

**The Harms of Violence are Unevenly Distributed: How does the harm caused to victims of violence vary by relationship to the perpetrator?**

**Abstract**

It is not disputed that crime harms victims. Violence specifically can cause physical and emotional harms to victims' health (McManus et al. 2022; Chandan et al. 2020). The outcomes of violent victimisation can be attributed to multiple factors such as sex, repetition, and victim-perpetrator relationship. For example, acts by men against women are reported as having greater potential for harm than the same act perpetrated by a woman against a man (Walby and Towers, 2017). However, studies that compare the harms of violence by sex, victim-perpetrator relationship, and the interaction between them are rare. Studies which discuss the impacts of violence against women often look at this in isolation from other violence (Stark, 2007; Koss, 1990). This paper uses data from the Crime Survey for England and Wales to analyse violence against women in the context of all violence. By investigating the outcomes of violent crime, this paper suggests: the odds of experiencing harm increases as the distance to the perpetrator decreases; the gendered aspects of violence are important for understanding the harms inflicted by perpetrators; and including emotional harms shows how violence without injury is still harmful.

**Key words:** violence, harms, injury, domestic violence, gender

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## **Introduction:**

Violence harms health (WHO, 2014) by impacting both the physical health and the mental health of the victim (McManus et al. 2022; Chandan et al. 2020). The outcomes of violent victimisation can be attributed to multiple factors such as sex (of the victim and perpetrator), repetition and offence type. For example, acts by men against women are reported as having greater potential for harm than the same act perpetrated by a woman against a man (Walby and Towers 2017). The Violence Against Women (VAW) field centres on disaggregated 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. Specifically, violence by domestic relations differs from violence by strangers through sex, repetitions, and severity (Bachman 2000; Walby, Towers and Francis 2014).

Conversely, traditional criminology does not routinely disaggregate by sex and studies which focus on comparing violence by the above factors are uncommon, not least because of the separation of different forms of violence into different distinct fields of study. It is uncommon to find research which considers violence by strangers (and acquaintances) and violence by domestic relations together (Hullenaar et. al. 2022). Studies often focus on one aspect of harm (Chandan et al. 2020; Sivarajasingam et. al. 2003) or violence, for example hate crime (Ignaski and Lagou, 2014; Crag-Henderson and Sloan 2003) or homicide (Zhao 2021).

This paper uses a large dataset compiled from the Crime Survey for England and Wales (CSEW) of violent crimes in England and Wales (Walby et al. 2022) to compare all violence. Disaggregating by sex and victim-perpetrator relationship to assess whether the likelihood of experiencing injury or an adverse emotional response after violent victimisation differs between victims. This paper also considers the possible intersections between sex and victim-perpetrator relationship to contribute to discussions of harm within the violence against women field which are specifically concerned about how these interactions can impact the outcomes of violence.

This paper 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. While this paper shows differences in violence by domestic relations, acquaintances, and strangers, it also demonstrates how even relatively 'simple' questions cannot be answered without a comparative approach. The results suggest: the likelihood of harm from violent crime increases as the distance to the perpetrator decreases; 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.

## Literature Review

Mainstream criminological theories of violence often focus on the causes and the perpetrators of violence. Common theories of violence include cultural strain theories (Merton, 1938), rational choice theory (Becker, 1968), routine activities approach (Cohen and Felson, 1979), self-control theories (Gottfredson and Hirschi 1990) and the theory of criminal careers (Blumstein et al. 1988, Farrington, 1994). These explanations of violence attribute violence to socio-economic inequalities and male perpetrators (Young 1999). The traditional criminological paradigm, leaves sex out of the analysis of violence on the basis that violence is perpetrated by the disadvantaged, usually male, against those with more power or high socioeconomic status. Analyses of violence sometimes even exclude violence by domestic perpetrators and violence with a sexual motive with little or no justification (Ganpat et al. 2020; Tseloni et al. 2010; Farrell et al., 2014).

Criminology has since developed to include the field of Violence Against Women (VAW). This field of study has successfully raised awareness of male violence against women (Kelly, 1988; García Moreno et al, 2005). This field challenges traditional theories of violence by demonstrating the importance of including motivation, intention, and outcomes into analyses of violence to fully understand the gendered inequalities in violent crime (Walby and Towers, 2017). Literature in this area has a specific interest in violence by domestic perpetrators (domestic violence) which is disproportionately experienced by women and perpetrated by men (Dobash and Dobash, 1998; Stark 2007; Walby and Towers, 2017). This has also led to discussions on how the outcomes of domestic violence may differ to the outcomes of other types of violent crime.

### *Harms of Violence and Sex of the victim*

It is not disputed that crime harms victims. Violence specifically can cause physical and emotional harms to victims' health. While there is a wide breadth of research into the harms of violence, current research often includes all types of crime into one analysis (Ignatans and Pease, 2019, Shapland and Hall, 2007), considering the impacts of property and personal crimes together. Or, some studies focus only on one 'type' of violence such as hate crime victimisation (Iganski and Lagou, 2014; Iganski, 2008) or violence against women (Koss, 1990, Kelly 1988).

'Harm' is usually categorised under injury and emotional/psychological harm (Grenfield and Paoli, 2013; Walby and Towers 2017). Sometimes, physical injury is the only harm considered (Sivarajasingam et al. 2003; Iganski

and Lagou, 2014; Warner, 2009). The 'violence against the person' definition of violence used by the Office for National Statistics (ONS) uses 'force' as a key measure of violence occurring (Davies et al. 2024). 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). However, Shapland and Hall (2007) acknowledge that most victims of violence will not experience physical injury.

Considering the emotional impact of violent victimisation is important as physical injury is uncommon. Shapland and Hall (2007) discuss the emotional effects of crimes disaggregated by burglary, vehicle-related crime, and violence, finding that emotional reactions were most prevalent in victims of violence than other crimes. Additionally, using the CSEW specifically, Iganski and Lagou (2014) analysed data on racially motivated hate crime, finding that victims often have different emotional responses. Iganski and Lagou (2014) focus on the range of emotional responses recorded by victims of hate crime and highlight the diversity of impacts experienced by victims of hate crime. They discovered that not every victim of hate crime experiences the same emotional distress and that some victims will not report an emotional reaction. Craig-Henderson and Sloan (2003: 482) argued that the negative emotions experienced by victims of racially motivated crimes were "qualitatively distinct" from victims of similar crimes that were not racially motivated.

Severity is usually measured by the type of act perpetrated and the consequence of the act. Theories (and measurements) of violence that ignore the severity of the act are criticised (Dobash et al. 1998). 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 Towers, 2017). The potential for more serious harm (for example in offences categorised as serious wounding) means that the severity of the offence is 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 its 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.

As mentioned above, VAW research has emphasised the impact that sex of the victim may have on the outcomes of violence. Specifically, in relation to violence by domestic perpetrators whereby the perpetrator is often male, and the victim is often female, thus increasing the risk of serious physical injury (Stark 2010; Thompson, 2006). While violence by strangers is usually discussed under a framework of one perpetrator, one crime, one victim (Walby and Towers 2017), other types of violence do not fit into this. When the perpetrator is known to the

victim, there is the opportunity for repeated events of violence. The repeated nature of domestic violence is often linked to increased severity, both in terms of physical injury and harm to mental wellbeing. Walby, Towers and Francis (2014) argue that the harms from violence are unevenly distributed, with violence against female victims having much greater consequences than violence against men.

Therefore, violence perpetrated by domestic relations differs from violence by strangers or acquaintances in important ways such as the duration and repetition of the abuse and the severity of the impact (Koss, 1990). Domestic 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). According to Koss (1990), most victims will experience an “immediate distress response” post-victimisation e.g., fear, and domestic violence is often discussed in relation to the severe mental harm caused by the sustained nature of the violence (Chandan et al. 2020; McManus et al. 2022; Jonas et. al. 2014). 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 can be expected to differ (See *Anger and Fear*).

Violence against women, by men, is said to reinforce gender inequality (Kelly 1988). While violence is often physical, some aspects of violence against women and girls involve non-physical coercion and control (Stark 2007; Myhill 2015). Myhill (2015) has found that “while the prevalence of situational violence is fairly symmetrical, coercive controlling abuse is highly gendered, with women overwhelmingly the victims”. Hester (et al., 2013; 2017) categorises domestic violence and abuse as a continuum from ‘negative behaviour’ (usually one-off events of situational couple violence but can also be longer lasting) to coercive controlling violence abuse which produces inequalities and reduces liberty.

Overall, while violence is characterised by its physical effect on the victim, it is generally agreed that the emotional effects of crimes are important when considering the overall picture of victimisation experiences (Shapland and Hall, 2007; Ignatans and Pease, 2019). For violence, it is common for the victim to report no injury, or minor injuries (Shapland and Hall, 2007). Therefore, more victims will experience emotional impacts from violence than who will experience physical injury. However, studies on violence often focus on one area of violence or one aspect of harm (Chandan et al. 2020; Sivarajasingam et. al. 2003) and studies which discuss the impacts of domestic violence often look at this in isolation from other violence (Stark, 2007; Koss, 1990). While

Shapland and Hall (2007) emphasise the importance of including emotional effects of crime into the 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). This paper aims to contribute to the above discussions on harms by assessing the association between victim-perpetrator relationship and sex of the victim on harms experienced by victims of violence.

### *Anger and Fear*

Fear is often considered to be the appropriate response to victimisation (Henson and Reynolds, 2015) and is the most studied (Dutton et al. 1998; Farrall et al. 2014; Gilchrist et al. 1998; Teatero and Penney, 2015; Roach et al. 2020; Hale 1996). While there is a substantial literature on the fear of violence, literature on anger is more limited (Roach et al. 2020, Ignatans and Pease, 2019).

Anger is considered to be the opposing response to fear, and therefore is not always categorised as a negative response. 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 assumed to be 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, after anger and annoyance. Roach, Cartwright, and Pease (2020) further discuss this in relation to terrorism (specifically, the Manchester Arena and London Bridge terror attacks), finding that anger was a more common response than fear in the aftermath of terrorism events.

Fear responses to violent victimisation are gendered. One study by Stanko (1992) found that women’s reported fear of crime is three times higher than men, despite the CSEW showing a higher prevalence of violence towards men (ONS, 2020). The difference in fear of crime for women compared to men is consistent throughout many studies (Baumer 1978; Hindelang et al. 1978; Stanko 1992; Stanko 1995). As well as fear of potential victimisation, women are also said to feel more frightened post-victimisation than men (Skogan and Maxfield 1981). As domestic violence is more commonly experienced by women, we might expect that female victims feel most afraid after this type of victimisation. A key aspect of domestic violence and abuse is coercive control, whereby fear and intimidation is part of a variety of tactics to keep a victim from leaving a violent relationship (Stark, 2007; Hester et al. 2017). Myhill (2015:362) conceptualises coercive control as “abuse that was ongoing, denigrating, perceived as threatening, and had caused a degree of fear”.

While there is clearly a well-established literature on the fear of crime, the literature on anger is sparse (Ignatans and Pease, 2019). In addition to this, research on how victim-perpetrator relationship impacts fear/anger responses is almost non-existent (Henson and Reynolds, 2015), with the exception of intimidation tactics used in the context of coercive control (Stark, 2007; Myhill, 2015). The papers that do disaggregate by relationship, usually distinguish between strangers and non-strangers and discuss fear of further victimisation (Jackson, 2009; Scott, 2003).

### *Research Questions*

This paper furthers the developments of the VAW field by discussing violence against women in the context of all violence, forming clear comparisons of the harms of violence by strangers, acquaintances, and domestic relations. The VAW field centres on disaggregated analyses of violence, specifically emphasising the interaction between sex of the victim and sex of the perpetrator and how this influences the nature and outcomes of violence.

Specifically, this paper analyses the impact of victim-perpetrator relationship, sex of the victim and the interaction between them both on the harms experienced by victims of violence. The interaction between sex of the victim and victim-perpetrator relationship is often acknowledged as important (Walby, Towers and Francis, 2014; Stark 2010; Dobash and Dobash, 1998) but has not been investigated in this way. This paper will also expand further on past research by including anger and fear as two emotional responses which are in need of further attention (Davies, 2022).

This paper answers two research questions:

- 1) How does the interaction between sex of the victim and victim-perpetrator relationship affect the harms resulting from violent victimisation?
- 2) How does the interaction between sex of the victim and victim-perpetrator relationship affect experiences of anger and fear from violent victimisation?

### **The Data**

The CSEW is a cross-sectional national victimisation survey with a yearly sample of around 35,000 respondents. As a household survey, this excludes people who are not permanent residents of an address e.g., people in

temporary accommodation, people living temporarily with friends or family, people in care homes or halls of residence and people who are homeless (ONS, 2019).

The respondent is asked to disclose experiences of victimisation over a 12-month reference period (prior to the date of the interview). One victim can disclose multiple (up to six) victimisations, with each victim form in the data referring to a discrete criminal event. These forms can also record either single event 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, 2020:20). This means that repetitions of the same crime can be recorded in one victim form.

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, 2020). Due to these features, it has become a useful and popular data source for academic analysis.

The "Changing Violence" (CV) dataset (Walby et al. 2022) contains eleven sweeps from the CSEW from 2006/7 to 2016/17. This dataset contains only victim forms for violent victimisations (as defined below). Most victims (80%) recorded one discrete victimisation.

Most victims in the sample were white (91.5%), 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/temporarily 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%) and divorced (11.6%). Separated and widowed had the smallest percentage of respondents with 5.3% and 2.4%. There were an almost equal percentage of male and female respondents, with only slightly more males (51.5%) than females (48.5%). The mean age of respondents was 38.5.

### *Violent crime*

The CSEW asks respondents about their victimisation experiences, including questions on the nature of the offence (e.g. whether force was used by the perpetrator, whether property was stolen etc.). The answers to



these questions are then coded by trained coders into offence categories (Kantar Public, 2021). The CSEW published definition of violence uses the 'violence against the person' definition and includes common assault, serious wounding, other wounding, and attempted assault. Serious wounding and other wounding with a sexual motive are also included. This paper expands the 'violence against the person' definition to also include events of rape, attempted rape and indecent assault and threats of violence (threats to kill/assault, sexual threat and other threat or intimidation).

The decision to expand the definition of violence was made because of the impact of a narrower definition of violence on the estimations of violence against women (Cooper and Obolenskaya, 2021; Davies et al 2024). However, it should be noted that the definition used in this paper does not encompass all aspects of violence by domestic perpetrators, as it excludes many aspects of 'coercive control'. Coercive control is a complex concept which is not fully captured in the main CSEW survey module (Myhill, 2015), with the exception of threats offences (Hester, 2013). Also, a definition of violence was needed which allowed for the comparison across relationship types (coercive control occurs as part of domestic abuse only). Therefore, it is likely that the sample used in this paper underestimates the impact of domestic violence due to this omission.

For the most part, the offence categories were unchanged. This is with the exception of sexual violent offences. Serious wounding with a sexual motive only occurred 10 times in the data (0.04%), other wounding with a sexual motive and attempted rape occurred in 0.3% of victim forms and rape occurred in 0.6% of victim forms. Therefore, offence type was recoded to combine sexual violence 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 victim forms for each category.

Threat offences made up 48.9% of victim forms in the data, with the most common being threat to kill or assault (33.2%), followed by common assault (29.9%), other wounding (9.6%), attempted assault (5.5%), serious wounding (3.3%), and all physical sexual violent offences (including rape, attempted rape, indecent assault, serious wounding with a sexual motive and other wounding with a sexual motive) (2.7%).

#### *Victim-perpetrator relationship*

In the CSEW, the respondent is asked if they know anything about the perpetrator, such as sex, age or ethnicity, and how they know them. From these questions, victim-perpetrator relationship is categorised into three categories: stranger, acquaintance and domestic. Stranger violence includes events where the victim did not have any information about the perpetrator(s). Acquaintance violence is defined as events of violence where the victim knew the perpetrator at least by sight, for example, colleagues and people met through work, neighbours, and friends of family members. Domestic violence includes violence perpetrated by (ex-) intimate partners, or any family or household member.

In the case of multiple perpetrators, the closest relationship to the victim is recorded. Violence by strangers makes up less than half (44.3%) of violent events in the 'CV' dataset, violence by acquaintances was 41.1% of victim forms. Violence by domestic relations made up the remaining 14.6%.

In this paper, violence against women refers to events of violence (defined above) against female victims, and domestic violence refers to violence by current or ex intimate partners, family members and other people living in the household.

#### *Sex of the victim and sex of the perpetrator*

The CSEW records whether the respondent to the questionnaire is male or female. Therefore, sex is used to investigate the gendered nature of violence and harms. 51.5% of victim forms related to male victims and 48.5% female victims. Similarly, the sex of the perpetrator is coded as a binary male or female. 79.4% of victim forms were perpetrated by men, 20.6% were perpetrated by women.

#### *Harms*

This paper uses injury and emotional reaction as two indicators for harm. For events where the victim indicated that physical force was used by the perpetrator specifically, the victim is asked "Were YOU bruised, scratched, cut or injured in any way?" (ONS, 2016:92). Additionally, they are asked "What sort of injuries did you receive?" (*ibid*), a question with a list of twelve possible injuries the victim can disclose, which can include multiple responses.

Of the victim forms which recorded *physical* violence (including sexual violence), over half (57.9%) experienced a physical injury of some kind and just under half did not. Of the victim forms which recorded at least one injury,

the majority 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).

As well as physical injuries, the CSEW asks all victims “Many people have emotional reactions after incidents in which they are victims of crime. Looking at this card did you PERSONALLY have any of these reactions after the incident?” and “which of these reactions did you personally have?” (ONS, 2016:95). The list of possible emotional reactions includes 10 possible responses. Most of victim forms in the CV dataset (85.8%) recorded at least one emotional reaction from the violent event. Around half recorded anger (53.6%), annoyance (47.7%) and shock (45.7%). A third of victim forms recorded fear (34.8%) and loss of confidence/ feeling vulnerable (29.5%). Fewer crime reports recorded crying/tears (19.7%), depression (12.6%), anxiety/panic attacks (17.3%) and difficulty sleeping (16.2%).

### **Method**

Binary logistic regression is used to predict injury (Model 1), emotional reaction (Model 2), anger (Model 3) and fear (Model 4) in four separate models. The logistic regression model (Agresti, 1996) is:

$$\log\left(\frac{\pi(\mathbf{x})}{1 - \pi(\mathbf{x})}\right) = \beta_0 + \mathbf{x}\mathbf{B} = \beta_0 + \beta_1x_1 + \beta_2x_2 + \dots + \beta_px_p$$

Where  $\pi(x) = \hat{y}$  is the predicted probability of the outcome (e.g. injury for model (1)) occurring given  $\mathbf{x}$ ,  $\mathbf{x}$  is the  $(1 \times p)$  vector of predictors,  $\beta_0$  is a constant term (intercept), and  $\mathbf{B}$  is a  $(p \times 1)$  vector of coefficient terms.

Each model has multiple predictor variables, which were coded as dummy variables in the usual way with the lowest category as the reference category. Specifically, for the research questions of this paper, victim-perpetrator relationship and sex of the victim were included, as well as an interaction term between the two. Age, socio-economic classification of the victim, sex of the perpetrator and whether the incident was a single or series event were also controlled for in each model.

For the modelling of injury (Model 1), only offences which can result in an injury were used. This excluded threats, which is almost half of the cases in the dataset. Therefore, Model 1 has a smaller N than the other

models. The subset of data for Model 1 contained 8610 victim forms, of which 4988 (57.9%) recorded injury and 3622 (42.1%) did not. Additionally, offence type is a predictor in Models 2-4 but was excluded from the first model because there is a strong definitional relationship and collinearity between offence and injury. For example, assaults are divided into three subgroups which depend on severity of injury: serious wounding, other wounding, and common assault.

For Model 2, there were 18,737 victim forms which recorded whether an emotional reaction occurred. The responses for Models 3 and 4 rely on the responses for Model 2. In the survey, the respondent is asked first whether they had an emotional reaction, and then what type (from a list including fear and anger). Therefore, Models 3 and 4 had the same N as Model 2.

Each model included the individual predictors, as well as an interaction term between sex of the victim and victim-perpetrator relationship.

## **Findings**

The interaction between the sex of the victim/victim-perpetrator relationship are used to examine the effect of these gendered interactions, as well as their individual effects. The odds ratios for the interaction terms were computed by multiplying the odds ratios for the relevant predictors. Table 1 shows the results computed using the coefficients for individual predictors and the interaction term for the four regression models.

To determine whether the interaction term was significant a likelihood ratio test comparing models with and without the interaction term was conducted. The Wald chi-squared test was also used to test the goodness of fit of the models. These tests are not included in Table 1 but are discussed in the text below. Finally, the reference category is indicated by '1' in the table and is a victim form for male victim, stranger perpetrator (in all other reference categories).

The table also presents the N and percentage for each category of the interaction. This differs slightly for Model 1 where a subsample of the data was used, with a smaller total N (explained above). For violence by strangers, the victim is usually male (64.9%) (72.3% for Model 1). Violence by acquaintances is experienced almost equally by men and women with 52.5% of victims being female (slightly less at 45.1% for Model 1). Violence by domestic relations is often perpetrated against female victims more than male victims (79.9% - 76.1% for Model 1).

For each model, victim forms with domestic perpetrators had the highest odds ratios (ORs) for each harm, when compared to victim forms with acquaintance or stranger perpetrators. This was true whether the victim was male or female. Victim forms with a domestic perpetrator and a male victim had odds of injury that were 1.5 times higher and odds of emotional reaction that were 1.6 times higher than for victim forms in the reference category (male victim, stranger perpetrator) ( $p < .001$ ). The odds of anger and fear were also significantly higher for male victims of domestic violence than male victims of stranger violence ( $p = .05$ ). The interaction term was significant for Model 1 when computing the Wald statistic ( $\chi^2(1) = 8.5, p = .004$ ) and compared to a reduced model using likelihood ratio test ( $\chi^2(2) = 24.718, p < .001$ ). The individual predictors for sex and victim-perpetrator relationship were also significant using the Wald statistic ( $\chi^2(2) = 18.8, p < .001$ ).

When the perpetrator was a domestic relation and the victim was female, the odds ratios for harms were often higher than all other categories. For this group, the odds of injury were twice as high ( $p < .001$ ), the odds of emotional reaction were four times as high ( $p = .05$ ), and the odds of fear were 3.8 times as high as the reference category (male victim, stranger perpetrator) ( $p = .05$ ). For victim forms with an acquaintance perpetrator and female victim, the odds of an emotional reaction ( $p = .01$ ) and fear ( $p < .001$ ) were both twice as high as the reference category and the odds of injury were 1.2 times as high ( $p = .01$ ). The interaction term was significant when compared to a reduced model for Model 2 ( $\chi^2(2) = 375.29, p < .001$ ) but was not significant for Model 4 ( $\chi^2(2) = 3.4007, p = .182$ ). However, the Wald statistic for Model 4 showed a better fit when the interaction term was included ( $\chi^2(1) = 9.3, p = .002$ ).

Victim forms with female victims had higher odds ratios of harm than victim forms with male victims, with a couple of exceptions. The first being injury and the second being experiences of anger. Victim forms for female victims of stranger perpetrated violence had odds of injury that were 29% lower than for male victims ( $p < .001$ ) and odds of anger that were 22% lower ( $p < .001$ ). However, the odds of fear ( $p < .001$ ) and emotional reactions ( $p < .01$ ) were twice as high for victim forms with female victims than for male victims when the perpetrator was a stranger. The interaction term was not significant for Model 3 ( $p = 0.141$ ), but likelihood ratio test showed a better fit for the full model than a reduced model ( $\chi^2(2) = 6.96, p = .031$ ). The individual predictors

for sex of the victim and victim-perpetrator relationship were significant predictors of anger ( $\chi^2(2) = 75.461, p = <.001$ ).

Table 1: Harms of violence for violent victim forms in the CSEW by sex of the victim and victim-perpetrator relationship							
		Sex of the Victim					
		Male Victim			Female Victim		
Harm Variables	Victim-perpetrator Relationship	N	%	OR from logistic regression <sup>1</sup>	N	%	OR from logistic regression
<i>Model 1 (Injury)</i>	Domestic	465	23.9	1.469 ***	1478	76.1	2.092 ***
	Acquaintance	1751	54.9	1.221 **	1438	45.1	1.212 **
	Stranger	2514	72.3	1	964	24.8	.715 ***
<i>Model 2 (Emotional Reaction)</i>	Domestic	593	20.1	1.594 ***	2363	79.9	4.132 *
	Acquaintance	3621	47.7	1.059	3970	52.3	2.097 **
	Stranger	5318	64.9	1	2872	35.1	2.008 ***
<i>Model 3 (Anger)</i>	Domestic	593	20.1	1.190 *	2363	79.9	1.152 *
	Acquaintance	3621	47.7	1.085 *	3970	52.3	.995 *
	Stranger	5318	64.9	1	2872	35.1	.787 **
<i>Model 4 (Fear)</i>	Domestic	593	20.1	1.270 *	2363	79.9	3.835 *
	Acquaintance	3621	47.7	.998	3970	52.3	2.478 ***
	Stranger	5318	64.9	1	2872	35.1	2.334 ***

Significance codes \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$   
<sup>1</sup> Logistic Regression models also included, age, sex of the perpetrator, socio-economic classification of the victim and whether the event was a single incident or series.

### Discussion and Conclusions

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 (Koss, 1990; Dobash et al. 1992). This paper interrogates these assumptions, using regressions analysis to investigate the importance of sex (of the victim) and victim-perpetrator relationship in predicting the harms experienced by victims of violence. This paper goes beyond current research by considering the interactions between sex of the victim and victim-perpetrator relationship explicitly.

Much of the literature on crime outcomes considers the emotional impact of violence (or crime in general) on victims (Shapland and Hall, 2007). Generally, a high proportion of victims experience at least one emotional reaction from the criminal violent event, whereas many victims will not experience a physical injury. Previous research has suggested that victims of domestic violence experience more emotional harm than victims of violence by strangers (Walby and Towers 2017; Koss, 1990). The psychological impact of violent events and the threats of violence in domestic relationships are what keeps people in the relationship (Kelly, 1988; Stark 2010), which often results in repeated victimisation at a high frequency. The repetitions and threats of violence are discussed in theorisations of domestic violence as being part of coercive and controlling behaviour and causing severe mental harm (Kelly, 1988; Stark 2010).

This paper finds victim-perpetrator relationship to be a significant predictor in three out of four of the models predicting harm. Disaggregating by the victim-perpetrator relationship (domestic, stranger, acquaintance) is necessary to understand the differences in harms caused to victims of violence. The odds of injury, emotional reactions and fear increases as the distance to the perpetrator decreases when controlled for by sex (victim and perp), socio-economic class, repetitions, and offence type. Therefore, the relationship to the perpetrator matters when considering the potential harm to the victim as 'more' harm can be expected when the victim knows the perpetrator well.

Male and female victims of violence showed significantly different responses to violent events. Sex of the victim was an important predictor for both anger and fear. Male victims showed higher odds of anger when the sex of the perpetrator and victim-perpetrator relationship were controlled for. However, female victims of violence showed much higher odds of fear compared to male victims, also controlling for the sex of the perpetrator and victim-perpetrator relationship. Fear of violence or fear of intimate partner are also a common question which can be used to indicate experiences of violence or coercion e.g., by doctors or professionals, but this might result

in bias towards female victims. These findings show that male victims do not report being fearful as often in the survey.

Previous research has shown that women are more fearful of being a victim of crimes (Baumer 1978; Hindelang et al. 1978; Skogan and Maxfield 1981; Stanko, 1995). This paper demonstrates that women are also more fearful after violent victimisation. This paper contributes to the already substantial body of literature on fear of violence by showing the importance of sex and victim-perpetrator relationship on the amount of fear experienced by victims and acknowledging that there are differences in the way that male and female victims may respond to violence. Considering other frequent emotional reactions, such as anger means that victims are not discounted because they are not fearful (Ignatans and Pease, 2019; Roach et. al., 2020; Teatero and Penney, 2015). There are many other commonly recorded emotions which are experienced other than fear (and sometimes as well as fear), with the CSEW recording nine possible reactions to crime.

However, the results of this paper should be considered carefully. Not every victim will record an injury or an emotional reaction. While emotional reactions were experienced more commonly than injuries, around 20% of victims did not record experiencing an emotional response at all and over half recorded no injury. There is therefore a small proportion of victims which may not report any harm from a violent victimisation. As well as this, the analysis focuses on four binary response questions and so does not reveal much about the severity of harm. The CSEW records over 20 possible injuries and emotional reactions which range from scratches to broken bones and annoyance to depression. Future work would involve using methods which could take the severity of the outcomes into consideration to determine if injuries and emotional responses to violence are more severe for specific groups of victims.

The overall conclusions of this paper are that victim-perpetrator relationship and sex of the victim are important factors when considering the potential harm to the victim. Additionally, it is important to consider how these dimensions interact and effect a victim's experiences of violence. Victims of domestic violence showed the highest odds of injury and emotional reactions, followed by violence by acquaintances. However, the interaction between sex of the victim and relationship type also showed that it is often female victims of domestic perpetrators who experience the highest odds of harms. While the outcomes of violence differ by victim-perpetrator relationship, this does not suggest that the current approach of studying domestic violence as separate from violence by strangers (or acquaintances) is the most useful. The research questions of this paper



could only be answered by adopting a unified theory of violence, and then disaggregating by gendered dimensions (such as sex of the victim) to identify patterns. If we only consider 'violent crime' under the framework of male violence against men, we exclude some of the most repeated, harmful, and gendered violence from the discussion.

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### **Key messages:**

- A victim's odds of experiencing harm from violent crime increases as the distance to the perpetrator decreases.
- The gendered aspects of violence are important for understanding the harms inflicted by perpetrators on victims
- By including emotional harms into the analysis this paper shows how violence without injury is still harmful to the victim.

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