

Victims' perceptions of the criminality of their assault experiences: Analysis of physical assaults and threats by males captured in the 2005 Personal Safety Survey

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Introduction

Victimization surveys have been widely adopted since the nineteen seventies and have provided a valuable alternative source of information about the prevalence and incidence of crime. They question the public directly and they gather information about victimization events regardless of whether they have been reported to police. Furthermore, they explore the reasons why events are, or are not, reported. Surveys, therefore, provide one way of investigating the dark figure of crime; defined by Biderman and Reiss (1967: 1) as, 'occurrences that by some criteria are called crime, yet that are not registered in the statistics of whatever agency was the source of data being used.' Recent estimates produced from the British Crime Survey (BCS) suggest that approximately 57 percent of all crime is unreported (Nicholas, Povey, Walker & Kershaw 2005).

Surveys generally find that property offences such as completed breakins and motor vehicle theft are reported to police at a high rate (74% and 90%, respectively, e.g., ABS 2006a). Surprisingly, however, violent victimizations such as robbery, assault, and sexual assault, are less likely to come to police notice. For example, 32 percent of Australian assaults were reported in 1994 (ABS 1995), 28 percent in 1998 (ABS 1999), and 31 percent in both 2002 (ABS 2003) and 2005 (ABS 2006a). Assault victimizations are of particular interest because they are sufficiently numerous to be amenable to analysis and they have a large reporting gap that demands explanation.

Surveys overcome well-documented limitations of police recorded crime data. They cut across jurisdictional differences in the law and in police practices with respect to offence recording. Many criminologists assume, therefore, that surveys provide the best way of measuring the true incidence of crime (e.g., Matka 1990) despite certain limitations of their own (as discussed by Skogan 1981). Surveys have been particularly useful in exploring that part of the dark figure arising from victim non-reporting. A number of previous studies have analysed the relationship between victimization and reporting to police (e.g., Coumarelos & Allen 1999; Felson, Messner & Hoskin 1999; Kury, Teske & Wuger 1999; Skogan 1994; Tanton, Jones & Lubulwa 2001). For assaults, this research has demonstrated that reporting is influenced by a range of offence characteristics that can be broadly placed into three major categories: victim characteristics, victim-offender relationship characteristics, and characteristics of the incident, particularly concerning incident seriousness (e.g., see Carcach 1997; Skogan 1976; 1984; Wolf Harlow 1985, amongst others for a discussion of these issues). Still other researchers have identified additional factors that include past experience with police and also characteristics of the communities where victims live (e.g., Goudriaan, Lynch & Nieuwbeerta 2004; Goudriaan, Wittebrood & Nieuwbeerta 2006).

A rarely acknowledged assumption of survey research on the dark figure is that the events that victimization surveys uncover are genuinely criminal. An important study by Ruback, Greenberg and Westcott (1984) made explicit predictions about the importance of the victim labelling an event as a crime when determining if the event would be reported to police. As these authors suggest, 'Whether the victim labels this a crime depends on two factors: (a) the victim's own definition of a crime and (b) the similarity between the incident and the victim's definition' (Ruback et al. 1984: 55). Interestingly, despite the potential significance of this factor in accounting for the discrepancy between victimization as captured by surveys and police recorded crime, the victim's perception of the criminality of the incidents they are describing in surveys has been largely overlooked from a criminological perspective. Recent research findings indicate that this oversight may have significant

implications for the realist perspective that victim surveys capture all and only crime, as the victim's own perception of the criminality of their experiences may be exerting a significant influence on reporting to police.

There are a number of recent research findings that support this position. For example, in an analysis of the 1996 BCS, Mirrlees-Black (1999) discovered that only 39 percent of female victims of chronic domestic assault described the most recent incident to be a crime. Furthermore, less than half (45%) of respondents who defined themselves as 'victims of domestic violence' also considered the incident to be a crime, with the remainder considering the event to be wrong, but not a crime (34%), just something that happens (15%), or unsure how to classify the event (6%). This trend was also demonstrated by the 2002 NCSS (ABS 2003), where only 57 percent of assaults were considered to be crimes, and by the 2004/2005 BCS (Coleman, Hird & Povey 2006), where approximately 40 percent of violent crime victimisation was not considered to be a crime by the victims. Even lower percentages of victims considered their experiences to be crimes according to the 2005 Personal Safety Survey (PSS, ABS 2006b), with victims perceiving assaults perpetrated by a male to be criminal 37 percent of the time, and only 25 percent of the time if the perpetrator was female (for assaults perpetrated in the twelve months prior to survey participation).

Therefore, the purpose of this investigation is to further explore the relationship between assault incidents captured by surveys and the victim's own perception of the criminality of their experience. Using the framework for prediction provided by previous research into the relationship between victimisation and reporting, this research conducts specific analysis of the 2005 PSS data set (ABS 2006b), with unit record files made available for analysis via the remote access data laboratory facility.

Two additional components of the methodology will extend beyond simply analysing all assaults captured by the 2005 PSS in combination. First, separate analyses will also be undertaken for male and female victims in isolation. This is motivated by the fact that previous research into reporting of assaults has demonstrated a mixed, interactive relationship between the sex of the victim and the nature of the victim-offender relationship. On the one hand, Carcach (1997) demonstrated that female (but not male) victims were less likely to report assaults to police if the offender was known. However, Felson and Paré's (2005) analysis of the US equivalent to the PSS, the National Violence Against Women Survey, found that all victims were less likely to call the police when the offender was known, regardless of sex. Second, in addition to analysing physical assaults, this investigation will also incorporate separate analyses of the relationship between physical threats and perceived crime. Previous research into the relationship between assault victimisation (as captured by surveys) and reporting to police has consistently demonstrated the influence of the seriousness of an assault, with the likelihood of informing police increasing concomitantly to the seriousness of the incident (Coumarelos & Allen 1999; Criminal Justice Commission 1997; Hough 1990; Kury et al. 1999; Skogan 1984; 1994). Athens (2005) explained this finding through suggestion that a spectrum of seriousness exists for assaults, ranging from verbal tiffs on the minor end up to physical skirmishes and encounters as the incidents intensify. Given the expectation of reduced severity of physical threats relative to assaults, these various findings motivate separate analysis of the relationship between threats captured by the 2005 PSS and the perceived criminality of these incidents. For the remainder of this report, physical assaults and physical threats as defined by the 2005 PSS will be referred to as assaults and threats, respectively.

Methodology

Data Specifications

The 2005 PSS sampled 16,413 individuals: 11,861 females and 4,552 males. The survey collected demographic details from each respondent as well as information about any history of childhood abuse, harassment, experiences of partner violence, stalking, and violence (as discussed in ABS 2006c). As a consequence of the way that the dataset is structured it was not possible to analyse the most recent incidents of assault or threat, regardless of offender sex and incident severity. Instead, it was only possible to analyse the most recent incident of assault conducted by a male with one analysis and the most recent incident of threat perpetrated by a male with another.

With respect to assault perpetrated by a male, after data cleaning and coding, 1,557 records remained that involved: (a) each individual's most recent incident of assault (b) perpetrated by a male offender that (c) had occurred within the preceding five years. Of this sample, approximately 44 percent considered the assault incident they described in the survey to be a crime. By extension, the data set capturing threats perpetrated by a male that had occurred in the previous five years that was available for analysis contained 898 records; where once again 44 percent of victims considered these incidents of threat to constitute a crime.

Choice of Variables and Method of Analysis

Prior to undertaking the modelling, univariate tests were conducted on all selected parameters to determine if they were predictive of crime perception when considered in isolation. Individual variables were excluded from further analyses if $p > 0.1$, which resulted in the exclusion of parameters capturing whether the victim's had been a repeat victim of violence and whether the victim considered drugs had played some role in the most recent assault. Within the assault data set, nineteen parameters were subsequently utilised for stepwise multivariate modelling purposes. For the full data set this resulted in 81.9 cases per degree of freedom included in a regression model that retained all possible parameters, which is a suitable ratio for logistic regression (where a ratio of 40 to 1 or above is deemed acceptable for stepwise regression, e.g., Tabachnick & Fidell 2001). The corresponding ratios for separate female and male victim assault models were 51.7 and 34.8, respectively. Following the same process for the threat data set twelve parameters were retained for modelling purposes: victim age, employment status, individual and relative area disadvantage, drinking behaviour, drug use, injury severity, and the involvement of multiple perpetrators were all excluded from subsequent analysis of threat cases. As before, the equivalent ratios were 74.8 for the full data set, 41.3 for the female data set, and 40.4 for the male model.

Across all models, factors were entered in a stepwise manner, starting with an empty model and utilizing the standard defaults for stepwise modelling (a $p < 0.05$ criterion for inclusion of variables and $p > 0.10$ for variable removal). The dependent variable was whether the victim perceived the assault or threat captured by the survey to be a crime (coded 1 = yes and 0 = no). Consequently, for all parameters, an odds ratio significantly greater than 1.0 suggested a unit increase in this factor increased the likelihood of perceived crime.

Measures

The descriptive statistics all independent measures involved with these analyses are displayed in Table 1 and Table 2 (with additional breakdowns of these descriptive statistics available in Table 5 and Table 6, located within the Appendix). As with previous investigations of the relationship between assaults and reporting to police, three broad categories of independent variables were involved in these modelling processes. Brief descriptions of the variables selected to represent each of these categories are provided in the following section.

Table 1. Descriptive statistics of variables involved in analysis of assault

Category	Label	N	Mean	SD	Min	Max
Victim characteristics	Victim Male	1,557	0.40	0.49	0	1
	Over 24	1,557	0.77	0.42	0	1
	Employed	1,216	0.92	0.27	0	1
	Not in Workforce	434	1.57	0.82	0	2
	Repeat Victim	1,557	0.63	0.48	0	1
	Physically Abused Child	1,557	0.19	0.39	0	1
Social disadvantage and fear	Fearless Night Walk	1,557	0.50	0.50	0	1
	Unsafe Home Alone	1,557	0.18	0.38	0	1
	Individual Disadvantage	1,557	0.24	0.43	0	1
	Area Disadvantage	1,557	0.20	0.40	0	1
Routine activities	Drunk Regularly	1,557	0.28	0.45	0	1
Victim-offender relationship	Current Partner	837	0.71	0.96	0	1
	Previous Partner	853	1.29	1.49	0	2
	Known Non-Partner	965	0.55	0.50	0	3
Incident characteristics and seriousness	Private Dwelling	1,313	0.59	0.91	0	1
	Licensed Premises	834	0.78	0.76	0	2
	Injury Severity	1,557	0.60	0.49	0	2
	Drugs Involved	1,557	0.34	0.48	0	1
	Multiple Perpetrators	1,557	0.21	0.41	0	1
	Informal Support	1,557	0.86	0.34	0	1
	Lifestyle Changes	1,557	0.25	0.43	0	1

Table 2. Descriptive statistics of variables involved in analysis of threat

Category	Label	N	Mean	SD	Min	Max
Victim characteristics	Victim Male	898	0.49	0.50	0	1
	Over 24	898	0.82	0.39	0	1
	Employed	707	0.92	0.27	0	1
	Not in Workforce	246	1.55	0.83	0	2
	Repeat Victim	898	0.63	0.48	0	1
	Physically Abused Child	898	0.21	0.41	0	1
Social disadvantage and fear	Fearless Night Walk	898	0.52	0.50	0	1
	Unsafe Home Alone	898	0.16	0.37	0	1
	Individual Disadvantage	898	0.24	0.43	0	1
	Area Disadvantage	898	0.20	0.40	0	1
Routine activities	Drunk Regularly	898	0.24	0.43	0	1
Victim-offender relationship	Current Partner	473	0.34	0.75	0	1
	Previous Partner	508	1.34	1.49	0	2
	Known Non-Partner	759	0.36	0.48	0	3
Incident characteristics and seriousness	Private Dwelling	773	0.40	0.80	0	1
	Licensed Premises	623	1.55	0.83	0	2
	Injury Severity	-	-	-	-	-
	Drugs Involved	898	0.11	0.31	0	1
	Multiple Perpetrators	898	0.55	0.50	0	1
	Informal Support	898	0.25	0.43	0	1
	Lifestyle Changes	898	0.88	0.33	0	1

NB – Injury Severity was not meaningful when analysing threats, as there were no non-zero responses to this measure within the threat data set.

Victim Characteristics

Three broad types of victim characteristics were included in the models: (a) aspects of the individual, (b) their levels of fear and relative levels of social disadvantage, and (c) their movements and lifestyle, as captured by their routine activities.

With respect to aspects of the individual, four victim characteristics variables were included in the model. Of these, Victim Male, Over 24, and Physically Abused Child were all binary (coded 1 when positive). The victim's employment status was entered into the analysis as a categorical variable, with unemployed respondents compared with Employed and Not in Workforce respondents separately.

Two binary measures were included targeting the victim's general levels of fear: Fearless Night Walk, separated those victims who walked alone at night and felt safe, and Unsafe Home Alone, identified those respondents who reported feeling unsafe when home alone at night. An additional two parameters were included to test the impact of disadvantage on perceived crime. The first, Individual Disadvantage, was a binary variable calculated by comparing victims who, 'Could not raise \$2,000 within a week' with the rest. The second, Area Disadvantage, compared victims from the most disadvantaged quintile of areas, as measured by the SEIFA index of relative socio-economic disadvantage (based on the findings of Morgan et al. in press).

One variable was included in the model to expose elements of the victim's routine activities. This captured the frequency at which the victim got intoxicated (Drunk Regularly) and was binary, coded 1 for those victims who reported getting drunk at least twice a month.

Victim-Offender Relationship

Given the structure of the dataset only one relevant victim-offender parameter was utilised. This was dealt with as a categorical variable, with separate comparisons conducted for incidents perpetrated by strangers compared to (a) Current Partners, (b) Previous Partners, and (c) Known Non-Partners.

Incident Characteristics and Seriousness

One specific incident characteristic that could be examined concerned the location of the victimisation incident. This was tested as a class variable in the model, with Private Dwellings and Licensed Premises both compared separately with assaults or threats that happened at other locations. The final four parameters tested in the model examined the seriousness of the incident. First, Injury Severity, was coded 0 when victims were not physically injured, 1 when they were physically injured but did not see a doctor, and 2 when they were injured and a doctor was required. (Given the nature of the distinction between the physical assault and physical threat data sets, there were not any non-zero responses for the Injury Severity parameter in the physical threat data. As a consequence, this variable was excluded from the threat analyses.) Second, if there was more than one attacker involved, Multiple Perpetrators was coded 1 (and 0, otherwise). Next, a binary variable was included to capture whether the victim had sought any form of informal support (with Informal Support = 1, if this was the case). Finally, Lifestyle Changes was coded 1 for those victims who reported making at least one lifestyle change following their victimisation experience as a result of injury, anxiety, or fear.

Results

Analysis of Assaults

Overall Model Fits

As discussed previously, the analytical strategy in this case was to produce separate models for male and female victims in addition to the summary model that analysed the complete set of assault victimisation data. The full model resulted in $\chi(df = 12) = 310.10$, a successful prediction rate of 74.0 percent, a Somer's D value of 0.49, and McFadden's $\rho^2 = 0.15$.¹ The odds ratios and error bars for odds ratios of parameters retained when modelling the full data set are displayed in Figure 1 (a), represented by the black circles (the presentation style for these odds ratios was motivated by work by Gelman, Pasarica & Dohia 2002; and Kstellec & Leoni 2007).

Utilising the same set of parameters (necessarily minus Victim Male) the male victim model demonstrated a slightly better predictive capacity for modelling perceived crime relative to the female victim-only model: $\chi(df = 8) = 156.24$, successful prediction rate of 77.7 percent, Somer's D = 0.57, and McFadden's $\rho^2 = 0.19$, compared with $\chi(df = 7) = 168.10$, successful prediction rate of 71.7 percent, Somer's D of 0.47, and McFadden's $\rho^2 = 0.13$. The patterns of odds ratios and error bars for the female and male models are displayed in Figure 1 (b) and Figure 1 (c) respectively.

Victim Characteristics

As expected based on previous research the full model indicated that victims who were male and under 25 years were less likely to perceive assault victimizations to be crimes. Across all models none of the social disadvantage and fear parameters were retained and victim's employment status and history of abuse as a child were also found to be non-significant. Within the overall model, the routine activities parameter concerned with excessive alcohol consumption did have an influence on the perception of crime, but the separate models demonstrated that this was specific to male victims: with those who reported getting drunk regularly also being less inclined to perceive their most recent assault as a crime. Alcohol consumption was non-predictive of perceived crime in the female model.

Victim-Offender Relationship

When presented in the full model, it is clear that for the aggregated dataset, when the perpetrator was known to the victim this significantly reduced the likelihood that the victim perceived their assault to be criminal. Large sex differences direct attention to the separate male and female models: for females, victimization by a current partner or a known non-partner significantly reduced the perception of the criminality of their most recent event. This reduction did not extend to victimization by ex-partners, although there was some tendency for this to occur. In opposition to this, the victim-offender parameter made no significant contribution to the male only model.

Incident Characteristics and Seriousness

The full model pointed to the importance of incident seriousness, with injury severity, multiple perpetrators, informal support seeking and the need for lifestyle changes all increasing the perceived criminality of the incident. However, important differences emerged in the sex-specific

models. The occurrence of assaults in a private dwelling seemed more important for male victims, although this effect did not attain statistical significance. More importantly, assaults in licensed premises were perceived to be less criminal by male victims but not by female victims. The presence of multiple

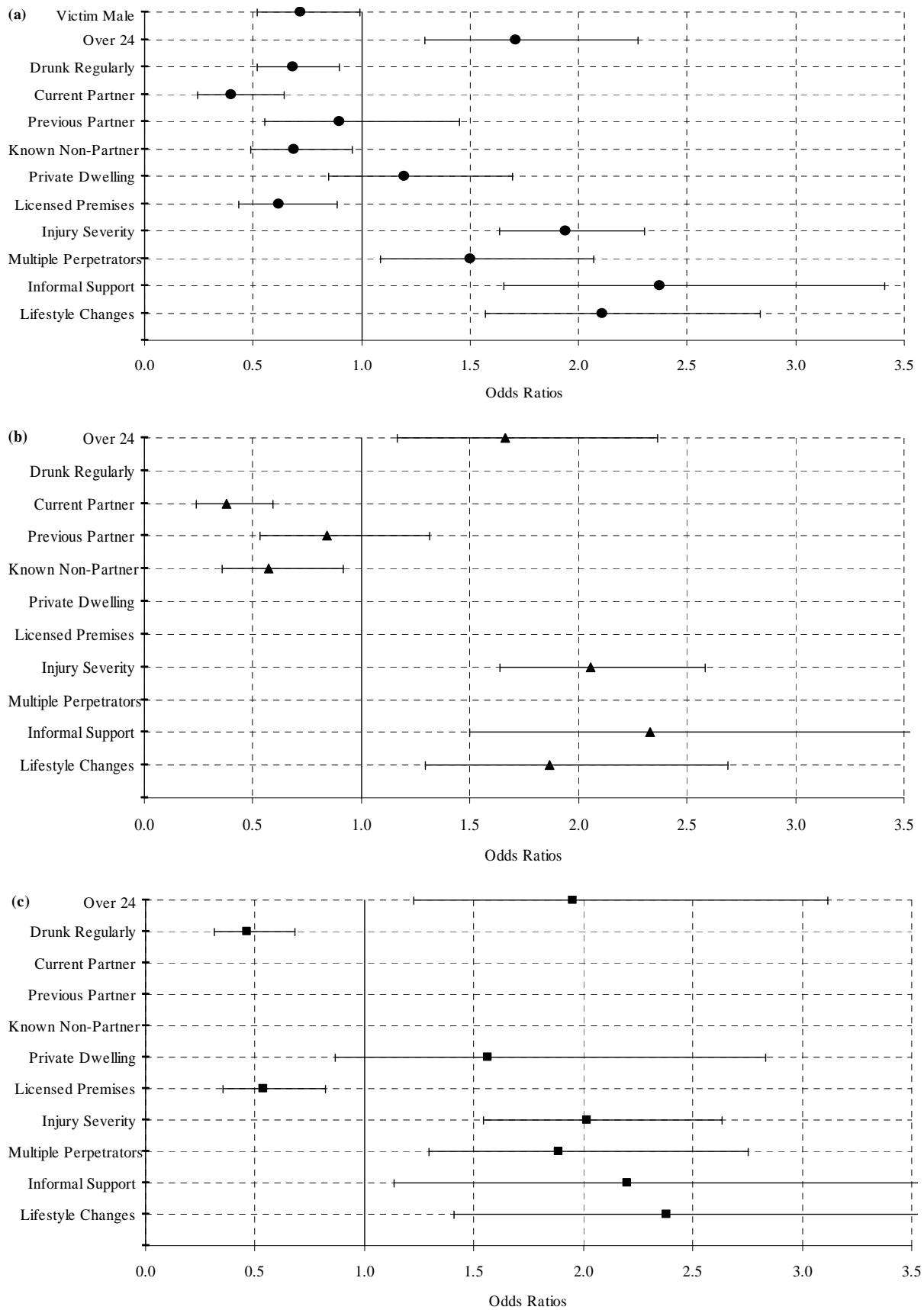


Figure 1. Dot plots presenting odds ratios and error bars for parameters predicting perceived crime for assaults: (a) all data (circles), (b) female-only data (triangles), and (c) male-only data (circles)

Perpetrators had a large impact on male victims, but not on female victims, no-doubt reflecting the greater frequency of such situations for males relative to females. For both male and female victims, injury severity, the seeking of informal support, and the need for lifestyle changes, all had large influences on the perceived criminality of the most recent incident.

Analysis of Threats

Overall Model Fits

Relative to the assault models, a much more modest success was recorded when utilising the eligible parameters to model the probability of perceiving a threat to be a crime. The odds ratios for all parameters from the threats analysis are displayed in Figure 2, using the same presentation style as before. Overall, the full model resulted in $\chi(df = 8) = 99.8$, a successful prediction rate of 65.9 percent, a Somer's D value of 0.37, and McFadden's $\rho^2 = 0.08$, as displayed in Figure 2 (a). Interestingly, in the opposite pattern to the sex-specific models of assaults previously, the female threat victim model (Figure 2 (b)) outperformed the male victim-only model (Figure 2 (c)): $\chi(df = 5) = 57.2$, successful prediction rate of 62.6 percent, Somer's D = 0.38, and McFadden's $\rho^2 = 0.09$, compared with $\chi(df = 3) = 30.7$, successful prediction rate of 49.0 percent, Somer's D of 0.27, and McFadden's $\rho^2 = 0.05$.

Victim Characteristics

Once again, as with assaults, threats were less likely to be perceived as crimes if the victims were male, with 51 percent of female victims classifying threat experiences as criminal compared with only 37 percent of male victims. As indicated previously, neither the victim's age nor the routine activities parameter assessing the victim's drinking frequency were retained for modelling purposes.

Victim-Offender Relationship

The pattern of odds ratios produced by the full dataset suggest that threats perpetrated by a person known to the victim were less likely to be perceived as crimes relative to threats perpetrated by strangers. This was the same pattern as produced for assaults, previously. Once again, the separate models for males and females indicated that the victim-offender relationship was only predictive for female victims.

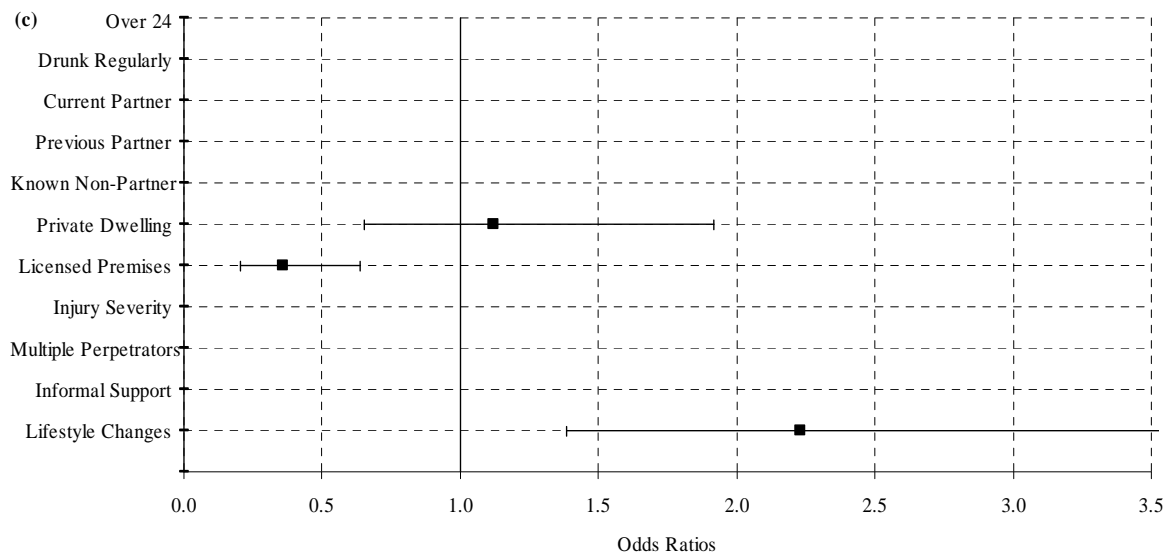
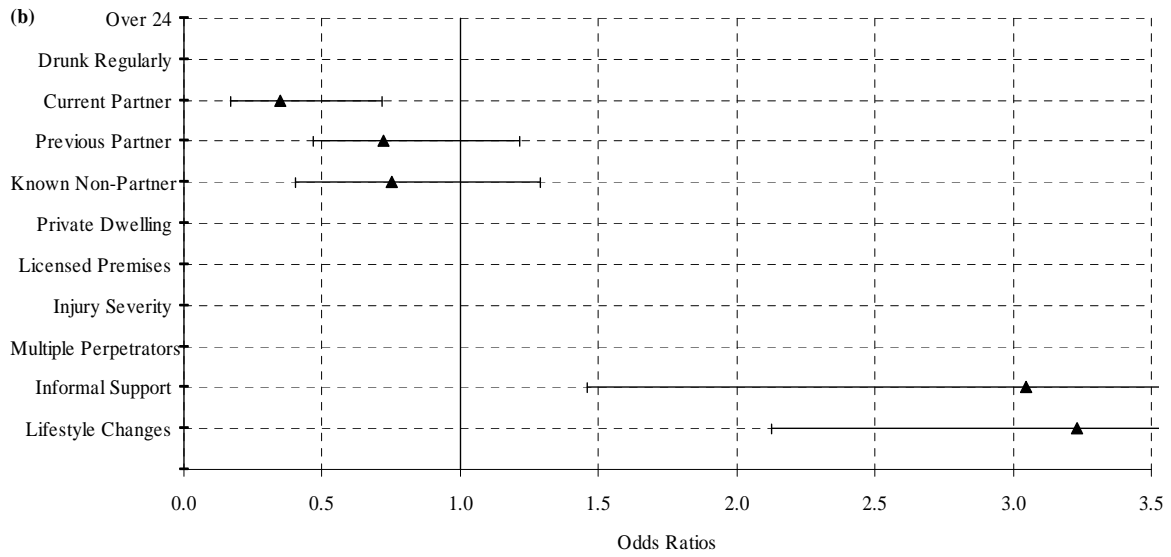
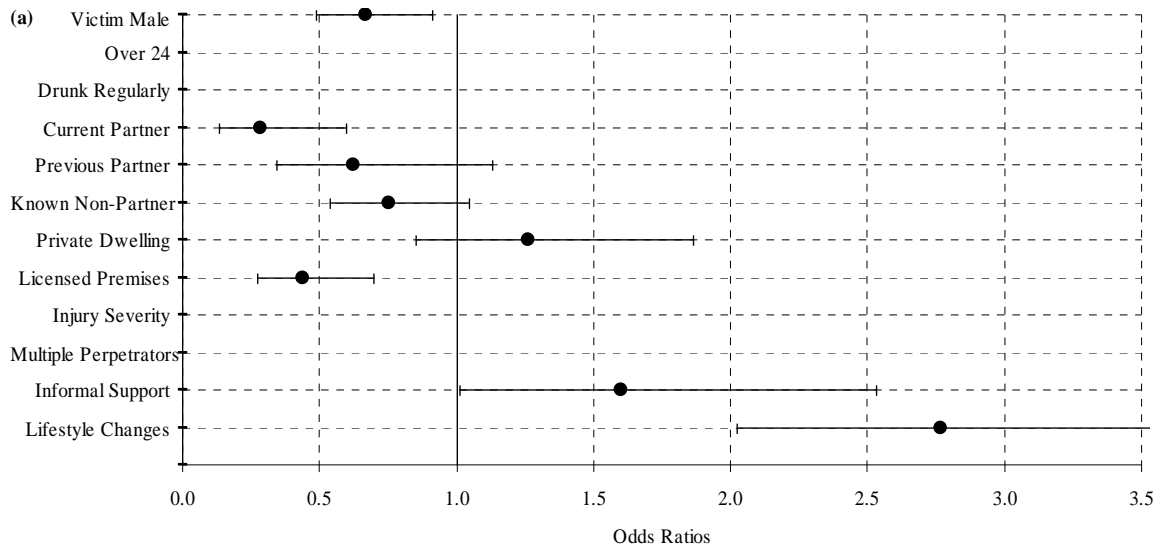


Figure 2. Dot plots presenting odds ratios and error bars for parameters predicting perceived crime for threats: (a) all data (circles), (b) female-only data (triangles), and (c) male-only data squares)

Incident Characteristics and Seriousness

As with assaults previously, threats that occurred in a private dwelling were more likely to be perceived to be crimes, while those occurring in licensed premises were not. The sex-specific models revealed that this pattern was produced by male victims only, as these parameters were non-predictive for females. Overall, victims who sought informal support were increasingly likely to perceive threats to be criminal: an effect which this time was only true for female victims. Finally, for all victims, instigating lifestyle changes as a result of the most recent incident of violence increased the likelihood of the threat being perceived to be a crime. The involvement of multiple perpetrators in the threat incident was non-predictive of the perceived criminality of the event in all cases.

Comparing Assaults and Threats

This section briefly explores the different patterns of odds ratios produced when modelling assaults and threats, examining the full data sets (Figure 3 (a)), female victims only (Figure 3 (b)), and male victims only (Figure 3 (c)). All ratios displayed in these figures have all been displayed previously within this report: they are simply re-presented here for ease of comparison. It goes beyond to scope of this report to attempt to explain these variations across specific parameters, and instead this section acts to highlight that such variation exists and to motivate a more detailed exploration of these issues in future work. The shapes used to depict the full data set, female-only data, and male-only data are consistent with those used in the previous figures. Black filled-in shapes represent the assault odds ratios and white-filled shapes display the threat ratios.

Overall, it is interesting to consider the degree of similarity that was observed when utilising the full data sets to model the relationship between incident and perception of crime for assaults and threats. Across all models, where the same parameters were retained, the direction of influence is identical.

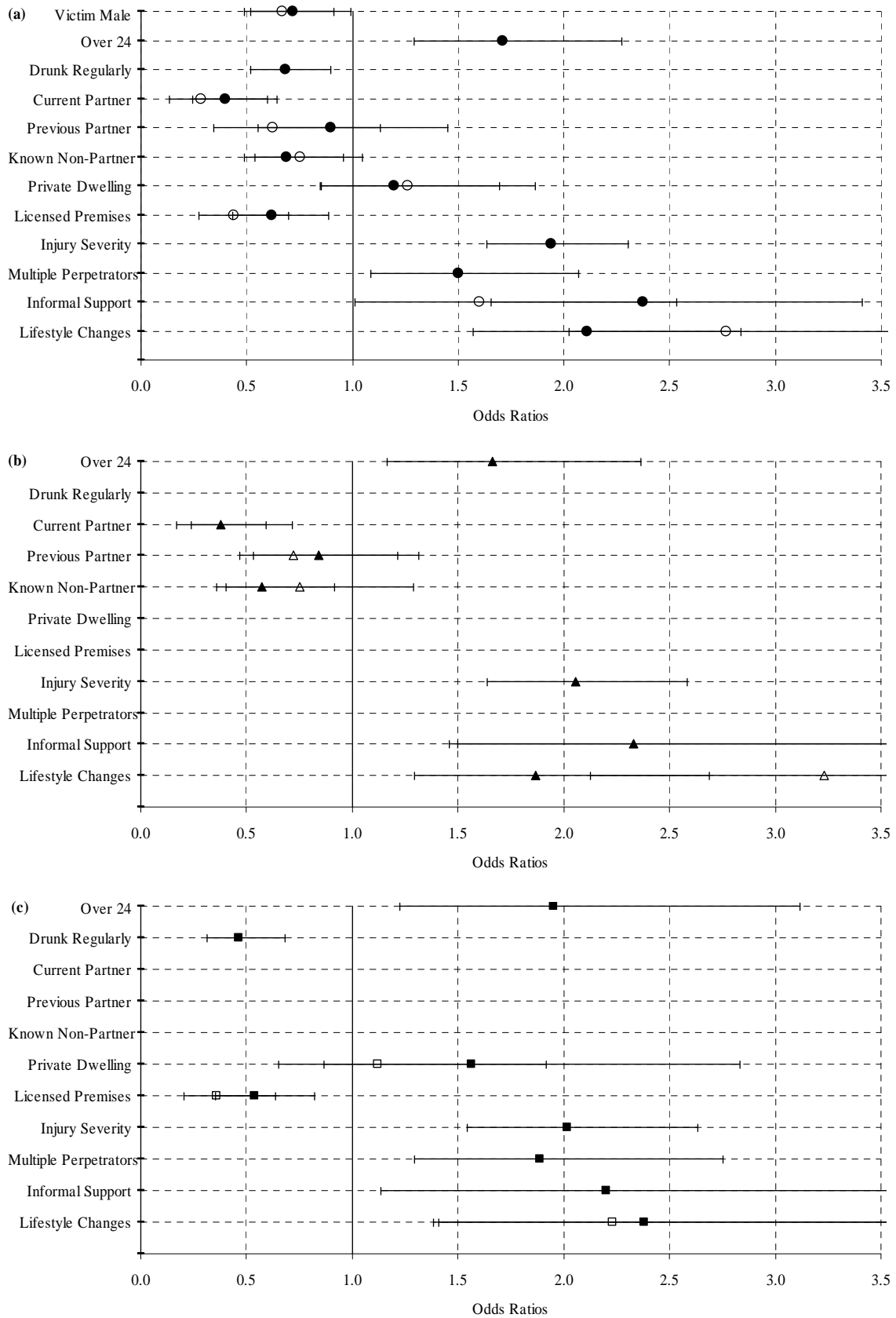


Figure 3. Dot plots presenting odds ratios and error bars for parameters predicting perceived crime for assaults (black filled shapes) and threats (white shapes) for: (a) all data (circles), (b) female-only data (triangles), and (c) male-only data (squares)

The Relationship between Perceived Crime and Reporting

The analysis presented so far has demonstrated that the factors previously utilised to explain aspects of the relationship between assaults (as captured by surveys) and reporting to police are also able to account for perceptions of criminality of assaults (and, to a more limited extent, of threats). However, the significance of this novel question about the victim’s perception of the criminality of their experience can be enhanced by a brief examination of the relationship between perceived crime and reporting to police, as displayed in Table 3 for assaults and Table 4 for threats.

Table 3. Crime and reporting correlation matrix for assaults (N = 1,557)

Reporting		Perception		Total
		Not crime	Crime	
Police not told	Row %	72.3	27.7	
	Column %	83.5	40.3	
	Total %	46.5	17.9	64.4
Police told	Row %	25.8	74.2	
	Column %	16.5	59.7	
	Total %	9.2	26.5	35.6
Total %		55.7	44.3	

These patterns (which were consistent across male and female victims when analysed separately) demonstrate five important findings:

Roughly 44 percent of these cases were considered to be crimes by the victims.

Approximately one-quarter of the 5 year assault (26.5%) and threat (25.2%) cases captured by the 2005 PSS were both considered to be crimes and reported to police.

Half of all these cases were neither perceived as crime nor reported (46.5% for assaults and 48.4% for threats).

One-fifth of the victimisation incidents examined here could be classified as the dark figure of crime (17.9% of assaults and 18.9% of threats), as they were crimes according to the victims but not brought to the attention of the police.

Approaching 10 percent of all crimes examined here (and about one-quarter of all reported crimes) were reported despite the victim themselves not considering them to be crimes (9.2% of the total assault sample and 7.5% of the threats).

Table 4. Crime and reporting correlation matrix for threats (N = 898)

Reporting		Perception		Total
		Not crime	Crime	
Police not told	Row %	71.9	28.1	
	Column %	86.7	42.9	
	Total %	48.4	18.9	67.4
Police told	Row %	22.9	77.1	
	Column %	13.3	57.1	
	Total %	7.5	25.2	32.6
Total %		55.9	44.1	

Discussion

The final section of this report provides an overview of the main findings of this research, discusses some of the theoretical and applied implications of these outcomes, and make some suggestions for the directions of future work in this area.

Overview of Main Findings

The capacity of these models to predict perceived crime varied as a function of crime type and also depended on the composition of the data set involved (either aggregated or separated as a function of victim sex). When analysing assault, the full model displayed a relatively good predictive success of about 74 percent, with slightly better capacity to fit male-only data (78% success) relative to female-only data (72%). The same sets of parameters were less able to predict the likelihood of perceiving a threat to be criminal: achieving a correct prediction of 66 percent overall, which varied between 63 percent for female victims and dropped as low as 49 percent for males (remembering that chance performance is 50%).

Across all of the models generated here the three broad categories of parameters that have been demonstrated to have relevance to understanding the relationship between assault victimisation and reporting to police were also found to significantly predict victim's perceptions of the criminality of their assault and threat experiences. Generally, parameters targeting victims' histories of abuse, levels of fear, and relative disadvantage were not useful when attempting to predict the extent to which they perceived assaults and threats to be crimes. The models point to both differences and commonalities in the male and female perception of assault incidents as criminal. For women, their relationship with the perpetrator had a significant influence on the perceived criminality of their victimization, with female victims generally less inclined to perceive incidents to be crimes when the

perpetrator was known (with less conclusive results when the perpetrator was an ex-partner). In contrast, the study indicated that male perceptions of incident criminality are not affected by victim-offender relationships but are influenced by routine activities such as heavy drinking and by the setting of incidents in licensed premises. The results suggest an unwillingness of male victims to criminalise incidents in these settings unless victimization involves multiple offenders, or if there are other serious incident characteristics. While the study cannot be definitive on the issue, it points to the acceptance of some violent incidents as fights and as things to be left outside of the criminal justice system. To the extent that this conclusion is valid, it points to the important role proprietors and place-managers must play in ensuring public venues, and particularly licensed premises, are well managed. Although the differences as a consequence of victim sex are unsurprising given previous findings about the differential effect of the sex of the offender on victim's reporting behaviour the varied influence of the location of assault is an interesting effect worthy of additional attention in future research.

Importantly, and contrary to the model of Ruback et al. (1984), the PSS points to a range of incidents which are not perceived as crime, but are still reported to police. More research is needed to investigate why these incidents are reported and what services are sought. In the case of violence against women by known offenders, it may be that victims believe on the basis of past experience that a non-criminal incident will escalate unless police are called. Consistent with this perspective and in questioning the conceptualization of domestic violence under the heading of vulnerable victims, Hanmer (2003: 268) suggests, 'Why not conceptualise domestic violence as interpersonal crime or violent crime in which some calls for assistance will not involve a criminal offence?' A position that is supported by research evidence that the demonstration of initiative by victims can be preventative, regardless of the police response (e.g., Felson, Ackerman & Gallagher 2005). In addition to this relationship between reporting and perceived crime, the correlational investigation also demonstrated relatively consistent percentages of cases that were (a) perceived as crimes and reported, (b) perceived as crime and not reported (the dark figure), and (c) neither perceived as crime nor reported to police.

Implications

These findings emphasise the importance of identifying which cases captured by surveys are considered to be crimes from the victim's perspective. This was demonstrated to vary across crime types and across victim sex. From the findings of this research crime type and sex of victims must be considered non-trivial when attempting to predict the likelihood of an event being perceived as a crime and also in understand the extent of the dark figure of crime.

From a practical perspective, these results make it clear that victim surveys have the potential to over-estimate the extent to which victims perceive assaults to be crimes (an issue that had been outlined, but not subjected to detailed analysis by Coleman et al. 2006; and Mirrlees-Black 1999). Despite the presence of the dark figure (approximately 20% of cases) around half of the cases analysed here did not constitute crime from the victim's perspective. With this in mind, it is relatively unsurprising not all victimisation was reported to police in this case. Although the failure of a victim to classify their experience as criminal does not necessarily mean no crime has occurred, the findings of this study cannot be neglected. Given that surveys should work with concepts that are recognizable by the respondents who generate the data, it is arguable that victim perceptions of

crime are fundamentally important for understanding of the complex motivations underlying victim reporting behaviour.

The victim's perception of the criminality of their violent incident has been down-played in modern surveys, which adopt an objective, behavioural definition of victimization and then apply the label crime in the reporting of their results: an approach which presents a potential interpretation trap for criminologists and policy-makers. At present, Australian survey questions focus on criminal justice responses to violence and the reasons why victims do not report crime to police, rather than the service they are seeking when they do report to police. The PSS provides an exception in this regard because it investigates the victim's own perception of the nature of their incident and the range of other services sought by victims.

Future Research

It is beyond the scope of this report to attempt to explain these variations across specific parameters. Instead, the aim here has been to demonstrate the existence of variation within victims' perceptions of the criminality of the experiences they report in victimisation surveys. It is hoped that these findings will motivate a more detailed exploration of these issues in future work. One obvious avenue for future exploration, to examine the predictive contribution perceived crime makes to attempts to understand reporting behaviour, is the focus of a forthcoming paper by these authors. In addition to this, valuable contributions would be made by examination of variations in the extent to which perceived crime contributes to victimisation estimates across (a) survey methodologies, (b) datasets, and (c) crime types. Furthermore, given the exploratory nature of this investigation, this research did not examine the relationship between predictor variables and perceived crime for assaults involving female perpetrators, which is an important issue that is necessarily left for future research.

Conclusion

When surveys were originally developed a range of caveats about potential contaminants were voiced, including sampling error resulting from the relative infrequency of serious victimisation and uneven distributions of crime, victim's fabrication or failing to disclose information, interviewer biases, forgetting and incomplete recall, and differential productive survey participants (as discussed by Skogan 1981, amongst others). Over time, however, the emphasis placed on these concerns has diminished, one result of which has led some realist criminologists to contend that victimisation surveys offer the best way of measuring the true incidence of crime, as they are not influenced by limitations associated with police recorded crime data, such as jurisdictional differences in law, official police procedures, and informal police practices (as presented by Matka 1990). A working assumption of this approach is to posit that all events recorded by victimisation surveys are criminal and that they expose a substantial fraction of the dark figure of unrecorded crime by capturing victimisation not reported to police. In addition to reigniting interest in these previously discussed limitations of surveys, it is hoped that these findings will increase awareness about a novel issue for surveys to contend with: the potential for capturing a broader sense of social harm, and thus, overestimating crime.

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Endnotes

1 McFadden's ρ^2 is a restricted range estimate of the proportion of variance accounted for by a model and tends to be much lower than R^2 . For modelling purposes McFadden's ρ^2 values between 0.2 and 0.4 are considered to be very satisfactory (Tabachnick & Fidell 2001).

Appendix

Table 5. Additional breakdown of descriptive statistics of variables involved in analysis of assault

Category	Label	Level	N	Weighted proportion	Value	Perceived crime proportion
Total	Total sample	Perceived crime	1,557			0.44
Victim characteristics	Victim Male	Victim female	930	0.60	0	0.47
		Victim male	627	0.40	1	0.41
	Over 24	24 and under	354	0.23	0	0.31
		Over 24	1,203	0.77	1	0.48
	Employment Status	Unemployed	93	0.06	0	0.52
		Employed	1,123	0.72	1	0.41
		Not in Workforce	341	0.22	2	0.53
	Repeat Victim	Single victim	981	0.37	0	0.42
		Repeat victim	576	0.63	1	0.46
	Physically Abused Child	No physically abused child	1,265	0.81	0	0.42
Physically abused child		292	0.19	1	0.53	
Social	Fearless Night	Not fearless night walk	778	0.50	0	0.47

Category	Label	Level	N	Weighted proportion	Value	Perceived crime proportion
disadvantage and fear	Walk	Fearless night walk	779	0.50	1	0.42
	Unsafe Home Alone	Not unsafe home alone	1,278	0.82	0	0.43
		Unsafe home alone	279	0.18	1	0.50
	Individual Disadvantage	Not individually disadvantaged	1,179	0.76	0	0.42
		Individually disadvantaged	378	0.24	1	0.52
	Area Disadvantage	Not most disadvantaged area quintile	1,238	0.80	0	0.43
Most disadvantaged area quintile		319	0.20	1	0.48	
Routine activities	Drunk Regularly	Drunk less than twice a month	1,126	0.72	0	0.48
		Drunk more than twice a month	431	0.28	1	0.35
Victim-offender relationship	Victim-Offender Relationship	Stranger	549	0.35	0	0.45
		Current Partner	288	0.19	1	0.34
		Previous Partner	304	0.20	2	0.58
		Known Non-Partner	416	0.27	3	0.40
Incident characteristics	Assault Location	Not PD or LP	590	0.38	0	0.45
		Private Dwelling (PD)	723	0.46	1	0.48

Category	Label	Level	N	Weighted proportion	Value	Perceived crime proportion
and seriousness		Licensed Premises (LP)	244	0.16	2	0.33
	Injury Severity	No physical injury	662	0.43	0	0.29
		Physical injury, no doctor	582	0.37	1	0.47
		Physical injury, doctor	313	0.20	2	0.73
	Drugs Involved	Drugs did not contribute to assault	619	0.40	0	0.44
		Drugs did contribute to assault	938	0.60	1	0.45
	Multiple Perpetrators	Single perpetrator	1,227	0.79	0	0.42
		Multiple perpetrators	330	0.21	1	0.52
	Informal Support	No informal support	211	0.14	0	0.25
		Informal support	1,346	0.86	1	0.47
	Lifestyle Changes	No lifestyle changes made	1,175	0.75	0	0.36
		Lifestyle changes made	382	0.25	1	0.69

Table 6. Additional breakdown of descriptive statistics of variables involved in analysis of threat

Category	Label	Level	N	Weighted proportion	Value	Perceived crime proportion
Total	Total sample	Perceived crime	898			0.44
Victim characteristics	Victim Male	Victim female	454	0.51	0	0.51
		Victim male	444	0.49	1	0.37
	Over 24	24 and under	163	0.18	0	0.39
		Over 24	735	0.82	1	0.45
	Employment Status	Unemployed	55	0.06	0	0.42
		Employed	652	0.73	1	0.43
		Not in Workforce	191	0.21	2	0.49
	Repeat Victim	Single victim	331	0.37	0	0.48
		Repeat victim	567	0.63	1	0.42
	Physically Abused Child	No physically abused child	705	0.79	0	0.43
Physically abused child		193	0.21	1	0.50	
Social disadvantage and fear	Fearless Night Walk	Not fearless night walk	430	0.48	0	0.49
		Fearless night walk	468	0.52	1	0.39
	Unsafe Home	Not unsafe home alone	751	0.84	0	0.42

Category	Label	Level	N	Weighted proportion	Value	Perceived crime proportion
	Alone	Unsafe home alone	147	0.16	1	0.56
	Individual Disadvantage	Not individually disadvantaged	678	0.76	0	0.43
		Individually disadvantaged	220	0.25	1	0.47
	Area Disadvantage	Not most disadvantaged area quintile	719	0.80	0	0.43
		Most disadvantaged area quintile	179	0.20	1	0.47
Routine activities	Drunk Regularly	Drunk less than twice a month	684	0.76	0	0.45
		Drunk more than twice a month	214	0.24	1	0.40
Victim-offender relationship	Victim-Offender Relationship	Stranger	421	0.47	0	0.43
		Current Partner	52	0.06	1	0.31
		Previous Partner	87	0.10	2	0.52
		Known Non-Partner	338	0.38	3	0.45
Incident characteristics and seriousness	Assault Location	Not PD or LP	498	0.55	0	0.46
		Private Dwelling (PD)	275	0.31	1	0.50
		Licensed Premises (LP)	125	0.14	2	0.23
	Injury Severity	No physical injury	-	-	-	-

Category	Label	Level	N	Weighted proportion	Value	Perceived crime proportion
		Physical injury, no doctor	-	-	-	-
		Physical injury, doctor	-	-	-	-
	Drugs Involved	Drugs did not contribute to assault	405	0.45	0	0.46
		Drugs did contribute to assault	493	0.55	1	0.43
	Multiple Perpetrators	Single perpetrator	673	0.75	0	0.43
		Multiple perpetrators	225	0.25	1	0.46
	Informal Support	No informal support	109	0.12	0	0.29
		Informal support	789	0.88	1	0.46
	Lifestyle Changes	No lifestyle changes made	618	0.69	0	0.35
		Lifestyle changes made	280	0.31	1	0.63