Crime Victims' Demographics Inconsistently Relate to Self-Reported Vulnerability

Nelli Aihio^a, Daniel Frings^a, Rachel Wilcock^b and Phillip Burrell^c

^a*School of Applied Sciences, Division of Psychology, London South Bank University, UK;* ^b*Department of Psychology, The University of Winchester, Winchester, UK;* ^c*School of Engineering, Division of Computer Science and Informatics, London South Bank University, UK*

Previous research has found a discrepancy between the number of individuals who self-report as being vulnerable and official prevalence estimations. Both this discrepancy and victims' views about their vulnerability need addressing in order to identify further training needs for criminal justice system agencies and to that ensure victims receive the appropriate support. Using data from the Metropolitan Police Service (MPS) User Satisfaction Survey (USS) ($n = 47,560$), the present study explores 1) crime victims' self-reported vulnerability and its association with demographics; 2) police identification of vulnerability; and 3) whether the needs of vulnerable victims are catered for. The results indicate that 38% of the sample self-identified as being vulnerable, a considerably higher percentage than estimated in previous literature. Although associations have been found between vulnerability and demographics, these have been negligible or have had weak effect sizes. The findings are discussed in relation to the current definition of a vulnerable victim, and the role of personal circumstances in self-identification are highlighted.

Key words: courts; criminal justice; police; victims of crime; vulnerability.

Introduction

Both victims, and witnesses, of crimes can be considered vulnerable. Although definitions of the term can vary (see below), vulnerability is broadly defined as the 'quality or state of being exposed to the possibility of being attacked or harmed, either physically or emotionally' Oxford Dictionaries Online (2016). The United Kingdom criminal justice system recognises that there are both victims and witnesses of crime who are vulnerable. However, a discrepancy has been found between the figures for self-reported vulnerability and official estimates (Burton, Evans, & Sanders, 2006). For instance, a previous Home Office report entitled *Speaking Up for*

Justice (Home Office, 1998) estimates that 3% to 5% of prosecution witnesses might be vulnerable due to their mental or physical disability and that a further 2% could be vulnerable because they are a victim of a certain type of crime, such as racial, sexual or domestic violence. Estimated prevalence of vulnerability amongst witnesses is 5% to 7%. When intimidated witnesses are also included, the estimate rises to 7% to 10%. However, the findings of Burton et al. (2006) indicate that 45% of their sample self-identified as being potentially vulnerable/intimidated witnesses (VIW). In contrast, the criminal justice agencies cited in Burton et al. identified 9% as VIWs. This lower percentage is within the

Home Office's (1998) estimation range of 7% to 10%. Burton et al. made a conservative estimation that 24% of the sample consisted of potential VIWs.

As Burton et al. (2006) highlight a serious discrepancy between self-identification and the agencies' estimation, the current study aims to explore, via victims' self-reports, whether self-identified vulnerability is still relatively high, if any particular demographic group are self-identifying as more vulnerable than others, and whether or not the police are perceived as being able to identify vulnerability and cater for the needs of vulnerable individuals.¹ The study also explores changes in self-reported vulnerability over the three-year period of 2009 to 2012.

Research is required on victims' self-reports and police identification of vulnerability because it may reveal further training needs for criminal justice organisations. Identifying vulnerability is also critical to ensuring that victims can give their best evidence in court. Giving evidence can be a daunting experience as matters are discussed and questioned in public and victims are usually expected to give evidence with the defendant present. This situation could interfere with giving best evidence, particularly if the victim is psychologically vulnerable. Identifying vulnerability should lead to appropriate support or enhanced services being offered to both victims and witnesses. This, in turn, may have a beneficial effect on victims' psychological well-being whilst they proceed through the criminal justice system and beyond.

Definition of Vulnerability in the Criminal Justice Context

One possible source of the observed discrepancy in estimation rates is the difficulty in defining and operationalising 'vulnerability'. For example, a physically disabled individual may be at risk of abuse due to the reduced physical defences that limit escape options (Nosek, Foley, Hughes, & Howland, 2001). Individuals who are psychologically vulnerable may be at

risk of harm due to learning difficulties or because of mental health issues. Two meta-analyses conducted recently indicate that children and adults with mental disability or illness are at greater risk of violence than their non-disabled peers (Hughes et al., 2012; Jones et al., 2012). Mental disorders have also been linked to a higher risk of homicidal death (Crump, Sundquist, Winkelby, & Sundquist, 2013).

The Code of Practice for Victims of Crime (Ministry of Justice, 2015) defines the following criteria for vulnerable victims: under the age of 18 at the time of the offence; quality of evidence is likely to be diminished because of a mental disorder; has a significant impairment in intelligence and social functioning; has a physical disability or is suffering from a physical disorder. Police services and courts use this definition. If a victim is deemed vulnerable then he or she becomes eligible for 'special measures' in court, which include giving evidence from behind a screen or via video link, the removal of the wigs and gowns of court personnel, or having an intermediary assisting with communication.

The Code of Practice definition is limited in that it makes no reference to emotional states or to a victim's views about his or her own vulnerability. Gudjonsson (2010) has suggested that psychological vulnerabilities need to be considered more broadly than simply as a mental illness or learning disability and that the focus should perhaps move to mental health and personality issues in general. Perloff (1983) has suggested that negative life events, including crime, produce a feeling of vulnerability with symptoms of emotional stress. This is supported in Coston (1995), who found that the majority of previously victimised homeless women felt vulnerable to future victimisation. Therefore, defining vulnerability accurately can be problematic.

Importance of Accurate Identification and Identification Bias

The Crown Prosecution Service (CPS) calls for the early identification of vulnerable witnesses

for both practical and supportive reasons. Special measures applications are subject to a strict timescale and if victims' needs are not identified early on then there may not be sufficient support, which could result in a lack of confidence in the system and may even lead to an unsuccessful prosecution (Crown Prosecution Service, 2009; K. Smith & Tilney, 2007). In general, there may be inconsistencies in recording vulnerability. The police may identify a person as vulnerable whilst the CPS does not. Alternatively, the CPS may identify vulnerability in a case but is not given sufficient information by the police to justify special measures for the victim (Charles, 2012).

The identification of vulnerability may be affected by stereotyping of the victim by the evaluator. A person possessing a stereotype about a certain group may attribute the stereotypical characteristics to an individual belonging to that group and then make a judgement about the person (Brown, 2010). For instance, Christie (1986) described the stereotype of the 'ideal victim' for whom society most readily affords both sympathy and the label 'victim': an elderly lady who is robbed by a drug addict. In contrast, a young man who is assaulted in a pub by someone he knows is less likely to be labelled a victim or, perhaps, considered as vulnerable. Stereotypes can cause a problem for identification if some individuals fail to be identified as vulnerable because they do not fit the stereotypical image of a 'vulnerable person'. Indeed, in other contexts (e.g. the health arena), categorisation and systematic bias have been found to contribute to differences in quality of service. For example, ethnicity biases in health-care decision-making may result in discrimination during stressful, time-pressured or high-emotion situations (Major, Mendes, & Dovidio, 2013). Similar processes may operate in the criminal justice context with differences or biases in identification leading to variation in police services.

An alternative approach to identifying vulnerability is to consider how victims themselves perceive their own status. From this

perspective, it may be beneficial to explore possible psychological mechanisms which may underlie the self-identification of vulnerability. Appraisal theory argues that emotions are extracted from appraisals or evaluations of events (Lazarus, 1991). A primary appraisal is the evaluation of an event's importance for one's well-being. If the event is evaluated as self-relevant, a secondary appraisal is made to assess how well one is able to cope with the consequences. The mediating role of appraisals in emotions has been found in daily life (Nezlek, Vansteelandt, Van Mechelen, & Kuppens, 2008) as well as in the relationship between military combat exposure and psychological distress (McCuaig & Ivey, 2012). Appraisal theory accounts for individual differences in reactions to the same event and these may be more important than between group differences. Self-reporting as vulnerable may be linked with appraisals suggesting that the individual is unable to meet the challenges that the event presents and, as a result, feelings of vulnerability ensue.

Factors Predicting Vulnerability

Both external and self-driven identification of vulnerability may be linked to demographic and individual difference factors. Alongside markers such as mental health and disability described in the current code of practice definition, research indicates that other factors may also influence perceptions of vulnerability. People may feel vulnerable to crime due to social and demographic factors, such as being a woman, an elderly person, unemployed, having negative expectations of themselves, or perceiving themselves as socially marginalised (Vieno, Roccato, & Russo, 2013). In terms of individual difference factors, low sexual and body esteem, self-blame and low self-control have been found to link with individuals' risk of victimisation (Fox, Gover, & Kaukinen, 2009; Hassouneh-Phillips & McNeff, 2005; Miller, Markham, & Handley, 2007; Turanovic & Pratt, 2014).

Vulnerability is often mentioned in research on the fear of crime (Cossman & Rader, 2011; Killias & Clerici, 2000; Schafer, Huebner, & Bynum, 2006). This area of research has found a gender effect in fear of crime, with women being more fearful of crime than men (W. R. Smith & Torstensson, 1997; Reid & Konrad, 2004; Schafer et al., 2006). It has been suggested that for women the fear of sexual assault influences the fear of other types of crime, even property crime, although not to the same extent as for personal crime (Ferraro, 1996). W. R. Smith and Torstensson (1997) concluded that women might perceive greater risk in their environment and respond by expressing a higher fear of crime than men. In contrast, men may think they are invulnerable and therefore discount risks.

Other personal demographics may also be a source of perceived vulnerability. In Perry and Alvi (2012), participants from ethnic, religious, and lesbian, gay, bisexual and transgender (LGBT) communities were asked how hate crime incidents affected their communities. All those surveyed agreed that incidents of hate crimes made them feel vulnerable due to the nature of the crime being interpreted as a 'message' to others in that community. Chakraborti and Garland (2012) argue that in terms of hate crimes, vulnerability and 'difference' should be central to the investigation, using the Sophie Lancaster case as an example. The victim was attacked and killed in 2007 in a targeted assault due to her distinctive appearance as a member of the 'Goth' subculture. At the time, subcultures such as Goths were not included in police hate crime categories. It could be argued that even without the official recognition as a hate crime, the case was highly distressing for the Goth community and potentially increased their feelings of vulnerability to falling victim to such an extreme offence.

Aims and Hypotheses

Burton et al. (2006) highlight the discrepancy between self-identification and the agencies' estimations. They also found that the police

have difficulties in identifying VIWs. The police appear to hold a cognitive hierarchy in identification such that children and victims in sexual assault cases are more likely to be identified as VIWs due to the visibility of their apparent vulnerability.

Since the Burton et al. (2006) report there has been no further research published examining the discrepancy between official estimations of vulnerable victims and self-identified vulnerability. Further, the report does not capture whether people in particular demographics are more or less likely to self-identify as vulnerable. This is important, because levels of service provision may need reviewing if such discrepancies exist.

To address this, the primary purpose of the current study is to determine from victim self-reports whether previous Home Office estimations for the number of vulnerable victims are reflected in a large sample of victims and whether any demographic has a perception of being more or less vulnerable than others. Based on the criminal justice definition and the research literature it was expected that the youngest and/or oldest age groups would be more likely to feel vulnerable than other age groups, that women would feel more vulnerable than men, and that victims of hate crimes would report greater feelings of vulnerability than victims of other types of crime. The study also explores victims' perceptions about the police's ability to identify their vulnerability and cater for their needs. The data also allow an investigation into year-on-year changes in vulnerability, identification, and catering for needs.

Method

Participants

Data from the first edition of the Metropolitan Police Service (MPS) User Satisfaction Survey (USS) for the period 2009 to 2012 were analysed (Metropolitan Police Service, 2013). The data set includes data from 36 different borough operational command unit

areas across Greater London with a total of 123,174 respondents. Data were collected quarterly between 2005 and 2012; however, the vulnerability question and responses were only included and recorded from 2009 onwards. The data were sourced from the UK Data Service. The sample includes victims of burglary, violent crime, vehicle crime, racially-motivated crime, and road traffic collisions. The survey does not record participants' specific age but rather their age group. The youngest age group is 16 to 24 years and the oldest is 75 years and over. The data excludes victims of domestic violence, serious assaults and sexual offences. In total 47,560 participants responded to the MPS USS vulnerability question. Of these, 62.5% are male and 37.5% female and the mode for age is 25 to 34 years.

Procedure

The data were gathered via telephone interviews conducted by an external market research company on behalf of the MPS. The interviews took place 6 to 12 weeks after victims reported a crime. The data were analysed using chi-square tests. Given that multiple comparisons were undertaken, an increased risk of a Type 1 error was present. To account for pooled error rates, each test was subject to Bonferroni α adjustment with the critical p value set at the $<.001$ level to achieve $\alpha = .05$. In addition, where significant associations were observed, they were evaluated primarily in terms of their effect size.

Measures

Vulnerability

Self-reported vulnerability was measured with one item: 'Did you consider yourself to be vulnerable in this instance? This could have been because of your age, a disability, or personal circumstances'. Responses were recorded as 'Yes', 'No', 'Not answered', 'Don't know', and 'Refused'. As the meaning

of the latter three answers are open to interpretation, data were recoded into a dummy variable only including 'Yes' and 'No' responses with all other responses recoded as missing.

Identification and Catering for Vulnerability

Perceived identification of, and catering for, vulnerability was derived from responses to the question 'Was this [vulnerability] identified by the police when you first contacted them?' and the follow-up question 'Were these needs catered for?'. As with vulnerability measure, the 'Yes', 'No', 'Not answered', 'Don't know', and 'Refused' responses were recoded as a dummy variable to include 'Yes' and 'No' responses only with all other responses recoded as missing.

Results

Out of the total sample, 47,560 (38.6%) victims responded to the vulnerability question, with 37.6% self-reported as being vulnerable. Table 1 displays the descriptive statistics for each demographic group. Among the males, 31.5% reported as being vulnerable while 47.7% of females reported as being vulnerable. The relationship between gender and vulnerability is significant, although weak in strength (Rea & Parker, 1992), $\chi^2(1, n = 47,557) = 1254.16, p < .001, \Phi = .16$.

Of the respondents who had a physical or mental disability ($n = 4,067$), over half (59.3%) self-reported as vulnerable. Interestingly, of the respondents who did not have a disability ($n = 42, 221$), 35.6% reported being vulnerable, indicating that their vulnerability may have stemmed from age, personal circumstances or both.

Sources of Disability

Figure 1 displays the ten most commonly cited sources of disability. Notably, the largest percentage is for mobility issues (46.1%). It should be noted that the disability total does not add up to 100% because the

respondents had in some instances indicated more than one source of disability. Only one of the most commonly cited sources – mental health – produces a weak association with vulnerability, $\chi^2(1, n = 47,560) = 427.98, p < .001, \Phi = .10$; people who self-reported mental health issues were more likely to report as being vulnerable.

The remainder of the sources also indicate statistically significant associations, except for issues with speaking which have no association at all after Bonferroni α adjustment. However, the effect sizes are all under .10, indicating negligible effects. This suggests that no meaningful assumption can be made

about vulnerability based on sources other than mental health issues.

Vulnerability in Age Groups

The analysis revealed a significant relationship between age and vulnerability; however, this association is negligible, $\chi^2(6, n = 47,218) = 162.52, p < .001$, Cramer’s V = .06. Table 1 displays self-reported vulnerability in percentages by each demographic group. The 16- to 24-year-olds have the highest percentage of respondents who considered themselves vulnerable and the 55- to 64-year-olds the lowest. The negligible effect size suggests that no

Table 1. Self-reported vulnerability by demographic groups.

Variable	n	%	Self-reported as vulnerable	
			(n)	%
Gender	47,557			
Female	17,857	37.5	8522	47.7
Male	29,700	62.5	9350	31.5
Ethnicity	46,161			
White	29,760	64.5	9648	32.4
Black	6197	13.4	2914	47.0
Asian	7129	15.4	3268	45.8
Mixed	1578	3.4	786	49.8
Other	1497	3.2	748	50.0
Age group (range in years)	47,218			
16–24	8185	17.3	3543	43.3
25–34	12,221	25.9	4514	36.9
35–44	10,916	23.1	4124	37.8
45–54	8411	17.8	2981	35.4
55–64	4595	9.7	1570	34.2
65–74	1918	4.1	664	34.6
75 and over	972	2.1	374	38.5
Crime type	47,560			
Burglary	11,379	23.9	6613	40.5
Violent crime	14,161	29.8	7396	52.2
Vehicle crime	15,150	31.9	2816	18.6
Road traffic collision	3723	7.8	1172	31.5
Racially-motivated crime	3147	6.6	1876	59.6
Self-reported vulnerability	47,560			
Vulnerable	17,873	37.6		
Not Vulnerable	29,687	62.4

Figure 1. The most commonly cited sources of disability.

meaningful assumption can be made about vulnerability based on victims' ages. It appears that respondents in the youngest age bracket, including under 18s, are no more vulnerable than those in other age brackets.

Vulnerability and Ethnicity

The ethnicity variable was created from the original 16 ethnic groups in the data set and reduced to 5 ethnic groups: White, Black, Asian, Mixed, and Other. For example, White British, White Irish and White Other were compressed into the single category White. Among ethnicity groups it is Other that has the highest percentage of respondents (50%) who reported being vulnerable, followed by Mixed (49.8%), Black (47%), Asian (45.8%) and White (32.4%). The comparison of proportions in vulnerability does not significantly differ between Black and Asian or between Black, Mixed and Other. The proportion of White significantly differs from all other ethnicity groups at the $\alpha = .05$ level. A significant association was found between ethnicity and vulnerability, with a weak effect size $\chi^2(4, n = 46,161) = 978.97, p < .001$, Cramer's $V = .15$. Therefore, although there is a difference in vulnerability indicating that

white victims self-report as less vulnerable than other ethnicity groups, the association is weak.

Vulnerability Between Crime Types

A moderate relationship was found between crime type and self-reported vulnerability: $\chi^2(4, n = 47,560) = 4377.77, p < .001$, Cramer's $V = .30$. Table 1 presents the percentages of those who reported as being vulnerable by each crime type. Victims of racially-motivated crimes have the highest percentage of self-reported vulnerability (59.6%) and victims of vehicle crimes have the lowest (18.6%). Comparison of proportions indicate significant differences between all crime types at the $\alpha = .05$ level.

Identifying Vulnerability

Demographics were used to determine whether there are any differences between the groups in relation to the police identifying vulnerability. The independent variables are gender, age, ethnicity and crime type. Although each analysis for demographic associations with vulnerability identification produced a statistically significant result ($p <$

.001), all but one has an effect size of less than .10. Cramer's V for age, gender, and ethnicity is .05, indicating that there is a negligible association between these variables and the police identifying vulnerability.

The association between crime type and vulnerability identification is weak, $\chi^2(2, n = 16,156) = 416.57, p < .001$, Cramer's $V = .16$. The comparison of proportions reveals a difference in vulnerability identification between vehicle crime victims and all other crime types. Vulnerability is identified in 56.1% ($n = 2506$) of vehicle crime cases whereas in all other offences the identification of a victim as vulnerable varies between 74% and 78%.

Catering for Needs

Similar to the identification of vulnerability results, the associations between catering for vulnerability needs and demographics were statistically significant with negligible effect sizes. Cramer's V for age, ethnicity and crime type all fell short of the .10 threshold for a weak effect and gender has no association with catering for vulnerability needs ($p = .83$). Therefore it can be concluded that these variables have little if any relationship with the extent to which the police were catering for vulnerability needs.

Vulnerability Over Time

Self-reported vulnerability has increased over time from 32.1% in 2009/10 to 36.1% in 2010/11 and further to 46.0% in 2011/12. However, police identifying vulnerability has not increased at similar rates. In 2009/10, 70% of the respondents reported that their vulnerability had been identified and in 2011/12 that figure had increased to 73.8, while 83% of respondents whose vulnerability had been identified ($n = 11,269$) reported that their needs had been catered for. The figures fluctuate over time from 82.7% in 2009/10, rising to 84.8% in 2010/11 and then falling to 81.8% in 2011/12.

Discussion

This study is an investigation of self-reported vulnerability and its association with demographic variables and victims' perceptions regarding the police identifying their vulnerability and catering for their needs. Previous research has found an inconsistency between the official estimations of vulnerable victims and victims' self-reported vulnerability in that self-reported vulnerability is much higher than the official figure. In the current study, just over one third of victims self-reported as vulnerable, in contrast to the 5% to 7% prevalence estimate in the *Speaking Up for Justice* report (Home Office, 1998). The current figure is, however, comparable to the Burton et al. (2006) estimation of 24%. This corroboration supports the suggestion that there may be a significant discrepancy between subjective vulnerability and the official estimation. It should also be noted that the current data excludes victims of domestic violence, sexual offences, and serious assault cases. Had these crime categories been included then self-reported vulnerability may have been higher.

This study is focused on differences in self-reported vulnerability amongst different demographic groups. In terms of age, the youngest group (16- to 24-year-olds) has the highest percentage of respondents self-identifying as vulnerable – however, the results indicate that while the association between age and vulnerability is statistically significant, it is negligible in strength. Therefore, the current official cut-off age of 18 years for automatic identification as being vulnerable may not be the best criteria (although it clearly differentiates children from adults). To investigate this further, future research could examine more directly self-perceived vulnerability around this boundary.

In the same fashion, the oldest age groups should not automatically be considered as vulnerable. As Pain (1995) notes, grouping the elderly into one category is problematic because individual differences in vulnerability are not considered. Although for many

elderly people such an automatic identification may be beneficial, the negative outcome of using a certain age as a criterion is the lack of consideration of all other age groups. There might be a common perception that a young adult without a physical or mental disorder is not vulnerable. Recall the notion of the ideal victim (Christie, 1986), where an elderly lady is more likely to be afforded victim status (and probably vulnerable status as well) than a young man. Yet the elderly victim may not feel vulnerable at all, whereas the young man may. In such a case it is possible that an elderly victim is erroneously offered more support or access to services than the younger male victim. The present results would challenge this by suggesting that vulnerability exists in all age groups and caution against stereotyping.

Both ethnicity and gender have a significant but weak relationship with self-reported vulnerability. Women and ethnic minorities feel more vulnerable compared to males and whites people. In terms of gender, to some extent this may reflect women's general fear of crime, as has been suggested in the literature (W. R. Smith & Torstensson, 1997; Reid & Konrad, 2004). However, the weak relationship between gender and vulnerability indicates that large differences in vulnerability between males and females may not exist. In terms of ethnicity, the relationship is again weak but it is possible that there is a general sense of vulnerability to particular crimes due to ethnic group membership (Schafer et al., 2006). Indeed, between crime types, the highest percentage of respondents that reported as being vulnerable are those who have been victims of racially-motivated crimes.

A moderate-size association was found between vulnerability and crime type; therefore, crime type may be an important indicator of vulnerability. In racially-motivated crimes, violent crimes, and burglaries more victims self-identify as being vulnerable compared to those subjected to road traffic collisions and vehicle crime. For racially-motivated offences, it may be that prior

knowledge of such crimes induces vulnerability (Perry & Alvi, 2012); minority males may be more likely to indicate fear of personal victimisation (Schafer et al., 2006).

There is no reason to expect that a burglary victim should psychologically differ from a victim of vehicle crime in their reactions to the crime – that is, individuals have their own unique reactions to an event, as proposed by appraisal theory research (Lazarus, 1991; McCuaig & Ivey, 2012; Nezlek et al., 2008). Therefore, one possible explanation for the differences between victims of different crime types in self-identification may be that burglary, assault and hate crimes are more personal in nature (violating the feeling of personal safety) than vehicle crimes. This in turn may increase or induce the feeling of vulnerability post-victimisation (Perloff, 1983). It is possible that the respondents have reported their post-victimisation vulnerability; that is, instead of reporting what their perceived vulnerability status was at the time of the offence, the victims of personal crime have considered their current and future vulnerability that may have arisen from experiencing these offences.

Levels of police identification of vulnerability (as perceived by victims) do not appear to differ between demographics. None of the demographic groups stand out in terms of levels of identification, which in itself is an important and meaningful result. Encouragingly, this indicates that the police are not focusing on one particular group over others in their attempts to identify vulnerability. A weak association was found between crime type and identification. Although vehicle crime has the lowest percentage of self-reported vulnerability it also has the highest percentage of non-identification for those who did self-identify as vulnerable. It is possible that the victim's vulnerability is not considered due to the offence being perhaps regarded as low impact. Another explanation for non-identification in vehicle crime cases may be that this type of offence may be reported and resolved over the telephone

without an actual visit from the police. If there is no face-to-face encounter and the topic of vulnerability does not arise then it could explain the lower vulnerability identification in victims of this crime type compared to the other groups, where police attendance is more likely.

When a victim was identified as vulnerable the results indicate that there is very little association between demographics and catering for the needs of self-identified vulnerable victims. This is also an encouraging result as it suggests that when catering for the needs of the vulnerable there is no discrimination based on age, gender, ethnicity or the type of crime.

Self-reported vulnerability has increased over time from 32% to 46% between 2009 and 2012. A smaller increase from 70% to 73% was found in the police identification of vulnerability. Overall, this indicates a steady identification rate. Although self-reported vulnerability has increased, it appears that the police have not fallen behind on identifications.

Taking all these findings into consideration, there appears to be a difference as to what the criminal justice system regards as vulnerable and how victims themselves perceive vulnerability. The official definition is very specific, allowing only certain aspects of the human condition to be considered. However, this may not be in line with how the victims view themselves. These results also support Gudjonsson's (2010) idea that psychological vulnerabilities need to be considered more broadly than simply as a mental illness or learning disability. Environmental factors as well as previous experience of crime may shape an individual's sense of vulnerability (Goodey, 2004).

Cossman and Rader (2011) argue that those who self-report poor health may also perceive themselves to be more vulnerable to crime. If this is the case, it could partly explain the frequency of self-reported vulnerability in those who do not report disabilities, as the respondents may have considered their health when evaluating their vulnerability.

Personal circumstances could include any variable that is pertinent to the person at the time, including poor health or being unemployed, or perceiving oneself as being socially marginalised (Vieno et al., 2013). Further investigation into personal circumstances is not possible because the respondents were not asked to elaborate on their circumstances. Had this been the case, further significant sources of vulnerability may have been revealed.

It is also possible that the victims feel scared and consider this as a source of vulnerability. Currently, alongside the criteria for what defines a vulnerable victim, there is a separate category for intimidated victims and witnesses. This includes individuals whose evidence may be diminished due to fear or distress and also victims of specific crime types such as sexual offences and domestic violence. In addition, a person's age and social and cultural background must be accounted for when assessing victim intimidation. Intimidated witnesses are also entitled to special measures. However, in the minds of the public, the concepts of intimidation and vulnerability may well be, to a degree, interchangeable.

The current study has a number of practical implications. Currently, special measures are not granted based on victims' self-identification of vulnerability. Rather, special measures are subject to an application and being granted by a judge. It is understandable that the official guidelines are limited in their definition of vulnerability, as broader criteria for vulnerability could result in an increase in applications for special measures, requiring considerable resourcing and delaying case progression. However, the overall impact of catering for vulnerable individuals may not be as great as the impact of not considering victims' self-evaluation. It could be detrimental to their coping if they are excluded from appropriate support or services, and it may also diminish trust in the criminal justice system as a whole.

With an increase in numbers of vulnerable victims and witnesses there is a risk of

criminal justice agencies viewing such individuals as having diminished credibility. Although the CPS has guidelines for credibility assessment, in such cases a judgement based on stereotypes is a pitfall. Not considering a person as vulnerable may also result in behaviour that prevents victims from discussing their vulnerability. It is likely that more could be done to raise awareness of vulnerabilities that go beyond mental health, physical disabilities and learning disabilities.

The findings presented here come with caveats and methodological limitations. The vulnerability measure is left somewhat open to participants' personal interpretation. It is difficult to ascertain what victims consider to be the source of vulnerability if they have been thinking about 'their personal circumstances'. Also, with yes/no answers, detail and deeper meaning are lost. Future research could address this by including qualitative methods such as open responses or interviews. Until this research is completed it is difficult to build a complete picture regarding the nature of vulnerable victims and witnesses within criminal justice system.

In terms of the results, most associations are either negligible or weak in their effect. However, this can be interpreted to highlight the importance of both widening the scope of the vulnerability criteria and increasing the specificity of individual measures. An extrapolation of these findings is that it is difficult to identify specific groups which are likely to consistently view themselves as vulnerable or not vulnerable. Although the practical recommendations that can be drawn from this exploratory research are (by the nature of the data) limited, it is suggested that interventions should not assume that particular groups are likely to feel vulnerable (or not vulnerable).

Conclusions

The present study investigated victims' self-reported vulnerability and their perceptions of whether or not their vulnerability was identified

by the police and their needs were subsequently catered for. It is concluded that mental health issues and the type of crime experienced may be good criteria for predicting vulnerability, whereas age may not be. A potentially significant source of vulnerability – personal circumstances – may not have been accounted for in the current data set, which calls for more research. In summary, the results indicate that anyone could feel vulnerable after falling victim to any crime, and the current guidelines for the police and the court may be too rigid. It might be appropriate to consider combining the terms 'vulnerable' and 'intimidated' under the definition of vulnerable, as this may more accurately reflect what people consider vulnerable to mean. Finally, focusing more on victims' self-reports will allow referrals to the appropriate support services for victims of crime and subsequently may better serve the criminal justice system. Finally, it is worth highlighting that these findings should not be perceived as a criticism of who is included in the current vulnerability definition, but rather a call to review and further research who might be inadvertently excluded and what factors could influence victims' self-identification.

Acknowledgements

The authors would like to thank the London Metropolitan Police Service for their assistance on this project.

Disclosure Statement

No potential conflict of interest was reported by the authors.

Note

1. From here onwards, the term 'victim' is used to encompass victims and witnesses, except where research refers specifically to witnesses.

References

- Brown, R. (2010). *Prejudice: Its social psychology* (2nd ed.). Oxford, UK: Wiley-Blackwell.

- Burton, M., Evans, R., & Sanders, A. (2006). Are special measures for vulnerable and intimidated witnesses working? Evidence from the criminal justice agencies. *Home Office Online Report 01/06*. Retrieved from <http://collection.europarchive.org/tna/20080205132101/homeoffice.gov.uk/rds/pdfs06/rdsolr0106.pdf>
- Chakraborti, N., & Garland, J. (2012). Reconceptualizing hate crime victimization through the lens of vulnerability and 'difference'. *Theoretical Criminology*, 16(4), 499–514. doi: 10.1177/1362480612439432
- Charles, C. (2012). *Special measures for vulnerable and intimidated witnesses: Research exploring the decisions and actions taken by prosecutors in a sample of CPS case files*. London, UK: Crown Prosecution Service. Retrieved from http://www.cps.gov.uk/publications/research/cps_research_on_special_measures.pdf
- Christie, N. (1986). The ideal victim. In: Fattah, E. A. (ed.), *From crime policy to victim policy*. pp.17–30. Basingstoke: MacMillan.
- Cossmann, J., & Rader, N. E. (2011). Fear of crime and personal vulnerability: Examining self-reported health. *Sociological Spectrum*, 31, 141–162. doi: 10.1080/02732173.2011.541339
- Coston, C. T. M. (1995). Self other judgments about perceptions of vulnerability to crime among urban transient females. *International Review of Victimology*, 4(1), 33–46. doi: 10.1177/026975809500400103
- Crown Prosecution Service (2009). *Early special measures discussions between the police and the Crown Prosecution Service: Practice Guidance*. Retrieved from <http://www.cps.gov.uk/legal/assets/uploads/files/13007%20early%20measures%20smd%205th.pdf>
- Crump, C., Sundquist, K., Winkleby, M. A., & Sundquist, J. (2013). Mental disorders and vulnerability to homicidal death: Swedish nationwide cohort study. *BMJ: British Medical Journal*, 346, f557. doi: 10.1136/bmj.f557
- Ferraro, K. F. (1996). Women's fear of victimization: shadow of sexual assault? *Social Forces*, 75(2), 667–690. doi: 10.2307/2580418
- Fox, K. A., Gover, A. R., & Kaukinen, C. (2009). The effects of low self-control and childhood maltreatment on stalking victimization among men and women. *American Journal of Criminal Justice*, 34(3-4), 181–197. doi: 10.1007/s12103-009-9064-4
- Goodey, J. (2004). Victims and victimology: research, policy and practice. Harlow, UK: Longman.
- Gudjonsson, G. H. (2010). Psychological vulnerabilities during police interviews. Why are they important? *Legal and Criminological Psychology*, 15, 161–175. doi: 10.1348/135532510X500064
- Hassounah-Phillips, D., & McNeff, E. (2005). "I thought I was less worthy": Low sexual and body esteem and increased vulnerability to intimate partner abuse in women with physical disabilities. *Sexuality and Disability*, 23(4), 227–240. doi: 10.1007/s11195-005-8930-3
- Home Office (1998). *Speaking up for justice: Report of the interdepartmental working group on the treatment of vulnerable or intimidated witnesses in the criminal justice system*. Home Office: London. Retrieved from <http://www.nationalarchives.gov.uk/ero/details.aspx?seriesid=64444&deliverableUnitId=520&entrypoint=HO/421/2/P2/CPD/PVU/SUFJ.PDF>
- Hughes, K., Bellis, M. A., Jones, L., Wood, S., Bates, G., Eckley, L., ... Officer, A. (2012). Prevalence and risk of violence against adults with disabilities: A systematic review and meta-analysis of observational studies. *The Lancet*, 379(9826), 1621–1629. doi:10.1016/S0140-6736(11)61851-5.
- Jones, L., Bellis, M. A., Hughes, K., Wood, S., Hughes, K., McCoy, E., ... Officer, A. (2012). Prevalence and risk of violence against children with disabilities: A systematic review and meta-analysis of observational studies. *The Lancet*, 380(9845), 899–907. doi: 10.1016/S0140-6736(12)60692-8
- Killias, M., & Clerici, C. (2000). Different measures of vulnerability in their relation to different dimensions of fear of crime. *British Journal of Criminology*, 40(3), 437–450. doi: 10.1093/bjc/40.3.437
- Lazarus, R. S. (1991). Cognition and motivation in emotion. *American Psychologist*, 46(4), 352–367. doi: 10.1037/0003-066X.46.4.352
- Major, B., Mendes, W. B., & Dovidio, J. F. (2013). Intergroup relations and health disparities: A social psychological perspective. *Health Psychology*, 32(5), 514–524. doi: 10.1037/a0030358
- McCuaig Edge, H. J., & Ivey, G. W. (2012). Mediation of cognitive appraisal on combat exposure and psychological distress. *Military Psychology*, 24(1), 71–85. doi: 10.1037/t22929-000
- Metropolitan Police Service. (June 2013). Strategy and Performance, *Metropolitan Police Service User Satisfaction Survey, 2005/06-2012/13* [computer file] (2nd Edition). Colchester, Essex: UK Data Archive [distributor].
- Miller, A. K., Markham, K. D., & Handley, I. M. (2007). Self-blame among sexual assault

- victims prospectively predicts revictimization: A perceived sociolegal context model of risk. *Basic and Applied Social Psychology*, 29(2), 129–136. doi: 10.1080/01973530701331585
- Ministry of Justice (2015). The Code of Practice for Victims of Crime. London, UK: The Stationary Office. Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/476900/code-of-practice-for-victims-of-crime.PDF
- Nezlek, J. B., Vansteelandt, K., van Mechelen, I., & Kuppens, P. (2008). Appraisal-emotion relationships in daily life. *Emotions*, 8(1), 145–150. doi: 10.1037/1528-3542.8.1.145
- Nosek, M. A., Foley, C. C., Hughes, R. B., & Howland, C. A. (2001). Vulnerabilities for abuse among women with disabilities. *Sexuality and Disability*, 19(3), 177–189. doi: 10.1023/A:1013152530758
- Oxford Dictionaries Online. (2016). Vulnerable. Retrieved October 28, 2016, from <https://en.oxforddictionaries.com/definition/vulnerable>
- Pain, R. H. (1995). Elderly women and fear of crime: the least likely victims? A reconsideration of the extent and nature of risk. *British Journal of Criminology*, 35(4), 584–598.
- Perloff, L. S. (1983). Perceptions of vulnerability to victimization. *Journal of Social Issues*, 39(2), 41–61. doi: 10.1111/j.1540-4560.1983.tb00140.x
- Perry, B., & Alvi, S. (2012). 'We are all vulnerable': The in terrorem effects of hate crimes. *International Review of Victimology*, 18(1), 57–71. doi: 10.1177/0269758011422475
- Rea, L. M., & Parker, R. A. (1992). *Designing and conducting survey research*. San Francisco: Jossey Boss.
- Reid, L. W., & Konrad, M. (2004). The gender gap in fear: Assessing the interactive effects of gender and perceived risk on fear of crime. *Sociological Spectrum*, 24, 399–425. doi: 10.1080/02732170490431331
- Schafer, J. A., Huebner, B. M., & Bynum, T. S. (2006). Fear of crime and criminal victimization: Gender based contrasts. *Journal of Criminal Justice*, 34(3), 285–301. doi: 10.1016/j.jcrimjus.2006.03.003
- Smith, K. & Tilney, S. (2007). *Vulnerable adult and child witnesses*. Oxford, UK: Oxford University Press.
- Smith, W. R., & Torstensson, M. (1997). Gender differences in risk perception and neutralizing fear of crime: Towards resolving the paradoxes. *British Journal of Criminology*, 37(4), 608–634. doi: 10.1093/oxfordjournals.bjc.9014201
- Turanovic, J. J., & Pratt, T. C. (2014). "Can't stop, won't stop": Self-control, risky lifestyles and repeat victimization. *Journal of Quantitative Criminology*, 30(1), 29–56. doi: 10.1007/s10940-012-9188-4
- Vieno, A., Roccato, M., Russo, S. (2013). Is fear of crime mainly social and economic insecurity in disguise? A multilevel multinational analysis. *Journal of Community & Applied Social Psychology*, 23, 519–535. doi: 10.1002/casp.2150