significant (<0.05)

**These questions allow respondents to answer multiple responses, meaning that the percentages will exceed 100% and the number of responses will exceed the total number of crime reports.

As well as comparing injurious crime reports across types of violence, domestic and stranger violence were also compared to assess differences in emotional reactions. This shows that almost all (92.5%) of victims of domestic violence record feeling an emotional reaction as a result of the violent event in their crime report. This is compared to 84.5% of crime reports for victims of violence by strangers (Table 5.5.3). Therefore, there are some differences in the experiences of emotional harm from violence in the CV dataset. Overall, crime reports for victims of violence by domestic relations have higher proportions of injury and emotional

reaction, which suggests that violence by domestic relations may be more harmful than violence by strangers.

Table 5.5.3: Whether there was an Emotional Reaction from Violence Perpetrated by Domestic and Stranger Relations.

	Number of Domestic Crime Reports	Percent of valid responses	Number of Stranger Crime Reports	Percent of valid responses
Emotional Reaction	3030	92.5	9899	84.3
No Emotional Reaction	245	7.5	1840	15.7
Total	3275	100.0	11739	100.0
Missing	82		342	
Total	3357	100.0	12081	100.0

$X^2\ (1, N = 15438) = 144.623, p = 0.000$

To further investigate the differences in experiences of emotional harm, the types of emotional reactions experienced in the CV dataset were compared. As discussed earlier, anger (56%), followed by crying/tears (52.1%), shock (48.4%) and fear (47.1%) were the most common reactions to violence by domestic relations in the CV dataset. But, loss of confidence/feeling vulnerable (39.5%), annoyance (38.4%), difficulty sleeping (35.3%), anxiety/panic attacks (30.2%) and depression (29.2%) were also experienced in a significant proportion of crime reports for victims of domestic violence (Table 5.5.4). This showed that victims of domestic violence in the dataset often experienced internal emotional reactions more often than external emotional reactions (Iganski and Lagou, 2014).

Table 5.5.4: Emotional Reactions that Occurred as a Result of the Domestic or Stranger

	Number of Domestic Crime Reports	Percent of valid responses	Number of Stranger Crime Reports	Percent of valid responses
Anger*	1696	56.0	5143	52.0
Shock*	1468	48.4	4524	45.7
Fear*	1426	47.1	3090	31.2
Depression*	885	29.2	615	6.2
Anxiety/panic attacks*	914	30.2	1169	11.8

Loss of confidence/feeling vulnerable*	1197	39.5	2517	25.4
Difficulty sleeping*	1071	35.3	831	8.4
Crying/tears*	1578	52.1	902	9.1
Annoyance*	1165	38.4	4984	50.3
Other	76	2.5	290	2.9
Missing	2	0.0	5	0.1
Total	11478	-	24070	-

* Chi-square test is significant (<0.05)

**These questions allow respondents to answer multiple responses, meaning that the percentages will exceed 100% and the number of responses will exceed the total number of crime reports.

Emotional reactions recorded by victims in crime reports with stranger perpetrators differ. Like for victims of violence by acquaintances, victims of strangers experienced external emotional reactions more often than internal emotional reactions. The most common emotional reactions for crime reports with stranger perpetrators were anger (52%), annoyance (50.3%) and shock (45.7%). However, fear (31.2%) and loss of confidence/feeling vulnerable (25.4%) were also experienced in a significant minority of crime reports perpetrated by strangers (Table 5.5.4). However, unlike for crime reports with domestic perpetrators, crying/tears (9.1%), difficulty sleeping (8.4%), depression (6.2%) and anxiety/panic attacks (11.8%) were not common for victims of violence by strangers. Therefore, there are significant differences in the proportion of crime reports that record emotional reactions for all types of reaction except other, don't know and refused.

Table 5.5.5: How affected were the victims by the domestic or stranger violent offence?

	Number of Domestic Crime Reports	Percent of valid responses	Number of Stranger Crime Reports	Percent of valid responses
Very Much	1362	45.0	1852	18.7
Quite a Lot	1020	33.7	3097	31.3
A Little	646	21.3	4944	50.0
Total	3028	100.0	9893	100.0
Missing	329	-	2188	-
Total	3357	100.0	12081	100.0

$X^2\ (2, N = 12921) = 1080.435, p = 0.000$

Finally, the level of affect from the emotional harm experienced by victims were compared for crime reports with domestic and stranger perpetrators (Table 5.5.5). This showed further differences in the emotional harm experiences of victims of different types of violent crime. This shows some large differences between the crime reports for the two types of violent crime. For crime reports on violence with perpetrators who are domestic relations, the most common affect is 'very much' suggesting that the victims felt that the violent event negatively affected them to a high extent. However, half of crime reports for violence by strangers recorded 'a little' as the level of affect. This suggests that a larger proportion of victims of stranger violence experience a small affect from the violence than victims of a domestic relation (21.3%). The least common affect for victims of stranger violence is 'very much' (18.7%). Overall, it can be said that the emotional harms from violent crime affect victims of domestic relations to a higher extent than victims of stranger violence in the CV dataset. This suggests differences in both harms and their effect on the victim based on victim-perpetrator relationship.

The comparison of crime reports with domestic perpetrators and crime reports with perpetrators who are strangers reveals some differences. These differences were similar to that in the previous comparison of crime reports with acquaintance perpetrators. Victims of violence by domestic perpetrators were more likely to experience injury as a result of the violence than victims of strangers. More than half of crime reports with perpetrators who are strangers do not result in any injuries to the victim. The majority of crime reports on violence by strangers experienced emotional reactions, but this is a larger majority for victims of violence by domestic relations. The types of emotional reactions also differ to some extent. For victims of domestic violence, all emotional reactions are common responses. Whereas, for victims of violence by strangers, crying/tears, difficulty sleeping, depression and anxiety/panic attacks are all uncommon reactions. Finally, victims of domestic violence recorded higher levels of affect in their crime reports than victims of violence by strangers. Half of crime reports for violence by strangers recorded 'a little' affect from the violence compared to almost half of domestic violence crime reports recording being affected 'very much'. This suggests that domestic violence is more harmful than violence by strangers in both injury and emotional reactions from the event.

5.6 Summary

Harms will be used in this thesis to operationalise the difference between domestic violence and violence perpetrated by acquaintances or strangers. This analysis of harms identified three aspects of harms recorded in the CV dataset. These are; physical harms (injury), emotional reactions and the level of affect. Injury does not always occur as a result from a violent event, which is why it is necessary to include emotional reactions as a non-physical harm of violence. This ensures that a larger proportion of victim harms is explored in this analysis.

First, crime reports with domestic perpetrators were analysed. This allowed for the experiences of victims of domestic violence to be investigated to assess the most common injuries and emotional reactions, as well as the level of affect recorded for the violent event. Next, this was compared against crime reports with acquaintance and stranger perpetrators to highlight any differences in the experiences of harms for victims of different types of violent crime. The initial comparison of harms for crime reports in three victim-perpetrator relationships found differences in victims experiences of harm. This found that victims of violence by domestic perpetrators are more likely to experience injurious violence than victims of violence by strangers or acquaintances. As well as being more injurious, violence by domestic relations result in more emotional reactions with more affect. Every emotional reaction was common for victims of domestic violence, whereas depression, anxiety/panic attacks and difficulty sleeping were less common for victims of violence by acquaintances and were uncommon for victims of violence by strangers. Victims of domestic violence were also more likely to record that they were affected ‘very much’ by the incident than victims of violence by strangers and acquaintances. Overall, this suggests that domestic violence differs from other violence for all three aspects of harm and is more harmful than violence by strangers and acquaintances.

6. Assessing the Effect of Victim-Perpetrator Relationship on Victim Harms using Regressions Analysis

6.1 Introduction

The previous two chapters investigated the characteristics of violent crime (Chapter 4) and the harms of violent crime (Chapter 5) in the CV dataset disaggregated by victim-perpetrator relationship. These chapters identified some key dimension of violent crime that will be considered in each analysis of this thesis. These are sex of the victim, sex of the perpetrators, offence type, whether the event was repeated, injury and emotional reactions experienced by the victim. Chapter 4 found that violence by domestic relations was more often repeated, physical violence by men against women. Acquaintance violence was more often repeated, non-physical (threats) violence by men against both men and women. Stranger violence was more often single event, non-physical violence (threats) by men against men. Chapter 5 discovered that violence by domestic relations in the CV dataset was more often injurious and more often resulting in emotional reactions than violence perpetrated by acquaintances or strangers.

This chapter will use binary logistic regressions to investigate the harms resulting from violent crime more thoroughly. This will specifically answer whether the odds of harms occurring increase or decrease for violence by domestic perpetrators compared to violence by acquaintances and strangers. The analysis will also identify whether victim-perpetrator relationship is a more powerful predictor of harm occurring than sex of the victim, sex of the perpetrator, whether the violence is repeated, offence type, socio-economic classification of the victim and tenure type. Overall, these regressions will show how much victim-perpetrator relationship contributes to the harms experienced by victims of violent crime when compared to other characteristics of the offence and the victim.

The harms investigated by the binary logistic regressions include injury and emotional reactions recorded in the CV dataset. There will also be specific analyses on anger and fear as important emotional reactions identified in literature. The effect of victim-perpetrator relationship will be evaluated for each response variable and compared to the effects of the other possible predictor variables (listed above).

6.2 Methodology

Binary logistic regression is a quantitative method used to predict the probability of a binary outcome (Agresti 1996). Four binary logistic regression models were fit to the data using injury (1), emotional reaction (2), anger (3) and fear (4) as response variables. The logistic regression model (Agresti, 1996) is:

$$\log\left(\frac{\pi(\mathbf{x})}{1-\ \pi\ (\mathbf{x})}\right) = \beta_0 + \mathbf{xB} = \ \beta_0 + \ \beta_1 x_1 + \beta_2 x_2 + \cdots + \beta_p x_p$$

Where $\pi\ (x) = \hat{y}$ is the predicted probability of the event (e.g. injury for model (1)) occurring given **x**, **x** is the (1 x *p*) vector of predictors, β_0 is a constant term (intercept), and **B** is a (*p* x 1) vector of coefficient terms.

The four response variables used for these analyses each has a binary outcome. To assess injury, whether any physical injury occurred, with 1 = yes and 0 = no, was used. To investigate emotional reactions, whether any emotional reaction occurred as a result of the incident, 1 = yes and 0 = no, was used. For anger and fear as specific emotional reactions, whether anger or fear occurred, 1 = yes and 0 = no, was used.

The logistic regressions were fitted using the 'glm' function in R. There is a choice of link function which can be used with binary logistic regression models, with R choosing the logit link function by default. The logit link function was used for this analysis because the coefficients from logit models can be interpreted as odds ratios (or probabilities). Odds ratios are computed by taking the exponential of the beta coefficients found in R by exp(coef). Therefore, for the binary logistic regression in this chapter, the β coefficients are exponentiated and reported as odds ratios (OR).

Each predictor variable used in Models 1-4 have been operationalised in the CV Dataset to relate to various factors used to explain harm in Section 2.4 of the Literature Review. Or have been operationalised to relate to various factors used to distinguish between domestic violence and violence by other perpetrators in Sections 2.2 and 2.3 of the Literature Review. The crime reports are used as the unit of analysis in the CV dataset which record the various harms experienced by a victim of a specific event of violence. Many of the variables used in the analysis relate to the victim (for example, sex of the victim, socio-economic classification of the victim) and some relate to the event specifically (sex of the perpetrator, offence type, whether the event is repeated). This means that the units of analysis for the regression models are both the victim and the specific criminal event. Some victims may have multiple, separate

criminal events included in the regressions, though this is uncommon (see analyses of multiple and different perpetrators in Section 4.6.2).

In social sciences, it is common to use regressions analysis to characterise the nature or degree of relationship between specific response variables and multiple predictors (Azen and Budescu, 2003). Therefore, the intention of the binary regression models is not to find the model which best predicts injury or emotional reaction, but to assess the association of victim-perpetrator relationship on the amount of harm experienced by a victim of violent crime when compared to other factors relating to the type of violence and the victim. This will help to determine the effect that victim-perpetrator has on harm, when other possible characteristics of the violence is accounted for, and to assess whether victim-perpetrator relationship is a stronger predictor than other characteristics. In this case, it is important to determine the relative importance of the predictors on the various response variables (Budescu, 1993). Therefore, the aim of the models is to confirm a specific theory e.g., that victim-perpetrator relationship is an important predictor for harm.

To confirm the above theory, the importance of each predictor in each regression model will need to be determined. Predictor importance is concerned with ordering the predictors by their importance once the model has been selected (Azen and Traxel, 2009). The relative importance of a predictor variable can change depending on the subset of predictor variables included in the model. Azen and Traxel (2009) advocate for the use of dominance analysis for binary logistic regression to determine the importance of predictors in specific models. Standardised regression coefficients are not a good measure of predictor importance because they are model dependent and is not necessarily "preserved in all subset models" (*Ibid*: 320).

Instead, dominance analysis is used for Models 1-4 to answer the question of whether victim-perpetrator relationship is the most important predictor of harm (response variables). Dominance analysis was developed for use on linear regressions and an in-depth explanation of the mathematics behind this approach can be found in Budescu (1993). In summary, a predictor variable is said to be most important (dominant) only if this predictor betters the other in all possible subset models. As mentioned above, Azen and Traxel (2009) demonstrated that dominance analysis can also be used on binary logistic regression. However, measures of logistic regression model fit which serve as R^2 analogues are needed to extend this method for use on binary logistic regressions. This analysis uses the McFadden R^2. This meets the criteria for defining appropriate R^2 analogues (Van den Burg & Lewis, 1988; Liao & McGee, 2003)

of; boundedness, linear invariance, monotonicity and intuitive interpretability (these are explained fully in Azen and Traxel, 2009). The results of McFadden R^2 also closely mirrors R^2 (linear regression) both conceptually and mathematically (Menard, 2000; Azen and Traxel, 2009).

Therefore, this chapter will consist of Models 1-4, each being followed by a dominance analysis to determine the predictors relative importance. This will determine which aspects of the victim and the crime are important in determining the harms experienced and will inform the subsequent analysis in following chapters.

6.2.1 Missing Data

The CV dataset combines data from multiple (financial) years of the CSEW across more than 1200 variables. This means that missing data is likely. For this analysis, ten variables were identified as key dimensions of harm, or as key predictors of harm (see Table 6.1.2). Therefore, the missing data within these variables, rather than the CV Dataset as a whole, is what is of concern. For this analysis, all other variables, other than the nine response variables and predictors, were removed from the dataset.

The four response variables were used for this analysis are injury, emotional reactions, anger and fear experienced by the victim. For the model using injury (1), only offences which can result in injury will be used. This excludes threats, which is almost half of the offences recorded in the CV Dataset. Therefore, this model (1) would have a smaller number of cases used than the other models in this Chapter. The subset of data used to analyse injury contained 10993 cases. Of which, 6317 recorded experiencing and injury and 4676 did not. When a complete case analysis was used, this meant there was 9099 valid cases with no missing data across the nine variables needed for the regressions, a loss of 1894 cases. Most of these missing cases were from the socio-economic classification variable, which resulted in 1399 cases of missing data. Sex of the perpetrator also often has missing data, especially when the perpetrator is a stranger to the victim. This variable has 589 missing cases in the subset used for Model 1.

For the remaining models, the important variable for consideration is the emotional reaction variable. This model is key for Model 2 as it is the response variable. However, it is also important for Model 3 and 4 which use anger and fear as the response variables. This is because anger and fear are only recorded when the victim first records ‘yes’ to the emotional reaction variable. First, for Model 2, there were 22,825 cases which recorded whether an

emotional reaction occurred. There were 708 cases of missing data in this variable. For this subset of data, there were 2088 cases missing for socio-economic classification of the victim, 357 missing for sex of the perpetrator and 1018 were missing because of the injury variable. This resulted in there being 19,322 cases that were complete. This means a loss of 3,503 cases.

For Models 3 and 4, the data used had to include crime reports that recorded 'yes' to emotional reaction. The crime reports would not get to the follow-up question to record whether anger or fear occurred, if the emotional reaction variable recorded 'no'. This gives a dataset of 19,580 crime reports with at least one emotional reaction recorded, this means that anger or fear would be recorded as 'yes' or 'no'. Of these crime reports, 16,625 are complete cases and have no missing data in the predictor variables. As with the other data subsets, many of the missing values could be found in the socio-economic classification variable (1,766), the sex of the perpetrator variable (257) and the injury variable (889). Overall, this resulted in a loss of 2,955 cases.

Table 6.2.1 Table Summarizing the Missing Data in the Data used for Models 1-4

Model and Response Variable	Number of Cases	Number of Cases with Missing Data	Number of Valid Cases	% Missing
1 Injury	10993	1894	9099	17.2%
2 Emotional Reactions	22825	3503	19322	15.3%
3 Anger	19580	2955	16625	15.1%
4 Fear	19580	2955	16625	15.1%

6.2.2 Justifying the Predictor Variable Choices

A series of predictor variables relating to the characteristics discussed above were included in the various regression models (see Table 6.1.2). The response variables for the regressions were the two main indicators of harm included in the CV dataset. These variables are; whether a visible physical injury occurred because of the violent event (*injury1*) and whether the victim experienced an emotional reaction as a result of the violent event (*emotreac*). Both are coded so that yes = 1 and no = 0. Emotional reactions are needed to account for the harms of offences like threats or attempted assault, where there is no possibility for physical injury.

Two additional response variables will be investigated using binary logistic regression. These are anger (*whemota*) and fear (*whemotb*). These two variables are sub-categories of the *emotreac* variable. These two specific emotional reactions have been selected to investigate

how reactions might differ across the variables discussed above. Fear and intimidation are often referred to as a method of control and coercion in coercive control literature (Myhill, 2015; Stark 2007). So, this has been identified as one of the key indicators of a coercive impact – this is just one element of coercive control that can be identified within the CSEW and CV dataset. Ignatans and Pease (2019) discuss that anger and fear are opposing emotional reactions which are caused by differing perceptions of what has happened to the victim. They are related to the "fight vs. fight" response to negative events (Ignatans and Pease, 2019 and Roach, Cartwright and Pease, 2020). Therefore, both anger and fear were chosen out of the many emotional reactions in the CSEW, to compare responses by different groups of victims. Both emotional reaction variables are coded with yes = 1 and no = 0.

The review of the literature identified which variables would be included as possible predictor variables. Most importantly for the research questions of this thesis, victim-perpetrator relationship was included. In the CV dataset, the relationship between the victim and the perpetrator is included in three binary variables: *perpdomestic, perpacquaintance* and *perpstranger*. This allows for more than one yes/1 response to be coded for multiple relationships in the cases that were committed by more than one perpetrator. However, for the purposes of the regressions, the three binary variables were recoded using the following rule: The *relationship* variable is derived to include the closest relationship to the victim in the cases of multiple perpetrators of different relationships. For example, in the case of multiple perpetrators with both acquaintance and stranger, acquaintance is recorded as the victim-perpetrator relationship. But, if there were domestic and acquaintance perpetrators for the same event, this was coded as domestic. This variable is coded with stranger = 1, acquaintance = 2 and domestic =3. Relationship as a three-level categorical variable allows for the individual effect of each relationship in the regression with stranger as the reference category, but also allows for the overall importance of relationship to be investigated. This will answer the research question of whether domestic violence causes more harm for victims than violence by strangers and acquaintances. It will also help to determine whether relationship has a significant effect on harms when the repetitious nature of domestic violence, victim SES, sex of the victim and sex of the perpetrator are all accounted for.

The sex of the respondent (*sex*) and sex of the perpetrator (*ofsex*) are important and are considered as a key dimension of violence that differs depending on the type of violence. These are included as predictors in the regressions on harm to establish the effect on the harm the sex of the victim, sex of the perpetrator and the interaction between the two may have. This will

also be included with relationship to investigate whether the influence relationship has on the harm variables goes beyond the impact of sex of the perpetrator and sex of the victim. Sex of the victim is coded so that male = 1 and female = 2. Sex of the perpetrator is coded with male = 1, female = 2 and both sexes = 3. The category of 'both sexes' refers to crime reports that record an event with multiple perpetrators and they are both male and female. Therefore, an event with multiple perpetrators who were all males would be recorded as 'male' in the sex of the perpetrator variable. This variable for sex of the perpetrator was chosen because the variable which recorded whether the perpetrator was male or female (with no category for both sexes) had a large amount of missing data. Therefore, to include as many complete responses as possible, *ofsex* was chosen instead.

Whether the crime report relates to a single incident or a series of incidents (*pincid*) was included in all five models. This variable was included in the regressions as it was established through the literature to be a key dimension of domestic violence. This has been found to be significantly different for victims of domestic perpetrators and acquaintance perpetrators, which is often series, compared to stranger violence which is more often single. Whether the crime report is repeated is coded with 1 = series and 2 = single. The number of repeated offences is considered in more detail in Chapter 7.

Offence type (*offence*) is used to examine whether the seriousness of the offence impacts the emotional harm experienced by victims of violent crime. The severity of a violent offence is often considered in relation to both the offence type and the harms it results in. The type of violent offence is coded using the answers to multiple questions in the survey, including whether physical force was used, whether an injury occurred and whether there was a sexual motive to the offence. This is discussed more in the outline below. This variable was included in most of the regression analyses to examine the effect of the type of the offence on the resulting emotional harm. However, this variable was excluded from Model 1 because of collinearity (explained in Section 6.2.3). Offence type was also recoded to combine the physical sexual violence offence types into a single category of violence labelled 'All Physical Sexual Violence'. This included rape, serious wounding with a sexual motive, other wounding with a sexual motive, attempted rape and indecent assault. The reason for this is that there are few crime reports categorised as sexual offences (also shown in Table 6.2.2). Despite this, the category of physical sexual violence still has significantly fewer crime reports than other violent offence types. This means that the standard errors for some categories of offence type are high, and as a result, the estimates may be less significant (see Model 2 in Table 6.4.1).

The NS-SEC five category system of socio-economic class (*Rnssec5*) and ONS harmonised tenure type (*tenharm*) were included as predictors to indicate the socio-economic position of the victim. NS-SEC five category system of socio-economic class is based on the victim's current or last occupation. This variable has 5 categories of socio-economic class, including never worked/ long term unemployed. These two variables will be used to assess the impact of socio-economic class on the harms experienced by victims of violent crime. Any cases which were labelled as 'unclassified' were recoded to be missing for the purpose of the regressions.

Table 6.2.2 List Of Predictor Variables Used In Models 1-4 Including Descriptive Statistics For Each Variable And Variable Label In The Changing Violence Dataset

Variable	Levels	Frequency of Crime Reports	Percentage of Crime Reports
Did You Have Any Emotional Reactions After Incident? (*Emotreac*)	Yes	19580	85.8
	No	3245	14.2
Were You Bruised, Scratched, Cut or Injured In Any Way (*Injury1*)	Yes	6317	57.5
	No	4676	42.5
Which Reactions Did You Have: Anger (*Whemota*)	No Anger	9086	46.4
	Anger	10494	53.6
Which Reactions Did You Have: Fear (*Whemotb*)	No Fear	12764	65.2
	Fear	6816	34.8
Victim-Perpetrator Relationship (*Relationship*)	Stranger	10165	44.3
	Acquaintance	9423	41.1
	Domestic	3357	14.6
Sex Of The Respondent (*Sex*)	Male	12129	51.5
	Female	11418	48.5
Sex Of The Perpetrator(S) (*Ofsex*)	Male	17484	77.8
	Female	3281	14.6
	Both Sexes	1714	7.6
Whether The Violent Event Is Repeated (*Pincid*)	Series	5942	25.2
	Single	17605	74.8
	Owners	11982	51.2

ONS Harmonised Tenure Type (*Tenharm*)	Social Rented Sector	5568	23.8
	Private Rented Sector	5850	25.0
The Ns-Sec Five Category System Of Socio-Economic Class (*Rnssec5*)	Higher Managerial, Administrative And Professional Occupations	7768	36.3
	Intermediate Occupations	2268	10.6
	Small Employers And Own Account Workers	1928	9.0
	Lower Supervisory And Technical Occupations	2150	10.1
	Semi-Routine And Routine Occupations	6334	29.6
	Never Worked And Long-Term Unemployed	929	4.3

As this thesis is concerned with the differences in violent crime when categorised by victim-perpetrator relationship, some key predictors were needed. For this reason, a 'theory-led approach to model specification' has been adopted, using the approach from Towers (2013). This chapter is designed to test the impact of victim-perpetrator relationship on different harm variables (dependent variables). Therefore, victim-perpetrator relationship was included in all models irrespective of whether it is significantly associated with the dependent variable over and above the effects of the other predictor variables. To answer the research questions of the thesis, sex of the victim and whether the crime report was single, or series were all retained in all models. Backwards stepwise regression was used to determine if any of the other predictors could be dropped but for Models 1-4 all the predictors were kept.

6.2.3 Injury as the Response Variable (1)

The first model (1) was fitted with injury as the response variable. Models 2 – 4 includes all response and predictor variables discussed in Section 6.2.2. But, for Model 1 offence was excluded from the predictor variables. This is because there is a strong definitional relationship between offence and injury (Table 6.2.3). The offence variable is coded from free text by specially trained coders once the survey responses are returned to the survey office.

The selected offence coding relies on responses to multiple questions within the survey, which includes injury and whether force was used for violent offences. The offence coding system was developed for the 1982 British Crime Survey and was designed to closely match

the method of classifying incidents by the police (Technical Report, 2017). The definition of the offences is closely related to whether an injury occurred. For example, assaults are divided into three subgroups which depend on severity of injury. These are serious wounding, other wounding, and common assault. The guidelines for the coders to decide which subgroup to code for are:

1. Serious wounding must involve a wound where the skin is broken, or a broken bone occurs. The injury needs immediate medical attention, and the offender must have intended to do serious bodily harm. The coding here relies on the type of injury (broken bones/teeth/loss of consciousness/cuts that required medical attention, or a cut caused by a weapon (e.g., a knife).
2. Other wounding is defined if the above occurs unintentionally or if minor injuries occur. Minor injuries include cuts (not severe force), severe bruising, chipped teeth, bruising or scratches which required medical attention.
3. Common assault is coded when the victim is punched, kicked, pushed, spat at, or had a drink thrown over them but there was no injury or a negligible injury. Minor bruising or black eye counts as negligible injury. Medical attention is not needed. Any incident where the victim experienced no, or minor injury is common assault even if a weapon (such as a knife) is used.

Assaults with a sexual motive are coded separately and are classified using a different process. The offences are coded as one of the three assault classifications above if there is no indication of a sexual motive. Threats are coded when there is no force used and therefore no injury present. If there was a threat incident, but force was used then this is coded as one of the assault codes above or one of the sexual offence codes. This depends on the type of force.

Therefore, when offences are included as a predictor variable there is a high correlation between offence and injury. This is an issue here because there is deterministic dependence between the two variables. The offence is determined by what injury is experienced (as well as type of force). This is shown in the table below:

Table 6.2.3 Final Offence Code by Whether the Violence Resulted in Injury

	Were you bruised, scratched, cut or injured in any way		Total
	Yes	No	

Final offence code (after ONS checking) (*Offence*)	Serious wounding	773	3	776
		99.6%	0.4%	100.0%
	Other wounding	2244	2	2246
		99.9%	0.1%	100.0%
	Common assault	3033	3877	6910
		43.9%	56.1%	100.0%
	Attempted assault	14	481	495
		2.8%	97.2%	100.0%
	Rape	110	34	144
		76.4%	23.6%	100.0%
	Serious wounding with sexual motive	10	0	10
		100.0%	0.0%	100.0%
	Other wounding with sexual motive	81	0	81
		100.0%	0.0%	100.0%
	Attempted rape	35	36	71
		49.3%	50.7%	100.0%
	Indecent assault	17	243	260
		6.5%	93.5%	100.0%
	Threat to kill/assault	0	7831	7831
		0.0%	100.0%	100.0%
	Sexual threat	0	144	144
		0.0%	100.0%	100.0%
	Other threat or intimidation	0	3368	3368
		0.0%	100.0%	100.0%
	Threats against others, made to the respondent	0	167	167
		0.0%	100.0%	100.0%
Total		6317	16186	22503
		28.1%	71.9%	100.0%

This table shows the conceptual relationship between offence and injury (collinearity). The green cells show cases where there is no injury by definition and the yellow rows show cases where injury is needed by definition. There is a small number of miscoding in the data, where no injury is recorded for serious wounding and other wounding, but this is uncommon (3 and 2 cases over 11 sweeps of data in the CV dataset). Overall, this table shows that serious wounding, other wounding, serious wounding with a sexual motive and other wounding with a sexual motive are defined by an injury occurring (as well as medical attention being accessed by the victim). Attempted assault does not usually involve physical contact or injury. Injury never occurs with threats. Therefore, this justifies the decision to exclude offence code when

fitting regression models for injury as there is clear collinearity between the two variables. However, offence will still be included as a predictor for all other models.

6.3 Model (1): Is Victim-Perpetrator Relationship an Important Predictor of Injury?

Injury has been posited in the Literature Review chapter as an important operationalisation of the concept of harm from violent crimes (Grey, 2011; Shapland and Hall, 2007). Many criminological conceptualisations of harm include injury as either the only factor of harm considered or as part of a complex definition of victim harm which includes multiple other components (Ruback et al. 1984; Shapland and Hall, 2007). When assessing the implications of violent crime by different perpetrators domestic violence is often considered as more injurious (Dobash and Dobash, 2004) due to the frequency of the violence and the gender dimensions often associated with violence by domestic perpetrators.

Therefore, a binary logistic regression model was used to understand the effects of victim-perpetrator relationship on the likelihood of injury from violent crime. The results of the logistic regression can be found in the table below (Table 6.3.1). As with the exploratory analysis of the injury variables (Chapter 5), the regressions were applied to a subset of the CV dataset which excluded threats offences. Threats were excluded from the analysis of injury because there is no possibility of an injury occurring as no physical act is recorded. The CSEW does not ask victims of violent threats if an injury occurred (and subsequently is not recorded in the CV dataset).

As well as including individual predictors of injury, some interaction terms were included. These interactions are important in relation to the gendered dimensions of violent crime discussed in Walby and Towers (2017). The interaction between the sex of the victim/the sex of the perpetrator and sex of the victim/victim-perpetrator relationship are used to examine the added effect of the gendered interactions, as well as their individual effects.

The reference categories for each individual predictor variable can be found in the table as 'ref. cat'. The intercept is the result of a crime report which is in all reference categories (i.e. male victim, male perpetrator, stranger perpetrator, single event violence, home owner, of a higher managerial profession).

Table 6.3.1 Logistic Regression Results for Model 1 with Whether an Injury Occurred as the Response Variable

	Odds Ratio (exp(β))	β	SE	Sig.	Odds of Injury compared to ref cat.

(Intercept)	.890	-.116	.053	-		
Whether the Event is Repeated (*Pincid*)						
Series	.762	-.272	.054	<.001	***	24% decrease in odds compared to ref cat..
Single (ref cat.)		-	-	-		
Sex of Victim (*Sex*)						
Female	.666	-.406	.079	<.001	***	35% decrease in odds compared to ref cat.
Male (ref cat.)		-	-	-		
Sex of the Perpetrator (*Ofsex*)						
Female	.794	-.230	.120	<.05	.	21% decrease in odds compared to ref cat.
Both sexes	.989	-.011	.124	.929		
Male (ref cat.)		-	-	-		
ONS Harmonised Tenure Type (*Tenharm*)						
Social rented sector	1.318	.276	.057	<.001	***	32% increase in odds compared to ref cat.
Private rented sector	1.182	.167	.053	.001	**	
Owners	-	-	-	-		
Socio-Economic Classification (*Rnssec5*)						
Intermediate occupations	1.338	.292	.076	<.001	***	34% increase in odds compared to ref cat.
Small employers and own account workers	1.331	.286	.084	<.001	***	33% increase in odds compared to ref cat.
Lower supervisory and technical occupations	1.261	.232	.076	.002	**	26% increase in odds compared to ref cat.
Semi-routine and routine occupations	1.492	.400	.057	<.001	***	49% increase in odds compared to ref cat.
Never worked and long-term unemployed	1.755	.563	.109	<.001	***	76% increase in odds compared to ref cat.
Higher managerial, administrative and professional occupations (ref. cat)		-	-	-		
Victim-Perpetrator Relationship (*Relationship*)						
Acquaintance	1.171	.158	.062	<.01	*	17% increase in odds compared to ref cat.
Domestic	1.722	.544	.124	<.001	***	72% increase in odds compared to ref cat.

Stranger (ref cat.)		-	-	-		
Interaction Terms						
Female Victim: Female Perpetrator	1.656	.504	.145	<.001	***	66% increase in odds compared to ref cat
Female Victim: Perpetrators of Both Sexes	1.319	.277	.191	0.148		-
Female Victim: Acquaintance Perpetrator	1.349	.299	.103	0.003	**	35% increase in odds compared to ref cat.
Female Victim: Domestic Perpetrator	1.638	.494	.151	0.001	**	64% increase in odds compared to ref cat.

Conventional Significance codes in R: '***'0.001 '**'0.01 '*' 0.05 '.' 0.1

Hosmer-Lemeshow Test: $X^2 = 11.477, P = 0.176$

N = 9099

Table 6.3.2 Probabilities of Injury Using Interaction Terms (and ref. cat for all other variables)

Sex Of The Victim/Sex Of The Perpetrator	**Victim-perpetrator Relationship**		
	Stranger	Acquaintance	Domestic
Male Victim/ Male Perpetrator	0.47	0.51	0.61
Male Victim /Female Perpetrator	0.41	0.45	0.55
Female Victim/ Male Perpetrator	0.37	0.48	0.63
Female Victim /Female Perpetrator	0.44	0.55	0.69

The results in Table 6.3.1 shows that all predictors included in the model were significant. Whether the event was repeated showed that series (repeated) crime reports had odds of injury that were 24% lower than single event violence (in all other reference categories) (P = <.001). Sex of the victim showed that female victims had 35% higher odds of injury than male victims (P=<.001). When the perpetrator was female, the odds of injury decreased by 21% (P=<.05).

Two variables were used to relate to the Socio-Economic Status (SES) of the victim. Tenure type showed that those in the social rented sector had 32% higher odds of injury than homeowners (P=<.001). Socio-economic classification of the victim showed that the odds of injury increase as the classification decreased. For example, crime reports for victims who had never worked had 76% higher odds than higher managerial workers (P=<.001), but crime

reports for victims in intermediate occupations had 36% increase in odds of injury compared to higher managerial workers (P=<.001).

Victim-perpetrator relationship was also significant (P=<.001). Crime reports with acquaintance perpetrators had 17% higher odds of injury than crime reports with stranger perpetrators (in all other reference categories). Crime reports with domestic perpetrators had 72% increase in odds of injury compared to crime reports with stranger perpetrators.

Table 6.3.2 uses the coefficients for the interaction terms to produce probabilities of injury occurring for each subgroup. The probabilities are calculated at the reference level for all other explanatory variables in the model. This showed that domestic crime reports had the highest probabilities of injury for every combination of sex of the victim/sex of the perpetrator. The highest odds of injury were for domestic crime reports with female victims and female perpetrators (0.69). This was followed by female victims of domestic, male perpetrators (0.63). For domestic perpetrators, the lowest probability of injury was for male victims of female perpetrator (0.55). The lowest probability of injury occurring was for male perpetrated, stranger violence against female victims (0.37), followed by male victims of stranger, female perpetrators (0.41).

6.3.1 Is Victim-Perpetrator Relationship the Most Important Predictor of Injury?

To understand the significance of each individual predictor when a model includes multiple predictors, the contribution of each predictor can be used. The Model produces coefficients which primarily tests the null hypothesis that the coefficient is zero, but they also indicate the nature of the relationship with the response variable. Deviance tests indicate the contribution to the model fit of each variable.

This can be done through an analysis of deviance which investigates the additional contribution of each variable as they are added to the model. However, this is dependent on the order in which the variables are added into the model and could show different results if the predictors are in a different order. A second way to determine this is using dominance analysis. This method uses McFadden R^2 to identify where a variable has a higher contribution than the others. Originally, dominance analysis was developed for use with linear regressions (Budescu, 1993). But it has also been used with binary logistic regression (Azen and Traxel, 2009). A variable is said to dominate when it has a higher contribution than all other predictors in all other subset models (Azen and Traxel, 2009). This is demonstrated in the dominance analysis

matrix table (Table 6.3.2) with a '1'. Where there is '0' the variable does not dominate and where there is '0.5' dominance could not be established.

Table 6.3.3 Dominance Analysis Matrix for Model (1)

	Single or Series Crime Report	Sex of The Victim	Sex of The Perpetrator	ONS Harmonised Tenure Type	Socio-Economic Classification	Victim Perpetrator Relationship
Single or Series Crime Report		0.5	0.5	0.5	0	0
Sex of The Victim	0.5		1	0	0	0
Sex of The Perpetrator	0.5	0		0	0	0
ONS Harmonised Tenure Type	0.5	1	1		0	0
Socio-Economic Classification	1	1	1	1		0
Victim Perpetrator Relationship	1	1	1	1	1	

The table above (6.3.3) shows that victim-perpetrator relationship was dominant over every other predictor variable in the Model 1. This means that out of this group of predictors, victim-perpetrator relationship is the most important predictor of whether an injury occurred.

The dominance analysis for the other predictors showed that whether the crime report is single, or series could not be determined as dominant over sex of the victim, sex of the perpetrator and tenure type. Whether the crime report is single, or series was not dominant over socio-economic classification or relationship. Sex of the perpetrator is not dominant over any variable in the Model 1.

The two variables chosen to explore the victim's social class were ONS harmonised tenure type and socio-economic classification. These two variables were dominant over whether the crime report was single or series, sex of the victim and sex of the perpetrator.

This is also demonstrated in the graph below (Figure 6.3.1) which plots the average contributions of each predictor to the change in McFadden R^2. The graph also demonstrates the importance of the victim-perpetrator relationship variable in relation to the other predictor variables in the logistic regression. Overall, relationship seems to be the most important predictor of injury in the CV dataset. Sex of the perpetrator and sex of the victim contributed the least in predicting injury.

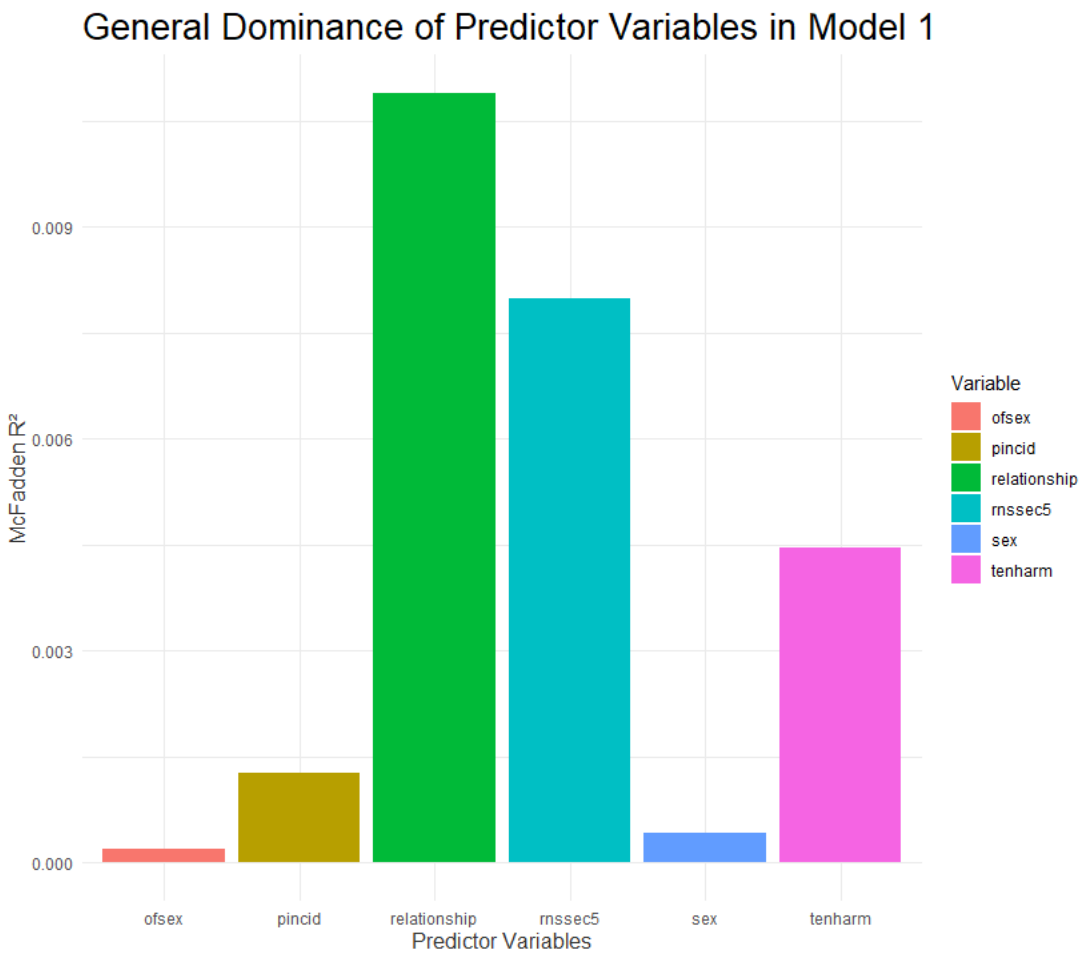

Figure 6.3.1 Graph showing the contributions of each predictor variable in Model (1) using Dominance Analysis

6.3.2 Summary of Model 1

Overall, the investigation into injury revealed that victim-perpetrator relationship is the most significant predictor of injury occurring from violence out of the chosen predictors for the model. Victim-perpetrator relationship has a larger effect on the odds of injury in the CV dataset than sex of the perpetrator, sex of the victim, victim socio-economic status (measured through ONS harmonised tenure type and the five categories of socio-economic classification). Model 1 revealed that victim-perpetrator relationship is especially significant when the relationship is domestic. Victims of violence by a domestic relation have double the odds of victims of violence by strangers to experience injury. Victims of violence by acquaintances also had higher odds than victims of strangers to experience injury, but this is to a lesser extent than violence by domestic relations. Violence committed by perpetrators known to the victim was more injurious than violence committed by people unknown to the victim. Sex of the victim and sex of the perpetrator were also significant.

Dominance analysis was used to investigate whether victim-perpetrator relationship was as important when its contribution to the model was considered separately, rather than additionally (as with the analysis of deviance table). The use of dominance analysis techniques confirmed that victim-perpetrator relationship has the most important effect than the chosen predictors for this analysis on whether violence results in injury. Victim-perpetrator relationship dominates over all the other predictor variables chosen for Model 1. Dominance analysis also showed that sex of the victim and sex of the perpetrator were relatively unimportant individual predictors of injury, when compared to the other predictors included in the models.

Overall, violence by a domestic relation is more injurious than violence perpetrated by acquaintances or strangers. Victim-perpetrator relationship is a more important predictor of injury than whether the violence is repeated, the victim's socio-economic classification, tenure type, sex of the victim and sex of the perpetrator.

6.4 Is Victim-Perpetrator Relationship an Important Predictor of Emotional Reaction?

A logistic regression model was used to assess whether victim-perpetrator relationship affects whether a victim experiences any emotional reaction from a violent incident. This response variable is 1 if the victims experience at least one emotional reaction. Similarly, to Model 1, multiple possible predictors were included in the model to assess the effect of victim-perpetrator relationship when other factors are accounted for. This will determine whether the victim's relationship to the perpetrator has a significant, important effect on whether an emotional reaction is recorded when other predictors are controlled for.

Model 2 is shown in Table 6.4.1. This model included an interaction term between sex of the victim and sex of the perpetrator and an interaction between sex of the victim and victim-perpetrator relationship.

Table 6.4.1 Regression Results for Model 2 Using Whether an Emotional Reaction Occurred as the Response Variable

	Odds Ratio (exp(β))	β	SE	Sig.		Odds of Emotional Reaction compared to ref cat.
(Intercept)	.831	.112	.185	-		
Whether the Event is Injurious (*Injury1*)						
Injury	1.341	.294	.07	<.001	***	34% increase in odds compared to ref cat.

No injury (ref cat)	-	-	-	-	-	
Whether the Event is Repeated (*Pincid*)						
Series	.917	-.086	.051	.08	.	9% decrease in odds compared to ref cat.
Single (ref cat.)	-	-	-	-		
Offence Type (*Offence*)						
Other wounding	.546	-.605	.184	.001	**	45% decrease in odds compared to ref cat.
Common assault	.303	-1.196	.175	<.001	***	70% decrease in odds compared to ref cat.
Attempted assault	.526	-.643	.228	.004	**	47% decrease in odds compared to ref cat.
Physical sexual violence	1.768	.570	.342	.096	.	77% increase in odds compared to ref cat.
Threat to kill/assault	.524	-.646	.184	<.001	***	48% decrease in odds compared to cat.
Sexual threat	.796	-.228	.412	.581		20% decrease in odds compared to ref cat.
Other threat or intimidation	.622	-.476	.191	.013	*	38% decrease in odds compared to ref cat.
Threats against others	.335	-1.095	.288	<.001	***	67% decrease in odds compared to ref cat.
Serious Wounding (ref cat.)	-	-	-	-	-	-
Sex of Victim (*Sex*)						
Female	1.861	.621	.075	<.001	***	86% increase in odds compared to ref cat.
Male (ref cat.)	-	-	-	-		
Sex of the Perpetrator (*Ofsex*)						
Female	.845	-.169	.115	.143		
Both sexes	1.285	.251	.112	.02	*	29% increase in odds compared to ref cat.
Male (ref cat.)	-	-	-	-		
ONS Harmonised Tenure Type (*Tenharm*)						
Social rented sector	1.298	.261	.061	<.001	***	30% increase in odds compared to ref cat.
Private rented sector	1.059	.058	.053	.276		
Owners	-	-	-	-		
Socio-Economic Classification (*Rnssec5*)						

Intermediate occupations	.858	-.154	.072	.033	*	14% decrease in odds compared to ref cat.
Small employers and own account workers	1.105	.100	.078	.199		
Lower supervisory and technical occupations	.936	-.066	.073	.365		
Semi-routine and routine occupations	1.10	.092	.057	.105		
Never worked and long-term unemployed	.929	-.073	.119	.538		
Higher managerial, administrative and professional occupations (ref. cat)	-	-	-	-		
Victim-Perpetrator Relationship (*Relationship*)						
Acquaintance	1.035	.0345	.056	.540		
Domestic	1.630	.489	.137	<.001	***	63% increase in odds compared to ref cat.
Stranger (ref cat.)	-	-	-	-		
Interaction Terms						
Female Victim: Female Perpetrator	1.066	.064	.143	.656		
Female Victim: Perpetrators of Both Sexes	1.058	.056	.183	.758		
Female Victim: Acquaintance Perpetrator	.962	-.038	.097	.694		
Female Victim: Domestic Perpetrator	1.264	.235	.175	.179		

Conventional Significance codes in R: '***'0.001 '**'0.01 '*' 0.05 '.' 0.1

Hosmer-Lemeshow Test: $X^2 = 14.756$, $P = 0.064$

N = 19322

Table 6.4.2 Probabilities Of Emotional Reaction Using Interaction Terms (and ref. cat for all other variables)

Sex Of The Victim/Sex Of The Perpetrator	**Victim-perpetrator Relationship**		
	Stranger	Acquaintance	Domestic
Male Victim/ Male Perpetrator	0.53	0.54	0.86
Male Victim /Female Perpetrator	0.49	0.49	0.61
Female Victim/ Male Perpetrator	0.68	0.7	0.81

Female Victim /Female Perpetrator	0.77	0.79	0.87

The individual predictors in Model 2 were all significant, however the interaction terms did not show much significance. When an injury occurred, there was a significant increase in the odds of an emotional reaction being recorded when compared to crime reports with no injury (P=<.001), in all other reference categories.

The offence type in the main effects uses serious wounding as the reference category (which is one of the more serious violent offences recorded in the CV dataset). Therefore, other wounding, common assault and attempted assault all had significant decreases in odds of emotional reaction when compared to serious wounding. As did all of the threat offences. The exception to this is physical sexual violence (which includes serious wounding with a sexual motive, other wounding with a sexual motive, rape, attempted rape and indecent assault). Physical sexual violence shows a 77% increase in the odds of an emotional reaction occurring than serious wounding (P = 0.09), for crime reports in all other reference categories.

The socio-economic classification variable showed a significant decrease in odds of emotional reactions occurring (by 14%) for intermediate occupations when compared to the reference category, which is higher managerial, administrative and professional occupations (P = .03). The tenure type variable showed a 30% increase in odds of emotional reactions occurring for social renters than homeowners (P= <.001).

The interaction terms in the model produced coefficients which were used to convert to probabilities, this makes the interpretation of the interactions easier. The probabilities are calculated at the reference level for all other explanatory variables in the model. This showed that the highest probability of an emotional reaction occurring were for female victim /female perpetrator/domestic perpetrator (0.87), followed by male victim/male perpetrator/domestic perpetrator (0.86). Most categories for domestic relationship had higher probabilities of emotional reaction than for other victim-perpetrator relationships. When the victim and the perpetrator was both female there were higher probabilities for emotional reaction in all three relationship categories, followed by female victim and male perpetrator.

6.4.2 Is Victim-Perpetrator Relationship the Most Important Predictor of Emotional Harm (2)?

Dominance analysis was used to investigate the individual contribution of each predictor variable. As for Model 1, dominance analysis will help to establish if there are any variables within Model 2 which completely dominate the other variables. This was used to establish the impact of victim-relationship on emotional reaction of victims of violent crime and whether there are predictors which have a larger impact than relationship.

Table 6.4.3 Dominance Analysis Matrix for Model (2)

	Whether the Crime Report Resulted in Injury	Single or Series Crime Report	Offence Type	Sex of The Victim	Sex of The Perpetrator	ONS Harmonised Tenure Type	Socio-Economic Classification	Victim-Perpetrator Relationship
Whether the Crime Report Resulted In Injury	0.5	1	0	0	0.5	0.5	0.5	0
Single or Series Crime Report	0	0.5	0	0	0	0	0	0
Offence Type	1	1	0.5	0.5	1	1	1	1
Sex of The Victim	1	1	0.5	0.5	1	1	1	1
Sex of The Perpetrator	0.5	1	0	0	0.5	0.5	0.5	0
ONS Harmonised Tenure Type	0.5	1	0	0	0.5	0.5	1	0
Socio-Economic Classification	0.5	1	0	0	0.5	0	0.5	0
Victim-Perpetrator Relationship	1	1	0	0	1	1	1	0.5

The dominance analysis matrix shows that there are no variables which completely dominate the other in Model 2 (Table 6.4.3). However, both offence and sex dominate all other variables except for each other (where dominance cannot be determined there is a 0.5). This confirms, along with the analysis of deviance table, that sex of the victim and offence type are the most important predictors for emotional reaction. Relationship is dominant over all other variables in the regression, except for offence and sex. Whether the crime report is single, or

series does not dominate against any other predictor variable in Model 2. The dominance analysis results are displayed in Figure 6.4.1 (below).

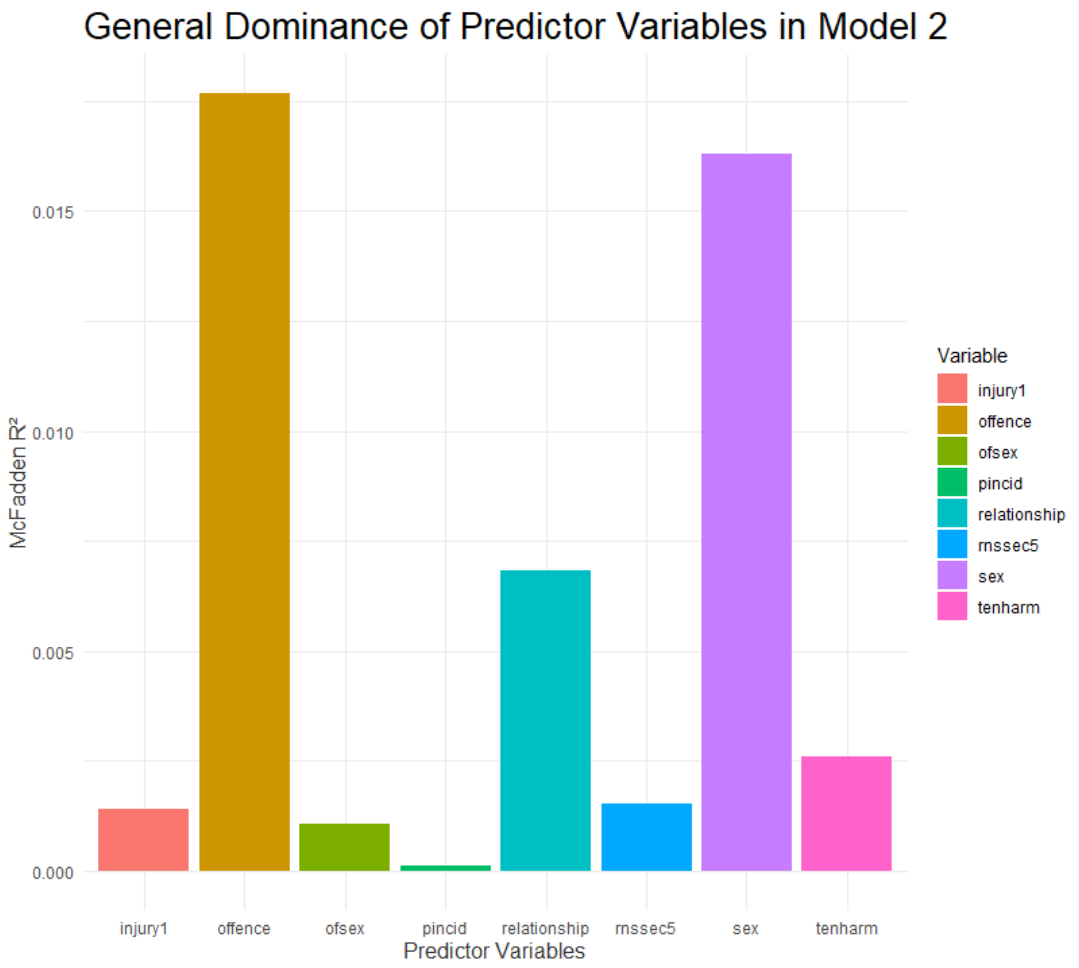

Figure 6.4.1 Graph showing the contributions of each predictor variable in Model 2 using Dominance Analysis

As shown in the graph and dominance analysis matrix, the most important predictors of victims experiencing an emotional reaction are offence type and sex of the victim. These two variables were more important predictors of emotional reactions in the CV dataset than victim-perpetrator relationship. However, victim-perpetrator relationship is also evident as an important predictor variable, though less so than sex of the victim and offence type. Whether the crime report is single, or series was shown to be the least important predictor for this model.

6.4.2 Summary of Model 2

Overall, Model 2 shows the significance of sex of the victim in predicting emotional reactions in crime reports on violent crime. This revealed that female victims had much higher odds than

male victims to record an emotional reaction from a violent offence. Sex of the perpetrator was also significant, though to a lesser extent. Violence by a domestic relation was very significant and had much higher odds for emotional reactions than violence by strangers. There was no significant effect on emotional reaction when acquaintance violence was considered with stranger violence as the reference category.

For emotional reactions, the variables chosen to indicate socio-economic class (tenure type and socio-economic classification) were not very significant in predicting emotional reactions from violent crime in the CV dataset. Whether the crime report involve single, or series event violence was not very significant in predicting emotional reactions from violent crime. Finally, adding interaction terms to account for the gendered aspects of violence were not significant in predicting emotional reactions from violent crime.

Dominance analysis was used to assess each variable's separate individual contribution to the model. This confirmed the importance of sex of the victim, offence type and victim-perpetrator relationship in predicting emotional reactions in the CV Dataset. Dominance analysis showed that although no one variable has complete dominance over the rest for Model 2, sex of the victim and offence type have almost equal effects on emotional reaction. Victim-perpetrator relationship is not the most important predictor of emotional reactions in the CV dataset, but it is identified as a key predictor, especially when the relationship between the victim and perpetrator is domestic.

6.5 Is Victim-Perpetrator Relationship an Important Predictor of Anger (3)?

A binary logistic regression model was used to further investigate the emotional harms of victims by assessing two specific responses to violent victimisation (Models 3 and 4). The first is Anger (3) and the second will be Fear (4). Model 3 was fitted on Anger, using similar predictor variables as the previous regression models in this chapter. Anger is identified in some literature as a positive, external emotional reaction (Iganski and Lagou, 2015). This is a healthy response to have to violent victimisation as it directs the feelings towards the person who perpetrated the violence against the victim. This is seen as a healthy response when compared to internalising the negative responses to the victimisation. Therefore, anger was chosen as an example of a specific emotional response to compare for different types of violent crime.

As with the previous two models, interactions terms were added for sex of the victim and sex of the perpetrator and for sex of the victim-perpetrator relationship. The results of the regression Model 3 can be found in Table 6.5.1 below.

Table 6.5.1 Regression Results for Model 3 Using Anger as the Response Variable

	Odds Ratio (exp(β))	β	SE	Sig.		Odds of Anger compared to ref cat.
(Intercept)	1.246	.220	.106	-		-
Whether the Event is Injurious (*Injury1*)						
Injury	1.107	.102	.057	.075	.	
No injury (ref cat)	-	-	-	-	-	
Whether the Event is Repeated (*Pincid*)						
Series	1.083	.079	.037	.034	*	10% increase in odds compared to ref cat.
Single (ref cat.)	-	-	-	-		
Offence Type (*Offence*)						
Other wounding	1.003	.003	.097	.973		
Common assault	.756	-.280	.094	.003	**	24% decrease in odds compared to ref cat.
Attempted assault	.784	-.243	.144	.092	.	22% decrease in odds compared to ref cat.
Physical sexual violence	1.290	.255	.136	.062	.	30% increase in odds compared to ref cat.
Threat to kill/assault	.757	-.278	.104	.008	**	24% decrease in odds compared to ref cat
Sexual threat	.833	-.183	.224	.416		
Other threat or intimidation	.654	-.425	.109	<.001	***	35% decrease in odds compared to ref cat.
Threats against others	.949	-.052	.216	.809		
Serious wounding (ref cat)	-	-	-	-		
Sex of Victim (*Sex*)						
Female	.848	-.165	.054	.002	**	15% decrease in odds compared to ref cat.
Male (ref cat.)	-	-	-	-		
Sex of the Perpetrator (*Ofsex*)						
Female	.736	-.307	.102	.003	**	26% decrease in odds compared to ref cat.

Both sexes	1.394	.332	.089	<.001	***	40% increase in odds compared to ref cat.
Male (ref cat.)	-	-	-	-		
ONS Harmonised Tenure Type (*Tenharm)*						
Social rented sector	1.071	.069	.042	.099		
Private rented sector	.999	-.001	.040	.972		
				-		
Socio-Economic Classification (*Rnssec5*)						
Intermediate occupations	1.087	.083	.055	.132		
Small employers and own account workers	1.294	.258	.059	<.001	***	29% increase in odds compared to ref cat.
Lower supervisory and technical occupations	1.136	.128	.058	.027	*	14% increase in odds compared to ref cat.
Semi-routine and routine occupations	1.161	.150	.041	<.001	***	16% increase in odds compared to ref cat.
Never worked and long-term unemployed	1.111	.105	.082	.202		
Higher managerial, administrative and professional occupations (ref. cat)	-	-	-	-		
Victim-Perpetrator Relationship (*Relationship*)						
Acquaintance	1.081	.078	.048	.106		
Domestic	1.119	.113	.107	.291		
Stranger (ref cat.)	-	-	-	-		
Interaction Terms						
Female Victim: Female Perpetrator	1.309	.269	.116	.020	*	31% increase in odds compared to ref cat.
Female Victim: Perpetrators of Both Sexes	.899	-.106	.121	.380		
Female Victim: Acquaintance Perpetrator	1.103	.098	.071	.165		
Female Victim: Domestic Perpetrator	1.082	.079	.121	.514		

Conventional Significance codes in R: '***'0.001 '**'0.01 '*' 0.05 '.' 0.1

Hosmer-Lemeshow Test: $X^2 = 6.477$, $P = 0.594$

N = 16625

Table 6.5.2 Probabilities of Anger Using Interaction Terms (and ref. cat for all other variables)

Sex of The Victim/Sex Of The Perpetrator	**Victim-perpetrator Relationship**		
	Stranger	Acquaintance	Domestic
Male Victim/ Male Perpetrator	0.55	0.57	0.58
Male Victim /Female Perpetrator	0.48	0.49	0.51
Female Victim/ Male Perpetrator	0.51	0.56	0.56
Female Victim /Female Perpetrator	0.51	0.55	0.56

Model 3 showed that whether the violence was repeated, and offence type were significant predictors for anger. Crime reports that were repeated showed odds of anger than were 10% higher than crime reports for single event violence. For offence type, crime reports which recorded physical sexual violence had 30% higher odds than serious wounding (ref cat) of recording anger (P = .06). Common assault showed a decrease in odds of anger by 24% (P=.003), attempted assault showed a decrease of 22% (P=.09), threat to kill showed a decrease of 24% (P=.008) and other threat showed a decrease in odds of anger by 35% (P=<.001) when compared to serious wounding as the reference category.

The results for Model 3 also show that victim-perpetrator relationship is not significant in predicting anger, neither is the interaction term showing the interactions between sex of the victim and victim perpetrator relationship. Table 6.5.2 used the coefficients for the interaction terms, sex of the victim and sex of the perpetrator and victim-perpetrator relationship to compute the probabilities for these subgroups. The probabilities are calculated at the reference level for all other explanatory variables in the model. This showed that there were little variations in the probabilities of anger across victim-perpetrator relationship groups. Though, male victim /female perpetrator showed the lowest probabilities of anger for all relationship categories, and male victim/ male perpetrator showed the highest.

6.5.2 Is Victim-Perpetrator Relationship the Most Important Predictor of Anger (3)?

The table below (Table 6.5.3) shows where a variable in the row dominates over the variable in the column. This is shown where there is a ‘1’. Using dominance analysis, it was

found that whether the crime report resulted in injury did not dominate over any of the predictors in Model 3 ('0.5' indicates that dominance could not be determined). This is also the case for whether the crime report was single or series, sex of the victim and ONS harmonised tenure type. Sex of the perpetrator was found to dominate over whether the crime report was single or series and sex of the victim. Victim-perpetrator relationship was also a more important predictor of anger than whether the crime report was single or series and sex of the victim. Offence type dominated over all other predictors in Model 3, suggesting it is the strongest predictor of anger.

Table 6.5.3 Dominance Analysis Matrix Table for Model 3

	Whether the crime report resulted in injury	Single or series crime report	Offence type	Sex of the victim	Sex of the perpetrator	Ons harmonised tenure type	Socio-economic classification	Victim-perpetrator relationship
Whether the crime report resulted in injury	0.5	0.5	0	0.5	0.5	0.5	0.5	0.5
Single or series crime report	0.5	0.5	0	0.5	0	0.5	0	0
Offence type	1	1	0.5	1	1	1	1	1
Sex of the victim	0.5	0.5	0	0.5	0	0.5	0	0
Sex of the perpetrator	0.5	1	0	1	0.5	0.5	0.5	0.5
Ons harmonised tenure type	0.5	0.5	0	0.5	0.5	0.5	0	0.5
Socio-economic classification	0.5	1	0	1	0.5	1	0.5	1
Victim-perpetrator relationship	0.5	1	0	1	0.5	0.5	0	0.5

The results of the dominance analysis above are used to plot a graph based on the contribution to McFadden R^2 of each variable (Figure 6.5.1). In Model 3, offence type was found to be the most important predictor of anger, followed by socio-economic classification (*rnssec5*) and whether the crime report resulted in injury (*injury1*). Victim-perpetrator relationship (*relationship*) was not a very important predictor of anger.

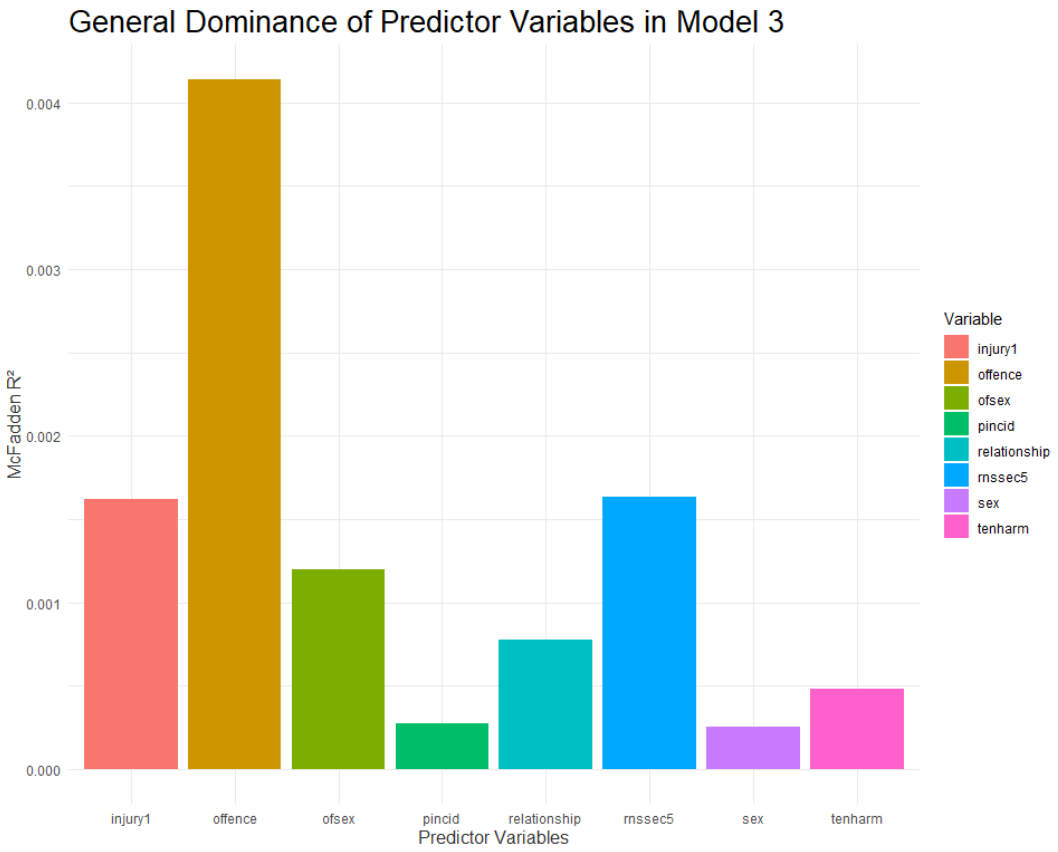

Figure 6.4.1 Graph showing the contributions of each predictor variable in Model (3) using Dominance Analysis

6.5.3 Summary of Model 3

This analysis of anger in the CV dataset revealed that victim-perpetrator relationship is not a very important predictor of anger. The predictors included in the regression were all significant to varying extents. Specifically, offence type, socio-economic classification of the victim and whether an injury occurred were particularly significant. Victim-perpetrator relationship was more significant for crime reports for victims of violence by acquaintances than violence by domestic relations, with the reference category being stranger. Victim-perpetrator relationship was not significant in Model 3 when interaction terms were added.

The dominance analysis method showed that offence type dominated all other predictors in Model 3 to be the most important predictor of whether anger was recorded. Socio-economic classification of the victim was also confirmed as an important predictor, as was whether injury occurred. Victim-perpetrator relationship was not shown to be the most important predictor when looking at anger, but the dominance analysis technique shows that it

is more important than sex of the victim, ONS harmonised tenure type and whether the crime report was repeated.

6.6 Is Victim-Perpetrator Relationship an Important Predictor of Fear (4)?

As with the previous models, another model was fitted using the same predictors and interaction terms but using Fear as a response variable. This can be found in Model 4 and results in Table 6.6.1 below.

Table 6.6.1 Results of Regression for Model 4 using Fear as the Response Variable

	Odds Ratio (exp(β))	β	SE	Sig.		Odds of fear compared to ref cat.
(Intercept)	.404	-.906	.114	<.001		
Whether the Event is Injurious (*Injury1*)						
Injury	.993	-.007	.067	.917		-
No injury (ref cat)	-	-	-	-		-
Whether the Event is Repeated (*Pincid*)						
Series	1.087	.084	.040	.035	*	10% increase in odds compared to ref cat.
Single (ref cat.)	-	-	-	-		
Offence Type (*Offence*)						
Other wounding	.658	-.419	.100	<.001	***	34% decrease in odds compared to ref cat.
Common assault	.458	-.782	.098	<.001	***	54% decrease in odds compared to ref cat.
Attempted assault	.944	-.058	.153	.704		-
Physical sexual violence	.991	-.009	.136	.949		-
Threat to kill/assault	.949	-.053	.111	.635		-
Sexual threat	1.560	.445	.232	.055	.	56% increase in odds compared to ref cat.
Other threat or intimidation	.911	-.093	.116	.422		-
Threats against others	.794	-.231	.225	.304		-
Serious wounding (ref cat)	-	-	-	-		-
Sex of Victim (*Sex)*						
Female	2.023	.705	.058	<.001	***	100% increase in odds compared to ref cat
Male (ref cat.)	-	-	-	-		
Sex of the Perpetrator (*Ofsex*)						

Female	.834	-.181	.122	.136		-
Both sexes	1.250	.223	.094	.018	*	25% increase in odds compared to ref cat.
Male (ref cat.)	-	-	-	-		
ONS Harmonised Tenure Type (*Tenharm*)						
Social rented sector	1.107	.102	.045	.022	*	11% increase in odds compared to ref cat.
Private rented sector	1.084	.081	.044	.064	.	-
Owners (ref. cat)	-	-	-	-		-
Socio-Economic Classification (*Rnssec5*)						
Intermediate occupations	1.055	.053	.059	.367		-
Small employers and own account workers	1.109	.103	.064	.107		-
Lower supervisory and technical occupations	.965	-.035	.064	.580		-
Semi-routine and routine occupations	1.062	.060	.044	.173		-
Never worked and long-term unemployed	1.251	.224	.086	.009	**	25% increase in odds compared to ref cat.
Higher managerial, administrative and professional occupations (ref. cat)	-	-	-	-		-
Victim-Perpetrator Relationship (*Relationship*)						
Acquaintance	.998	-.002	.055	.972		-
Domestic	1.270	.239	.121	.049	*	27% increase in odds compared to ref cat.
Stranger (ref cat.)	-	-	-	-		-
Interaction Terms						
Female Victim: Female Perpetrator	.814	-.206	.135	.127		-
Female Victim: Perpetrators of Both Sexes	.680	-.386	.126	.002	**	32% decrease in odds compared to ref cat.
Female Victim: Acquaintance Perpetrator	1.071	.069	.077	.370		-
Female Victim: Domestic Perpetrator	1.398	.335	.135	.013	*	40% increase in odds compared to ref cat

Conventional Significance codes in R: '***'0.001 '**'0.01 '*' 0.05 '.' 0.1

Hosmer-Lemeshow Test: $X^2 = 13.344, P = 0.101$

N = 16625

Table 6.6.2 Probabilities of Fear Using Interaction Terms (and ref. cat for all other variables)

Sex of The Victim/Sex Of The Perpetrator	**Victim-perpetrator Relationship**		
	Stranger	Acquaintance	Domestic
Male Victim/ Male Perpetrator	0.29	0.29	0.35
Male Victim /Female Perpetrator	0.25	0.25	0.3
Female Victim/ Male Perpetrator	0.45	0.47	0.59
Female Victim /Female Perpetrator	0.36	0.37	0.5

The results of Model 4 shows that unlike for anger, injury is not a significant predictor of fear. Fear of violence is therefore not significantly associated with whether the victim is physically injured. For offence type, serious wounding is used as the reference category. Most of the other offence types do not show a significant difference to serious wounding when predicting fear. But, other wounding and common assault were less likely to predict fear than serious wounding. This was very significant (P = <.001). Interestingly, sexual threats made to the respondent had odds that were 50% higher for fear than serious wounding (P = .05).

The social economic classification variable showed that the only category that showed a significant difference in the odds of fear when compared to higher managerial, administrative and professional occupations (reference category) is never worked and long-term unemployed. Crime reports with victims who in the category of never worked and long-term unemployed had a 25% increase in the odds of recording fear (P = .05). Tenure type showed that victims who were in the social rented sector had an 11% increase in the odds of injury compared to homeowners (P = .02).

The probabilities in Table 6.6.2 were used to interpret the various gendered interactions in the model. The probabilities are calculated at the reference level for all other explanatory variables in the model. This showed that the probabilities of fear occurring showed little difference for each sex of the victim/sex of the perpetrator category when the perpetrator was stranger or acquaintance (for example, the probability of fear for male victim/ male perpetrator was 0.29 when the perpetrator was acquaintance and stranger, and for male victim/female perpetrator the probability was 0.25 for acquaintance and stranger). For every sex of the

victim/sex of the perpetrator combination the probability was highest for domestic perpetrators. The highest probability of fear was found for crime reports with female victims/male perpetrators/domestic perpetrator (0.59).

6.6.2 Is Victim-Perpetrator Relationship the Most Important Predictor of Fear (4)?

The predictor variables in Model 4 were also summarised using dominance analysis to assess the importance of each predictor in the model. The results of the dominance analysis can be found in the tables below.

Table 6.6.3 Dominance Analysis Matrix for Model 4 with Fear as Response Variable

	Whether the crime report resulted in injury	Single or series crime report	Offence type	Sex of the victim	Sex of the perpetrator	ONS harmonised tenure type	Socio-economic classification	Victim-perpetrator relationship
Whether the crime report resulted in injury	0.5	0.5	0	0	0.5	0.5	0.5	0
Single or series crime report	0.5	0.5	0	0	0.5	0.5	0.5	0
Offence type	1	1	0.5	0.5	1	1	1	1
Sex of the victim	1	1	0.5	0.5	1	1	1	1
Sex of the perpetrator	0.5	0.5	0	0	0.5	0.5	0.5	0.5
ONS harmonised tenure type	0.5	0.5	0	0	0.5	0.5	0	0
Socio-economic classification	0.5	0.5	0	0	0.5	1	0.5	0
Victim-perpetrator relationship	1	1	0	0	0.5	1	1	0.5

The dominance analysis matrix in the Table 6.6.3 above confirmed that individually offence type, sex of the victim and victim-perpetrator relationship are all important predictors of fear. However, there is no one predictor that completely dominates the others in Model 4. Offence type is more important than whether the crime report resulted in injury, whether the crime report was single or series, sex of the perpetrator, ONS harmonised tenure type, socio-economic classification, and victim perpetrator relationship. Sex of the victim also dominates

over the same variables. It could not be determined which was more important between sex of the victim and offence type. Victim-perpetrator relationship is also an important predictor of fear. This predictor dominates over whether the crime report resulted in injury, whether the crime report was single or series, ONS harmonised tenure type and socio-economic classification.

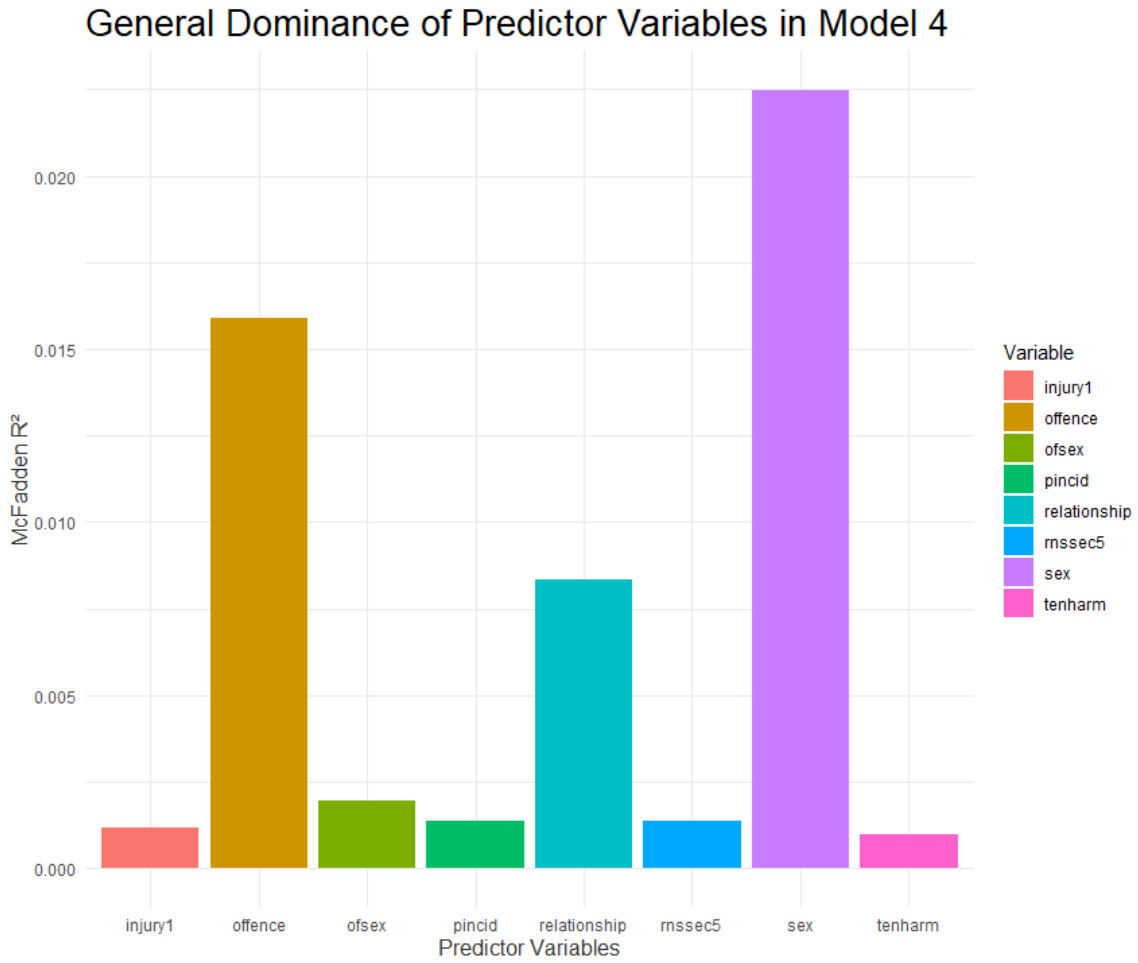

Figure 6.6.1 Graph of Dominance Analysis for Predictors in Model 4 with Fear as Response Variable

Finally, Model 4 was displayed in the graph above (Figure 6.6.1) which confirms that sex of the victim (*sex*) is the most important predictor of fear, followed by offence type (*offence*) and victim-perpetrator relationship (*relationship*). Dominance analysis does not show the importance of injury, sex of the perpetrator, whether the crime report is single or series and socio-economic class in predicting fear. Therefore, although victim-perpetrator relationship could not be determined as the most important predictor of fear in the CV dataset, it was still identified as an important factor.

6.6.3 Summary of Model 4

The analysis of fear revealed that although injury was not a significant predictor, offence type was. Most of the significant offence types (other wounding and common assault) had lower odds than serious wounding to result in fear. However, sexual threats were had much higher odds to evoke fear than serious wounding. Although perhaps expected this evidence is very important. This analysis also identified sex of the victim and sex of the perpetrator as important. Female victims had double the odds to experience fear and female perpetrators had lower odds of evoking fear in crime reports.

Model 4 also revealed the importance of victim-perpetrator relationship when considering fear. According to Model 4, crime reports with violence perpetrated by domestic relations had much higher odds of fear. Adding interactions showed that sex of the victim along with sex of the perpetrator is also significant, with female victims of domestic perpetrators having much higher odds of fear in the CV Dataset. This is key to debates around domestic violence and coercive control.

Dominance analysis identified that sex of the victim was the most important individual variable in the regression model for fear. This is followed by offence type and victim-perpetrator relationship. Therefore, it can be concluded that although victim-perpetrator relationship is not the most important predictor of fear, it still has a significant and important contribution to the likelihood of fear occurring. However, sex of the victim and offence type were found to be more important predictors of fear.

6.7 Summary:

Injury (1):

The investigation into which variables may predict injury in the CV dataset revealed that victim-perpetrator relationship was the most important predictor of injury. Victim perpetrator relationship was more important than whether the violence was repeated, sex of the victim and sex of the perpetrator. For the injury analysis, victim-perpetrator relationship was found to be the most important individual predictor for Model 1. This was demonstrated using dominance analysis. The victim knowing the perpetrator in some way made injury more likely than the victim not knowing the perpetrator. This is especially true when the perpetrator is a domestic relation. Victims of violence by domestic perpetrators had odds of injury that were 72% higher

than for stranger. Victims of acquaintances had odds of injury 17% higher than victims of violence by strangers.

Sex of the victim and sex of the perpetrator were both found be significant predictors of injury when the interaction terms are interpreted. This showed that female victims had a decrease in odds of injury when compared to male victims.

Emotional Reaction (2):

The most important predictors for emotional reactions were sex of the victim and type of offence. Female victims were much more likely to record an emotional response than male victims of violent crime. Sex of the perpetrator was also significant, as was victim-perpetrator relationship, but to a lesser extent.

The dominance analysis for Model 2 found that victim-perpetrator relationship was not as important as sex of the victim or offence type. However, a domestic perpetrator does make the odds of reporting an emotional reaction 63% higher than for victims of stranger violence, although the perpetrator being acquaintance was not significant when compared to stranger.

Overall, a victim has the highest odds of reporting an emotional reaction if they are a victim of serious wounding or physical sexual violence, they are female and victimised by a domestic relation. Emotional reactions are also more likely for people of lower socio-economic class. The interaction terms were not significant for emotional reaction.

Anger (3):

The most important predictor of anger was offence type. The highest odds of anger were for victims of physical sexual violence and serious wounding. Socio-economic classification was also significant predictors for anger. Overall, anger had the highest odds when a victim recorded serious physical violence, that resulted in injury, were of a lower socio-economic classification. For predicting anger, sex of the victim, sex of the perpetrator, ONS harmonised tenure type and whether the violence was repeated were also revealed to be significant predictors of anger. This has important implications for understanding how men and women react to violence, when compared to the results of Model 4 on Fear.

Fear (4):

The most important predictor in the analysis of fear was sex of the victim. This showed that female victims had higher odds of fear than male victims of violence in the CV dataset. Offence

type was also revealed to be an extremely important predictor of fear. There were higher odds of fear for victims of sexual threats and serious wounding. The odds of fear were 56% higher for victims of sexual threats than for victims of serious wounding. Victim-perpetrator relationship was somewhat important in predicting fear. The likelihood of experiencing fear was 30% higher for violence with a domestic perpetrator than violence by strangers. Acquaintance violence was not significant when compared to stranger for this analysis. Overall, the analysis on fear identified sex of the victim, offence type and victim-perpetrator relationship as important predictors. Whether an injury occurred as a result of the offence, sex of the perpetrator, whether the event was repeated. Socio-economic classification and ONS harmonised tenure type were all not important in predicting fear.

Table 6.7.1 Summary Table of the Variables Found to be Important for the Various Models

Model	Relationship	Sex of the Victim	Offence	Single or Series	Sex of the Perpetrator	Tenure Type	Socio-economic Classification	Injury
1 Injury			NA					NA
2 Emotional Reaction								
3 Anger								
4 Fear								

First most important

Second Most important

Third most important

The table above (Table 6.7.1) summarises the most important variables for the various regression analyses. The importance of victim-perpetrator relationship varies depending on the dimension of harm considered. First, it is the most important variable for predicting the likelihood of injury. Crime reports with violence by domestic relations have higher odds of resulting in physical injury on the victim. The two variables which indicate the socio-economic class of the victim (tenure type and socio-economic classification) were also found as important predictors of injury. Victim-perpetrator relationship was also found to be important for emotional reaction and fear, with victims being more likely to record both reactions when the perpetrator is domestic. However, for both fear and emotional reaction, sex of the victim and offence type were more important predictors than victim-perpetrator relationship. For fear, sex of the victim was most important, followed by offence. For emotional reaction, offence type was the most important, followed by sex of the victim.

Anger also showed offence type to be the most important predictor. However, this differed from the other models as sex of the perpetrator and whether an injury occurred were also very important. Whether the crime report is repeated was not found to be an important predictor for any of the models.

6.7.1 Answering the Research Questions:

The primary research question of this thesis is: does violence by domestic relations differ from violence by acquaintances and strangers? This can be answered by investigating the secondary research questions outlined in Section 3.2.1 of Chapter 3. These sub questions operationalise the difference between violence by strangers, acquaintances, and domestic relations by the harmfulness of the violence. This analysis confirmed the judgement from the previous chapter that violence does differ depending on the relationship to the perpetrator. Specifically, in the odds of certain harms occurring from different types of violence (Table 6.7.2). Violence by domestic relations has higher odds of injury and emotional reactions. As well as this violence by domestic relations showed higher odds of fear. This is all when compared to victims of stranger violence (reference category).

However, victim-perpetrator relationship is not always the most significant variable in the analysis (see Models 2 and 3 in Table 6.7.1). Sex of the victim and nature of the offence also matter when harms of violent crime are considered. But it is important to acknowledge that for all models, a domestic victim-perpetrator relationship showed the highest odds of the harm occurring (Table 6.7.2). For anger, domestic and acquaintance had equally high odds of this occurring. For each dimension of harm, the lowest odds of occurring were found for violence perpetrated by strangers, with emotional reaction and fear showing equally lower odds of occurring for stranger and acquaintance, when compared to the odds for violence by domestic relations.

Table 6.7.2 Summary Table Showing Which Type of Victim-Perpetrator Relationship had the Highest and Lowest Odds for Each Harm Dimension Considered.

Predictor Variable (Model)	**Victim-Perpetrator Relationship**			
		Domestic	Acquaintance	Stranger
Injury (1)	*Highest Odds*	✓		
	Lowest Odds			✓
Emotional Reaction (2)	*Highest Odds*	✓		
	Lowest Odds		✓	✓

Anger (3)	*Highest Odds*	✓	✓	
	Lowest Odds			✓
Fear (4)	*Highest Odds*	✓		
	Lowest Odds		✓	✓
NB: Where there are two columns ticked for one row there was no significant difference between the two variables in the regression analysis.				

This analysis also contributed to answering some of the sub-questions of the thesis. First, whether repetitive violence is more harmful than single event violence (Research question 6). Crime reports that involved repeated events of violence had higher odds of experiencing injury, anger and fear than single event violence. But crime reports with series violence had lower odds of recording emotional reaction. This is shown in Table 6.7.3.

Table 6.7.3 Summary Table Showing the Highest and Lowest Odds of Each Dimension of Harm for Single and Series Crime Reports.

Predictor Variable (Model)	**Whether the Crime Report Involved Repeated Violence**		
		Single	Series
Injury (1)	*Highest Odds*		✓
	Lowest Odds	✓	
Emotional Reaction (2)	*Highest Odds*	✓	
	Lowest Odds		✓
Anger (3)	*Highest Odds*		✓
	Lowest Odds	✓	
Fear (4)	*Highest Odds*		✓
	Lowest Odds	✓	

Second, whether violence against women was more harmful than violence against men (Research Question 5). The answer to this question is summarised in Table 6.7.4. This analysis contributed to answering this question by revealing that violence against men had higher odds of injury compared to violence against women in Model 1, though the probabilities in Table 6.3.2 show this is more nuanced. Violence against women had higher odds of resulting in emotional reactions and fear than male victims. But male victims had higher odds of experiencing anger than female victims.

For the perpetrators of violence, male perpetrators had higher odds of perpetrating injurious violence than female perpetrators, and higher odds of victims recording an emotional reactions, anger and fear than victims of violence by female perpetrators. However, multiple

perpetrators where the perpetrators were people of both sexes had higher odds than male and female perpetrators to perpetrate violence that results in emotional reactions and anger. But multiple perpetrators of both sexes were not significant for injury or for fear.

Table 6.7.4 Summary Table Showing the Highest and Lowest Odds of Each Dimension of Harm for Sex of the Victim.

Predictor Variable (Model)	**Sex of the Victim**		
		Female	Male
Injury (1)	*Highest Odds*	-	✓
	Lowest Odds	✓	-
Emotional Reaction (2)	*Highest Odds*	✓	
	Lowest Odds		✓
Anger (3)	*Highest Odds*		✓
	Lowest Odds	✓	
Fear (4)	*Highest Odds*	✓	
	Lowest Odds		✓
NB: Sex of the victim was not significant for injury (Model 1). This means that the odds of injury were the same (not significantly different) for male or female victims.			

The above summaries of the four models presented in this chapter shows the importance of three variables in predicting harm. These variables are victim perpetrator relationship, sex of the victim and type of offence. The importance of each of these variables is demonstrated in Table 6.7.1 above. This concludes that while victim-perpetrator relationship is significant for each model, the importance of sex of the victim and offence type for predicting harm cannot be ignored. There are multiple dimensions of harm (emotional, physical and the level of affect) which are explained by victim-perpetrator relationship, sex of the victim and offence type (specifically whether the violence has a sexual motive) to varying extents. Therefore, these three variables will be important in informing the development of harm scores for different types of violent crime.

7. Building Indices of Harm: The Results

7.1 Introduction

This is the fourth findings chapter of the thesis. The previous findings chapters established the nature of domestic violence (Chapter 4), the harms of domestic violence (Chapter 5), and whether victim-perpetrator relationship was an important predictor of harm (Chapter 6). This revealed that the nature of domestic violence is most commonly; physical, repeated violence by men against women when compared to violence by other perpetrators. The harms of domestic violence showed that domestic violence is more likely to be injurious and cause emotional reactions, which affected the victim 'very much', than violence by other perpetrators. Victim-perpetrator relationship was found to be significant in predicting injury and emotional reactions. Violence by domestic perpetrators had the highest odds of experiencing injury, emotional reactions and fear. This determines that domestic violence does differ from violence by acquaintances and strangers. Though acquaintance violence was also shown to differ to violence by strangers (to a lesser extent).

The previous findings chapters also established that sex of the victim was important in first distinguishing violence by domestic perpetrators (where the victim is most commonly female) from violence by acquaintances (where the victim is equally male or female) and strangers (where the victim most commonly is male). Second, as being a significant predictor of harms. Sex of the victim was significant in predicting injury and for predicting emotional reactions. Female victims had higher odds for emotional reactions, and fear than male victims. But male victims had higher odds of anger and injury.

Research Question (6) asks whether repeated violence is more harmful than single event violence. This was also investigated in Chapters 4-6. This showed that violence by domestic perpetrators was most likely to be repeated violence, violence by acquaintances was often repeated. Whereas violence by strangers is more likely to be single event violence. Single event violence had higher odds of injury compared to repeated violence, when controlling for other variables, but repeated (series) violence had higher odds for emotional reaction, anger and fear. However, whether the event is repeated while significant was not one of the top three significant predictors when harms were considered when compared to victim-perpetrator relationship, sex of the victim, sex of the perpetrator, offence type and socio-economic status of the victim.

This chapter will expand on previous analyses and use binary factor analysis to create multiple indices of harm. First, an index will be constructed to measure overall harm, assuming one factor. Each of the harm variables identified in the data (see Tables 3.5.6 to 3.5.10) will be included as initial indicators of overall harm. The results of the one factor analysis will be used to produce factor scores. These scores will be produced so that each case in the CV dataset is allocated a 'harm score'. This can then be used to calculate the means for subgroups of crime reports. The means will be calculated for crime reports by type of perpetrator (domestic, acquaintance, stranger) and tested for differences using ANOVA. This can be used to answer research question; is violence by domestic perpetrators more harmful than violence by acquaintance or strangers? This will also be calculated for sex of the victim to compare the results of crime reports with female victims with male victims. This will contribute to answering research question; is violence against female victims more harmful than violence against male victims?

A second factor analysis will then be carried out assuming two factors. These two factors will be used to investigate whether it is possible to separately measure emotional harm and physical harm. A similar process as above will produce factor scores where one set of scores will measure emotional harm and the other physical. In this analysis, each case in the CV dataset will be allocated two scores. The means can then be used for different subgroups (by victim-perpetrator relationship and sex of the victim) to compare whether there is a difference when types of harm are analysed separately. This will assess whether domestic violence is both emotionally and physically more harmful than violence by other perpetrators. This will be repeated for sex of the victim to produce means for emotional harm for female and male victims and means for physical harm for male and female victims. This analysis will answer the above two research questions more fully by establishing whether violence by domestic perpetrators is emotionally more harmful than violence by other perpetrators and whether it is also physically more harmful. And, whether violence by female victims is physically and emotionally more harmful than violence by male victims. Therefore, the three original questions (4, 5 and 6) will be answered by answering sub questions listed below:

4. Is domestic more harmful than other (acquaintance and stranger) violence on average?
    a. *Is violence by domestic perpetrators more harmful overall than violence by other perpetrators on average?*
    b. *Is violence by domestic perpetrators more emotionally harmful than violence by other perpetrators on average?*

c. *Is violence by domestic perpetrators more physically harmful than violence by other perpetrators on average?*

5. Is (male) violence against women more harmful than (male) violence against men on average?

   a. Is violence against female victims more harmful overall than violence against male victims on average?

   d. *Is violence against female victims more emotionally harmful than violence against male victims on average?*
   e. *Is violence against female victims more physically harmful than violence against male victims on average?*

6. Is repetitive (series) violent crime more harmful than single violent crimes *on average*?
   a. *Is series violence more harmful overall than single-event violence on average?*
   b. *Is series violence more emotionally harmful than single-event violence on average?*
   c. *Is series violence more physically harmful than single-event violence on average?*

7.1.2 Binary Factor Analysis

Factor analysis works by creating a composite indicator out of multiple single indicators. This is a common approach to larger datasets with large numbers of variables (Bandura, 2006). It is generally easier to interpret the results of a composite indicator than try to identify common trends across many separate indicators (Saltelli, 2007; OECD, 2008). A composite indicator is formed when several individual indicators (variables) are compiled into a single index based on an underlying model (OECD, 2008). Composite indicators usually measure a multidimensional concept that cannot be captured by a single indicator, in this case harm. Factor analysis is a common method for creating composite indicators. The pros and cons of composite indicators can be found in Saisana and Tarantola (2002) and the OECD 'Handbook on Constructing Composite Indicators' (2008). To summarise, the benefits of composite indicators is that they allow complex, multidimensional concepts to be analysed in a way that is useful for informing policy and decision-makers, they are easier to interpret than analysing

the information from several individual indicators (therefore, they facilitate communication with the general public), they reduce the size of the set of indicators without losing the underlying information base and they allow users to compare complex dimensions effectively. The cons of composite indicators relate to the risk of poor construction (and misinterpreted information) and misuse of methods. The misconstruction or misuse of composite indicators can oversimplify conclusions, lead to inappropriate policies and lead to researchers ignoring difficult to measure dimensions.

Factor analysis is a common statistical method used to assess whether survey respondents have similar patterns of responses (Pagès, 2014; Kline, 2014; Lawley and Maxwell, 1962). The assumption of factor analysis is that for a group of observed variables, there are a smaller set of underlying latent variables, referred to as factors. These factors can explain the interrelationships between the observed variables. The idea is that multiple observed variables would have similar patterns of responses because they are all associated with one or more latent variable (Bryant and Yarnold, 1994; Gorsuch, 1983). Therefore, identifying factors allows researchers to investigate concepts that are not easily measured by looking at a few interpretable factors, rather than a larger number of variables (Grace-Martin, 2008). A common use of factor analysis can be found in psychometrics. Generally, concepts within mental health research can be hard to measure in a single variable or from a single survey question. Therefore, several individual questions can be used to measure the concept (e.g. depression) (Fabrigar et al. 1999).

There are two ways to conduct factor analysis. These are exploratory and confirmatory. Confirmatory factor analysis assumes that you enter the analysis with a firm idea about the number of factors that will be encountered, and which variables will load onto each factor. These ideas are based on published findings. The analysis in this thesis has used exploratory factor analysis. Exploratory factor analysis is used to investigate the relationships between variables and does not have a pre-determined number of factors. This analysis assumes one factor for the first analysis and then explores the use of two factors (a three-factor analysis was also conducted but the results were hard to interpret and therefore it was excluded from the analysis). This analysis was used to test the differences in the outcomes of violence when investigating violence perpetrated by strangers, acquaintances, or domestic relations. Usually, exploratory factor analysis is used to compute and interpret factor scores and to build (and test) scales (Fabrigar and Wegener, 2011). The number of factors used in the analysis in this chapter was determined by my own interpretation of the factors (i.e. that it ‘makes sense’ that there are

two distinct factors for emotional and physical harm, but also that one factor can be used to measure overall harm).

This thesis will use binary factor analysis as an exploratory method to produce an index score of harm. A list of 22 binary variables have been identified in the CV dataset which could be used to measure harm (see Table 7.1.1). This is not an exhaustive list of every aspect of harm, but it includes multiple dimensions of physical and emotional harm. These harms are easily comparable across violence by domestic relations, strangers, and acquaintances. However, financial harm, serious mental health harms and elements of coercive control are not included. Financial harm and coercive control are usually specific to violence by domestic relations (Domestic Abuse Act, 2021) and would be difficult to compare across the various types of violent crime included in this analysis.

The variables considered for this analysis are all included in the CV dataset as binary variables where 1 = yes (the victim did experience this type of harm) and 0 = no (they did not experience this type of harm). These variables are listed in the table below (Table 7.1.1). Two of these variables were merged into other variables due to few cases being recorded. An explanation of this can be found in Section 7.2.

Table 7.1.1 List of various harm variables in the CSEW along with the frequency of 'yes' and 'no' responses.

	Harm Variable	**'Yes'**	**'No'**
Emotional Reactions	Anger	10014	11793
	Shock	8512	13295
	Fear	6455	15352
	Depression	2374	19433
	Anxiety	3225	18582
	Loss of confidence	5507	16300
	Difficulty Sleeping	3049	18758
	Crying/tears	3729	18078
	Annoyance	8928	12879
	Other	549	21258
Physical Injuries	Minor Bruising/Black eye	3548	18259
	Severe Bruising	1786	20021
	Scratches	1304	20503
	Cuts	1541	20266
	Broken/fractured Bones	303	21504
	Broken nose	187	21620
	Lost/broken/chipped teeth	190	21617
	Concussion/ loss of consciousness	308	21499
	Facial/Head injury including caused by acid	163	21644
	Other	475	21332

For this thesis, there is a large list of possible individual indicators of harm (table above). The previous chapter (Chapter 6) looked at two of these in more detail using logistic regression analysis (fear and anger in Models 3 and 4). However, to assess all individual indicators of harm in this way would be complicated to interpret. Therefore, a composite indicator would be more informative (OECD, 2008). A composite indicator allows a single overall harm score to be created using all the individual harm variables (see Grace-Martin, 2008). However, classical factor analysis assumes that the observed variables and the latent factors are both continuous (Magidson & Vermunt, 2003; Han & Yang, 2016). Factor analysis uses a measure of association between the continuous variables (the polychoric correlation for continuous, or tetrachoric correlation for binary cases). The factor analysis is then performed on this correlation matrix.

Therefore, the most common type of analysis to use with binary factor analysis is the inferred underlying variable approach. This is a type of factor analysis which is performed on tetrachoric correlations for binary data (or on polychoric correlations for ordinal data). The inferred underlying variable approach assumes that each binary variable relates to an unobserved normally distributed continuous variable. Then, factor analysis can be applied to analyse these inferred correlations. High correlations between the variables shows if the data is appropriate for factor analysis.

The 'psych' package in R was used to conduct the factor analysis on the CV dataset. 'Psych' is a popular package which provide tools for assessing underlying latent structure. It has the functions to do principal component analysis, mediation models and factor analysis.

7.2 A Measure for Overall Harm

The previous chapters outline the decisions of which variables to include in a measure of personal harm. This includes 22 variables with 10 representing emotional reactions and 12 representing physical injuries. Two of the physical injury variables, "chipped teeth" and "facial/head injuries caused by acid, paint etc. being thrown in face", were rare. "Chipped teeth" had 89 positive responses and "facial/head injuries caused by acid, paint etc. being thrown in face" only had 13 positive responses. This resulted in zero correlations with other variables. To combat this, "chipped teeth" was merged into "lost/broken teeth" and "facial/head injuries caused by acid, paint etc. being thrown in face" was merged into "facial/head injuries

with no mention of bruising". This gives a list of 20 possible individual indicators of harm (Table 7.1.1).

The exploratory factor analysis (EFA) was conducted using the 'psych' package in R (Revelle, 2014). As the data is binary, a tetrachoric correlation is constructed rather than the Pearson correlation. This can be specified within the 'fa()' function. The tetrachoric correlation estimates what the correlation would be if measured on a continuous scale. This allows the factor loadings to be estimated for binary data. A first factor analysis (FA1) was conducted assuming one factor, which assumes a single factor would measure harm. A second factor analysis (FA2) was conducted, this time specifying two factors. I used the maximum likelihood method of estimating the factor analysis models. The second analysis is discussed later.

Table 7.2.1 Results for FA1 (overall harm)

Variable	**Factor Loadings**
Minor Bruising	0.17
Severe Bruising	0.52
Scratches	0.35
Cuts	0.37
Broken Bones	0.42
Broken Nose	0.35
Lost/Chipped Teeth	0.37
Concussion	0.50
Facial/Head Injury (including caused by acid)	0.22
Other Injury	0.30
Anger	0.32
Shock	0.46
Fear	0.60
Depression	0.82
Anxiety	0.73
Loss of Confidence	0.69
Difficulty Sleeping	0.83
Crying/Tears	0.72
Annoyance	0.08
Other emotion	-0.08

The factor loadings for FA1 (single factor analysis) vary significantly. The factor is designed to measure an overall concept of 'harm' from the 20 variables chosen to indicate harm. This includes emotional and physical harm into one measure. The factor loadings (Table 7.2.1) are all consistently above 0, except for annoyance and other emotion, and for minor bruising. The factor loadings for the emotional reaction variables from anger to other emotion in the table above are estimated to be similar, except for the two variables previously mentioned (annoyance and other emotion) and anger. This is similar for the physical injury variables.

These variables are estimated to have similar factor loadings (0.3 to 0.5), except for minor bruising and facial/head injuries. This analysis estimates positive factor loadings for most of the emotional reactions (except the two mentioned) as higher than the loadings for physical injuries. We can assume that this one factor model would provide a measure for overall harm. To produce a harm score for overall harm, we can use factor scores which can be computed in R (shown in Section 7.2.1).

Table 7.2.2 Additional Results from FA1 showing the Eigenvalue and Proportion of Variance explained.

	FA1
SS Loadings	4.96
Proportion Variance	0.25

The output given in R also provides "SS loadings". This is shown, alongside the proportion variance, (Table 7.2.2). The SS loadings are the sum of the squared loadings, also referred to as eigenvalues (Kline, 2014). This determines the value of a particular factor in terms of how much variance is explained. Generally, a factor is worth keeping if the eigenvalue is above 1 because this shows that the factor explains more of the variance than a single variable. In this case, the one factor analysis explains as much variance as 4.96 variables. The proportion variance explained by the one factor analysis is 25%, calculated from dividing the SS loadings variable by 20 minus the number of variables

The diagram below shows the variables included in Factor 1 and the size of the loadings estimated ordered by the size of the loadings. This shows that facial/head injury, minor bruising, annoyance and other emotion do not have factor loadings above 0.3. Therefore, they are not included as measuring factor 1 (overall harm) in the graph (shown by ML1). All other

variables are shown in the diagram as being measured by the one factor. As shown in the table, most of the emotional reaction variables load higher than the physical injuries.

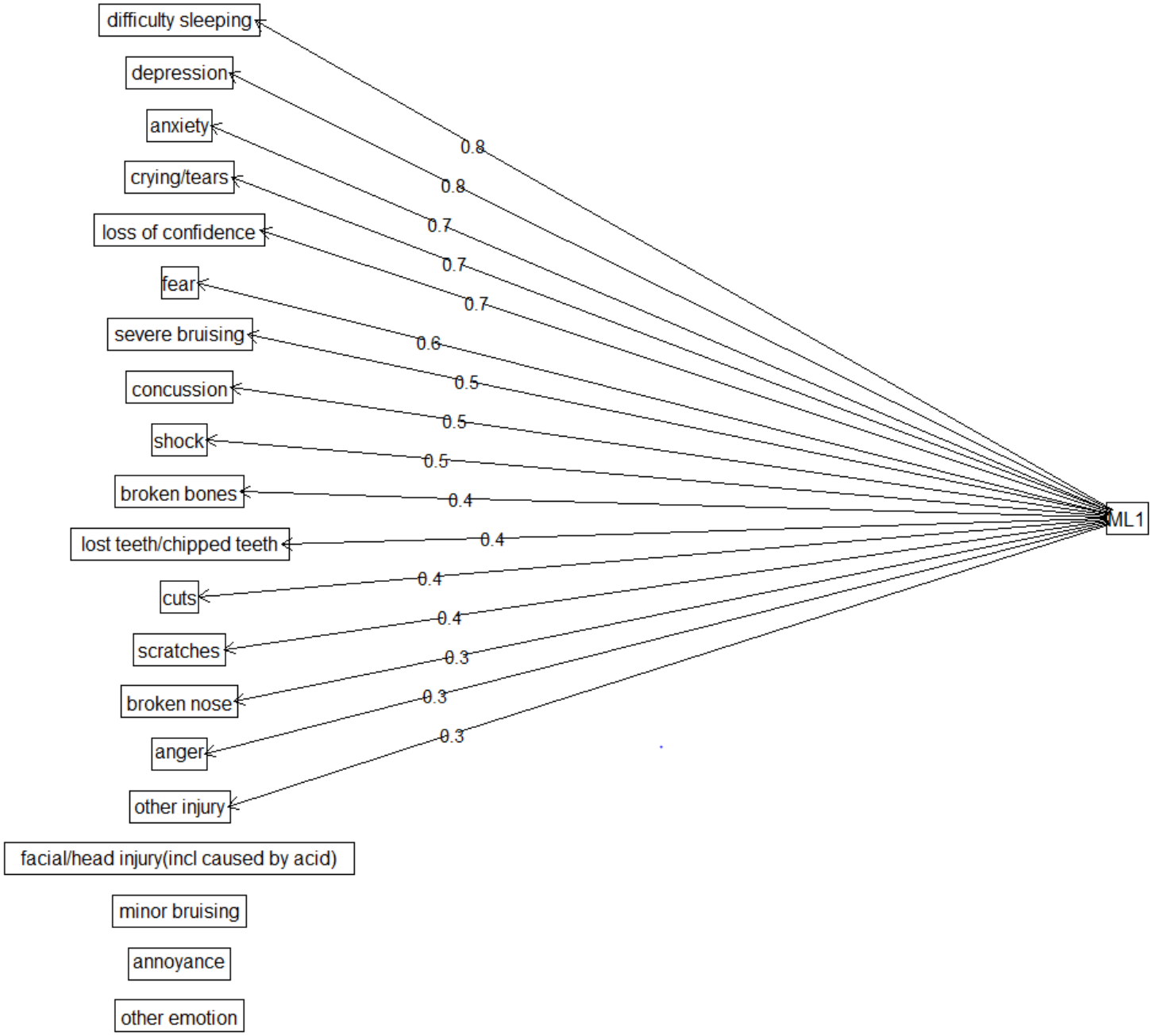

Figure 7.2.1 Diagram showing the Loadings of Each Variable for Factor 'ML1'

Using the threshold of 0.3, and assuming that the single factor creates a measure of overall harm, this suggests that annoyance is not a contributor to harm. According to this factor, minor bruising and facial/head injury including those caused by acid or paint etc. being thrown in face also do not contribute much to the measure of harm.

7.2.1 Creating an Index for Overall Harm

There are two ways of using Exploratory Factor Analysis to create a harm index (Grace-Martin, 2008). Either the factor-based scores or factor scores can be used. Both involve using the factor loadings to create a harm score. The first way to do this is by using factor-based scoring. Factor-based scores are the simpler approach to calculating scores. This involves calculating a linear combination of the indicators which ignores the weights. In this sense, each factor would be equally weighted by scoring a yes response as 1 and a no response as 0. The scores would be calculated by adding up (or averaging) each positive binary item. In this approach, the factor analysis is used to determine which indicators load onto each factor. Then, the indicators for each factor are combined. This method only makes sense when the loadings for the factor are similar and when the factors considered are uncorrelated (see the two-factor analysis in Section 7.3)

The second approach is more appropriate when the factor loadings for each indicator are very different (as with FA1). This approach uses the factor weights to compute scores instead. The weight for each indicator is derived from its factor loading. The factor weights are indicative of the degree of correlation to the factor (OECD, 2008). So, each indicator's contribution to the factor score depends on how high it loads onto the factor. A high loading suggests a strong contribution which would mean a higher factor weight. This way, the index reflects that each item has an unequal association with the factor. The weights for each indicator variables are standardised between -1 and 1. The weights attributed to each indicator can be found below in Table 7.2.3.

To create the factor scores, the variables considered are first scaled to the same mean and standard deviation. The factor loading of each variable is then multiplied by the scaled score and then they are summed to create the overall score for each case (Distefano et al, 2009). This method would retain the relationship between factors in analyses where more than one factor is assumed. The correlations between the factor scores would be the same as the correlations between factors (Gorsuch, 1983). To compute the factor scores, the Thurstone method was used in the 'psych' package. Thurnstone (1935) uses a least squares regression method of computing scores where "The predictor variables are weighted by regression coefficients, which are obtained by multiplying the inverse of the observed variable correlation matrix by the matrix of factor loadings…. And the factor correlation matrix" (Distefano et al, 2009:4).

Table 7.2.3 Factor Weights For Each Variable Produced Using FA1 (Overall Harm)

Variable	Weight
Minor Bruising	0.0307
Severe Bruising	0.1028
Scratches	0.1231
Cuts	0.0650
Broken Bones	0.1957
Broken Nose	0.1882
Lost/Chipped Teeth	0.1820
Concussion	0.2443
Facial/Head Injury (including caused by acid)	0.1478
Other Injury	0.1574
Anger	0.0792
Shock	0.1077
Fear	0.1652
Depression	0.2972
Anxiety	0.2311
Loss of Confidence	0.1927
Difficulty Sleeping	0.2703
Crying/Tears	0.2206
Annoyance	0.0136
Other emotion	-0.050

Table 7.2.4 Factor Scores Produced Using FA1 for the First Six Cases in the Changing Violence Dataset

Example	Factor Scores
1	0.220
2	0.248
3	0.810
4	2.635
5	1.963
6	1.602

As explained above, the factor scores (Table 7.2.4) are created by deriving weights for each binary variable in the analysis (Table 7.2.3). Each item's weight is derived from its factor loading. Which means that each variables contribution to the factor score depends on how strongly it relates to the factor. Or in this case, how strongly it is determined to measure harm. The factor scores are therefore referred to as "an optimally-weighted combination of items" (Grace-Martin, 2008). The weights are standardised to be between -1 and 1. The factor scores are derived for each complete case of the data meaning that each crime report in the CV dataset is given a score based on the number of positive responses to the binary variables. For more detailed explanation of how the scores are computed, see Distefano et al (2009).

Table 7.2.3 shows that most items are weighted around 0.1 to 0.2. Other emotion, annoyance, anger, and minor bruising are all weighted below 0.1. Difficulty sleeping,

depression, concussion, crying/tears, and broken bones are all 0.2 or higher. Table 7.2.4 shows the harm scores for the top 6 cases in the CV dataset. In these examples, we can see that cases 4 to 6 have relatively high harm scores. Cases 1 to 3 have similar harms scores which are much lower.

These scores are computed for every valid crime report in the dataset and will be used to evaluate the results for subsets of crime reports. Specifically, by victim-perpetrator relationship and sex of the victim.

The Cronbach alpha can be used as a reliability measure to test the reliability of the factor (Taber, 2017). The Cronbach alpha for FA1 is 0.66 (Table 7.2.5). The table shows the alpha score (in the column labelled "Alpha Measure When Variable is Dropped" below) for if variables are dropped from FA1. This shows an increase in the alpha when minor bruising or when annoyance is removed from the analysis. This validity measure is usually acceptable when it is above 0.7. Anything less than 0.6 is considered as poor. This analysis gave an alpha of 0.66, which is questionable (Taber, 2017).

Table 7.2.5 Alpha Measure for One Factor Analysis when Each Variable is Removed from the Analysis.

Variable	Alpha Measure when Variable is Dropped
minor bruising	0.67
severe bruising	0.65
scratches	0.65
cuts	0.65
broken bones	0.66
broken nose	0.66
lost teeth/chipped teeth	0.66
concussion	0.66
facial/head injury(incl caused by acid)	0.66
other injury	0.66
anger	0.65
shock	0.64
fear	0.63
depression	0.63
anxiety	0.63
loss of confidence	0.63
difficulty sleeping	0.62
crying/tears	0.62
annoyance	0.68
other emotion	0.66

7.3 Measuring Emotional Harm and Physical Harm Separately

To fully answer the questions; Is violence by domestic perpetrators more harmful than violence by acquaintance or strangers on average? (Research Question 4), Is violence against female victims more harmful than violence against male victims on average? (Research Question 5) and Is repeated violence more harmful than single event violence on average? (Research Question 6) multiple sub questions were suggested (listed in Section 7.1), a two-factor analysis should be conducted to measure emotional harm and physical harm separately. This will assess whether certain subgroups of crime reports and victims (domestic, female) experience more harm and whether this is attributed to emotional harm, physical harm, or both. The results from the two-factor analysis (FA2) can be found in Table 7.3.1 below.

Table 7.3.1 Results from A Factor Analysis Which Assumes Two Factors

Variable	Factor 1 Loadings (Emotional Harm)	Factor 2 Loadings (Physical Harm)
Minor Bruising	-0.07	0.38
Severe Bruising	0.07	0.80
Scratches	-0.01	0.62
Cuts	0.10	0.79
Broken Bones	0.04	0.66
Broken Nose	-0.01	0.62
Lost/Chipped Teeth	-0.05	0.72
Concussion	0.09	0.74
Facial/Head Injury (including caused by acid)	0.01	0.36
Other Injury	0.04	0.44
Anger	0.25	0.12
Shock	0.39	0.15
Fear	0.72	-0.14
Depression	0.80	0.10
Anxiety	0.81	-0.05
Loss of Confidence	0.75	-0.04
Difficulty Sleeping	0.82	0.07
Crying/Tears	0.74	0.03
Annoyance	0.08	-0.01
Other emotion	-0.11	0.06

The two-factor analysis shows that the physical injuries have consistently high loadings for factor 2 (‘ML2’ in diagram 7.3.1), the lowest being for minor bruising. Factor 1 (‘ML1’ in Figure 7.3.1) shows higher loadings for the emotional reaction variables and lower loadings for the injury variables. The exceptions for this are other emotion, annoyance, and anger. All three of which show low loadings for both factors. From this, we can determine that factor 2

measures physical harms of victims of violence and factor 1 measures the emotional harm. This will be used to create two separate harm indices. This will allow for a comparison between violence perpetrated by strangers, acquaintances, and domestic relations for both physical harm and emotional harm. This can then be compared to the overall harm indices which can be computed with the analysis above.

The loadings shown in the table above are also displayed in the diagram below. The 'cutpoint' for the diagram is 0.3. This shows that anger, other emotion and annoyance do not fit into either factor. But, unlike for the one factor analysis, minor bruising and facial/head injury do measure a factor here.

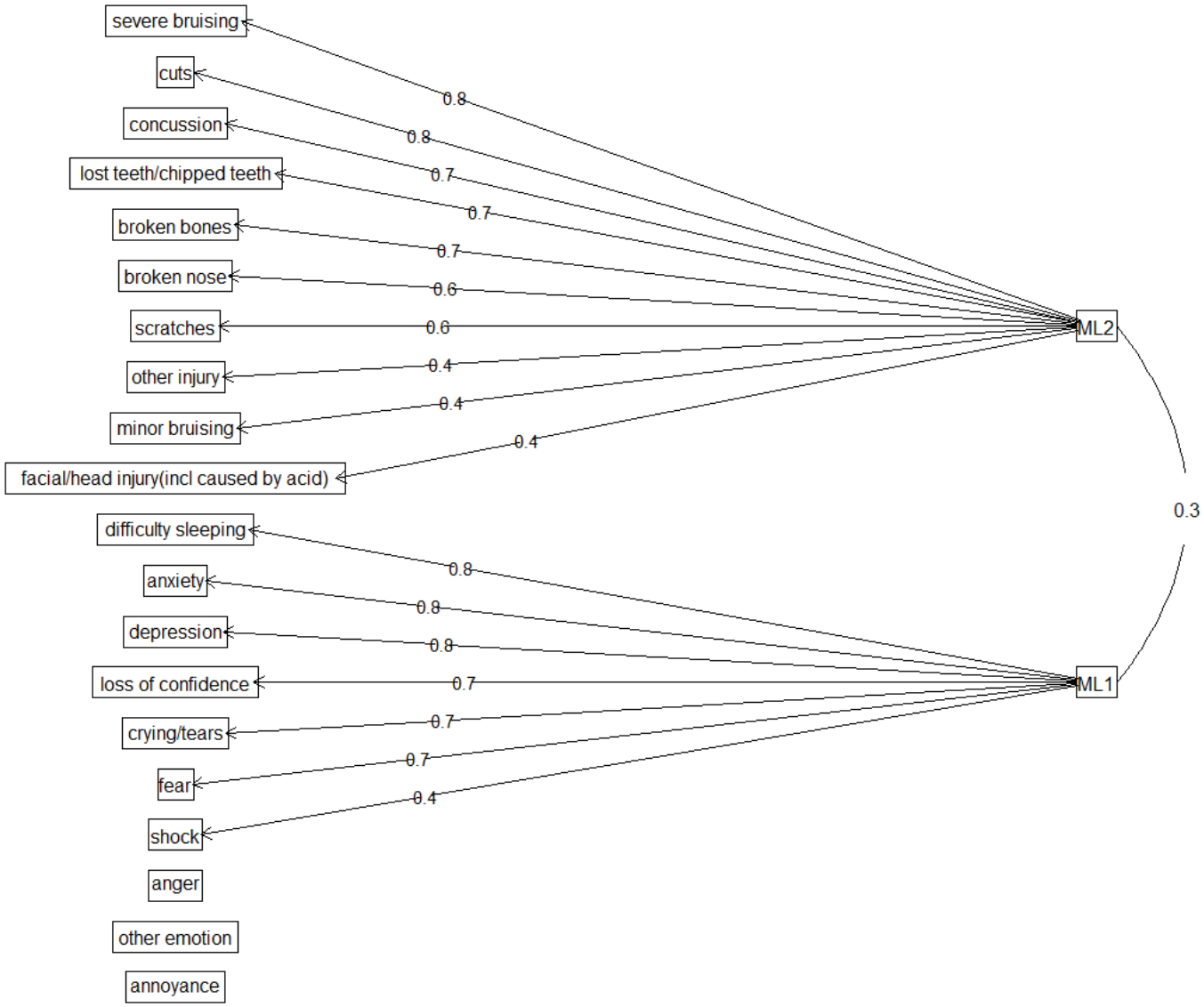

Figure 7.3.1 Diagram showing the Loadings of Each Variable for Two Factors 'ML1' and 'ML2'

The 'psych' package in R gives various methods of rotation for the factors. The rotation method can either allow for correlations between the factors or will treat them as statistically independent. Two popular methods of rotation in R are varimax and oblimin (SAGE Research Methods, 2014). The varimax method is an orthogonal rotation method. It makes the results of the factor analysis more easily interpreted by reducing the number of variables that have high loadings on each factor (Revelle, 2014). Oblimin is an oblique method of rotation that allows for the two factors to be correlated. This is indicated by the two-headed arrow between 'ML1' and 'ML2' in Diagram 7.3.1. This is the default method of rotation in R.

Table 7.3.2 Correlation Matrix to Show the Correlations Between the Two Factors

Factor Correlation Matrix		
	Factor 2 (Physical Harm)	**Factor 1 (Emotional Harm)**
Factor 2 (Physical Harm)	1.00	0.33
Factor 1 (Emotional Harm)	0.33	1.00

The Oblimin rotation was used for FA2. The correlations between the factors (Table 7.3.2 above) were examined to see if the coefficients were higher than 0.32. A number above .32, in this case .33, shows that there is a significant overlap in variance among factors (SAGE Research Methods, 2014). This is indicated by the arrow between the factors in the diagram above. Therefore, these two factors are correlated. This shows that an oblique rotation method is appropriate in this instance.

The SS Loadings (eigenvalues) showed that the first factor explains as much variance as 3.9 variables in the data, and the second explained as much variances as 4.1 variables.

7.3.1 Creating Indices for Physical Harm and Emotional Harm

The two-factor analysis was used to estimate the factor weights, and the factor scores (Tables below). The weights for factor 2 are high for physical injuries and the weights for factor 1 are higher for the emotional reactions. This is reflected in the factor loadings, also.

Table 7.3.3 Factor Weights for Each Variable Produced Using Two Factors

Variable	**Weight for Factor 2 (Physical Harm)**	**Weights for Factor 1 (Emotional Harm)**

Minor Bruising	0.1243	-0.0442
Severe Bruising	0.2965	-0.0133
Scratches	0.2543	0.0069
Cuts	0.3095	-0.0808
Broken Bones	0.3429	0.0458
Broken Nose	0.3639	0.0259
Lost/Chipped Teeth	0.3985	-0.0006
Concussion	0.3789	0.0914
Facial/Head Injury (including caused by acid)	0.2509	0.0327
Other Injury	0.2495	0.0482
Anger	0.0488	0.0565
Shock	0.0601	0.0817
Fear	-0.0831	0.2399
Depression	0.0490	0.2989
Anxiety	-0.0348	0.2898
Loss of Confidence	-0.0199	0.2323
Difficulty Sleeping	0.0310	0.2890
Crying/Tears	-0.0113	0.2440
Annoyance	-0.0140	0.0191
Other emotion	0.0363	-0.0663

Table 7.3.4 Sample of the Factor Scores Produced Using One Factor for the First Six Cases in the Changing Violence Dataset

Example Factor Scores		
	Factor 2	**Factor 1**
1	0	0.255
2	0	0.288
3	0	0.984
4	2.117	2.494
5	0	2.219
6	3.152	0

This produces two scores for each of the cases in the data. One relates to factor one and one set of scores relates to factor 2. Some of the weights are negative which occasionally results in negative factor scores.

7.4 Harm Indices

7.4.1 Harm Index Results for Overall Harm

The factor scores developed in the previous two analyses (FA1 and FA2) were added to each case of the dataset so that there were three additional columns on the CV dataset. The three additional columns were the scores for each of the three indices made for harm. The scores in the first column were the scores for overall harm. An exploratory analysis of the scores showed that the minimum score was -1.32 and the maximum score was 12.8. An analysis of the mean

scores showed that the mean score increases as the number of 'yes (1)' responses to the 20 predictor variables increases. For example, the cases which record five 'yes (1)' responses have a higher mean score than cases which record one to four 'yes (1)' responses. The maximum number of 'yes (1)' responses was 17. Cases with zero 'yes' responses across the 20 variables can be said to experience no harm from the violent event, however these were scored as -1.01. Therefore, 1 was added to each score to force cases of no harm to record a score of 0. This gives a new maximum score of 13.8 and a minimum score of -0.32.

These scores were used to find the mean for each subgroup of interest in that dataset. This thesis is particularly interested in victim-perpetrator relationship. Therefore, the mean scores for violence by domestic relations, acquaintances and strangers can be found in Table 7.5.1. However, previous analysis also showed the importance of sex of the victim in its effect on the types of harm experience by victims. Therefore, the means for male and female victims have also been included. These can be found in Table 7.5.2.

Table 7.4.2 Mean Factors Scores for Overall Harm Disaggregated by Victim-Perpetrator Relationship

Variable and Category	**Mean for FA1 (overall harm)**
Relationship Domestic	1.794
Relationship Acquaintance	1.021
Relationship Stranger	0.723

The mean scores for the overall harm indices indicated that violence by domestic perpetrators in the CV dataset has a score of 1.794. This is compared to acquaintance which is 1.021 and stranger which has a mean score of .723. From Table 7.4.2, it is indicated that violence by domestic perpetrators scores higher on the overall harm indices than violence by strangers and acquaintances. Therefore, it could be said that crime reports on violence perpetrated by domestic relations record more harm on average than crime reports on violence perpetrated by strangers and acquaintances. Violence by acquaintances scored higher on the index than violence by strangers. Therefore, crime reports on violence by strangers score lower on average than crime reports on violence perpetrated by acquaintances. This is investigated further using FA2 and the separate indices for emotional and physical harm. This is discussed below.

Table 7.4.3 Mean Factors Scores for Overall Harm Disaggregated by Sex of the Victim

Variable and Category	Mean for FA1 (overall harm)
Sex Female	1.293
Sex Male	0.732

The analysis in Chapter 6 also emphasised the importance of sex in the victim when determining the odds of experiencing specific types of harm. Sex of the victim was particularly important in analysis of emotional harm, especially for fear (Table 6.7.1 in Chapter 6). Therefore, Table 7.4.3 shows the mean scores for the overall harm index when the victim is male or female. This shows that crime reports with female victims have a higher mean harm score than those with male victims. Female victims had a mean score of 1.293 and males had a mean score of .732.

This analysis for overall harm also involved looking at the means for victim-perpetrator relationship and sex of the victim together. This is shown below in Table 7.4.3. The table shows that when the victim is male and the perpetrator is a stranger, the mean harm score is the lowest (.641). This is followed by crime reports with a male victim and perpetrator who is an acquaintance (mean score of .812). The highest mean score is found when the victim is female, and the perpetrator is domestic (1.977). The second highest is for female victim and acquaintance perpetrator (1.212). The mean for female victims is higher for each relationship type than for male victims, specifically for domestic perpetrators.

Table 7.4.4 Mean Factors Scores for Overall Harm Disaggregated by Sex of the Victim and Victim-perpetrator Relationship

		Victim-Perpetrator Relationship		
		Stranger	**Acquaintance**	**Domestic**
Sex of the Victim	**Male**	0.641	0.812	1.069
	Female	0.872	1.212	1.977

The previous analysis also demonstrated the importance of other gendered dimensions of the violence on harms. The mean scores for sex of the perpetrator were also disaggregated from the scores for overall harm. This was also disaggregated for the interactions between sex of the victim. These results can be found in Tables 7.4.5, 7.4.6 and 7.4.7 below.

Table 7.4.5 Mean Factors Scores for Overall Harm Disaggregated by Sex of Perpetrator

Variable and Category	Mean for Overall Harm

Sex: Female	1.082
Sex: Male	0.982
Sex: Both Sexes	1.113

Table 7.4.6 Mean Factors Scores for Overall Harm Disaggregated by Sex of Perpetrator and Victim-Perpetrator Relationship

		Victim-Perpetrator Relationship		
		Stranger	**Acquaintance**	**Domestic**
Sex of the perpetrator	**Female**	0.770	1.164	1.231
	Male	0.699	0.954	1.945
	Both Sexes	0.905	1.231	1.644

Table 7.4.7 Mean Factors Scores for Overall Harm Disaggregated by Sex of Perpetrator and Sex of the Victim

		Sex of the Victim	
		Female	**Male**
Sex of the perpetrator	**Female**	1.153	0.844
	Male	1.304	0.710
	Both Sexes	1.316	0.888

Table 7.4.5 shows that there were some variations in harm score depending on sex of the perpetrator. The score for victims of multiple perpetrators of different sexes (both sexes) had the highest mean score for overall harm with 1.113. This is closely followed by female perpetrators with a mean of 1.082 and male perpetrators with .982. The variation in scores for sex of the perpetrator are more evident when the interactions between sex of the perpetrator and victim-perpetrator relationship is considered. This is shown in Table 7.4.6.

Table 7.4.6 shows the significance of including the interaction between victim-perpetrator relationship and the sex of the perpetrator together. The mean scores for overall harm here show that the scores are higher when the perpetrator is domestic. A male perpetrator and domestic relationship have the highest mean score of 1.945. This is followed by domestic perpetrator with (multiple) perpetrators of both sexes with 1.644. Though this is uncommon for violence with domestic, where there is usually one perpetrator (see analysis in Methodology Chapter). Crime reports with multiple acquaintance perpetrators of both sexes had a mean harm score of 1.231, followed by female, acquaintance perpetrators (1.164) and male, acquaintance

perpetrators (0.954). The scores for sex of the perpetrator were lowest for instances where the perpetrator was a stranger. Male, stranger perpetrator had the lowest mean harm score of .699.

Table 7.4.7 shows the mean scores for overall harm when the interaction between sex of the victim and sex of the perpetrator is considered. The highest mean overall harm score here is for female victims of (multiple) perpetrators of both sexes with a score of 1.316. This is very closely followed by crime reports with female victims and male perpetrators (1.304). Crime reports with female victims and female perpetrators had a mean overall harm score of 1.153. The crime reports with female victims had higher mean harm scores for all sex of the perpetrator categories than the categories for crime reports with male victims. Male victims of male perpetrators had the lowest mean score for overall harm with 0.71.

Two more variables were considered for disaggregation. These were whether the crime report was a single or series event and the offence type. The mean scores for these subgroups can be found in Tables 7.4.8 and 7.4.9 below.

Table 7.4.8 Mean Factors Scores for Overall Harm Disaggregated by Whether the Crime Report was Repeated (Single or Series)

Variable and Category	Mean for Overall Harm
Single	0.942
Series	1.195

Table 7.4.8 shows the mean harm score for overall harm for single and series crime reports. This showed that series crime reports have slightly higher mean for overall harm than crime reports on single events. Series crime reports had a score of 1.195 and single event reports had a score of .942. The table below (Table 7.4.9) shows the mean scores for the grouped number of incidents recorded in victim forms. This grouped the number of incidents at regular intervals up to 20. The decision was then made to include a group of high frequency victims of 20 to 95 incidents. This group is not common (See Table 4.3.5 in Chapter 4 as an example). There is also the option to record an answer of ‘too many to count’. Table 7.4.9 shows that the mean overall harm scores usually increase as the number of incidents increases, except for 11 to 15 repetitions. Crime reports with single incidents have the lowest mean overall harm score of .942 and crime reports which record 21 to 95 incidents have the highest overall score of 1.565.

Table 7.4.9 Mean Factors Scores for Overall Harm Disaggregated by Number of Incidents Recorded in the Crime Report

Variable and Category	Mean for Overall Harm
1	0.942
2 to 5	1.120
6 to 10	1.389
11 to 15	1.179
16 to 20	1.429
21 to 95	1.565
Too many to count	1.146

The final disaggregation was done using offence type. The mean overall score for each offence type is shown in Table 7.4.10. This shows that violence with injury, and sexual violence with injury have the highest mean harm scores. Serious wounding with a sexual motive has the highest mean overall harm score of 5.732, followed by serious wounding (4.147), rape (3.459) and other wounding with a sexual motive (2.618). When the violence has a sexual motive, the harm score is elevated than when compared to similar offences that do not have a sexual motive (see serious wounding with a sexual motive, compared to serious wounding or other wounding with a sexual motive, compared to other wounding).

Table 7.4.10 Mean Factors Scores for Overall Harm Disaggregated by Offence Type

Variable and Category	Mean for Overall Harm
Serious wounding	4.147
Other wounding	1.789
Common assault	0.730
Attempted Assault	0.725
Rape	3.459
Serious Wounding with a Sexual Motive	5.732
Other wounding with a sexual motive	2.618
Attempted rape	2.588
Indecent Assault	1.271
Threat to Kill/Assault	0.741
Sexual Threat	1.306
Other Threat or Intimidation	0.789

Threats against others	0.806

Common assault, attempted assault, threats to kill/assault, other threat or intimidation and threats against others all have a similar score for overall harm (around .7 or .8). The exception here is sexual threat which has a higher score of 1.306. So, for offence type the overall harm scores are higher for offences with injury. is expected as the score is created by weighting and combining the various combinations of responses to injury and emotional reaction, but some offences only have an emotional reaction (no injury). The overall harm scores are elevated when there is a sexual motive.

The effect of the variables shown in the tables discussed above were analysed further using linear regression (Model 6 shown in Table 7.4.11). This analysis uses the harm score as the dependent variable and sex of the victim, victim-perpetrator relationship, sex of the perpetrator, whether the crime report is single or series and offence type as the predictor variables.

Table 7.4.11 Linear Regression Results for Model (6) with Overall Harm Score as the Predictor

	β	**SE**	**T value**	**Sig.**	
(Intercept)	0.626	0.016	38.467		
Sex of the Victim					
Female	0.243	0.028	8.804	<.001	***
Male (ref. Cat.)	-	-	-	-	-
Victim-Perpetrator Relationship					
Acquaintance	0.170	0.025	6.917	<.001	***
Domestic	0.449	0.056	7.960	<.001	***
Stranger (ref. Cat.)		-	-	-	-
Sex of the Perpetrator					
Female	-0.042	0.0542	-0.809	0.418	
Both sexes	0.166	0.046	3.634	<.001	***
Male (ref. cat.)	-		-	-	
Whether the Crime Was Repeated					
Series	0.019	0.020	0.951	0.341	
Single (ref. cat.)	-	-	-	-	-
Interaction Term					
Female: Acquaintance	0.178	0.373	4.762	<.001	***

Female: Domestic	0.656	0.065	10.106	<.001	***
Female: Female	-0.038	0.060	-0.637	0.524	
Female: Both Sexes	-0.011	0.064	-0.176	0.861	
$R^2 = 0.5$					

Table 7.4.12: ANOVA Table for Model (6) with Overall Harm Score as the Predictor

	Sum sq	Df	F value	Pr(>f)
Sex of the Victim	721.83	1	488.97	<.001
Victim-perpetrator Relationship	1654.07	2	560.24	<.001
Sex of the perpetrator	56.03	2	18.98	<.001
Whether the crime report is repeated	1.34	1	0.91	0.34
Sex of the victim: victim-perpetrator relationship	155.81	2	52.77	<.001
Sex of the victim: Sex of the perpetrator	0.62	2	0.21	0.82
Residuals	31456.63	21309	Na	Na

Model 6 shows a linear regression using the overall harm score as the response variable. The predictors chosen for this model are the variables used to disaggregate the harm scores throughout this chapter. These are: victim-perpetrator relationship, sex of the victim, sex of the perpetrator, whether the crime was repeated and the interactions between sex of the victim and victim perpetrator relationship, and sex of the victim and sex of the perpetrator. The results of this are shown in Table 7.4.11.

Whether the crime report was repeated was the only predictor that was not significant in Model 6. Sex of the victim was extremely significant and shows that the harm score for the overall harm index increases by an average of .243 (P=<.001) when the victim is female when compared to male. This increases to .656 when the victim is female, and the perpetrator is domestic (P=<.001). When the perpetrator is a domestic relation (and the victim is in all other reference categories) the score increases by around .449 (P=<.001). For crime reports with acquaintance perpetrators the score increases by .178 for female victims and .17 for male victims. When the crime report records perpetrators of both sexes, the score for overall harm increases by around .166 for male victims (P=<.001) compared to crime reports with male

perpetrators but shows no significant increase or decrease for female victims of perpetrators of both sexes.

Finally, the ANOVA table in Table 7.4.12 shows the contributions of each predictor variables as they are added into the model. It is important to note that this is dependent on the model that has been chosen and the order that the predictor variables are added to the model. The contribution shows the additional contribution of each variable to a model that already includes the predictors that are in the table above it. So, sex of the victim reduces the residual deviance of the model by 721.83 (P=<.001). When victim-perpetrator relationship is added, an additional 1654.07 is reduced, which is extremely significant. Sex of the perpetrator also explains a significant amount of the variance (P=<.001). Whether the crime report is repeated and the interaction between sex of the victim and sex of the perpetrator both do not reduce the deviance of the model significantly when the model already includes sex of the victim, sex of the perpetrator and victim-perpetrator relationship.

From the ANOVA Table, it seems that victim-perpetrator relationship is the most important predictor for an increase in overall harm score, when compared to the other predictors in Model 6. Followed by sex of the victim, the interaction between sex of the victim: victim-perpetrator relationship and sex of the perpetrator.

7.4.2 Harm Index Results for Emotional Harm

This section discusses the results of the two-factor analysis (FA2) with a focus on the factor scores for emotional harm. As above, the scores were added to the dataset. The two-factor analysis produces two sets of scores which were added to the data as two separate columns. One column contained the scores for emotional harm. This was used to produce the means for subgroups in the data. Following a similar analysis as for overall harm, the mean scores were produced for the three victim-perpetrator relationship groups and for sex of the victim.

Table 7.4.13 show the means for emotional harm by victim-perpetrator relationship. Crime reports which record violence by domestic perpetrators has a higher mean score for emotional harm (1.776) than violence by acquaintance (1.010) and violence by strangers (0.689). Therefore, it was determined that the emotional harm experienced by victims in the CV dataset was more severe for victims of domestic perpetrators and least severe for victims of stranger perpetrators.

Table 7.4.13 Mean Factors Scores for Emotional Harm Disaggregated by Victim-Perpetrator Relationship

Variable and Category	Mean for FA1 (emotional harm)
Relationship Domestic	1.776
Relationship Acquaintance	1.010
Relationship Stranger	0.689

As above, the separate indices were used to investigate the harm scores for sex of the victim. The results for emotional harm by sex of the victim can be seen in Table 7.4.14. Crime reports with female victims have a higher mean score in the index for emotional harm (1.337) than crime reports with male victims (0.648). Therefore, female victims score higher on the emotional harm index than male victims.

Table 7.4.14 Mean Factors Scores for Emotional Harm Disaggregated by Sex of the Victim

Variable and Category	Mean for FA1(emotional harm)
Sex Female	1.337
Sex Male	0.648

Table 7.4.15 Mean Factors Scores for Emotional Harm Disaggregated by Sex of the Victim and Victim-Perpetrator Relationship

		Victim-Perpetrator Relationship		
		Stranger	**Acquaintance**	**Domestic**
Sex of the Victim	**Male**	0.561	0.724	0.951
	Female	0.925	1.270	1.983

Finally, the interaction between sex of the victim and victim-perpetrator relationship was examined. The results of this can be seen in Table 7.4.15. This shows that for both male and female victims, the mean scores increase as the distance to the perpetrator decreases. So, the scores for violence by domestic perpetrators are highest and the scores for violence by strangers is the lowest for both groups. However, for female victims, the scores are significantly higher for each relationship category than for male victims. For example, the mean emotional harm score for violence by strangers against female victims is 0.925. This is extremely similar as for the mean emotional harm score for male victims of violence by domestic perpetrators (0.951). Therefore, the lowest mean emotional score for female victims is similar to the highest for male victims. Overall, closeness to the perpetrator effects the mean emotional score for victims of violence, however there is an added affect when sex of the victim is also included.

Table 7.4.16 Mean Factors Scores for Emotional Harm Disaggregated by Sex of Perpetrator

Variable and Category	Mean for Emotional Harm
Sex: Female	1.068
Sex: Male	0.958
Sex: Both Sexes	1.106

Sex of the perpetrator was also disaggregated for emotional harm (Table 7.4.16). This showed similar results as the mean scores for overall harm. The mean score for emotional harm was highest for crime reports with (multiple) perpetrators of both sexes with 1.106. This was followed by 1.068 for female perpetrators and 0.958 for male perpetrators. This is investigated more by looking at the interactions between sex of the perpetrator and victim-perpetrator relationship (Table 7.4.17) and sex of the perpetrator and sex of the victim (Table 7.4.18)

Table 7.4.17 Mean Factors Scores for Emotional Harm Disaggregated by Sex of Perpetrator and Sex of the Victim

		Victim-Perpetrator Relationship		
		Stranger	**Acquaintance**	**Domestic**
Sex of the perpetrator	**Female**	0.740	1.175	1.164
	Male	0.669	0.930	1.937
	Both Sexes	0.844	1.267	1.673

Table 7.4.18 Mean Factors Scores for Emotional Harm Disaggregated by Sex of Perpetrator and Victim-Perpetrator Relationship

		Sex of the Victim	
		Female	**Male**
Sex of the perpetrator	**Female**	1.156	0.772
	Male	1.397	0.624
	Both Sexes	1.366	0.819

When victim-perpetrator relationship is considered alongside sex of the perpetrator, the results are slightly different. Where crime reports with perpetrators of both sexes had the higher mean score for emotional harm when considered alone, male perpetrators who are domestic relations to the victim have the highest mean score (1.937) in Table 7.4.17. This is followed by

domestic perpetrators who are people of both sexes (1.637), then multiple acquaintance perpetrators of both sexes. Stranger perpetrators had the lowest mean scores for all sex of the perpetrator categories. The lowest mean for emotional harm was found for male perpetrators of stranger violence (0.669).

The same analysis was done for sex of the perpetrator by sex of the victim (Table 7.4.19). This showed that the highest mean score could be found for female victims of male perpetrators (1.397), closely followed by female victims of people of both sexes (1.366). The lower mean emotional harm score could be found for male victims. Male victims of male perpetrators had the lowest mean emotional harm score of .624.

Table 7.4.19 Mean Factors Scores for Emotional Harm Disaggregated by Whether the Crime Report was Repeated (Single or Series)

Variable and Category	Mean for Emotional Harm
Single	0.900
Series	1.232

Mean emotional harm scores were also disaggregated by whether the crime reports were a one-off or repeated event (found in Table 7.4.19) and offence type (Table 7.4.19). Table 7.4.18 shows that crime reports with a series crime event, which is an event that is repeated more than once, have a higher mean score for emotional harm (1.232) than crime reports that are single events (.9). Table 7.4.20 below shows the mean emotional harm score by grouped number of incidents recorded in the crime reports. This shows that the emotional harm score seems to increase as the number of incidents increases. As with the overall harm score, the exception is the mean score for crime reports with 11 to 15 incidents. The lowest emotional harm score was for one incident at .9 and the highest was for 'too many to count' at 1.575.

Table 7.4.20 Mean Factors Scores for Emotional Harm Disaggregated by Number of Incidents Recorded in the Crime Report

Variable and Category	Mean for Emotional Harm
1	0.900
2 to 5	1.175
6 to 10	1.425
11 to 15	1.189
16 to 20	1.536
21 to 95	1.570

Too many to count	1.575

Table 7.4.21 Mean Factors Scores for Emotional Harm Disaggregated by Offence Type

Variable and Category	Mean for Emotional Harm
Serious wounding	2.858
Other wounding	1.330
Common assault	0.719
Attempted Assault	0.841
Rape	3.379
Serious Wounding with a Sexual Motive	4.529
Other wounding with a sexual motive	2.580
Attempted rape	2.689
Indecent Assault	1.434
Threat to Kill/Assault	0.869
Sexual Threat	1.518
Other Threat or Intimidation	0.928
Threats against others	0.930

Finally, Table 7.4.21 shows the mean emotional harm score my offence type. This shows that offence types which are sexually motivated have higher mean emotional harm scores than offences which do not. Serious wounding with a sexual motive has a mean score of 4.529 which is the highest emotional harm score for offence type. Serious wounding (without sexual motive) has a mean score of 2.858. Rape has a mean score of 3.379 and sexual threat has a mean score of 1.518. Attempted acts have scores which are not much lower than completed acts. Attempted rape has a mean emotional harm score of 2.689, which is similar to other wounding with a sexual motive (2.580). Attempted assault has a mean emotional score of .841, which is similar to the score for common assault (.719). Threat offences have mean emotional harm scores which are higher than the less serious physical offence types (such as common assault and attempted assault), with threats to kill/assault having a mean emotional score of .869, other threat or intimidation having a mean emotional score of .928 and threats against others having a mean score of .93.

The variables used in Tables 7.4.13 to 7.4.21 to disaggregate for mean emotional harm scores were then used as predictors in a linear regression model, the results shown in Table 7.4.22. This linear regression model (Model 7) used the emotional harm scores generated by FA2 as the response variable and sex of the victim, victim-perpetrator relationship, sex of the perpetrator, whether the crime report is single or series and offence type as the predictor variables.

Table 7.4.22: Linear Regression Results for Model (7) using Emotional Harm Score as Response Variable

	β	**SE**	**T value**	**Sig.**	
(Intercept)	0.536	0.015	35.816		
Sex of the Victim					
Female	0.391	0.025	15.379	<.001	***
Male (ref. Cat.)	-	-	-	-	-
Victim-Perpetrator Relationship					
Acquaintance	0.151	0.023	6.700	<.001	***
Domestic	0.379	0.052	7.317	<.001	***
Stranger (ref. Cat.)		-	-	-	-
Sex of the Perpetrator					
Female	-0.010	0.048	-0.213	0.831	
Both sexes	0.178	0.042	4.230	<.001	***
Male (ref. cat.)	-		-	-	
Whether the Crime Was Repeated					
Series	0.090	0.018	4.955	<.001	***
Single (ref. cat.)	-	-	-	-	-
Interaction Term					
Female: Acquaintance	0.198	0.034	5.773	<.001	***
Female: Domestic	0.649	0.055	10.882	<.001	***
Female: Female	-0.136	0.055	-2.455	0.014	
Female: Both Sexes	-0.051	0.059	-0.875	0.382	
$\boldsymbol{R^2 = 0.49}$					

Table 7.4.23: ANOVA Table for Model (7) using Emotional Harm Score as Response Variable

	Sum sq	**Df**	**F value**	**Pr(>f)**
Sex of the Victim	119.99	1	61.06	<.001
Victim-perpetrator Relationship	822.33	2	209.22	<.001
Sex of the perpetrator	20.79	2	5.29	0.01

Whether the crime report is repeated	136.25	1	68.33	<.001
Sex of the victim: victim-perpetrator relationship	46.1	2	11.73	<.001
Sex of the victim: Sex of the perpetrator	28.46	2	7.24	.001
Residuals	41877.86	21309	Na	Na

Table 7.4.22 shows the results of the linear regression model using the emotional harm score from FA2 as the response variable. This also uses the variables used to disaggregate the emotional harm scores as predictors for Model 7. This showed that each variable chosen as a predictor was significant. Interaction terms were included for sex of the victim and victim perpetrator relationship, and sex of the victim and sex of the perpetrator.

This analysis showed that the emotional harm scores increased significantly when the victim is female (P=<.001). Female victims showed an increase of .391 for emotional harm scores when compared to the intercept (crime reports in all reference categories; male victim, male perpetrator, stranger perpetrator, single event violence). This increased even more when the perpetrator was a domestic relation, and the victim was female (.649, P=<.001). Crime reports which recorded violence against female victims by acquaintance perpetrators showed an increase in the emotional harm score by .198 compared to reference categories (P=<.001). Male victims of acquaintance perpetrators had an increased emotional harm score of .151, and male victims of violence by domestic relations had a .379 increase to their harm scores for emotional harm.

Whether the crime reports recorded a repeated event was also very significant for emotional harm (P=<.001). Series crime reports had a higher emotional harm score than single event violence (around .09 higher).

An ANOVA table was produced for Model 7 and this can be found in Table 7.4.23. This shows that victim-perpetrator relationship explains the most amount of variance in Model 7, reducing the residual deviance by 822.33 (when sex of the victim is already in the model), this is followed by whether the crime report is repeated and sex of the victim. Both interaction terms in the model also reduced the residual deviance by a significant amount.

7.4.3 Harm Index Results for Physical Harm

The analysis on FA2 was repeated, this time with a focus on the physical harm scores. The scores in this section showed some key differences to the overall score and the emotional harm score discussed in the sections previously. The mean scores were compared for the three victim-perpetrator relationship categories and sex of the victim. Table 7.4.22 shows the means for domestic, stranger and acquaintance victim-perpetrator relationship subgroups. Violence by domestic perpetrators also has a higher mean score for physical harm (1.047) than violence by acquaintances (.612) and strangers (.564). This shows similar results as for the previous two harm indices, with crime reports with domestic perpetrators having the highest harm score. However, these mean scores are lower than for overall harm and emotional harm. This is because fewer victims will experience physical harm (see Table 3.5.6) than emotional harm. Therefore, there are 17,216 cases in the CV dataset which will have a physical harm score of zero and 6463 cases which have a harm score above zero.

Table 7.4.24 Mean Factors Scores for Physical Harm Disaggregated by Victim-Perpetrator Relationship

Variable and Category	Mean for FA2 (physical harm)
Relationship Domestic	1.047
Relationship Acquaintance	0.612
Relationship Stranger	0.564

The scores for physical harm disaggregated by sex of the victim show opposing results to the overall harm scores and scores for emotional harm. Table 7.4.25 shows that the score for physical harm differ as male victims have a higher mean score than female victims. This suggests that male victims in the CV dataset experience a larger amount of physical injury and/or more severe physical injury than women. Again, the mean scores are not very high for physical harm when disaggregated by sex of the victim.

Table 7.4.25 Mean Factors Scores for Physical Harm Disaggregated by Sex of the Victim

Variable and Category	Mean for FA2 (physical harm)
Female	0.587
Male	0.723

The physical harm scores were also disaggregated by sex of the victim and victim-perpetrator relationship to show the interaction between the two. This is shown in Table 7.4.26 below. The results here show that the highest physical harm scores are for female victims of domestic perpetrators (1.063). This is closely followed by male victims of domestic perpetrators who have a mean physical harm score of .981. The differences in male and female scores of physical harms have more pronounced differences when the perpetrator is acquaintance or stranger. For both categories, male victims have the higher mean score. Female victims of stranger violence have the lowest mean physical harm score of all categories in this table with .37.

Table 7.4.26 Mean Factors Scores for Physical Harm Disaggregated by Sex of the Victim and Victim-Perpetrator Relationship

		Victim-Perpetrator Relationship		
		Stranger	**Acquaintance**	**Domestic**
Sex of the Victim	**Male**	0.669	0.761	0.981
	Female	0.370	0.477	1.063

Table 7.4.27 below shows the mean scores for physical harm disaggregated by sex of the perpetrator. This table shows that this disaggregation shows little difference in the mean scores for physical harm when the perpetrator is female, male or people of both sexes (with multiple perpetrators). The mean score for male perpetrators is .662, followed by female perpetrators with .646 and people of both sexes with a mean physical harm score of .625. To investigate this further, the mean scores for physical harm were also disaggregated for sex of the perpetrator and victim-perpetrator relationship (Table 7.4.27) and sex of the perpetrator and sex of the victim (Table 7.4.28), and this showed some key differences.

Table 7.4.27 Mean Factors Scores for Physical Harm Disaggregated by Sex of Perpetrator

Variable and Category	**Mean for Physical Harm**
Female	0.646
Male	0.662
Both Sexes	0.625

Table 7.4.28 Mean Factors Scores for Physical Harm Disaggregated by Sex of Perpetrator and Victim-Perpetrator Relationship

		Victim-Perpetrator Relationship		
		Stranger	**Acquaintance**	**Domestic**
Sex of the perpetrator	**Female**	0.579	0.589	0.889
	Male	0.548	0.630	1.101
	Both Sexes	0.721	0.530	0.710

Table 7.4.29 Mean Factors Scores for Physical Harm Disaggregated by Sex of Perpetrator and Sex of the Victim

		Sex of the Victim	
		Female	**Male**
Sex of the perpetrator	**Female**	0.647	0.710
	Male	0.580	0.723
	Both Sexes	0.724	0.724

When sex of the perpetrator is considered alongside victim-perpetrator relationship there are bigger differences in the scores for physical harm. Crime reports with male, domestic perpetrators have a much higher physical harm score than other categories (1.101). Female, domestic perpetrators have the second highest physical harm score with .889. The lowest mean physical harm scores were acquaintance perpetrators of both sexes (.530) and male perpetrator of stranger violence (.548).

Table 7.4.29 shows the mean scores for physical harm when disaggregated by sex of the perpetrator and sex of the victim. For male victims of violence, the mean harm scores were not very different depending on whether the perpetrator was male (.723), female (.71) and both sexes (.724). For female victims, the harms scores for physical harm were highest for perpetrators of both sexes (.724) and lowest for male perpetrators (.58).

The mean scores for physical harm were also disaggregated by whether the crime report recorded a single or series crime event (Table 7.4.30). This showed that the physical harm of violence was slightly higher for series event violence (.928) than for single event violence (.919). Table 7.4.31 shows the mean physical harm scores for the grouped number of incidents. This showed that, generally, the mean physical harm scores increase slightly as the number of incidents increase. High frequency victims have the highest physical harm mean score with

1.246 and crime reports with 16 to 20 incidents had the lowest mean physical score at 0.859 (closely followed by 2 to 5 incidents).

Table 7.4.30 Mean Factors Scores for Physical Harm Disaggregated by Whether the Crime Report was Repeated (Single or Series)

Variable and Category	Mean for Physical Harm
Single	0.919
Series	0.928

Table 7.4.31 Mean Factors Scores for Physical Harm Disaggregated by Number of Incidents Recorded in the Crime Report

Variable and Category	Mean for Physical Harm
1	0.919
2 to 5	0.876
6 to 10	1.062
11 to 15	1.046
16 to 20	0.859
21 to 95	1.246
Too many to count	0.941

Table 7.4.32 Mean Factors Scores for Physical Harm Disaggregated by Offence Type

Variable and Category	Mean for Physical Harm
Serious wounding	6.120
Other wounding	2.650
Common assault	0.511
Attempted Assault	0
Rape	2.156
Serious Wounding with a Sexual Motive	6.774
Other wounding with a sexual motive	1.817
Attempted rape	1.006
Indecent Assault	0.077

Finally, physical harm of violence was assessed by looking at the mean harm scores for offence type (Table 7.4.32). This excluded threats offences (where there is no possibility of injury) but included attempted offences. The physical harm score by offence type can act as a

validation for the index as there is some expectation for the order of the scores. Attempted assault has a score of 0 which is expected as it is an incomplete assault. The highest mean physical harm score was for serious wounding with a sexual motive (6.774), followed by serious wounding (6.12), other wounding (2.65) and rape (2.156).

As with the other sets of harm scores in the previous sections, a linear regression model was fitted using the physical harm score as the response variables and sex of the victim, victim-perpetrator relationship, sex of the perpetrator and whether the crime report is single or series as the predictor variables. Offence is excluded here because of collinearity (See Section 6.2.3). The results of this can be found in Table 7.4.33 below.

Table 7.4.33 Linear Regression Results for Model (8) Using Physical Harm Score as the Response Variable

	β	**SE**	**T value**	**Sig.**	
(Intercept)	0.707	0.021	34.541		
Sex of the Victim					
Female	-0.339	0.035	-9.761	<.001	***
Male (ref. cat.)	-	-	-	-	-
Victim-Perpetrator Relationship					
Acquaintance	0.129	0.031	4.172	<.001	***
Domestic	0.442	0.071	6.239	<.001	***
Stranger (ref. cat.)		-	-	-	-
Sex of the Perpetrator					
Female	-0.153	0.066	-2.328	0.02	
Both sexes	0.016	0.057	0.283	<.001	***
Male (ref. cat.)	-		-	-	
Whether the Crime Was Repeated					
Series	0.247	0.025	-9.952	<.001	***
Single (ref. cat.)	-	-	-	- -	
Interaction Term					
Female: Acquaintance	0.002	0.047	0.039	0.969	
Female: Domestic	0.354	0.082	4.335	<.001	***
Female: Female	0.300	0.076	3.977	<.001	***
Female: Both Sexes	0.106	0.080	1.323	0.2	
$\boldsymbol{R^2 = 0.34}$					

Table 7.4.34 ANOVA Table for Model 8 Using Physical Harm Score as Response Variable

	Sum sq	Df	F value	Pr(>f)
Sex of the Victim	276.15	1	118.55	<.001
Victim-perpetrator Relationship	1016.68	2	218.22	<.001
Sex of the perpetrator	16.30	2	3.50	0.03
Whether the crime report is repeated	230.73	1	99.05	<.001
Sex of the victim: victim-perpetrator relationship	47.75	2	10.25	<.001
Sex of the victim: Sex of the perpetrator	38.67	2	8.30	<.001
Residuals	49639.06	21309	Na	Na

Finally, a linear regression model was done using the physical harm score as the response variable and victim-perpetrator relationship, sex of the victim, sex of the perpetrator, whether the crime was repeated and the interaction terms for victim-perpetrator relationship and sex of the victim and sex of the victim and sex of the perpetrator as predictor variables. Table 7.4.33 shows the results of this.

For female victims, the score for physical harm was lower than for male victims of violence (-.339). However, when the gendered aspects of the violence are disaggregated further, the assumption here changes. When the perpetrator is female, the physical harm score is lower than when the perpetrator is male (-.153) for male victims but was higher for female victims (.3). When the perpetrator is people of both sexes, the scores for physical harm increase for both male (.016) and female (.106) victims.

When victim-perpetrator relationship is considered, the physical harm scores for male and female victims both increase significantly. For female victims of domestic perpetrators, the physical harm score increases by .354 compared to the intercept. For male victims, this increases by .442. Series crime reports also show an increase in physical harm score of .247.

The ANOVA table for Model 8 is shown in Table 7.4.34. This shows that victim-perpetrator relationship also explains the most variance in the model, reducing the residual deviance significantly by 1016.68. Sex of the victim reduced the residual deviance the second

highest amount, by 276.15 and whether the crime report was repeated (230.73). But overall, all the predictors were significant in the ANOVA table, including the interaction terms.

7.5 Summary

The purpose of this chapter was to create an index of harm which could be used to compare the level of interpersonal harm experienced by victims of different types of violence. Binary EFA was used to do this which identified that while an overall harm measure was possible, it was also possible to measure emotional and physical harm as two separate indices. These were all used to answer the research questions of the thesis. The methods used in this chapter mean that each crime report in the CV dataset is allocated a harm score (for overall harm, emotional harm, and physical harm) meaning that each crime event has a score which is measured according the harms recorded by the victim. To determine the levels of harm experience by different subgroups of victims the mean harm scores were used.

Table 7.5.1: Summary of the Sub-Questions Answered in This Chapter

	Yes✓ / No ✘
Is violence by domestic perpetrators more harmful overall?	✓
Is violence by domestic perpetrators more emotionally harmful?	✓
Is violence by domestic perpetrators more physically harmful?	✓
Is violence against female victims more harmful overall?	✓
Is violence against female victims more emotionally harmful?	✓
Is violence against female victims more physically harmful?	✘

Table 4.8.1 shows each of the sub-questions outlined at the beginning of the chapter, along with the determination of the results of the multiple factor analyses conducted on the data. The first factor analysis showed a measure for overall harm which included all 20 emotional and physical harm variables into a single measure of harm. The results of this were analysed for various subgroups of crime reports; specifically, by victim-perpetrator relationship, sex of the victim and the combined interaction of them both.

Overall, it was determined violence by domestic perpetrators is more harmful overall than violence by acquaintances and strangers. The mean score for overall harm was highest for crime reports with domestic perpetrators. This is followed by crime reports with acquaintance perpetrators. Crime reports perpetrated by strangers had the lowest mean score for overall harm. From these results, it could be said that the level of harm experienced by the victim increases as the distance to the perpetrator decreases. This is also confirmed when the separate harm indices are used. The emotional harm scores showed a higher mean score for crime reports with domestic perpetrators than for both acquaintances and strangers. This is followed by crime reports by acquaintances, with crime reports with stranger perpetrators having the lowest mean for emotional harm. Finally, the mean score for physical harm is also highest for crime reports with domestic perpetrators than for acquaintances and strangers. The differences in the means scores for physical harm are smaller for each relationship group than for emotional harm.

The means were also assessed for sex of the victim. The previous chapters identified the importance of victim-perpetrator relationship and sex of the victim in affecting the amount of harm experienced by victims. Sex of the victim showed that the mean harm scores for female victims was higher for overall harm and emotional harm. The mean harm scores for sex of the victim for physical harm was slightly higher for male victims of violence. This was also compared when victim-perpetrator relationship was considered alongside sex of the victim. This showed that the harm scores for female victims were consistently higher across all relationship categories than for male victims. The most harm was experienced by female victims of domestic perpetrators, followed by female victims of acquaintance perpetrators. Male victims of stranger perpetrators had the lowest mean score for overall harm and emotional harm.

The next chapter will be the Discussion chapter of the thesis. This will bring the empirical findings and the literature from Chapter 2 together to answer the research questions of the thesis.

8. Discussion

8.1 Introduction

This chapter will discuss the empirical findings of the thesis in relation to the research questions; in the context of the current literature-base. The literature review chapter focused on presenting an in-depth discussion of the current knowledgebase on violence, violence by domestic relations and theorisations of harm from violence. This demonstrated mainstream theorisations of violence often ignore violence perpetrated against women by known perpetrators, because the mainstream concept is of an act perpetrated by the disadvantaged against the advantaged (Merton, 1938; Young 1999; Ray, 2018). Theorisations of violence against women are located in a specialist field, typically outside the mainstream. Drawing on these two perspectives enabled the thesis to set up a definition of "violence" as perpetrated by domestic relations, strangers and/or acquaintances, and to include physical violence, sexual violence and threats of violence which cross the criminal threshold. Using this definition, a specially constructed dataset utilising data on violent crimes from the Crime Survey for England and Wales was then identified as the most appropriate data source for analysis for the thesis research questions (listed below).

1. Does violence (and its outcomes) by domestic relations differ to violence by strangers or acquaintances?

2. Are victims of domestic violence more likely to be victims of violence by different perpetrators than victims of strangers or acquaintances?

3. Are victims of domestic violence more likely to be victims of multiple perpetrators than victims of strangers or acquaintances?

4. Is domestic more harmful than other (acquaintance and stranger) violence on average?
    a. *Is violence by domestic perpetrators more harmful overall than violence by other perpetrators on average?*
    b. *Is violence by domestic perpetrators more emotionally harmful than violence by other perpetrators on average?*

c. *Is violence by domestic perpetrators more physically harmful than violence by other perpetrators on average?*

5. Is (male) violence against women more harmful than (male) violence against men on average?
   a. *Is violence against female victims more harmful overall than violence against male victims on average?*
   b. *Is violence against female victims more emotionally harmful than violence against male victims on average?*
   c. *Is violence against female victims more physically harmful than violence against male victims on average?*

6. Is repetitive (series) violent crime more harmful than single violent crimes *on average*?
   a. *Is series violence more harmful overall than single-event violence on average?*
   b. *Is series violence more emotionally harmful than single-event violence on average?*
   c. *Is series violence more physically harmful than single-event violence on average?*

Because research on violence against women is typically compartmentalised and mainstream studies of "violence" often exclude domestic violence, (Walby and Towers, 2018) comparisons between violence by domestic relations and violence by other perpetrators are rare. Researchers of domestic violence have argued there are more severe consequences of this form of violence because of the gendered dynamics male violence against women predominately, i.e., violence perpetrated by a male against a female victim is more severe than the same act by a female against a male victim (Walby and Towers, 2018). This chapter explores the thesis findings (from the four previous chapters) in relation to the claims made in the current literature about the gendered nature and the outcomes of "violence", when all forms are included in the analysis.

Chapters Four (*Comparing Domestic Violence with Violence by Other Perpetrators*) and Five (*Comparing the Harms of Domestic Violence with the Harms of Violence by Other Perpetrators*) present exploratory findings which show significant differences between violence by domestic perpetrators and violence by strangers and acquaintances. Chapter Six

(*Assessing the Effect of Victim-Perpetrator Relationship on Victim Harms using Regressions Analysis*) used regressions analysis to confirm that analysing harms caused by violence utilising the victim-perpetrator relationship was appropriate; finding victim-perpetrator relationship to be a significant predictor in each analysis of harm caused. Together, these chapters build an evidence-base that shows disaggregating by the relationship between perpetrator and victim (domestic, stranger, acquaintance) is necessary to understand the differences in harms caused to victims of violence. Violence by domestic relations and violence by strangers are both gendered; these findings chapters also evidence that sex of the victim is an important dimension of violence which affects harm.

Chapter seven (*Building an Index of Harm: The Results*) presented the findings when factor analysis is used to build harm indices: one for overall harm, one for emotional harm, and one for physical harm. Drawing on the findings of Chapters 4, 5 and 6, Chapter 7 assessed the harm index scores for each victim-perpetrator relationship group; and for male and female victims, by comparing the mean index score for each subgroup, enabling an assessment to be made as to which sub-group (on average) experience the highest harm score. The chapter also presented the findings of statistical tests that examined the harm score index for interactions between relationship and victim sex. What this showed was that violence by domestic relations was more harmful for overall, emotional, and physical harm. The harm experienced by victims of violence increased as the distance to the perpetrator decreases. The gendered effect on harm is more complex. When the interactions of sex of the victim, sex of the perpetrator and victim-perpetrator relationship are considered, male perpetrated violence against female victims is more harmful for overall and emotional harm. Violence by domestic perpetrators is more physically harmful against women, especially when the perpetrator was male.

Overall, these various techniques have produced an in-depth analysis of types of violence and the harm experienced by different groups of victims. The discussion in this chapter will address how these analyses have contributed to answering the research questions listed above and will summarise the key findings/conclusions of the thesis.

8.2 Answering the Research Questions

This chapter answers the research questions of the thesis, in relation to the overarching title question: Is Domestic Violence Violent Crime? The thesis title question was expanded and operationalised using the main research question (1) of the thesis: Does violence (and its outcomes) by domestic relations differ to violence by strangers or acquaintances? This question

captures the two distinct areas of violence which are used to answer the thesis title question. The first is the characteristics of violent crime, and the second is the harms of violent crime. So, the discussion will begin by addressing the first part of Question 1: whether the characteristics and nature of violence by domestic relations differs to violence by strangers or acquaintances. The second part of the discussion will show how the differences in violence were investigated further by considering the harms of violence, disaggregated by various subgroups.

Overall, Research Question 1 is the main question of the thesis and is answered by drawing on all the findings and drawing on the conclusions of the sub-questions, Research Questions 2 to 6. Section 8.2.1 of this chapter will focus on how the characteristics of the violence differ, and Section 8.2.2 will summarise the findings of the analysis which operationalises harm to examine these differences.

8.2.1 Is Domestic Violence Violent Crime?: The Characteristics of the Violence

Current literature in the VAW field debate the aspects of domestic violence that may differ from violence by strangers (violence by acquaintances is notably absent), suggesting three key dimensions:

1. The gendered nature of the violence (sex of the victim and sex of the perpetrator).
2. Type of violence: physical, but whether sexual violence and/or threats of violence are counted.
3. Repetition: whether the violence is repeated or is a single incident; and how repetition is defined, for example by the same perpetrator, against the same victim.

Violence by domestic perpetrators has been argued to differ from violence by other perpetrators through sex (of the victim and perpetrator), repetitions, and severity (Bachman 1994; Walby, Towers and Francis 2014). However, traditional criminology does not disaggregate by sex, assumes the relationship between the victim and perpetrator to be ‘stranger’ and assumes that only one incident occurs (Walby and Towers, 2017). Approaches that compare violence by the three dimensions listed above are uncommon. Therefore, this thesis directly compares the key factors associated with different types of violence. First, by a comparison of violence disaggregated by victim-perpetrator relationship. This investigated the gendered nature of the violence, type of violence and repetition for three categories of violence: domestic, stranger and acquaintance. This highlighted significant differences and one main similarity between the three groups.

These three aspects of violence were investigated throughout the thesis. First, the findings of Chapter 4 established that there are three distinct categories of violence that differ by the above dimensions. Violence by domestic perpetrators in the CV dataset was found to be perpetrated against (mostly) women, perpetrated by (mostly) men, it is often repeated and often physical violence. It differed to violence by acquaintances which was equally as often perpetrated against men as women, usually by male perpetrators. It was repeated in a third of crime reports and was also equally physical violence as threats of physical violence. Violence by domestic perpetrators and violence by acquaintances both differed to violence by strangers in the CV dataset. Violence by strangers was often male violence against male victims and is rarely repeated. So, this thesis determines that violence differs in nature depending on who the perpetrator is. This does not agree that violence by domestic perpetrators differs to violence by other perpetrators, but that there are in fact three types of violence that differ from each other.

To add to this, the findings in Chapter 4 contributes to widespread debates in the VAW field around the gender neutrality of domestic violence. As discussed in the Literature Review in Chapter 2, the gender asymmetry of domestic violence is one of the main debates of family violence theorists and feminist theorists. Family violence theorists argue that women are just as likely as men to be perpetrators of violence within the family (Straus, 1979). However, feminist theorists disagree, arguing that domestic violence is predominantly male perpetrated against female victims (Walby, Towers and Francis, 2018; Stark, 2010). Therefore, sex of the victim and sex of the perpetrator were used to investigate the gendered dimensions of violence by domestic perpetrators in the CV dataset. This showed that neither violence by domestic perpetrators, nor violence by strangers are gender symmetrical. They are both highly gendered forms of violence (Mennicke and Kulkarni, 2016; Agnew, 1992; Walby, Towers and Francis, 2015), with most victims being female for domestic perpetrators and male for stranger perpetrators. Acquaintance violence was the most gender-neutral form of violence, in the CV dataset.

In relation to repetitions, the literature emphasises the importance of the repeated nature of domestic violence. The harmfulness of domestic violence is sometimes attributed to its repeated nature, with ideas of escalation theorising that the severity of the events increases over time (Walby and Towers, 2018). The repetitions recorded in the CV dataset have been used to assess whether the harmfulness of violent crime is worsened by the number of repetitions that have been experienced (see Chapter 7 and Section 8.2.2 in this chapter). Violence is often considered under the framework of "one perpetrator, one crime, one victim" (Walby and

Towers, 2017). However, domestic violence is often repeated, and acquaintance violence is sometimes repeated. Therefore, this assumption is only appropriate in the context of violence by strangers. When the perpetrator is known to the victim, this gives them the opportunity and access to the victim to continue perpetrating violence against them. Dobash et al (1992) attribute some severity of domestic violence to the repeated nature of the violence, arguing that coercion relies on the repeated nature of the violence to ensure the victim complies (Kelly, 1988). Repeated violence is usually considered to be more severe than single event violence, with the opportunity of escalation over time which could result in more injury and more emotional distress (Walby and Tower, 2018).

Despite the emphasis in academic literature on VAW on repetitions of violence, published crime statistics have controversially used capping methodologies (Flatley, 2017; Walby, Towers and Francis, 2016). Previously, series victim forms would be capped at 5 incidents when using these figures to produce estimates of crime. In 2017, ONS announced that they were developing their method of capping series incidents. They decided on the 98th percentile method, used on each crime type distinctly to produce the maximum number of repeated victimisations that will be included in final estimates of crime (Flatley, 2017). This is calculated by removing all the "too many to remember" responses as these are difficult to interpret and these responses will be replaced with the resulting number of the 98th percentile. However, capping at the 98th or 99th percentile also causes similar issues of bias and underestimation, for example capping personal theft at the 99th percentile would result in a limit of around 2 crimes per series, which is significantly lower than the past cap of five. In this way, a considerable number of crimes are still excluded. Even with the use of the 99th percentile (100th percentile would be all recorded data) violent crime is estimated to be under-represented by 20-40% (Walby, Towers and Francis, 2016).

In Walby, Towers and Francis (2014), it is estimated that there are almost as many violent offences against women (45%) as men (55%), though this is hidden through capping data as this characterises stranger violence (which is more likely to be 'one-off' and perpetrated against men and by men). As well as masking the gender dynamics of all violent crime, it also hides the gender distribution within domestic violence, making figures appear closer to gender symmetry rather than the 'true' figures (that women experience 84% of the violence in domestic relations). This thesis contributes to these discussions by further demonstrating the groups of victims that are affected by repeated violence. This is investigated further by using the concept of 'harm', seen in the following section to this chapter.

When looking at sex of the perpetrator and repetitions in the CV dataset, two other categories of victims were discovered. The sex of the perpetrator is recorded in two variables in the data, one which record 'male' or 'female', and one with the additional category of 'people of both sexes'. The latter variable had significantly fewer missing data and so was used throughout the analysis in Chapters 4-7. This identified where crime reports were recording events with multiple perpetrators. The analysis of repetitions showed that as well as single and series crime reports, victims could record up to six individual crime reports on discrete criminal events. These two categories of victims were analysed in two additional sections in Chapter 4. The analyses of victims of more than one perpetrator were used as another way to address the main research question of the thesis, by raising two more research questions (2 and 3, above). This went beyond current literature of violence and highlights more differences in the nature and characteristics of violence when disaggregating by victim-perpetrator relationship.

In the CV dataset, a large proportion of violence is repeated (46% domestic, 30% acquaintance and 14% stranger in the CV dataset). As well as violent events sometimes being repeated, victimisations can also involve multiple perpetrators, i.e., an event that is perpetrated by more than one person, for example violence by youths from the local neighbourhood. Twenty-nine percent (29%) of violent crimes recorded in the CV dataset involved more than one perpetrator (6492 crime reports). Fifty-eight percent (58%) of multiple perpetrator crime reports were by strangers (all perpetrators were unknown to the victim); 20% were by a combination of strangers and acquaintances; and 19% were by acquaintance (all perpetrators were acquaintances). A significantly smaller proportion of crime reports with multiple perpetrators were by domestic relations (1.3%) or domestic relations with any other victim-perpetrator relationship (domestic and stranger, 4%; domestic and acquaintance, 0.6% and domestic, stranger and acquaintance, 0.2%).

While these crime reports are a subset of the data (29% of the CV dataset), nevertheless, this thesis has produced evidence that suggests victims of domestic violence are much less likely to be victimised by multiple perpetrators in the same event than victims of other forms of violent crime, thus answering Research Question 2. And, suggesting a key difference between the perpetrators of violence by domestic perpetrators and violence by strangers or acquaintances.

The second analysis of victims of multiple perpetrators considered where victims have more than one crime report in the dataset. These victims can record separate events in separate

crime reports (up to 6 per victim), thus capturing victims who have experienced multiple violent events by either the same or by different perpetrators. If they have been victimised more than six times in the survey reference period (and it is not considered as a 'series' offence), then there is a hierarchy which decides which six crimes are recorded (ONS, 2019). Victims with multiple crime reports make up 12.5% of all victims (in the aggregated CV dataset).

When the victim-perpetrator relationship is the same for each crime report, there is no way to determine if this was the same perpetrator, only that they had the same relationship with the victim. However, where the relationship is different, this can be extracted (Section 4.6 of Chapter 4). This analysis shows it is not common to be victimised by both a domestic relation and another type of perpetrator within the survey reference period (Table 4.6.9 in Chapter 4). Whereas victims of different perpetrators within the reference period, are typically victimised by strangers, acquaintances, or a combination of both. Therefore, this analysis showed that victims of strangers or acquaintances more commonly experience violence by other perpetrators also, but this is not as common for victims of domestic perpetrators. However, it is important to acknowledge that victims with multiple crime reports are a small subset of the CV dataset.

8.2.2 Is Domestic Violence Violent Crime?: The Harms of the Violence

As mentioned earlier, the main research question of this thesis has two parts. The first is discussed in the previous section and outlines how the nature of violence differs depending on whether it is committed by a domestic relation, acquaintance or stranger. The second part of the question uses the outcomes of the violence to test the comparative differences in the violence. Outcomes are operationalised using the concept of 'harm'. Harm to the victim can be recorded in relation to injury, psychological harm, emotional harm or harm to mental wellbeing (Brennan, 2016; Ruback et al. 1984; Iganski and Lagou, 2014). Literature on 'harm' generally agree that there are two types of harm from violence, one which is physical, and one which is non-physical and involves detrimental emotional reactions. Both of which are recorded in the CV dataset. The analyses into the harms of violence in the CV dataset was used to answer the remaining research questions of the thesis (4-6), as well as the main title question.

The severity of violence is often linked to the act and/or its physical outcome to the victim (Dobash and Dobash, 1992; 2004, Dobash et al. 1992; Johnson, 1995). The more severe the act and resulting injury then the worse the violence. Feminist theorists of violence argue that an act will be more severe when it is perpetrated by a man against a woman (compared to the same

act perpetrated by a woman against a man). Walby, Towers and Francis (2014) agree, arguing that the harms of violence are not evenly distributed. They explain that the consequences of violence are more severe for women, who are more likely to experience injury than men, and their injury is more likely to be serious. Repetitious violence is also considered to be more emotionally harmful to the victim, as prolonged victimisation and threat of victimisation can have a detrimental psychological effect on the victim (Kelly, 1988). This section discusses the findings of the thesis regarding the harms of violence focusing on key dimensions of violence. These are victim-perpetrator relationship, sex of the victim/sex of the perpetrator and repetitions.

Victim-perpetrator relationship:

Contributing to answering Questions 4a-c, the analysis in Chapter 5 found substantive differences in the harms experienced by victims of domestic relations when compared to victims of acquaintances or strangers. When compared with crime reports for victims of violence by acquaintances, violence by strangers were slightly less likely to experience injury because of the violence (44.5% compared to 48.6%). However, of those who did experience injury, the type of injuries sustained were similar for most injury categories (see Table 5.3.2). The comparison of violence by domestic perpetrators and acquaintance perpetrators showed that crime reports with domestic perpetrators had a higher proportion which recorded injury (64%) than crime reports with acquaintance perpetrators and stranger perpetrators (Tables 5.4.1 and 5.5.1). The chi-square test showed both to be significant differences. For violence by domestic relations, strangers, and acquaintances the injuries sustain by the violence event is usually minor and more than half of the crime reports in the dataset record no physical injury at all. This shows the importance of including other possible outcomes of violence (Iganski and Lagou, 2014; Shapland and Hall, 2007).

Shapland and Hall (2007) emphasise the importance of including emotional effects of crime into an analysis of victim harms. Generally, a high proportion of victims experience at least one emotional reaction from the criminal violent event. Tables 5.4.4 and 5.5.4 show that a higher proportion of crime reports with domestic perpetrators experience an emotional reaction than crime reports for victims of violence by strangers or acquaintances. Though, similarly to the characteristics of violence, the proportion of harms experienced for crime reports by strangers or acquaintances also differed to each other. As well as including emotional harms because many victims do not experience injury, it is also an important consideration for

violence by domestic relations (Koss, 1990; Johnson, 2009). Generally, victims of domestic violence are considered to experience more emotional harm than victims of violence by strangers (Walby et al., 2017; Walby and Towers, 2018). The psychological impact of violent events and the threats of violence in domestic relationships are what keeps people in the relationship (which sometimes mean that they are victimised at a higher frequency). The repetitions and threats of violence are discussed in theorisations of domestic violence as causing more harm and are often discussed as distinct to domestic violence (Kelly, 1988; Stark 2010).

This was investigated further using regression analysis (Chapter 6) and factor analysis (Chapter 7). Chapter 6 showed that crime reports with domestic perpetrators had higher odds of recording injuries, emotional reactions, and fear. Often, crime reports with acquaintance perpetrators also recorded higher odds of these harm variables when compared to stranger. While the analysis in Chapter 6 revealed a lot about how victims of domestic relations, acquaintances or strangers experience the outcomes of violence, the seriousness of the injury or emotional reactions is not taken into account. Crime reports with domestic perpetrators could be more likely to record an injury, but the injury could be less severe than crime reports with strangers or acquaintance perpetrators. To some extent, this is demonstrated by the analysis of fear and anger in Chapter 6. Fear and anger show differing results depending on victim-perpetrator relationship, for example there is no significant difference in the odds of anger, but a significant difference in the odds of fear for violence by domestic perpetrators. However, this would be a complex analysis to conduct using regressions analysis as there are 22 separate injuries or emotional reactions that could be recorded, and each crime report can record a combination of these 22 variables. Therefore, Chapter 7 furthered this analysis by creating multiple composite indicators for harm (overall, emotional, physical).

The results of Chapter 7 resulted in the conclusion that violence by domestic relations results in a higher level of overall harm to victims, a higher level of emotional harm and a higher level of physical harm than violence by acquaintances or strangers. This conclusion contributes to discussions of severity in relation to violence. Harm from violent crime is not evenly distributed (Walby, Towers and Francis, 2014), and this analysis shows how certain victims of violent crime experience more overall harm than others. Particularly, that victims of domestic violence in the CV dataset experience more harm than victims of acquaintance or stranger perpetrators. However, victims of acquaintances experience more harm than those of

stranger perpetrators, but often less than victims of domestic relations. It was determined that in this analysis, harms are unevenly distributed so that those who are closer to the perpetrator experience more overall harm than victims who do not know the perpetrator. When sex of the victim is included alongside victim-perpetrator this is even more prominent, with female victims experiencing more harm than male victims, and more harm the closer they are related to the perpetrator.

These findings could contribute to discussions of coercive control by considering how coercive violence is by its emotional impact to the victims. Myhill (2015) argues that coercive control can be identified by feelings of fear and intimidation. Stark (2007:8) describes the emotional impact of coercive control as "humiliation, intimidation, and isolation". The analysis of Fear in Chapter 6 shows that victims of violence by domestic perpetrators have the highest odds of fear, along with female victims. Therefore, the level of emotional impact could act as an indication of coercion. Walby and Towers (2018b) argue that all violence is coercive to varying extents. Stark (2007) implies that the emotional impact of the violence is more harmful than the physical as this impact is longer-lasting and has a political motive.

The main conclusion of these analyses is that violence by domestic relations is more harmful than violence by strangers and acquaintances. However, the answer to the research question is more complex. This is because, violence by acquaintances is also more harmful than violence by strangers. Therefore, the response to Research Question 4 is that the harm to the victim seems to be related to how closely they know the perpetrator. That is, the closer the relationship the victim has to the perpetrator, the more harm they experience from violence.

Sex of the Victim/Sex of the perpetrator:

The fifth research question of this thesis was formed through the review of literature which describes differences between violence by domestic perpetrators and violence by other perpetrators. Literature on domestic violence identifies that violence by domestic perpetrators differs to violent crime through sex of the victim, that the violence is repeated, and that the violence is more severe (Bachman, 1994; Walby, Towers and Francis, 2014). The differences in severity are often attributed to the difference in the sex of the victim. Stranger violent crime is usually perpetrated by men against men. However, domestic violence is usually theorised to be more severe because the victim is usually female, and the perpetrator is usually male. Walby and Towers (2018) argued that acts by men against women are more serious than the same act from a female perpetrator towards a male victim. This means that the harms from violence are

unevenly distributed as women experience much greater consequences from being victimised by men than male victims experience (Walby, Towers and Francis 2016).

The answer to Research Question 5 is more nuanced because of the interaction between sex of the victim and sex of the perpetrator. This was discovered during the analysis in Chapter 6 and is often referred to throughout literature on VAW and domestic violence. When only sex of the victim is considered, this analysis gave some surprising results. The initial results of the regression showed that in the CV dataset, violence by female perpetrators seemed to be more likely to result in injury. However, this picture changed when other gendered dimensions (sex of the victim and victim-perpetrator relationship) were also included in the analysis. The dyad between sex of the victim and sex of the perpetrator differs when the perpetrators are domestic, acquaintance and stranger. These three gendered interactions within the violence offence need to be considered to understand the true extent that this affects the physical harms of the victim. Traditionally, mainstream criminology presents the perpetrators as (young) males (Merton, 1938, Agnew, 1992) and the victims as usually male (Young, 1999). However, when the perpetrator is a domestic relation, the perpetrator is still usually male (Dobash and Dobash, 1992), but the victim is female (Walby and Towers, 2018). The dynamic of male perpetrator, female victim impacts the consequences of the violence which can be more severe than when the violence is male to male.

The difference in physical harm for male and female victims was more apparent when victim-perpetrator relationship was also included. The differences between male and female victims in the CV dataset are larger within relationship categories than for the overall data. For example, male victims of violence perpetrated by strangers have a mean score of 0.669. But female victims of violence by strangers had a mean physical harm score of 0.370. The differences for acquaintance violence were similar. However, violence by domestic relations were the only instance where female victims did not differ to male victims. The mean physical score for female victims of domestic perpetrators was 1.063. Whereas the mean score for male victims of domestic perpetrators was 0.981. This shows the importance of including multiple gendered aspects into one analysis. When some of this is excluded, the results of the analysis differ. The results which only consider sex of the perpetrator seem to show female perpetrators as inflicting more physical harm than male victims of violence. However, this is not true when disaggregated further and interactions are included. Male perpetrators inflict more harm when the perpetrator is a domestic relation and when the perpetrator is an acquaintance.

Overall, the results of the analysis disaggregated by sex of the victim and sex of the perpetrator are important. These results demonstrate the need to make the gendered interactions of the violence visible. This is evident in literature within the VAW field. Mainstream criminology focuses on the perpetrators. These theorisations of violence attribute violence to male perpetrators for several possible reasons. Men are more likely to be violent because they experience difference strains than women (Agnew, 1992), because they have less self-control due to lower supervision from parents (Gottfredson and Hirschi, 1990). The victim is either assumed to be male (Merton, 1938, Young 1999) or the sex of the victim is not mentioned (Agnew, 1992). However, the VAW field of criminology focuses on the victims. Feminist literature emphasises that the harms of violence are unevenly distributed with female victims experiencing more harm than males (Walby, Towers and Francis, 2016). The distribution of harm is often associated with the gendered nature of the violence, and the consideration that domestic violence, and other forms of violence against women, is perpetrated by men against women.

The gendered nature of the violence makes a difference is which harms and the amount of harm which is experienced by victims. However, the analysis of injury shows how the interactions between the sex of the victim and sex of the perpetrator needs to be considered in order to get a full idea of the impact on harm. When sex of the perpetrator is considered alone, violence perpetrated by females seemed to cause more physical harm. However, when included alongside sex of the victim and victim-perpetrator relationship this conclusion changes. Including multiple gendered dimensions showed that male violence against female victims was more harmful than female violence against male victims. This was emphasised further when victim-perpetrator relationship was considered. This showed that domestic relationships elevate the amount of harm experienced by both female and male victims. The probability tables in Chapter 6 (Table 6.3.1) show the interactions between the three gendered dimensions included in the analysis and show that male perpetrated violence, against female victims had the highest probability of injury (0.63), emotional reaction (0.81) and fear (0.59) when the perpetrator was a male domestic relationship.

Male and female victims of violence showed significantly different responses to violent events. Male victims showed higher probabilities of anger despite the sex of the perpetrator or victim-perpetrator relationship. However, female victims of violence showed much higher probabilities of fear compared to male victims, also despite the sex of the perpetrator or victim perpetrator relationship. Overall, this thesis contributes to discussions of the harms of violence

when considering gendered interactions. This thesis showed that female victims will often experience more harm than male victims, both for emotional and physical harm (showed when other gendered dimensions are considered). However, this also showed the importance of considering various gendered dimensions of violence into the analysis together to gain a complete picture of the violence. Looking at sex of the victim alone suggests that male victims experience more physical harm than female victims. However, this is not the conclusion when domestic relationship is included.

The conclusion to Research Question 5 is that including gender into the analysis of violence is important. The type of violence experienced (stranger, acquaintance or domestic) differs, as do the outcomes of the violence. Where violence against men may be more physically harmful (when perpetrated by male, strangers, and acquaintances), violence against women is more emotionally harmful (for all subgroups) and more physically harmful when perpetrated by domestic relations (especially male, domestic). Overall, the research question does not capture the full extent gendered relationships on the outcomes of violence, which can give an incomplete picture of the violence. Gendered dimensions (including but not limited to; sex of the victim, sex of the perpetrator and victim-perpetrator relationship) should be included in the analysis of violence as they can add to the discussions and conclusions of the nature of violent crime (Walby, Towers and Francis, 2014).

Repetitions:

Repetitions were established as an important aspect of domestic violence which differs to other violence in the Literature Review (Chapter 2) and the analyses in Chapter 4. Violence is often considered under the framework of "one perpetrator, one crime, one victim" (Walby and Towers, 2017). However, domestic violence is often repeated, and acquaintance violence is sometimes repeated. Therefore, this assumption is only appropriate in the context of violence by strangers. When the perpetrator is known to the victim, this gives them the opportunity and access to the victim to continue perpetrating violence against them. Dobash et al (1992) attribute some severity of domestic violence to the repeated nature of the violence, arguing that coercion relies on the repeated nature of the violence to ensure the victim complies (Kelly, 1988). Repeated violence is usually considered to be more severe than single event violence, with the opportunity of escalation over time which could result in more injury and more emotional distress (Walby and Tower, 2018).

This thesis investigates the repetitions of domestic violence, and other violence, as best as is available in the CV dataset. Repetitions are approached using single and series crime reports. Single crime reports record one-off events which are not repeated. Series crime reports are recorded when the same event (offence type) is repeated more than once, by the same perpetrator and against the same victim. Using this variable as an indicator of repetition only measures one aspect of repetition and does not account for repeated events that are perpetrated by the same perpetrator but are different offence types (e.g. assault with injury and threats).

Overall, the analysis in this thesis confirmed that the harms felt by victims of violence increase as the number of repetitions increase. That is, that single event violence is often less harmful, physically, and emotionally than repeated violent offences. This analysis also showed that the difference in emotional harm was greater than the difference in physical harm.

This contributes to current discussions on repeated violence that suggests that the severity of the violence is worse when the repetitions are greater (Dobash et al. 1992). This especially contributes to debates within the VAW field which suggests that repeated violence is coercive and harmful (Kelly, 1988; Walby and Towers, 2018). Repetition is often discussed alongside theorisations of coercive control (Stark, 2007; Kelly, 1988). This thesis demonstrated that domestic violence is the type of violence that is most often repeated, followed by acquaintance violence and stranger violence as the least repeated. Stark (2007) discusses repeated violence in the context of (predominantly female) victims of domestic violence, arguing that the repetition of violence, as well as nonphysical coercive and controlling behaviours, are damaging to the victim's mental wellbeing. This is demonstrated in the analyses in this thesis through the increase emotional harm to victims of repeated violence when compared to victims of one-off violence. For Stark (2007; 2010), the harm of domestic violence comes from the repetition of the non-physical coercive acts which stops the victim from exiting the relationship and allows them to be subject to more physical violence and control.

The analysis of repetitions contributes to the debates around coercion by looking at the physical and emotional harms of repeated violence and comparing it to one-off violence. This shows that both physical and emotional harms are increased when the violent acts are repeated against the victim. This also demonstrates that this is especially apparent when looking at the amount of emotional harm experienced when the number of offences increase in crime reports in the CV Dataset.

Also, discussed above, ONS currently use capping methodologies when calculating and publishing estimates of crime in national crime statistics. However, this excludes crime reports which have the highest number of repetitions. This is because including incidents of repeat victimisations can introduce significantly increased volatility to the data. But, excluding them introduces systematic bias. Removing this group of victims from the study can present a very different picture of crime statistics, especially violent crimes where repetition is much more common. This is especially criticised as this disproportionately impacts violence by domestic relations, which is more likely to be repeated at a high frequency than strangers or acquaintances. In Walby, Towers and Francis (2014), it is estimated that there are almost as many violent offences against women (45%) as men (55%), though this is hidden through capping data as this favour's stranger violence (which is more likely to be 'one-off' and perpetrated against men and by men). As well as masking the gender dynamics of all violent crime, it also hides the gender distribution within domestic violence, making figures appear closer to gender symmetry rather than the 'true' figures (that women experience 84% of the violence in domestic relations). The research conducted in this thesis demonstrates that as well as affecting figures for crimes with female victims and crimes with domestic perpetrators, not including the most repetitious violence by using capping methods also excludes more harmful violent offences.

The discussion from Section 8.2.1 and 8.2.2 are summarised in the next section.

8.3 Summary

This discussion summarised how the thesis question 'is domestic violence violent crime?' can be approached in two ways. This led to the conceptualisation of Research Question 1 and the subsequent research questions designed to answer this. To answer the question of whether domestic violence differs to violent crime by strangers or acquaintances, the characteristics and the harms of violence were compared. The analysis of this thesis demonstrates how the current separation of violence into distinct criminological fields (mainstream criminology looking at violence by strangers and the field of VAW), means that answering relatively 'simple' questions is made difficult. Therefore, this thesis uses a unified theory of crime to analyse violence, disaggregating by gendered dimensions of violence throughout. This resulted in the conclusion that: the harms from violent crime increase as the distance to the perpetrator decreases, for overall harm, emotional harm, and physical harm; the gendered aspects of violence are important for understanding the harms experienced by victims; and including emotional harms shows how violence without injury is still harmful.

Overall, this thesis demonstrates that violence by domestic relations differs to violence from strangers and to violence by acquaintances. The victims, in the CV dataset, experience more harm when victimised by domestic relations. This is especially apparent for emotional harm. The analysis in this thesis confirmed theorisations of domestic violence that suggest the violence is most likely perpetrated by men (Dobash and Dobash, 1992; Stark, 2007), more often repeated than violence by strangers (Dobash et al, 1992) and is more severe (Walby and Towers, 2018; Walby, Towers and Francis, 2018). This showed that violence by domestic relations differs on various characteristics when compared to violence by strangers and acquaintances. However, violence by strangers and acquaintances are not the same either. When violence perpetrated by strangers is compared with violence perpetrated by acquaintances, differences were found on the same characteristics (sex of the victim, repetitions, and severity). Therefore, three distinct types of violence were identified. This meant that this thesis approached the research questions by comparing three subsets of violence, rather than two (violence by domestic perpetrators and violence by non-domestic perpetrators). Therefore, though domestic violence is different to violent crime, on all dimensions analysed in this thesis, this would not have been identified without an integrated approach to crime. Including violence by domestic relations, acquaintances, and strangers into one analysis, and disaggregating by victim-perpetrator relationship, sex of the victim and sex of the perpetrator meant that the differences and similarities in the violence could be identified.

As well as investigating violent crime through an integrated approach, this thesis used harms to further operationalise differences between violence by domestic relations and other forms of violent crime. Chapter 7 details the construction of the harm indices used to measure overall, emotional, and physical harm. Each crime report in the dataset received scores corresponding to the indices being used. This meant that subgroups of victims could be analysed using mean harm scores. For this thesis, these subgroups were victim-perpetrator relationship, sex of the victim, sex of the perpetrator, repetitions and type of violence. The methodology used is not new, however this is a relatively uncommon use of factor analysis. This method of producing harm index scores is useful for any number of researchers. This can be applicable to a variety of quantitative data sources, so long as the information is recorded as binary data on individual indicators of harm. The harm indices created for this thesis could be replicated by other researchers and disaggregated by any combination of other variables. For example, the score could have been disaggregated by age, ethnicity of the victim, socio-economic classification of the victim. The victim-perpetrator relationship could have been

disaggregated by more specific relationship groups, such as intimate compared to non-intimate domestic relations and the narrower acquaintance relationships also included in the data. Therefore, the possible future uses of a harm indices such as this are wide and would contribute to various considerations of harm.

The methodology resulted in multiple indices of harm for violence. Many previous methods to measure the harm of crime stem from the Cambridge Crime Harm Index (Sherman et al. 2016). This method weights types of crime by the lowest sentence suggested in UK sentencing guidelines, ranking the harm of the crimes by the possible custodial sentence associated to that crime. It uses police and court data to gain a quantity of offences for a certain time period, where the count of each crime is then multiplied by the number of days the offender would receive in prison should they receive the lowest sentence for that crime. However, there are several reasons why using sentencing guidelines for this purpose may not be the most effective measure of crime. With this method judgements of crime are constrained within offence categories, which means that all crimes within a crime type will be scored the same, e.g., assaults occasioning actual bodily harm will be scored alike despite how the harm of the crime is perceived by the victim (example in Ignatans and Pease, 2016). Despite the name, it might be suggested that the Cambridge Crime Harm Index is not actually designed to measure 'harm'. The aim of the crime harm index is to create a measure of crime that accounts for the varying seriousness of crimes, rather than counting the number of occurrences only. It uses sentencing guidelines as a way to operationalise the seriousness of crimes and thus create this weighted score. Therefore, though this method weights crime based on perceived seriousness, it is not necessarily measuring harm. It is too deterministic to assume a linear relationship between sentencing and harm, as this index does (i.e. the longer the sentence then the more harm measured), especially when looking at actual sentences imposed. Using binary factor analysis to create harm indices offers an alternative method to measure harm from violent crime which uses a composite indicator of multiple aspects of harm, including types of injury and possible emotional reactions. Rather than using sentencing guidelines, or sentences imposed by courts, this method considers the personal harm to the victim. This offers an innovative index which measures the impact of harm by its impact to the victim and could be used as an indicator of societal impact which accounts for the victims.

The conclusion of the thesis follows this Chapter. This summarises the findings of the thesis in the context of its wider implications.

9. Conclusion

This thesis explored the implications of comparing violent crime by victim-perpetrator relationship and the implications of mainstreaming DVC into the analysis of violent crime. The aim of this thesis was to contribute to answering the thesis title question 'Is Domestic Violence Violent Crime?', to assess whether the exclusion of domestic violence from analyses of violent crime is justified. This thesis utilised three stages of analysis, which approached the research question in two ways. First, the characteristics of the violence were compared by analysing multiple dimensions of violence: sex of the victim (and its interaction with the sex of the perpetrator); repetitions of the violence; and severity. Second, this thesis focused on the harms of violent crime to the victim, to assess whether the outcomes of violence differs when the perpetrator is domestic, stranger or acquaintance.

As discussed at the start of the thesis (see Introduction and Literature Review), criminology often treats violence by domestic relations as different to violent crime. Mainstream theorisations of violence are often used to explain violence by male perpetrators against male victims, describing violence as a product of socio-economic inequality, where the disadvantaged perpetrate violence against the advantaged. These theories do not explain instances where disadvantaged people are victimised by people in a position of power, for example male perpetrated violence against women. Therefore, the field of VAW emerged which centred on the gendered dimensions of violence, specifically how the interaction between sex of the victim and sex of the perpetrator affects the nature and the outcomes of violence.

While the purpose of this thesis is to answer the question 'Is Domestic Violence Violent Crime?', the answer is nuanced. On one hand, the analyses in this thesis demonstrate several ways in which violence by domestic relations differs from violence by strangers and acquaintances. The nature of violence differs when the violence is perpetrated by domestic relations compared to other perpetrators, by sex of the victim, by the extent to which the violence is repeated, and by the type of violent offence perpetrated. The analyses in Chapters 5-7 showed significant and notable differences in the physical and emotional harms of victims depending on who perpetrated the violence. The main finding of the thesis being that the closer the victim's relationship to the perpetrator then the greater the harm experienced by the victim. The only dimension of violence that stays the same, is the sex of the perpetrator, which is usually male for all types of violent crime.

On the other hand, this thesis answers the title question: 'Is Domestic Violence Violent Crime?' by integrating domestic violence into the analysis of violent crime. The thesis includes violence by all perpetrators into the analysis, which then involves disaggregating and comparing violence by victim-perpetrator relationship and sex of the victim/sex of the perpetrator. The various analyses in this thesis determined that domestic violence does differ to violence by other perpetrators. However, this does not mean that it should be considered separately from other forms of violent crime. Instead, it should be included into the analysis alongside other violence crime, with gendered dimensions being disaggregated within the analysis. Victim-perpetrator relationship and sex of the victim both matter as the nature and outcomes of the violence differ. It does not make sense to separate violence by domestic relations from other forms of violent crime. This thesis concludes that there are three distinct types of violent crime (by domestic relations, by acquaintances, and by strangers), which cause differing amounts of harm to the victim. Without an analysis which mainstreams domestic violence and gender into the analysis relatively simple questions about the nature and outcomes of violent crime cannot be answered.

The results of this thesis also show the important of considering gender when analysing violence. This thesis specifically focuses on the sex of the victim and sex of the perpetrator (and the interaction between the two), as well as victim-perpetrator relationship. The importance of the sex of the victim in level of harm experienced is found to be especially important when considered alongside sex of the perpetrator. Male and female victims recorded different emotional responses to violent events. Female victims were much more likely to feel fearful after a violent event, especially when the perpetrator was male. Male victims were much more likely to feel angry after a violent event. Violence against women was more harmful when perpetrated by a male domestic perpetrator than violence by female domestic perpetrators, against male victims. VAW was most harmful when perpetrated by a domestic relation than by strangers or acquaintances.

The contributions of this thesis are theoretical, policy and methodological.

9.2 Contributions of the Thesis

9.2.1 Theoretical Contributions

The contributions of this thesis are theoretical, policy and methodological. The findings of this thesis contribute to debates within academia by showing the merits of mainstreaming DVC into the discussions of violent crime. This thesis shows that separating domestic violence

from violence by other perpetrators is not the best way to analyse violence. This thesis used a definition of violent crime which includes physical violence, sexual violence and threats of violence - with DVC being these same offences perpetrated by a domestic relation. Overall, the differences highlighted between violent crime (by strangers or acquaintances) and DVC by this thesis demonstrate the importance of including *all* violent crime into the same analysis to enable comparisons of various aspects of violence (especially sex of the victim, repetitions, severity).

Including threats and emotional harm into discussions of violence also contributes to debates around the physicality of violence in the field of VAW. Feminist theories of domestic violence attribute much of the harm to the detrimental impact the violence has to the victim's emotional wellbeing (Stark, 2007; Kelly, 1988). The data and definition of violence used in this thesis cannot be used to assess coercive and controlling behaviour (as Stark, 2007 defines it). The analysis in this thesis can be used to discuss the non-physical outcomes of violence, but not non-physical acts of coercive and controlling behaviour. The results of the analysis in the findings chapters show emotional harm is more severe when violence is perpetrated by domestic relations, and when the perpetrator is male, and the victim is female. This shows that the harms of violence often go beyond the physical; violence without injury is harmful.

This thesis contributes to academic debates within sociology and criminology regarding the separation of domestic violence from violence by other perpetrators. This is justified by the assumption that domestic violence is different in nature to violence by strangers and acquaintances (Ganpat et al. 2020). This means that violence by domestic relations is either explicitly excluded from the analysis, or implicitly ignored by using the framework of violent crime in mainstream criminology which suggests that violence is usually perpetrated by socially and economically disadvantaged young men, against other men. Studies which focus on directly comparing key factors associated with different types of violence are rare. This thesis demonstrates the benefits of using a unified approach to violence; the research questions of this thesis could not have been answered by adhering to the current practices of separating VAW and "violent crime".

9.2.2 Methodological Contributions

The methodological contributions of this thesis are also important. While the methodology utilised to create the harm indices is not new, the way it has been deployed in this thesis is relatively uncommon. This thesis used binary factor analysis to create multiple indices

of harm. Many previous methods to measure the harm of crime stem from the Cambridge Crime Harm Index (Sherman et al. 2016). This method "weights" types of crime by the lowest sentence suggested in UK sentencing guidelines, ranking the harm of the crimes by the possible custodial sentence associated to that crime. However, there are several reasons why using sentencing guidelines for this purpose may not be the most effective measure of crime. Judgements of crime are constrained within offence categories, which means that all crimes within a crime type will be scored the same, e.g., assaults occasioning actual bodily harm will be scored alike despite how the harm of the crime is perceived by the victim (example in Ignatans and Pease, 2016). It is too deterministic to assume a linear relationship between sentencing and harm, i.e., the longer the sentence the greater the harm. Using binary factor analysis to create harm indices offers an alternative method to measure harm from violent crime which uses a composite indicator of multiple aspect of harm, including types of injury and possible emotional reactions. This offers an innovative index which measures the impact of harm by its impact to the victim and could be used as an indicator of victim-based societal impact.

The resulting indices mean each case can be allocated its own harm score, based on what the index is designed to measure. Each crime report having an individual score based on the victim's responses means that average (mean) scores for any range of subsets can be computed. This method of producing harm index scores can be applied to a variety of quantitative data sources, so long as the information is recorded as binary data on individual indicators of harm. The harm indices created for this thesis can be replicated by other researchers and disaggregated by any combination of other variables. For example, the score could have been disaggregated by age, ethnicity of the victim, socio-economic classification of the victim. The victim-perpetrator relationship could have been disaggregated by more specific relationship groups, such as intimate compared to non-intimate domestic relations. Therefore, the possible future uses of harm indices such as this are wide and would contribute to various theoretical and practical debates about the harm caused by different types of violence.

The results of this thesis demonstrate the importance of considering repetitions in discussions of violence. For example, the problems of recording repetitions in police data (Phoenix, 2021) and the ongoing discussions about the Office for National Statistics (ONS) use of capping methodologies to estimate crime in the UK. The Home Office and ONS have previously used methods of capping that include an arbitrary cap of repetitions at five, and (recently revised) the 98th percentile (Flatley, 2017). This new methodology (98th percentile)

results at different caps for each offence type, with personal theft being capped at two, whereas violence by domestic perpetrators is capped at 12 (the cap for all violence). The use of capping methodologies is a topic of debate as violent crime is estimated to be under-represented by up to 60% (Towers, Walby and Francis, 2016). Walby, Towers and Francis (2014), using the CSEW estimated there are almost as many violent offences against women (45%) as men (55%) when reports of violent crime are uncapped. As well as masking the gender dynamics of all violent crime, capping also hides the gender distribution within domestic violence, making figures appear closer to gender symmetry rather than the 'true' figures (that women report 80% of domestic violence in the CSEW). This thesis shows that repetitions are important because the more violence is repeated, the more harm is experienced by the victim. Therefore, by capping violent offences not only is the true number of offences underestimated, but the most harmful offences are excluded.

9.2.3 Policy Contributions

The debates around separating violence into specialist fields of criminology are also evident in current proposals for new policy in the UK. Domestic violence has been a central concern, especially due to the rise in reports during the COVID19 pandemic, which has coincided with a reduction in other forms of violence (Usher et al. 2021; Usher et al. 2020). Current discussions can be positioned on the two sides of the answer to the question 'Is Domestic Violence Violent Crime?'. On one hand, there are suggestions that misogyny could become a hate crime in the UK, which would further separate violence against women by including sex as a protected characteristic in Hate Crime Law in the UK (Law Commission, 2021). On the other, there are discussions around including domestic abuse and VAW as serious violent crime (Home Office, 2021: Domestic Abuse Commissioner, 2021).

Calls for sex to be included as protected characteristics have been raised for years (UK Parliament, 2021). However, the most recent report from the Law Commission (2021) suggests that this will not be supported. It was determined that the change in law would prove unhelpful in the contexts of sexual violence and domestic abuse. Women's groups such as Women's Place UK (2021) argue that making certain offences "aggravated" is not effective if the crimes concerned (domestic violence, sexual violence) are not already adequately policed, investigated, or prosecuted. This thesis contributes to this debate by demonstrating that the separation of domestic violence into specialist fields, and specialist laws, would not benefit the understanding of the violence, from which interventions should be derived.

Serious violent crime is a policy field with access to resources, including domestic abuse and VAW as serious violent crime would mean that domestic violence is included in discussions of violent crime in the UK, rather than being included in specialised areas. This will be included in the new Policing, Crime, Sentencing and Courts Bill (Home Office, 2021). The Government announced that an amendment to the Bill would include domestic abuse and sexual offences. The aim of the legislation is to provide measures for early intervention and require a range of public bodies to work together to reduce the numbers of victims and perpetrators of serious violent crime (Domestic Abuse Commissioner, 2021).

9.3 Summary

Overall, this project has potential significant contributions to academia, practice, and methodology. The findings of this thesis show that the harms of violence are associated with the victim-perpetrator relationship, sex of the victim and number of repetitions. These are important to contribute to debates within the VAW field, where it is argued that the harms of violence are unevenly distributed. This also shows the importance of considering the non-physical harms of violence. Overall, the thesis question 'Is Domestic Violence Violent Crime?' is answered in two ways. The first, that domestic violence is different from violence by other perpetrators because it is more often against women, more often repeated and more harmful than violence by strangers and acquaintances. The second, that despite these differences it does not make sense to exclude domestic violence from analysis of violent crime. Instead, domestic violence should be treated as a subset of violence, included in analysis but disaggregate by victim-perpetrator relationship and other gendered dimensions to compare. This thesis investigated 6 research questions which could not have been answered without taking this approach.

There are also methodological contributions which have been summarised in this conclusion. The findings on repetitions can support academic debates with ONS and the Home Office which shows the detrimental impact that capping methodologies can have on the measure of crime. Capping can underestimate the amount of violent crime towards women, who are most likely to be victimised repeatedly. It can also remove the most harmful violent events from the analysis. The main methodology used in this thesis resulted in multiple indices of harm; overall, physical, and emotional. This methodology has future uses for further research. As well as presenting a methodology that can be adopted by other researchers, the harm index scores produce can be disaggregated by any variable of interest in the CV dataset.

This means that future research can include disaggregating by intimate and non-intimate domestic relationships, by victim socio-economic status and by other protected characteristics considered in hate crime legislation e.g., victim ethnicity.

This thesis argues that while domestic violence is different to violence perpetrated by strangers or acquaintances, it does not make sense to exclude it from discussions of violent crime. The findings of this thesis showed that acquaintance violence is also different to stranger violence, thus identifying three different types of violence. The overall conclusion is that DVC should be mainstreamed in analysis of violent crime, but victim-perpetrator relationship should be disaggregated to highlight patterns and differences.

10. Bibliography

Abdi, H., Williams, L. J., and Valentin, D. (2013) Multiple Factor Analysis: Principal Component Analysis for Multitable And Multiblock Data Sets. *WIREs Comp Stat*, 5, 149–179.

Ackerman, J. (2016) Assessing Conflict Tactics Scale Validity by Examining Intimate Partner Violence Overreporting. *Psychology of Violence*, 8(2), 207-217.

Ackerman, J. (2018). Assessing Conflict Tactics Scale Validity by Examining Intimate Partner Violence Overreporting. *Psychology of Violence*, 8(2), 207–217.

Agnew, R. (1992) Foundation for a general strain theory of crime and delinquency. *Criminology*, 30 (1), 47–87.

Agresti, A. (1996) *An Introduction to Categorical Data Analysis*. New York: Wiley.

Andersen, H. and Mueller-Johnson, K. (2018) The Danish Crime Harm Index: How It Works and Why It Matters. *Cambridge Journal of Evidence-Based Policing*, 2(1), 52-69.

Anderson, K. (2009) Gendering Coercive Control. *Violence Against Women*, 15(12), 1444-1457.

Archer, J. (2000) Sex Differences in Aggression Between Heterosexual Partners. *Psychological Bulletin 126*, 651–680.

Arnold, G. (2009) A Battered Woman's Perspective of Coercive Control. *Violence Against Women*, 15(12), 1432-1443.

Azen, R. and Budescu, D. V. (2003) The Dominance Analysis Approach for Comparing Predictors in Multiple Regression. *Psychological Methods*, 8, 129–148.

Azen, R. and Traxel, N. (2009). Using Dominance Analysis to Determine Predictor Importance in Logistic Regression. *Journal of Educational and Behavioural Statistics*, 34, 319-347.

Bandura, R. (2006) *A Survey of Composite Indices Measuring Country Performance: 2006 Update, United Nations Development Programme*. [pdf] Office of Development Studies. available at:

http://www.thenewpublicfinance.org/background/Measuring%20country%20performance_nov200 6%20update.pdf [Accessed 10th December 2021].

Bauman, Z. (2000) *Liquid modernity*. Polity: Cambridge.

Benier, K. (2017) The Harms of Hate: Comparing the Neighbouring Practices and Interactions of Hate Crime Victims, Non-Hate Crime Victims and Non-Victims. *International Review of Victimology*, 23(2), 179-201.

Blumstein, A., Cohen, J. and Farrington, D. (1988a) Longitudinal and Criminal Career Research: Its Value for Criminology. *Criminology*, 26, 1-35.

Blumstein, A., Cohen, J. and Farrington, D. (1988b) Longitudinal and Criminal Career Research: Further Clarifications. *Criminology*, 26, 57-74.

Bradbury-Jones, C., and L. Isham (2020) The Pandemic Paradox: The Consequences of COVID-19 on Domestic Violence. *Journal of clinical nursing*, 29, 2047-2049.

Brader, C. (2021) Misogyny: A New Hate Crime? *House of Lords Library*, Available at: https://lordslibrary.parliament.uk/misogyny-a-new-hate-crime/

Brand, S. and Price, R. (2000). The Economic and Social Costs of Crime. *Home Office Research Study*, 217. Home Office: London.

Brennan, I. R. (2016) When is Violence Not a Crime? Factors Associated with Victims' Labelling of Violence as a Crime. *International Review of Victimology*, 22(1), 3-23.

Brown, J. M. (2020) Force of Words: The Role of Threats in Terrorism. *Terrorism and Political Violence*, 32(7), 1527-1549.

Bryant, F. B., and Yarnold, P. R. (1995) Principal Components Analysis and Exploratory and Confirmatory Factor Analysis. In: L. G. Grimm & P. R. Yarnold (eds.) *Reading and Understanding Multivariate Analysis*. Washington, DC: American Psychological Association.

Bublitz, J and Reinhard, M. (2014) Crimes Against Minds: On Mental Manipulations, Harms, and a Human Right to Mental Self-Determination. *Criminal Law and Philosophy*, 8(1), 51-77.

Budescu, D. V. (1993) Dominance Analysis: A New Approach to The Problem of Relative Importance of Predictors in Multiple Regression. *Psychological Bulletin*, 114, 542–551.

Cain, M and Howe, A. (2008) *Women, Crime and Social Harm: Towards A Criminology for The Global Age*. Oxford: Hart.

Cohen, A (1955) *Delinquent Boys: the culture of the gang*. Glencoe: Free Press.

Cohen, L. and Felson, M. (1979) Social Change and Crime Rate Trends: A Routine Activity Approach. *American Sociological Review*, 44(4), 588-608.

Cohen-Louck, K. (2019) Perception of The Threat of Terrorism. *Journal of Interpersonal Violence*, 34(5), 887-911.

Cook, E. and Walklate, S. (2020) Gendered Objects and Gendered Spaces: The Invisibility of 'Knife' Crime. *Current Sociology*, 1-16.

Copson, L. (2018) Beyond 'Criminology vs. Zemiology': Reconciling Crime with Social Harm. In: Boukli A., Kotzé J. (eds) *Zemiology. Critical Criminological Perspectives.* Palgrave Macmillan.

Criger, D. W. (2011) Critical Perspectives on Crime and Social Harm: Toward a Criminology of Human Rights. *Sociology Compass*, 5(11), 984-994

Davis, R.C. and Friedman, L.N. (1985). 'The Emotional Aftermath of Crime and Violence'. *In Trauma and its Wake* (C.R. Figley, ed.). Brunner/Mazel; New York.

Department of Justice (2019) *The Northern Ireland Crime Survey: User Guide*. [pdf] Northern Ireland: Department of Justice. Available at: https://www.justice-ni.gov.uk/sites/default/files/publications/doj/ni-crime-survey-user-guide-oct.pdf [Accessed 10.12.2012).

DiStefano, C., Zhu, M., and Mindrilã, D. (2009) Understanding and Using Factor Scores: Considerations for The Applied Researcher. *Practical Assessment, Research, and Evaluation*, 14(20), 1-11.

Ditton J., Bannister J., Gilchrist E. and Farrall S. (1998) Afraid or Angry? Recalibrating the 'Fear' of Crime. *International Review of Victimology*, 6, 83-99.

Dobash R.E. and Dobash, R.P. (1992) *Women, Violence and Social Change*. London: Routledge.

Dobash R.E., Wilson M., et al. (1992) The Myth of Symmetry in Marital Violence. *Social Problems*, 39, 401–421.

Dobash, R. E. and Dobash, R. P. (1979) *Violence Against Wives: A Case Against the Patriarchy*. New York: Free Press.

Dobash, R. E. and Dobash, R. P. (1998) *Rethinking Violence Against Women*. London: Sage.

Dobash, R. P., & Dobash, R. E. (2004) Women's Violence to Men in Intimate Relationships Working on a Puzzle. *The British Journal of Criminology*, 44(3), 324–349.

Domestic Abuse Commissioner (2021) *Violence Against Women and Girls Must Be Considered as Serious, Violent Crime*. Available at: https://domesticabusecommissioner.uk/blogs/violence-against-women-and-girls-must-be-considered-as-serious-violent-crime/

Donagh, B. (2020) From Unnoticed to Invisible: The Impact of COVID-19 on Children and Young People Experiencing Domestic Violence and Abuse. *Child Abuse Review*, 29(4), 387-391.

Dutton, M. A., & Goodman, L. A. (2005). 'Coercive Control in Intimate Partner Violence: Towards a New Conceptualization'. *Sex Roles*, 52, 743-757.

Elias, N. (1994) *The Civilizing Process*. Oxford: Blackwell.

Escofier, B. and Pagès, J. (1994) Multiple Factor Analysis (AFMULT package). *Computational Statistics and Data Analysis*, 18(1), 121-140.

Eurostat (2014) *Crime Statistics: Statistics Explained*. Available at: http://ec.europa.eu/eurostat/statistics-explained/.

Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., and Strahan, E. J. (1999) Evaluating the Use of Exploratory Factor Analysis in Psychological Research. *Psychological Methods*, 4(3), 272-299.

Fabrigar, L. R. and Wegener, D. T. (2011) *Exploratory Factor Analysis*. Oxford University Press: Oxford

Farrall, S., Bannister, J., Ditton, J., Gilchrist, E. (1997). Measuring Crime and the 'Fear of Crime': Findings from a Methodological Study. British Journal of Criminology, 37, 657–78.

Farrell, G., Tilley, N. And Tseloni, A. (2014) Why the Crime Drop? Why Crime Rates Fall And Why They Don't. *Crime and Justice: A Review Of Research*, 43, 421-490.

Farrington, D. (1994) Early Developmental Prevention of Juvenile Delinquency. *Criminal Behaviour and Mental Health*, 4, 209-227.

Felson, M. and Cohen, L. (1980) Human Ecology and Crime: A Routine Activity Approach. *Human Ecology: An Interdisciplinary Journal*, 8(4), 389-406.

Ferrando, P. J. and Lorenzo-Seva, U. (2021) The Appropriateness of Sum Scores as Estimates of factor Scores in the Multiple Factor Analysis of Ordered-Categorical Responses. *Educational and Psychological Measurement,* 18(2), 205-228.

Flatley, J. (2017) Improving estimates of repeat victimisation derived from the Crime Survey for England and Wales. *Office for National Statistics* [pdf] Available at https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/methodologies/improvingestimatesofrepeatvictimisationderivedfromthecrimesurveyforenglandandwales

Francis, B and Lui, J. (2015) Modelling Escalation in Crime Seriousness: A Latent Variable Approach. *METRON*, 72(2), 277-297.

Francis, B., K. Soothill and Dittrich, R. (2001) A New Approach for Ranking "Serious" Offences: The Use of Paired-Comparisons Methodology. *British Journal of Criminology*, 41, 726-737.

Francis, B., Soothill, K. and Fligelstone, R. (2004) Identifying Patterns ad Pathways of Offending Behaviour: A New Approach to Typologies of Crime. *European Journal of Criminology*, 1(1), 48-87.

Freidrichs, D. O. and Schwartz, M.D. (2007) Editors' Introduction: on Social Harm and a Twenty-first Century Criminology. *Crime, Law and Social Change*, 48, 1-7.

Gaibulloev, K., Sandler, T. and C. Santifort (2012) Assessing the Evolving Threat of Terrorism. *Global Policy*, 3(2), 135-144.

Ganor, B. (2005). Terrorism as a Strategy of Psychological Welfare. *Journal of Aggression, Maltreatment, and Trauma*, 9(1/2), 33-43.

Ganpat, S. M., Garius, L., Tseloni, A. and N. Tilley (2020) Violence and the Crime Drop. *European Journal of Criminology*, 1-24.

Garcis-Moreno, C., Heise, L., Jansen, H., Henrica, A. F. M, Ellsberg, M. and Watts, C. (2005) Violence Against Women. *American Association for the Advancement of Science*, 310(5752) 1282-1283.

Gilchrist, E., Farrall, S., Bannister, J., Ditton, J. (1998). Women and Men Talking about the 'Fear of Crime': Challenging the Accepted Stereotype. British Journal of Criminology, 38, 283–98.

Gorsuch, R. L. (1983) *Factor Analysis.* Hillsdale, NJ: Lawrence Erlbaum Associates.

Gottfredson, D. (2007) Some Thoughts About Research on Youth Violence Prevention. *American journal of preventive medicine*. 33(2), 104 – 106.

Gottfredson, M. and Hirschi, R. (1983) Age and the Explanation of Crime. *The American Journal of Sociology*, 89(3), 552-584.

Gottfredson, M. and Hirschi, R. (1990*) A General Theory of Crime*. Stanford: Stanford University Press.

Grace-Martin, K. (2008) *How to Calculate an Index Score from a Factor Analysis*. Available at: https://www.theanalysisfactor.com/index-score-factor-analysis/ [Accessed 10.08.2021].

Graham-Kevan, N. and Archer, J. (2003) Intimate Terrorism and Common Couple Violence: A Test of Johnson's Predictions in Four British Samples. *Journal of Interpersonal Violence*, 18(11), 1247-1270.

Grenfield, V. and L. Paoli (2013) A Framework to Assess the Harms of Crimes. *British Journal of Criminology*, 53(5), 864-885.

Grey, B. (2011) Neuroscience and Emotional Harm in Tort Law: Rethinking the American Approach to Freestanding Emotional Distress Claims. In: M. D. A. Freeman (eds.) *Law and Neuroscience: Curent Legal Issues Volume 13*. Oxford: Oxford University Press, 203-230

Han, T., Lu, Y., Zhu, S. C., and Wu, Y. N. (2017) Alternating Back-Propagation for Generator Network. *AAAI*, 3, 13 - 23.

Haylock, S., Boshari, T., Alexander, A. C., Kumar, A., Manikam, L., and Pinder, R. (2020) Risk Factors Associated with Knife-Crime in United Kingdom among Young People Aged 10-24 Years: A Systematic Review in *BMC Public Health*, 20(1), 1451-1470.

Herman, J. L. (2003) The Mental Health of Crime Victims: Impact of Legal Intervention. Journal of Trauma Stress, 16, 159–166.

Hillyard, P. and Tombs, S. (2007) From 'Crime' to Social Harm?. *Crime and Social Change*, 48, 9-25.

Hillyard, P., Pantazis, C., Tombs, S. and Gordon, D. (2004) *Beyond Criminology: Taking Harm Seriously*. London: Pluto Press.

Hillyard, P., Pantazis, C., Tombs, S. and Gordon, D. (2008) 'Social Harm' and its limits?. In: McMahon, W. (ed.), *Criminal Obsessions: Why Harm Matters More than Crime*, [2nd eds]. London: Center for Crime and Justice Studies, King's College London, 62–69.

HMIC (2014) *Crime Recording: Making the Victim Count. The Final Report of an Inspection of Crime Data Integrity in Police Forces in England and Wales.* [pdf] Available at: https://www.justiceinspectorates.gov.uk/hmicfrs/wp-content/uploads/crime-recording-making-the-victim-count.pdf.

Home Office (2012) *Cross-Government Definition of Domestic Violence: A Consultation Summary of Responses.* [pdf] Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/157800/domestic-violence-definition.pdf.

Home Office (2015) *Controlling or Coercive Behaviour in an Intimate or Family Relationship*. [pdf] Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/482528/Controlling_or_coercive_behaviour_-_statutory_guidance.pdf.

Home Office (2015b), *Home Office Counting Rules for Recorded Crime: Violence Against the Person. April 2015*. [pdf] Available online at https://www.gov.uk/government/uploads/system/uploads/attachment_ data/file/457163/count-violence-august-2015.pdf.

Home Office (2016) *Police Recorded Crime and Outcomes: Open Data Tables User Guide*. [pdf] Available online at: https://www.gov.uk/government/statistics/police-recorded-crime-open-data-tables.

Home Office (2020a) *Home Office Counting Rules for Recorded Crime*. London: Home Office.

Home Office (2020b) *Domestic Abuse Bill 2020: Overarching*. London: Home Office.

Home Office (2021) Domestic Abuse and Sexual Offences To Be Treated As Seriously As Knife Crime. Available at: https://www.gov.uk/government/news/domestic-abuse-and-sexual-offences-to-be-treated-as-seriously-as-knife-crime

House, P and Neyroud, P. (2018) Developing a Crime Harm Index for Western Australia: the WACHI. *Cambridge Journal of Evidence-Based Policing*, 2(1), 70-94.

Iganski P (2008) *'Hate Crime' and the City*. Bristol: Policy Press.

Iganski, P., & Lagou, S. (2014) The Personal Injuries of Hate Crime. In: N. Hall, A. Corb, P. Giannasi, & J. Grieve (eds.), *The Routledge International Handbook on Hate Crime*, London: Routledge, 34-46.

Ignatans, D. and Pease, K. (2019) Are Victims of Crime Mostly Angry or Mostly Afraid? *Crime Prevention and Community Safety*, 21:314–324

Ignatans, D. and Pease, K. (2016) Taking Crime Seriously: Playing the Weighting Game. *Policing*, 10(3), 184–193.

Johnson, M. (1995) Patriarchal Terrorism and Common Couple Violence. *Journal of Marriage and the Family*, 57, 283–94.

Johnson, M. (2008) *A Typology of Domestic Violence*. Boston, MA: North-Eastern University Press.

Johnson, M. E. (2009) Redefining Harm, Reimagining Remedies, and Reclaiming Domestic Violence Law. *U.C. Davis Law Review*, 42(4), 1107-1164.

Johnson, M. P. (2006) Conflict and Control: Gender Symmetry and Asymmetry in Domestic Violence. *Violence Against Women*, 12(11), 1003-1018.

Jones, S. (2000) *Understanding Violent Crime*, Cardiff University: Open University Press.

Karim, A. and B. Lawrence (2007) *On Violence: A Reader*, North Carolina: Duke University Press.

Kärrholm, F., Neyroud, P. and Smaaland, J., (2020) Designing the Swedish Crime Harm Index: an evidence-based strategy. *Cambridge Journal of Evidence-Based Policing*, 4, 15-33.

Kelly, L. (1988) *Surviving Sexual Violence*. Cambridge: Polity Press.

Kilby, J. and Ray, L. (2014) 'Introduction' to special issue Violence and Society: towards a New Sociology. *The Sociological Review*, 62(S2), 1-12.

Kline, P. (2014) *An Easy Guide to Factor Analysis*. Florence: Taylor and Francis.

Koss, M. P. (1990) The Women's Mental Health Research Agenda: Violence Against Women *American Psychologist*, 45(3), 374–380.

Langton, L. and Truman, J. (2014) Socio-Economic Impact of Violent Crime. *Bureau of Justice Statistics Special Report* [pdf] Available online at https://bjs.ojp.gov/content/pub/pdf/sivc.pdf

Lasslett, K. (2010) Crime or Social Harm? A Dialectical Perspective. *Crime, Law and Social Change*, 54(1), 1-19.

Law Commission (2021) Hate Crime Laws: Final Report. *Law Commission No. 402*, [pdf] Available at: https://s3-eu-west-2.amazonaws.com/lawcom-prod-storage-11jsxou24uy7q/uploads/2021/12/Hate-crime-report-accessible.pdf

Law Commission (2021b) *Hate Crime: Final Report Summary*. [pdf] Available at: https://s3-eu-west-2.amazonaws.com/lawcom-prod-storage-11jsxou24uy7q/uploads/2021/12/6.7808_LC_Hate_Crime_Summary_Dec21_WEB.pdf

Lawley, D. N., and Maxwell, A. E. (1962) Factor Analysis as a Statistical Method. *The Statistician*, 12(3), 209-229.

Leung, A. (2004) *The costs of Pain and Suffering from Crime in Canada.* In: Research and Statistics Division Methodological Series. Canada: Department of Justice.

Liao, J. G. and McGee, D. (2003) Adjusted Coefficients of Determination for Logistic Regression. *The American Statistician*, 57, 161–165.

Lui, J., Francis, B. and Soothill, K. (2011) A Longitudinal Study of Escalation in Crime Seriousness. *Journal of Quantitative Criminology*, 27, 175-196.

MacLeod, J., Grove, P. and D. Farrington (2012) *Explaining Criminal Careers Implications for Justice Policy*. Oxford: Oxford University Press.

Magidson, J. and J. K. Vermunt, (2003) Comparing Latent Class Factor Analysis with Traditional Factor Analysis for Data mining. In H. Bozdogan (Eds.), *Statistical Data Mining and Knowledge Discovery*, Florida: Chapman and Hall/CRC, 373-383.

Maguire, M. (1980) The Impact of Burglary upon Victims. *British Journal of Criminology*, 20, 261-275.

Maguire, M., Morgan, R. and Reiner, R. (2012), *The Oxford Handbook of Criminology (5th ed)*, Oxford: Oxford University Press.

Malbon, E., Carson, L. and S. Yates (2018) What Can Policymakers Learn from Feminist Strategies to Combine Contextualised Evidence with Advocacy? *Palgrave Communications*, 4(1), 1-8.

McFadden, D. (1974) The Measurement of Urban Travel Demand. *Journal of Public Economics*, 3, 303–328.

McLaughlin, E., Muncie, J. and Hughes, G. (2003), *Criminological Perspectives: Essential Readings (2nd ed.)*, London: Sage.

Mehlkop, G. and Graeff, P. (2010) Modelling a Rational Choice Theory of Criminal Action: Subjective Expected Utilities, Norms, and Interactions. *Rationality and Society*, 22(2), 189-222.

Menard, S. (2000) Coefficients of Determination for Multiple Logistic Regression Analysis. *The American Statistician*, 54, 17–24.

Mennicke, A. and S. Kulkarni (2016) Understanding Gender Symmetry within the Expanded Partner Violence Typology. *Journal of Family Violence*, 31, 1013-1018.

Merken, S. and V. James (2020) Perpetrating the Myth: Exploring Media Accounts of Rape Myths on "Women's" Networks. *Deviant Behaviour*, 41(9), 1176-1191.

Merton, R. (1938), Social Structure and Anomie. *American Sociological Review*, 3(5), 672–682.

Mitchell, R. J., (2019) The Usefulness of a Crime Harm Index: Analysing the Sacramento Hot Spot Experiment Using the California Crime Harm Index (CA-CHI). *Journal of experimental criminology*, 15(1), 103-113.

Morgan, J., and. Simons, M. (2018) Changing Media Coverage of Violence Against Women. *Journalism Practice*, 12(9), 1165-1182.

Myhill, A and K. Hohl (2019) The "Golden Thread": Coercive Control and Risk Assessment for Domestic Violence. *Journal of Interpersonal Violence*, 34(21), 4477-4497.

Myhill, A. (2015) Measuring Coercive Control: What Can We Learn from National Population Surveys? *Violence Against Women*, 21(3), 355-375.

Obokata, T. (2006) *Trafficking of Human Beings from a Human Rights Perspective: Towards a Holistic Approach*. BRILL: Leiden.

OECD (2008) 'Handbook on Constructing Composite Indicators: Methodology and User Guide. [pdf] Available at https://www.oecd.org/els/soc/handbookonconstructingcompositeindicatorsmethodologyanduserguide.htm

Office for National Statistics (2015) A Stocktake of Crime Statistics in England and Wales. [pdf] Available online at http:// www.ons.gov.uk/ons/rel/crime-stats/crime-statistics/year-ending-september-2014/stystock-take-of-crime-statistics.html.

Office for National Statistics (2018a) 2017-18 Crime Survey for England and Wales Questionnaire (From April 2017). [pdf] Available at https://www.ons.gov.uk/file?uri=/peoplepopulationandcommunity/crimeandjustice/methodologies/crimeandjusticemethodology/201718csewquestionnaire.pdf

Office For National Statistics (2018b_) Crime Severity Score (Experimental Statistics). [xls] Available at https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/datasets/crimeseverityscoreexperimentalstatistics

Office for National Statistics (2018c) The Nature of Violent Crime In England and Wales: Year Ending March 2017. [pdf] Available at https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/articles/thenatureofviolentcrimeinenglandandwales/yearendingmarch2017

Office for National Statistics (2019), Crime in England and Wales QMI, [pdf] Available at https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/methodologies/crimeinenglandandwalesqmi

Office for National Statistics (2019b) Crime Survey for England and Wales (CSEW) Dataset User Guide: Adults Aged 16 and Over 2017/18. [pdf] Available at http://doc.ukdataservice.ac.uk/doc/8464/mrdoc/pdf/8464_2017-18_csew_adults_dataset_user_guide.pdf

Office For National Statistics (2020) User Guide to Crime Statistics for England and Wales. [pdf] Available at https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/methodologies/userguidetocrimestatisticsforenglandandwales

Office for National Statistics, (2017) Domestic Abuse, Sexual Assault and Stalking. [pdf] Available at https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/compendium/focusonviolentcrimeandsexualoffences/yearendingmarch2016/domesticabusesexualassaultandstalking

Office for Statistics Regulation (2019) Statistics from the Scottish Crime and Justice Survey. https://www2.gov.scot/Topics/Statistics/Browse/Crime-Justice/crime-and-justice-survey/users

Pagès, J. (2014) *Multiple Factor Analysis by Example Using R* (1st Eds). Florida:Chapman and Hall.

Pease, K. (1988) *Judgements of Offence Seriousness: Findings from the 1984 British Crime Survey*. London: Home Office.

Pemberton, S. (2007) Social Harms Future(s): Exploring the Potential of the Social Harm Approach. *Crime, Law and Social Change*, 48, 27-41.

Pemberton, S. (2015) *Harmful societies: Understanding Social Harm*. Bristol: Policy Press.

Pence, E. and Paymar, M., (1993) *Education Groups for Men Who Batter: The Duluth Model*. New York: Springer Publishing Company.

Phoenix, J. (2021) *Measuring the Repetition of Domestic Violence and Abuse in Police Data* [Doctoral thesis] [pdf] Available at: https://eprints.lancs.ac.uk/id/eprint/157506/1/2021phoenixphd.pdf

Pinker, S. (2011) *The Better Angels of Our Nature*. London: Allen Lane.

Piquero, A., Farrington, D. and Blumstein, A. (2003) The Criminal Career Paradigm. *Crime and Justice: A Review of Research*, 30, 359-506.

Piquero, A., Farrington, D. and Blumstein, A. (2007) *Key Issues in Criminal Career Research New Analyses of the Cambridge Study in Delinquent Development*. New York: Cambridge University Press.

Pratt, T, Turanovic, J., Fox, K. and Wright, K. (2014) Self-control and victimization: a Meta-Analysis. *Criminology*, 53(1), 87–116.

Pratt, T. and Cullen, F. (2000) The Empirical Status of Gottfredson and Hirschi's General Theory of Crime. *Criminology*, 38, 931–64.

Ray, L. (2018) *Violence and Society (2nd Eds)*. London: Sage.

Renzetti, C. (2011) Economic Issues and Intimate Partner Violence Against Women in Renzetti, C., Edleson, J. and R. K. Bergen (Eds) *Sourcebook on Violence Against Women. 2nd edition.* Los Angeles: Sage, 171-188.

Revelle, W. (2014) *The 'psych' Package*. Documentation available at CRAN: http://cran.r-project.org/web/packages/psych/index.html

Roach, J., Cartwright, A. and K. Pease (2020) More Angry Than Scared? A Study of Public Reactions to the Manchester Arena and London Bridge Terror Attacks of 2017. *Studies in Conflict and Terrorism*, 1-25.

Robinson, A., Myhill, A. and J. Wire (2018) Practitioner (Mis)Understandings of Coercive Control in England and Wales. *Criminology and Criminal Justice*, 18(1) 29-49.

Rose, M. R., Nadler, J. and J. Clark (2006) Appropriately Upset? Emotion Norms and Perceptions of Crime Victims. *Law and Human Behaviour*, 30, 203-219.

Ruback R. B., Greenberg M. S., and Westcott, D. R. (1984) Social Influence and Crime-Victim Decision Making. *Journal of Social Issues*, 40(1), 51–76.

Rubin, E. L. (1999) Introduction: Minimizing Harm as a Solution to the Crime Policy Conundrum. In *Minimizing Harm: A New Crime Policy for Modern America*, E. L. Rubin (eds.), 1–33. Boulder: Westview.

SAGE Research Methods (2014) How-to Guide for R: Rotation. [pdf] available at https://methods.sagepub.com/dataset/howtoguide/rotation-nilt-2014-r

Saisana M. and Tarantola S. (2002) *State-Of-The-Art Report on Current Methodologies And Practices for Composite Indicator Development*. European Commission. [pdf] Available at http://cv.uoc.edu/moduls/UW08_M3105_00015/web/main/fichas/material/ISPRA_2002.pdf

Saltelli A. (2007) Composite Indicators Between Analysis and Advocacy. *Social Indicators Research*, 81, 65-77.

Sentencing Council (2018) Overarching Principles: Domestic Abuse. Available at https://www.sentencingcouncil.org.uk/overarching-guides/magistrates-court/item/domestic-abuse/

Sethi, D. (2006) *Injuries and Violence in Europe: Why they Matter and What can be Done*. World Health Organisation: Denmark.

Shapland, J., & Hall, M. (2007). What Do We Know About the Effects of Crime on Victims? *International Review of Victimology*, 14(2), 175–217.

Sharp-Jeffs, N., Kelly, L. and Klein, R. (2018) Long Journeys Toward Freedom: The Relationship between Coercive Control and Space for Action – Measurement and Emerging Evidence. *Violence and Women*, 24(2), 163-185.

Shen, F. (2013) Mind, Body, and the Criminal Law. *Minnesota Law Review*, 97(6), 2036-2175.

Shepherd, J., Qureshi, R., Preston, M. and Levers, B. (1990). Psychological Distress after Assaults and Accidents'. *British Medical Journal*, 301, 849-850.

Sivarajasingam, V., Shepherd, J. P., Matthews, K. and S. Jones (2003) Violence-Related Injury Data in England and Wales: An Alternative Data Source on Violence. *British Journal of Criminology*, 43(1), 223-227.

Spalek, B. (2006) *Crime Victims: Theory, Policy and Practice*. Basingstoke: Macmillan.

Stark, E. (2007) *Coercive Control*. Oxford: Oxford University Press.

Stark, E. (2009) Rethinking Coercive Control. *Violence Against Women*, 15 (12), 1509-1525.

Stark, E. (2010) Do Violent Acts Equal Abuse? *Sex Roles*, 62, 201–211.

Stark, E. (2012) Looking Beyond Domestic Violence: Policing Coercive Control. *Journal of Police Crisis Negotiations*, 12, 199-217.

Starkweather, J (2014) Factor Analysis with Binary Items: A Quick Review With Examples. *RSS Matters*, available at https://web3.unt.edu/benchmarks/issues/2014/09/rss-matters

Straus et al. (1996) The Revised Conflict Tactics Scales (CTS2): Development and Preliminary Psychometric Data. *Journal of Family Issues*, 17(3), 283 – 316.

Straus, M. A (1979) Measuring intra-family conflict and violence: The Conflict Tactics (CT) Scales. *Journal of Marriage and Family*, 41(1), 75-88.

Straus, M. A (1980) Victims and Aggressors in Marital Violence. *American Behavioural Scientist*, 23(5), 681-704.

Straus, M. A. (1973) A General Systems Theory Approach to a Theory of Violence Between Family Members. *Social Science Information*, 12(3), 105–125.

Straus, M. A. (1990) The Conflict Tactics Scales and Its Critics: An Evaluation and New Data on Validity and Reliability. In M. A. Straus and R. J. Gelles (Eds.) *Physical violence in American families*. New Brunswick, NJ: Transaction Publishers, 49- 73.

Straus, M. A. (1990b) Injury and Frequency of Assault and the "Representative Sample Fallacy" in Measuring Wife Beating and Child Abuse. In M. A. Straus & R. J. Gelles (Eds.), *Physical violence in American families.* New Brunswick, NJ: Transaction Publishers, 75-91.

Straus, M. A. and S. Steinmetz (1973) The Family as a Cradle of Violence. *Society*, 10(6), 50-56.

Strickland, P. and G. Allen (2018) Domestic Violence in England and Wales: Briefing Paper. *House of Commons Library*, [pdf] Available at https://researchbriefings.files.parliament.uk/documents/SN06337/SN06337.pdf

Taber, K. S. (2017) The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education. *Research in Science Education*, 48, 1273-1296.

Teatero, M.L. and Penney, A. M. (2015) Fight-or-flight response. In I. Milosevic & R.E. McCabe, (Eds.), *Phobias: The Psychology of Irrational Fear*. Santa Barbara, CA: Greenwood.

The Women's Centre Cornwall (2021) *Recording Misogyny As A Hate Crime*. Available at: https://www.womenscentrecornwall.org.uk/information-support/guides/misogyny-as-a-hate-crime/

Tilly, C. (2004) Terror, Terrorism, Terrorists. *Sociological Theory*, 22 (1): 5-13.

Towers, J. (2015) Making the Links Between Economic Inequality and Intimate Partner Violence. *Safe - The Domestic Abuse Quarterly*, 53, 22-25.

Tseloni, A. , Ntzoufras, I., Nicolaou, A. And Pease, K., (2010) Concentration of Personal and Household Crimes in England and Wales. *European Journal of Applied Mathematics*, 21(45), 325-348.

Usher, K., Bhullar, N., Durkin, J., Gyamfi, N. and Jackson, D. (2020) Family Violence and COVID-19: Increased Vulnerability and Reduced Options For Support. in *International Journal of Mental Health Nursing*, 29(4), 549-552.

Usher, K., Bradbury-Jones, C., Bhullar, N., Durkin, J., N. Gyamfi, Fatema, S. R and Jackson, D. (2021) COVID-19 and Family Violence: Is This A Perfect Storm? *International Journal of Mental Health Nursing*, 30(4), 1022-1032.

Walby, S. (2004) *The Cost of Domestic Violence.* London: Women and Equality Unit (DTI).

Walby, S. and J. Allen (2004) Domestic Violence, Sexual Assault and Stalking: Findings from the British Crime Survey *Home Office Research Study*, [pdf] Available at http://nomsintranet.org.uk/roh/official-documents/HomeOfficeResearchStudy276.pdf

Walby, S. and J. Towers (2018b) Untangling the Concept of Coercive Control. *Crime and Criminal Justice*, 18(1), 7-28.

Walby, S. and P. Olive (2014) *Estimating the Costs of Gender-based Violence in the European Union*, Luxembourg: Publications Office of The European Union.

Walby, S. and Towers, J. (2018) Measuring Violence to End Violence: Mainstreaming Gender in *Journal of Gender-Based Violence*, 1(1), 11-31.

Walby, S. J. Towers and B. Francis, (-) 'Technical Paper on the Methodology used by the Paper "Is Violent Crime Increasing or Decreasing?" [pdf] Available at http://www.research.lancs.ac.uk/portal/files/102876063/Technical_Paper_311215_.pdf

Walby, S., J. Towers and B. Francis (2014) Mainstreaming Domestic Violence and Gender-Based Violence into Sociology and the Criminology of Violence. *The Sociological Review*, 62(2), 187-214.

Walby, S., Francis, B., Phoenix, J. and Davies, E. (2022) Changing Violence 11-year Dataset. City, University of London. [Dataset] https://doi.org/10.25383/city.16608523.v1

Walby, S., Francis, B., Phoenix, J. and Davies, E. (Working Paper) *Changing Violence Methodology Document*

Walby, S., Towers, J., Balderston, S., Corradi, C., Francis, B. J., Heiskanen, M., Helweg-Larsen, K., Mergaert, L., Olive, P., Palmer, C. E., Stockl, H. and Strid, S. (2017) *The concept and measurement of violence against women and men.* Bristol: Policy Press.

Walby, S., Apitzsch, B., Armstrong, J. E., Balderston, S., Szmagalska-Follis, K., Francis, B. J., Kelly, L., May-Chahal, C. A., Rashid, A., Shire, K., Towers, J. and Tunte, M. (2016) *Study*

on the Gender Dimension of Trafficking in Human Beings. Luxembourg: Publications Office of the European Union.

Walby, Sylvia (2012) Violence and Society: Introduction to an Emerging Field of Sociology, *Current Sociology*, 61(2), 95-111.

WHO (2021) *Violence Against Women*. Available at: https://www.who.int/news-room/fact-sheets/detail/violence-against-women

Women's Place UK (2020) *WPUK response to Law Commission Hate Crime Consultation December 2020.* [pdf] Available at: https://womansplaceuk.org/wp-content/uploads/2021/02/WPUK-Hate-Crime-Submission-2020.pdf

Women's Place UK (2021) *Misogyny Is the Problem. Hate Crime Legislation Is Not the Answer*. Available at: https://womansplaceuk.org/2021/03/13/misogyny-is-the-problem-hate-crime-legislation-is-not-the-answer/

Young, J. (1999) *The Exclusive Society: Social Exclusion, Crime and Difference in Late Modernity*. London: SAGE Publications.