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**Violent Crime, Gender Inequalities and Well-Being: Models
based on a Survey of Individual Capabilities and Crime Rates
for England and Wales**

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**Violent Crime, Gender Inequalities and Well-Being:
Models based on a Survey of Individual Capabilities and Crime Rates for England and
Wales**

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**Violent Crime, Gender Inequalities and Well-Being:
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Abstract

Drawing on data from a new survey of individual capabilities across a range of life domains, the paper explores gender inequalities in the causes, experiences and consequences of violent crime. Measuring not only experienced violence, but also feelings of fear and vulnerability to future experiences of violence, we attempt to show how these two types of variables interact and how they impact on well-being. Socio-demographic, economic, personality and environmental differences are taken into account. Key empirical findings include: the identification of a particularly vulnerable group using data for men and women separately; gender inequalities in the propensity to experience different forms of violence; gender inequalities in the impact of key factors, such as the number of dependent children, employment status, income (household and personal) and education, on the likelihood of experiencing violence; a strong link between experienced domestic violence and vulnerability to future domestic violence for women; and strong evidence of the negative impact of self-assessed vulnerability on well-being.

JEL Codes: I12, I31

Keywords: violence, gender inequalities, the capabilities approach, crime, happiness, income

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1. Introduction

One of the most profound changes in the analysis of economic welfare in recent years has been the development of a ‘capabilities’ approach to human welfare. Many academics and policy-makers in development have been attracted to Sen’s (1985, 2000) proposition that what people are free to do across a large number of dimensions should be a focus of policy action and have been persuaded that traditional welfare economics did not explicitly or accurately provide an appropriate informational basis for such policies, Sen (1979). Within and elaborating this framework, Martha Nussbaum (2000, 2005) has sought to provide an explicit and comprehensive account of the capabilities that matter to people and has suggested that an important source both of disutility and rights violations suffered by women especially, are those that derive ultimately from the use of physical violence.

According to her view, various forms of violent crime would be relevant to economic analysis. This paper analyses data from a new survey designed to collect data on many aspects of a person’s capabilities and focuses on those questions dealing with violence. Freedom from the threat of physical violence is interesting for substantive and technical reasons. Not only might it give rise to positive utility but it is likely to impact a range of other abilities, particularly any to do with freedom of movement. Moreover, the experience of violence can be regarded as a relatively exogenous shock to the individual and therefore particularly suitable for analysing its impact on a person’s welfare, especially where we have a reasonably rich set of variables which account for interpersonal differences. An alternative approach to linking violence and economic activity is to argue, as in Fleurbaey (forthcoming), that severe economic deprivation is itself a form of violence. That argument is entirely consistent with this paper though here we concentrate on the welfare impacts of violence.

Much of the early work using the capabilities approach to human welfare was theoretical or conceptual in nature and many came to hold the view that it was not possible to do empirical work based on the approach, either because human capabilities were not typically measured by secondary data or because the options a person had could never, feasibly, be enumerated. A growing body of work now challenges this view in various ways (see, for example, Alkire (2002), Anand and van Hees (2006), Anand, Hunter and Smith (2005), Burchardt and Le Grand

(2002), Klasen (2000), Laderchi (2001), Martinetti (2000), Qizilbash (2002), Kuklys and Robeyns (2005) and Schokkaert and van Ootegem (1990)). This paper contributes to that developing corpus by using a new data set, constructed specifically to measure individual capabilities, in order to examine gender differences in welfare deprivation associated with physical violence. Specifically, the paper explores three issues. First, we measure capabilities and functionings associated with three different types of violence to compare violent experience, current fear and self-reported vulnerability across sexes. Second, we go on to explore the idea that experience of violence has secondary effects on human welfare via the fear and vulnerability that it can induce. In these exercises we give the concept of capability a *probabilistic extension* which we believe to be natural from a decision-theoretic perspective, even though much of social choice theory is cast in deterministic terms. In a nutshell, our approach amounts to saying that the more vulnerable a person feels, or the higher their objective risk of assault is, the less *capable* they are of going about their everyday lives.

Finally, we examine the impact of violence on life satisfaction. This last exercise inevitably raises questions with capabilities researchers about our use of happiness data in the context of an approach to welfare economics which rejects utilitarianism. We therefore make the following points to clarify our position. Firstly, the happiness variable that we employ, which is used standardly now in labour- and macro- economics as well as in social psychology where it originated, is not merely a measure of happiness in the hedonistic sense but rather reflects answers to questions about life satisfaction. Life satisfaction is a philosophically broad concept which, for most people we would argue, depends on a) both achievements and capabilities and b) both welfare and agent relative goals. These two dichotomies give rise to a four-fold taxonomy in Sen (1993) and it could be argued that life satisfaction provides a reasonable way of aggregating wellbeing over all four cells that Sen identifies. The empirical implication is that, even if life satisfaction measures a person's overall wellbeing with some error, it is still legitimate to use the ranking of respondents to derive results about classes of individuals. At a pragmatic level, it is also worth noting that life satisfaction is relatively inexpensive to collect in the context of regular household surveys which are particularly important as they form the basis for much of the best data sets on quality of life around the world. In this work, therefore, we view the utility function as a relation between a broad measure of life quality and capabilities.

The rest of the paper is structured as follows. Section 2 introduces two data sources, on capabilities and local crime levels respectively, which are merged for the purposes of subsequent

analysis, and it shows some preliminary descriptive analysis of the data. Section 3 presents the models considered, and their estimation results, to identify the vulnerable, the impact of experienced violence on feelings of fear and vulnerability and the impact of all of these on life satisfaction. Section 4 concludes.

2. Data and Preliminary Analysis

In this section, we describe the data to be used before going on to identify the groups of individuals who are more vulnerable to each of the different types of violence we measure, we provide an estimate of the impact of experienced violence on feelings of fear and future vulnerability, and we conclude with an estimate of how important experienced violence, together with the resulting feelings of fear and vulnerability, are for an individual's well-being deprivation. This analysis is done separately for men and women mainly because the interpretation and actual realization of each of the types of violence discussed is known to vary greatly by gender.

2.1. The Dataset

The dataset used throughout this paper was constructed by taking a subset of variables from our survey of capabilities and merging into it a local crime figure from a secondary data source. Our primary data comes from a survey developed by Anand et al (2005) which was developed to provide information on all the basic capabilities as defined in Nussbaum (2000). The survey was designed to elicit on all the Nussbaum capabilities, a range of standard socio-demographic covariates and a five dimensional measure of personality. Specifically, this paper uses only the subset of capability-related questions that are directly linked to violence and its impact on the individual's capability set. There are direct questions on experienced violence, where respondents are asked whether they have ever been a victim of a particular type of violence. In this study, 3 types of violence are analysed: sexual assault (SA), domestic violence (DV) and any other type of violence or assault (VA). These are binary variables taking the value 1 if the individual has ever been a victim and 0 otherwise. There are indirect questions where respondents are asked about their feelings of vulnerability towards the threat of each of these types of violence: how vulnerable to Sexual Assault in the future (VSA), how vulnerable to Domestic Violence in the future (VDV) and how likely the individual believes he or she can be a victim of the remaining type of violence (LVA). There are also questions addressing safety, where respondents are asked to assess how safe they feel walking alone in their residential area both during the day (D) and at

night (N). The questions which we analyse are reproduced *verbatim* below together with information on coding.

Experience

1. Have you ever been a victim of sexual assault (yes=1/no=0) SA
2. Have you ever been a victim of domestic violence (yes=1/no=0) DV
3. Have you ever been a victim of some other form of assault or attack (yes=1/no=0) VA

Fear

4. Please indicate how safe you feel walking alone in the area near your home during the daytime (7 point scale: 1=completely safe, 7=completely unsafe) D
5. Please indicate how safe you feel walking alone in the area near your home after dark (7 point scale: 1=completely safe, 7=completely unsafe) N

Vulnerability

6. Please indicate how vulnerable you feel to sexual violence (7 point scale: 7=completely vulnerable) VSA
7. Please indicate how vulnerable you feel to domestic violence (7 point scale: 7=completely vulnerable) VDV
8. How likely do you think it is that you will be a victim of violent assault or attack (7 point scale: 7=extremely likely) LVA

Here, we view responses to questions 1 to 3 above as providing information on functionings whilst responses to questions 4 to 8 above provide information on capabilities. The reason is just that we take it that the extent to which a person is fearful or feels vulnerable is negatively but directly related to Nussbaum's ability to 'be secure against assault' as described above. In other words, the higher the score on questions about fear and vulnerability, the smaller will be a person's capability set. By contrast, whilst questions about past experience might provide indicators of current capabilities, they are direct measures of what is or has done and are foremost measures of functionings. Responses are ordinal and either binary or on 7 point scales as indicated. In addition, the experience questions allow for a 'prefer not to answer' response.

To assess how experienced violence, together with aggravated feelings of insecurity and vulnerability, impact on well-being, respondents are also asked to self-assess their satisfaction

with their life as a whole. This is again a categorical variable measured on a 1-7 scale, where 1 stands for the least deprived scenario (“completely satisfied”) and 7 stands for the most deprived scenario (“completely dissatisfied”).

This paper also uses a rich set of economic, socio-demographic, personality and residential indicators to account for differences in the propensity to become a victim and for differences in the levels of tolerance and interpretation of the meaning of violence. These are age, gender, ethnicity, marital status, education attained, employment status, the number of dependent children living on the individual income, individual together with income, their 3-digit postcode, from which region is computed, and personality-related questions. Another essential feature of this data set is the availability of the latter variables. Given that the data only have a cross-section of individuals, the personality variables account for individual differences in terms of coping or interpreting strategies. The personality variables used for estimation were constructed following Gosling and Rentfrow (2003). They propose a parsimonious and directly measurable personality construct in an attempt to reduce the error incurred when deducing personality from behaviour or from a wide range of traits obtained through questions on self-assessed behaviour. They show that personality seems to be well-represented by a 5 variable construct, where each variable is the combination of 2 antithetical traits. The actual questions used to build the personality variables, together with all the questions resulting in the variables used for the analysis of violence and well-being, are described in the Appendix A.

All of the questions above were contained within a survey that was delivered by a professional market research company (YouGov) to members of its nationally representative online panel. In effect, ours was a sample quota as the company approached panel members at random until a previously agreed limit, in this case 1000 responses, was reached.

Apart from differences at the individual level, we attempt to account for differences at the neighbourhood level. This is because the external environment can, to varying degrees, promote each of these classes of violence or cause variations in feelings of fear and vulnerability. Using the postcode information, we are able to retrieve the corresponding level of crime that each individual experiences in their local area. We chose to characterize the external environment in this way mainly because we only have about 1000 observations spread across the UK (which means that there would not be enough observations per postcode to offer a richer description of the external environment). The underlying assumption we are making is that, for the purposes of

this paper, two neighbourhoods are similar as long as they have the same local crime rate. The local crime data used can be found at <http://www.crimestatistics.org.uk/tool/>. This variable measures the number of all reported crime offences per 1000 individuals in the first quarter of 2004. It is collected at the CDRP (Crime and Disorder Reduction Partnerships) level, throughout England and Wales only (we hence lost the 90 observations corresponding to the Scottish sample). In effect, all postcode neighbourhoods within a CDRP are assumed equal. Ideally, a higher level of detail would be preferred but the main advantage of these data is that they combine police records with the British Crime Survey self-reported data. As such, the crime rate figures we use are updated and cross-validated by these 2 sources. The reason for choosing all crime offences and not just the categories of crime against the person is that all crimes have consequences for security and consequent vulnerability for the individual. Indeed, it would be hard to draw a line between the crimes which matter for personal safety and those which do not. For example, whilst car theft, drug offences, and burglary are not directly aimed at the person, they do raise safety concerns that would make people fearful. Leaving these out could induce a higher degree of error than including irrelevant categories, especially because they are all positively correlated.

2.2. Preliminary Analysis

We begin our exploration of the gender differences in the incidence and impact of violence by examining some descriptive statistics. In Appendix B, we also present a very basic descriptive statistics of all the variables used in this study. Table 1 shows the proportion of men and women that have been a victim of each of the 3 types of violence. Women are significantly more likely to be a victim of sexual assault and domestic violence whereas men are more likely to be a victim of the remaining form of violence. Results support findings of previous studies (e.g. Dobash and Dobash (2003), Greenfield (1998) and Heitmeyer and Hagen (2005)).

To identify what could be promoting these differences, we further check how the likelihood of being a victim varies by different economic factors. Agarwal (2006) suggests that a higher degree of female autonomy serves both as a deterrent and as an exit option for women who suffer domestic violence. In general, whenever there is an imbalance of power, there is an opportunity for abuse, whether it is perpetrated by men or women. We try to measure autonomy in terms of income (individual income relative to the household's income), education, employment status and in terms of number of dependent children. To get a glimpse of how violence impacts on well-being, we also present how each type of violence is distributed across the different levels of

general satisfaction. Table 4 presents the results. For women, a lower individual income does not seem to make victimization more likely, at least in what sexual assault and domestic violence are concerned. For men, the decreasing probability of these 2 types of violence with income is more evident. The same pattern emerges when household income is considered instead. This can in part be due to the fact that what seems to matter is not so much the individual income, but its income relative to the spouse. The multivariate analysis discussed in a later section sheds some light on the matter.

Looking at the number of children, both the probability of sexual assault and of domestic violence increase with the number of children for women, but they decrease for men. This suggests that children can be a serious impediment for women to leave their home when subject to violence, but the relation between the number of children and the violence towards men should be explored further. Education *per se* does not seem to matter for any of the types of violence considered. However, employment status seems another key determinant of the propensity for violence, in particular for sexual assault and domestic violence. For women, there is a clear negative relation between the probability of suffering from sexual assault and domestic violence and the number of hours engaged in the labour market. For men, they are more likely to suffer from these 2 types of violence either when working part-time (between 8 and 29 hours a week) or when not working at all.

When we then look at the proportion of victims in each life satisfaction category, we see that this proportion is higher for the least satisfied groups, except when the residual category for men is concerned. There is however a relatively large number of women that declare themselves as completely satisfied, even though they have been a victim of some sort of violent assault. This might be argued to undermine any analysis that uses this variable as an indicator of well-being. If individuals persistently report themselves as completely satisfied, independently of their life circumstances, the potentially important relation between particular variables of interest and well-being is weakened. This has been labelled the adaptive preferences problem and has led several researchers to exclude altogether these variables from any well-being analysis. However, and as discussed in Section 1, the fact that important statistical relations still subsist reveals that this variable is of use and it consists of a comparatively cheap and quick way of collecting information on well-being.

Table 2 shows average feelings of fear and vulnerability for both sexes. Overall, women feel less safe than men walking alone in their residential area both during the day and at night and both genders also feel statistically more afraid at night than during the day (p -value = 0 for both sexes using a rank-sum test). Furthermore, the gender who is more likely to be a victim of a particular type of violence also feels more vulnerable to it. Exception is to be made to the type of violence other than sexual assault or domestic violence. Even though men are three times as likely to be a victim of this type of violence, the difference in terms of future vulnerability is negligible. Given the broad nature of this type of violence, which includes property crime, fraud, robbery, it is hard to interpret this finding. But it can mean that similar expectations over future assaults represent similar views on the environment and circumstances they live in.

Table 3 presents a rank correlation matrix for all the eight violence-related variables. Results did not change substantially when this was carried out for men and women separately. Broadly speaking, results show that all indicators of fear and vulnerability are positively correlated with each other and with the corresponding type of experienced violence. Table 3 also shows positive correlations between all three types of experienced violence, even though one of them is not significant. This suggests there are particularly vulnerable groups of people more likely to suffer from all types of violence. Next section attempts to identify the economic, socio-demographic and environmental characteristics of these groups.

3. Estimation of Models

In this section, we identify the more vulnerable groups to each type of violence, the impact of experienced violence on feelings of insecurity and vulnerability, and the impact of experienced violence and its indirect effects on well-being.

The variables used in the multivariate analysis have been discussed in Section 2.1. and the questions which give rise to these variables are in Appendix A. Most variables are categorical so that the right procedure is to treat each category as a dummy variable. Including the variable in a regression equation without considering potential non-linear, non-homogeneous effects across different categories would be a too simplistic model and would yield inconsistent estimates. However, due to the relatively small number of observations available (just below 1000 without the Scottish sample), it is not always possible to find enough observations *per* all combinations of all variables. As such, some categories are collapsed for the purpose of estimation. The safety variables now only have 4 categories with a similar number of observations, the vulnerability

variables have 3 categories only, the income related variables have 4 categories and the general satisfaction variable is collapsed to a 3 category variable³. Employment status becomes a binary variable where the relevant factor is the amount of time spent at home. Hence, it takes the value 1 if the person works less than 8 hours (this includes retired, unemployed, students, not-working for another reason and the very short hours PT workers) and 0 otherwise. Marital status was divided into 3 categories: individuals with a partner (married or not), separated (after having had a partner, whether the separation is a divorce or not) and those that never had a partner or the partner no longer exists (widowed individuals). We took the view that isolating separated individuals is important because there is evidence that some of the most serious cases of domestic violence have been inflicted by ex-spouses. The number of dependents collapses to having none or at least one child dependent on one's income. The personality questions are still treated as continuous variables, mainly because they take too many values and given its abstract nature, interval data could be too arbitrary.

3.1. Identifying the more vulnerable

Probit models are estimated for each of the 3 types of violence and results are presented in Table 5. The first three columns, referring to the results where the dependent variable is experienced sexual assault, domestic violence and any other type of violence respectively, refer to the regressions run just on women while the last three mirror the first but are run just on men. Separated individuals are more likely to have ever been a victim of all types of violence, especially when it comes to domestic violence experienced by men. This can mean that men will more easily end up a relationship where they feel victimized than women. Once we condition on the contribution of the individual towards the household's income, we see that women are less likely to be a victim of sexual assault or domestic violence the higher the income of the household they live in. However, conditional on the household income, the higher the female participation, the more likely they will be abused, except for the highest income group of all. This contradicts Agarwal (2006)'s claim that the higher the woman's human capital, the higher the deterrent and exit options which decrease their overall probability of experiencing domestic violence. It seems that if the relative status of the woman is high, the higher the chances the spouse will become violent.

³ The precise thresholds used to redefine the categories of these variables are available on request. The new categories result from the tradeoff between keeping enough diversity and ensuring a reasonable number of observations *per* new category. In the regressions, the safety and vulnerability questions were treated as continuous.

On the other hand, conditional on the male participation, men are also more subject to domestic violence not only when they belong to a poor household, but also when the household is in the highest income group. This seems to suggest that when the income of the woman is large compared to the man's, it is also more likely that the man will be the victim of domestic violence⁴. Unfortunately, these patterns are not always statistically significant, fact we believe due to the small number of observations. Domestic violence seems more likely among non-White British. Being a graduate man with at least one child prevents him from being a victim of domestic violence whereas the existence of children has the opposite impact on women. There are also some regional and personality differences, which reflect different environmental and cultural conditions, together with different coping and interpreting strategies. All in all, violence seems to be a threat that cross-cuts all individuals, but there are still some groups that seem to more likely be a victim, even if these results are not always significant.

3.2. Is there an impact of experienced violence on fear and vulnerability feelings?

One question that arises concerns the extent to which fear and vulnerability are a consequence of experienced violence or other factors. In what follows, we address this question by estimating the impact of experienced violence on all indicators of fear and vulnerability, again conditioning on individual differences in personality, socio-demographic and economic differences, as well as on environmental characteristics. Table 6 presents the results of the self-reported safety variables whereas Table 7 presents the results of the self-reported feelings of vulnerability. There are very few significant determinants of feelings of fear apart from regional and local crime variables. This suggests that individuals are capable of detaching overall environmental characteristics from their own personal sphere of experiences. Both men and women report feeling more unsafe, both at night and during the day, in regions and in CDRP's with a higher criminal activity. Nevertheless, income, let it be earned by oneself or another member in the household, together with schooling, seem to be buying safety. The latter result confirms the findings in Pradhan and Ravallion (2003). This basically confirms that safety is a normal good and higher income households should be able to purchase more of it. To put it differently, even though richer households might be more attractive for perpetrators because of the higher average returns in case of an offence, the costs and risks associated with attempting a crime against an individual who is

⁴ One needs to take into account the nature and severity of the types of domestic violence incurred by men and women. Whereas the domestic violence suffered by women tends to be more physical, the one suffered by men tends to be more psychological. Another reason why it is important to analyse the determinants of violence separately for men and women.

better prepared are not compensating (see Donohue and Levitt (1998) for a discussion of this argument).

Looking at vulnerability feelings, which are intrinsically within the individual sphere, conclusions change substantially. Table 7 summarizes them. Regional and local crime variables still play a role, even if not as strongly as when safety is concerned. The older one is, the less vulnerable they feel to any kind of violence and White British women are particularly more vulnerable to sexual assault than non-White British women. What is striking is the importance that experienced violence has on increasing feelings of vulnerability. The strongest evidence regards domestic violence. Both men and women who have been a victim of such violence feel strongly more vulnerable than their counterparts. This finding does confirm the importance of viewing violent attack as a problem that has long-lasting consequences.

3.3. Is there an impact of experienced violence and associated feelings of fear and vulnerability on well-being?

The analysis of the consequences of violence would not be complete without an appraisal of how it impacts on well-being. Table 8 presents the results of regressing our measure of well-being on different sets of variables and for men and women separately. Column 1 and 3 try to reproduce the work in this area where only experienced variables are available, for women and men respectively. Columns 2 and 4 further incorporate the indirect effects violence has on feelings of vulnerability and fear, as seen in the previous section, again for women and men respectively.

The main finding is that even though experienced violence seems to deprive individuals, it is mainly indirect feelings of vulnerability that undermine well-being in the largest extent. This is so for women, but not as clear for men, which again points to the different degrees of average consequences and severity of these violent experiences. It can be that the type of violence incurred by men is just of a different nature from the one incurred by women.

The remaining results are not very significant (exception is to be made to being extrovert, again pointing to the need of including the personality variables in this study). This can be because of several reasons. Firstly, there is indeed a relatively small number of observations available. Secondly, the dependent variable being measured with error might be increasing the standard errors so much as to wipe away possible significant relationships. Lastly, some of the remaining variables are included to account for differences in the violence-related circumstances and were

not necessarily expected to have a significant direct impact on happiness anyway. We briefly summarise some of the findings, even if they are not always significant. Having been a victim of sexual assault seems to increase well-being. This can however be explained as a contrast effect. Having experienced such an event makes these individuals benefit, to a larger extent, of their relatively favourable present circumstances. Additional results show that the better off groups are the oldest group, the more educated, the men with higher income or in higher income households (this is not so for women; the relation between income and female well-being is not clear at all) and the White British. Not having a partner is on average a worse outcome, probably due to the loss of the widowed. Surprisingly, the local crime rates have a negative sign, which suggests that neighbourhoods with higher criminal activity make individuals better off. The immediate explanation is the choice of residential area. Individuals can choose where they want to live and areas with more crime are also areas with more opportunities, entertainment and other benefits that seem to outweigh the risks of crime.

4. Conclusions

This paper sought to explore gender inequalities in the context of violent crime and wellbeing. The framework used to structure our analysis is that of the capabilities approach which has emphasised freedom in the assessment of wellbeing and stressed the role of physical safety as one core factor that determines what a person is capable of doing or being. By merging data from a new British survey of individual human capabilities with published data on local crime rates, we have been able to use and combine information on experiences of violence of different sorts with feelings of fear and vulnerability to explore how these variables interact and impact on wellbeing. We also use more detailed information on personality controls than is normally accessible to economists in modelling activities of the kind conducted here. With these data, we then estimate probit models that identify the socio-economic and demographic groups that are more vulnerable to violence and hence, we argue, have relative smaller capability sets. We go on to examine the impact of experience on future expectations of violence, and explore the relationship with overall wellbeing thereby assessing the extent to which diminished capabilities are picked up by the measure of life satisfaction now commonly used.

There are several important findings we summarise here. The main finding is that, whereas household income impacts negatively on the propensity for violence, the most conflictive households seem to be the ones where women contribute highly to the household income, where

they are more likely to be both victims and perpetrators of domestic violence (except for the highest income group of all).

It is evident that there are marked differences between the sexes, with women experiencing higher rates of sexual assault and domestic violence and men experiencing higher levels of other forms of assault. The reported experiences may well be linked to gender inequalities of other kinds (social expectations and power) and hence the need to treat men and women separately.

When we turn to feelings of fear and vulnerability, it is particularly noticeable that these are strongly related to local crimes, a fact that suggests such feelings do indeed have an objective basis. Furthermore, the relationship with income is negative which confirms the view that safety is a normal good. There is also a particularly strong link between experience and vulnerability to domestic violence, a finding that reflects its recurrent nature.

Finally, we examine the relationship between violence and wellbeing, as measured by answers to a life satisfaction (happiness) question and find that whilst violence does have a significant impact on wellbeing, the principal impact appears to be through the feelings of vulnerability that it engenders. This was clear for women but less so for men, a difference that may well reflect the different severities of violence experienced by men and women.

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Table 1: Self-Reported Experience of Violence by Gender

	Proportion Females	Proportion Males	<i>p</i> -value*
Sexual Assault (SA)	0.151	0.048	0.000
Domestic Violence (DV)	0.226	0.099	0.000
Both Sexual Assault and Domestic Violence	0.062	0.015	0.000
Some other form of Violent Assault or Attack (VA)	0.123	0.339	0.000

* *t*-test on the equality of means, where data is not assumed to be paired.

Table 2: Self-Reported Violence-Related Capabilities by Gender

	Females		Males		<i>p</i> -value*
	Mean	Median	Mean	Median	
Fear During Day (D)	2.155	2	1.925	2	0.000
Fear at Night (N)	3.670	3	2.785	3	0.000
Vulnerability to Sexual Assault (VSA)	3.439	3	1.535	1	0.000
Vulnerability to Domestic Violence (VDV)	1.585	1	1.328	1	0.000
Likelihood of Assault in Future (LVA)	3.159	3	3.198	3	0.990

*Wilcoxon rank-sum test on the equality of the distributions.

Table 3: Correlation Matrix of all Self-Reported Violence-Related Variables

	SA	DV	VA	D	N	VSA	VDV	LVA
SA	1							
DV	0.229*	1						
VA	0.048	0.141*	1					
D	0.079*	0.05	0.008	1				
N	0.114*	0.071*	-0.007	0.678*	1			
VSA	0.189*	0.116*	-0.126*	0.401*	0.545*	1		
VDV	0.064*	0.277*	0.004	0.118*	0.134*	0.271*	1	
LVA	0.080*	0.049	0.166*	0.324*	0.346*	0.250*	0.176*	1

* Significant at 10% Significance Level.

Table 4: Distribution of all types of Experienced Violence
across several Economic Characteristics

	Females						Males					
	SA		DV		VA		SA		DV		VA	
	Obs	%	Obs	%	Obs	%	Obs	%	Obs	%	Obs	%
Individual Gross Income:												
No income	33	21.2	33	12.1	33	9.1	12	0.0	12	16.7	12	41.7
1 up to 9,999 a year	196	19.4	200	27.0	202	15.3	71	7.0	71	11.3	71	32.4
10,000 up to 19,999	157	14.6	161	22.4	161	10.6	129	5.4	130	13.8	129	37.2
20,000 up to 29,999	63	6.3	64	21.9	64	15.6	112	2.7	116	8.6	116	32.8
30,000 up to 39,999	26	19.2	26	11.5	25	12.0	56	3.6	56	8.9	56	30.4
40,000 or more a year	10	30.0	10	20.0	10	0.0	37	2.7	37	2.7	37	32.4
Prefer not to answer	62	4.8	62	22.6	64	7.8	41	9.8	41	4.9	41	31.7
Don't know	9	11.1	10	10.0	10	10.0	4	0.0	4	0.0	4	50.0
Total	556	15.1	566	22.6	569	12.3	462	4.8	467	9.9	466	33.9
Household Gross Income:												
No income	3	0.0	3	0.0	3	0.0	5	0.0	5	0.0	5	60.0
1 up to 9,999 a year	74	24.3	75	38.7	75	18.7	34	11.8	34	11.8	34	29.4
10,000 up to 19,999	118	21.2	121	25.6	122	13.1	88	5.7	88	18.2	87	36.8
20,000 up to 29,999	105	8.6	106	14.2	106	12.3	88	5.7	89	9.0	89	30.3
30,000 up to 39,999	83	16.9	85	22.4	85	10.6	69	1.4	71	11.3	71	36.6
40,000 or more a year	67	10.4	67	17.9	67	11.9	115	2.6	116	5.2	116	31.9
Prefer not to answer	70	7.1	71	21.1	73	6.8	44	9.1	44	4.5	44	29.5
Don't know	25	8.0	27	14.8	28	10.7	15	0.0	15	0.0	15	46.7
Total	545	14.7	555	22.5	559	12.2	458	4.8	462	9.5	461	33.6
Number of Children:												
None	369	15.2	375	20.5	377	11.7	332	4.8	337	8.9	337	32.9
1	70	14.3	71	26.8	71	8.5	50	10.0	50	16.0	50	44.0
2	78	11.5	80	22.5	81	16.0	54	1.9	54	11.1	54	38.9
3	28	21.4	29	27.6	29	13.8	21	0.0	21	9.5	21	14.3
4	9	33.3	9	55.6	9	33.3	2	0.0	2	0.0	1	0.0
More than 4	2	0.0	2	50.0	2	0.0	3	0.0	3	0.0	3	33.3
Total	556	15.1	566	22.6	569	12.3	462	4.8	467	9.9	466	33.9

Continued on next page

Table 4 – continued from previous page

	Females						Males					
	SA		DV		VA		SA		DV		VA	
	Obs	%	Obs	%	Obs	%	Obs	%	Obs	%	Obs	%
Employment Status:												
FT >= 30 hrs	192	13.0	199	18.6	198	11.6	268	2.6	272	9.6	272	37.9
PT >= 8 and <= 29 hrs	100	10.0	102	23.5	102	12.7	25	8.0	25	20.0	25	32.0
PT < 8 hrs	18	22.2	17	23.5	18	27.8	3	0.0	3	0.0	3	0.0
FT student	30	3.3	31	19.4	31	12.9	24	4.2	24	8.3	24	33.3
Retired	100	15.0	99	18.2	100	11.0	100	7.0	101	5.9	100	19.0
Unemployed	11	18.2	12	33.3	12	8.3	17	5.9	17	5.9	17	41.2
Not working	105	25.7	106	33.0	108	12.0	25	16.0	25	24.0	25	52.0
Total	556	15.1	566	22.6	569	12.3	462	4.8	467	9.9	466	33.9
Schooling:												
Vocational Diploma	133	18.0	138	29.0	138	15.2	140	5.7	140	12.9	140	31.4
CSE A Level	208	13.5	212	23.6	212	10.8	126	0.0	126	7.9	126	33.3
University Degree	143	15.4	142	14.1	144	11.8	131	6.9	134	8.2	134	35.1
Other Schooling	44	18.2	45	26.7	45	11.1	40	10.0	42	14.3	41	31.7
Total	528	15.5	537	22.7	539	12.2	437	4.8	442	10.2	441	33.1
Satisfaction with Life:												
Completely Satisfied	14	21.4	16	25.0	16	12.5	16	0.0	17	0.0	17	11.8
Very Satisfied	121	14.9	119	16.0	121	9.9	105	2.9	105	4.8	105	26.7
Fairly Satisfied	264	11.7	274	18.6	273	10.3	215	5.6	218	9.6	218	37.2
Neither Satisfied nor Dissatisfied	59	13.6	61	24.6	61	14.8	49	4.1	49	12.2	48	37.5
Fairly Dissatisfied	73	16.4	72	38.9	74	14.9	59	3.4	60	13.3	60	38.3
Very Dissatisfied	21	52.4	20	45.0	20	25.0	15	20.0	15	40.0	15	33.3
Completely Dissatisfied	4	25.0	4	50.0	4	75.0	3	0.0	3	0.0	3	33.3
Total	556	15.1	566	22.6	569	12.3	462	4.8	467	9.9	466	33.9

Variables described in the appendix

Table 5: Identifying the more vulnerable groups by Gender:
 Probit Models of each type of Experienced Violence

	Females			Males		
	SA	DV	VA	SA	DV	VA
[35, 55[years old	0.059 (0.212)	0.185 (0.192)	0.221 (0.225)	-0.161 (0.396)	0.302 (0.299)	0.105 (0.209)
>= 55 years old	0.123 (0.232)	0.304 (0.216)	-0.094 (0.257)	-0.319 (0.456)	0.094 (0.390)	-0.249 (0.254)
Separated	0.003 (0.288)	0.503 (0.259)	0.694* (0.277)	0.278 (0.408)	0.895* (0.360)	0.087 (0.318)
No Partner	-0.007 (0.218)	-0.070 (0.202)	0.300 (0.232)	-0.898 (0.484)	0.135 (0.364)	0.218 (0.221)
[10000, 20000[household income	0.118 (0.291)	-0.440 (0.263)	-0.043 (0.287)	-0.867 (0.533)	0.231 (0.435)	0.031 (0.371)
[20000, 30000[household income	-0.290 (0.325)	-0.809** (0.275)	0.153 (0.311)	-0.816 (0.661)	-0.125 (0.524)	-0.090 (0.405)
>= 30000 household income	-0.287 (0.333)	-0.663* (0.299)	0.023 (0.330)	-1.716** (0.605)	0.025 (0.566)	0.174 (0.420)
[10000, 20000[individual income	-0.095 (0.226)	0.297 (0.214)	-0.196 (0.253)	0.609 (0.497)	-0.400 (0.362)	0.124 (0.309)
[20000, 30000[individual income	-0.452 (0.330)	0.462 (0.278)	-0.175 (0.296)	0.006 (0.642)	-0.454 (0.451)	-0.129 (0.364)
>= 30000 individual income	0.352 (0.347)	-0.001 (0.376)	-0.362 (0.430)	0.728 (0.654)	-0.691 (0.548)	-0.353 (0.406)
Non-White British	-0.265 (0.329)	0.379 (0.264)	-0.075 (0.300)	(dropped)	0.439 (0.316)	0.343 (0.275)
At least 1 child	-0.174 (0.221)	0.068 (0.191)	-0.389 (0.216)	-0.208 (0.352)	0.304 (0.288)	0.257 (0.192)
Vocational Diploma	0.362 (0.310)	0.101 (0.284)	0.529 (0.394)	-0.166 (0.354)	-0.217 (0.355)	-0.055 (0.270)
CSE A Level	0.081 (0.308)	0.148 (0.267)	0.152 (0.376)	(dropped)	-0.411 (0.350)	-0.245 (0.269)
Graduate	0.231 (0.309)	-0.231 (0.288)	0.355 (0.389)	-0.077 (0.394)	-0.152 (0.352)	-0.103 (0.285)
Not employed (at home)	0.288 (0.199)	-0.012 (0.181)	0.002 (0.217)	-0.045 (0.344)	-0.200 (0.296)	-0.177 (0.226)
Extraversion	-0.063 (0.124)	-0.165 (0.104)	-0.212 (0.128)	-0.081 (0.152)	-0.258 (0.136)	-0.179 (0.097)
Agreeableness	0.180* (0.090)	0.235** (0.087)	0.257** (0.099)	0.082 (0.134)	0.248* (0.121)	0.068 (0.082)
Conscientiousness	-0.028 (0.096)	0.013 (0.090)	0.150 (0.100)	-0.023 (0.153)	0.183 (0.120)	0.279** (0.091)
Emotional Stability	-0.181 (0.095)	-0.025 (0.095)	-0.064 (0.112)	-0.065 (0.156)	-0.112 (0.121)	-0.031 (0.093)
Openness	-0.075 (0.095)	0.007 (0.085)	-0.020 (0.097)	-0.209 (0.150)	-0.085 (0.115)	-0.048 (0.090)
Local Crime Rates	0.009 (0.007)	-0.008 (0.007)	-0.001 (0.008)	0.006 (0.004)	-0.005 (0.007)	0.004 (0.005)
South of England exc. London	-0.024 (0.278)	-0.053 (0.255)	-0.363 (0.264)	0.528 (0.431)	0.050 (0.285)	-0.314 (0.236)
Midlands and Wales	0.109 (0.260)	0.389 (0.244)	-0.853** (0.274)	0.190 (0.524)	-1.224** (0.399)	-0.415 (0.231)
North of England	0.043 (0.247)	0.253 (0.236)	-0.388 (0.245)	-0.259 (0.503)	-0.111 (0.270)	-0.190 (0.219)
Constant	-1.472** (0.485)	-0.801 (0.440)	-1.253* (0.516)	-0.647 (0.703)	-0.856 (0.638)	-0.300 (0.484)

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Table 5 – continued from previous page

	Females			Males		
	SA	DV	VA	SA	DV	VA
Pseudo R ²	.077	.107	.106	.202	.195	.094
N	382	389	390	214	330	329

Significance levels : * : 5% ** : 1% *** : 0.1%

Marginal effects reported. Standard errors in parentheses.

All variables are described in the appendix.

Reference categories are: < 35 years old, married, Other schooling, [0,10000[gross household income, [0,10000[gross individual income, White British, no Dependent children, other schooling, working at least 8hrs/week and London.

Table 6: Ordered Probit Models of the Self-Reported Safety Variables by Gender

	Females		Males	
	D	N	D	N
Victim of Sexual Assault?	0.152 (0.162)	0.189 (0.172)	0.535 (0.320)	0.092 (0.306)
Victim of Domestic Violence?	0.078 (0.146)	-0.172 (0.150)	-0.143 (0.233)	-0.139 (0.222)
Victim of any other Form of Violence?	0.183 (0.181)	0.308 (0.194)	-0.069 (0.145)	0.000 (0.141)
[35, 55[years old	-0.087 (0.151)	-0.225 (0.155)	0.025 (0.184)	0.089 (0.175)
>= 55 years old	-0.181 (0.167)	-0.279 (0.173)	-0.030 (0.214)	0.091 (0.207)
Separated	-0.303 (0.219)	0.099 (0.228)	-0.066 (0.284)	-0.040 (0.269)
No Partner	-0.022 (0.158)	0.198 (0.164)	0.286 (0.193)	0.066 (0.184)
[10000, 20000[household income	-0.310 (0.217)	-0.254 (0.230)	-0.375 (0.301)	-0.293 (0.298)
[20000, 30000[household income	-0.152 (0.225)	-0.272 (0.241)	-0.420 (0.331)	-0.341 (0.326)
>= 30000 household income	-0.410 (0.244)	-0.350 (0.258)	-0.742* (0.354)	-0.484 (0.342)
[10000, 20000[individual income	-0.072 (0.168)	-0.262 (0.171)	-0.387 (0.256)	-0.170 (0.247)
[20000, 30000[individual income	-0.188 (0.219)	-0.252 (0.220)	-0.428 (0.299)	0.043 (0.288)
>= 30000 individual income	0.088 (0.275)	-0.228 (0.276)	-0.032 (0.336)	-0.256 (0.320)
Non-White British	-0.461* (0.222)	-0.562* (0.220)	0.073 (0.257)	0.165 (0.247)
At least 1 child	-0.099 (0.151)	-0.208 (0.155)	-0.020 (0.171)	-0.096 (0.159)
Vocational Diploma	0.151 (0.229)	0.483* (0.237)	-0.229 (0.238)	-0.442 (0.237)
CSE A Level	-0.172 (0.222)	0.252 (0.226)	-0.136 (0.240)	-0.510* (0.240)
Graduate	-0.580* (0.231)	-0.229 (0.233)	-0.788** (0.253)	-0.847*** (0.247)

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Table 6 – continued from previous page

	Females		Males	
	D	N	D	N
Not employed (at home)	0.025 (0.147)	0.387* (0.152)	-0.393* (0.189)	-0.317 (0.178)
Extraversion	-0.009 (0.079)	0.035 (0.080)	-0.059 (0.085)	0.056 (0.082)
Agreeableness	0.021 (0.069)	0.073 (0.071)	0.037 (0.071)	0.110 (0.068)
Conscientiousness	0.031 (0.074)	-0.077 (0.075)	0.083 (0.076)	-0.026 (0.074)
Emotional Stability	0.153* (0.073)	0.125 (0.074)	-0.007 (0.079)	-0.011 (0.076)
Openness	-0.061 (0.069)	0.043 (0.070)	0.057 (0.077)	-0.046 (0.074)
Local Crime Rates	0.012* (0.006)	0.009 (0.006)	0.008* (0.003)	0.021*** (0.005)
South of England exc. London	-0.707*** (0.198)	-0.798*** (0.209)	-0.597** (0.212)	-0.445* (0.200)
Midlands and Wales	-0.478* (0.191)	-0.395 (0.205)	-0.330 (0.198)	-0.279 (0.189)
North of England	-0.575** (0.187)	-0.460* (0.199)	-0.084 (0.189)	-0.043 (0.184)
Pseudo R ²	.061	.086	.088	.071
N	379	379	327	327

Significance levels : * : 5% ** : 1% *** : 0.1%

Standard errors in parentheses.

All variables are described in the appendix.

Reference categories are: < 35 years old, married, Other schooling, [0, 10000[gross household income, [0, 10000[gross individual income, White British, no Dependent children, other schooling, working at least 8hrs/week and London.

Table 7: Ordered Probit Models of the Self-Reported Vulnerability and Expectations Variables by Gender

	Females			Males		
	VSA	VDV	LVA	VSA	VDV	LVA
Victim of Sexual Assault?	0.263 (0.181)	-0.150 (0.219)	0.558** (0.174)	0.899** (0.324)	0.741 (0.402)	0.144 (0.341)
Victim of Domestic Violence?	0.016 (0.157)	0.917*** (0.183)	0.058 (0.161)	-0.299 (0.263)	1.302*** (0.284)	0.087 (0.245)
Victim of any other Form of Violence?	0.338 (0.205)	0.034 (0.240)	0.360 (0.195)	-0.044 (0.161)	-0.475* (0.221)	0.503** (0.155)
[35, 55[years old	-0.446** (0.165)	-0.746*** (0.189)	-0.499** (0.165)	-0.473* (0.200)	-0.379 (0.258)	-0.124 (0.195)
>= 55 years old	-0.945*** (0.183)	-1.046*** (0.236)	-0.706*** (0.186)	-0.658** (0.234)	-0.233 (0.287)	-0.597* (0.235)
Separated	-0.028 (0.233)	-0.039 (0.304)	0.245 (0.244)	0.160 (0.304)	0.474 (0.377)	0.494 (0.295)
No Partner	-0.129 (0.172)	-0.001 (0.208)	0.184 (0.173)	-0.039 (0.210)	0.466 (0.270)	0.109 (0.208)
[10000, 20000[household income	0.210	-0.174	0.091	-0.202	0.616	-0.139

Continued on next page

Table 7 – continued from previous page

	Females			Males		
	VSA	VDV	LVA	VSA	VDV	LVA
[20000, 30000[household income	(0.233)	(0.290)	(0.241)	(0.342)	(0.419)	(0.322)
	0.166	0.066	0.042	-0.597	-0.648	-0.406
	(0.248)	(0.291)	(0.251)	(0.378)	(0.493)	(0.360)
>= 30000 household income	0.096	-0.454	0.215	-0.668	-0.139	-0.511
	(0.264)	(0.328)	(0.270)	(0.398)	(0.499)	(0.381)
[10000, 20000[individual income	-0.281	0.057	-0.065	0.047	-0.594	-0.125
	(0.180)	(0.221)	(0.188)	(0.289)	(0.343)	(0.276)
[20000, 30000[individual income	-0.187	-0.080	0.034	0.357	0.159	0.218
	(0.235)	(0.275)	(0.237)	(0.335)	(0.421)	(0.327)
>= 30000 individual income	-0.530	0.238	-0.308	0.396	-0.062	0.383
	(0.290)	(0.359)	(0.304)	(0.370)	(0.465)	(0.365)
Non-White British	-0.642**	-0.146	0.126	0.038	0.002	0.485
	(0.228)	(0.276)	(0.235)	(0.284)	(0.351)	(0.270)
At least 1 child	-0.306	0.143	-0.018	0.075	0.453	-0.198
	(0.165)	(0.193)	(0.163)	(0.184)	(0.240)	(0.184)
Vocational Diploma	0.297	0.711	0.067	0.110	-0.136	0.003
	(0.242)	(0.422)	(0.262)	(0.283)	(0.371)	(0.258)
CSE A Level	0.142	0.695	0.125	0.301	0.250	-0.422
	(0.233)	(0.417)	(0.252)	(0.284)	(0.362)	(0.268)
Graduate	-0.140	0.481	0.019	0.030	0.059	-0.562*
	(0.241)	(0.434)	(0.260)	(0.293)	(0.369)	(0.271)
Not employed (at home)	0.087	-0.328	-0.010	-0.221	-0.485	0.014
	(0.157)	(0.193)	(0.163)	(0.212)	(0.274)	(0.205)
Extraversion	0.067	0.002	-0.133	-0.065	0.137	-0.006
	(0.084)	(0.104)	(0.087)	(0.095)	(0.120)	(0.094)
Agreeableness	0.117	0.144	-0.012	0.071	0.042	0.123
	(0.074)	(0.093)	(0.077)	(0.079)	(0.103)	(0.078)
Conscientiousness	-0.065	-0.234*	-0.006	0.102	0.054	0.022
	(0.078)	(0.105)	(0.083)	(0.084)	(0.110)	(0.080)
Emotional Stability	0.011	-0.093	0.153	0.070	-0.105	-0.150
	(0.077)	(0.097)	(0.079)	(0.088)	(0.113)	(0.085)
Openness	0.017	0.152	-0.021	0.074	0.155	-0.162
	(0.072)	(0.091)	(0.075)	(0.086)	(0.119)	(0.084)
Local Crime Rates	0.016*	0.003	0.002	0.006	0.006	0.007*
	(0.007)	(0.007)	(0.006)	(0.004)	(0.004)	(0.003)
South of England exc. London	-0.583**	0.128	-0.242	-0.094	0.270	-0.023
	(0.215)	(0.262)	(0.218)	(0.229)	(0.304)	(0.235)
Midlands and Wales	-0.352	0.108	0.086	-0.156	0.134	0.480*
	(0.211)	(0.262)	(0.210)	(0.216)	(0.297)	(0.215)
North of England	-0.067	-0.006	-0.240	-0.154	0.275	0.406
	(0.206)	(0.257)	(0.206)	(0.211)	(0.288)	(0.213)
Pseudo R ²	.107	.164	.079	.072	.203	.112
N	379	379	379	327	327	327

Significance levels : * : 5% ** : 1% *** : 0.1%

Standard errors in parentheses.

All variables are described in the appendix.

Reference categories are: < 35 years old, married, Other schooling, [0,10000[gross household income, [0,10000[gross individual income, White British, no Dependent children, other schooling, working at least 8hrs/week and London.

Table 8: Ordered Probit Models of Well-Being Deprivation
by Gender

	Females		Males	
	Experience only	Both	Experience only	Both
Victim of Sexual Assault?	-0.133 (0.170)	-0.264 (0.176)	0.044 (0.312)	0.002 (0.318)
Victim of Domestic Violence?	0.366* (0.152)	0.275 (0.160)	0.240 (0.235)	0.260 (0.250)
Victim of any other Form of Violence?	0.056 (0.189)	-0.062 (0.193)	-0.011 (0.149)	-0.039 (0.153)
Vulnerability to Sexual Assault		0.290** (0.096)		0.106 (0.123)
Vulnerability to Domestic Violence		0.302** (0.116)		-0.023 (0.156)
Likelihood of Future Violence of any other Type		0.290** (0.103)		0.092 (0.092)
[35, 55[years old	0.061 (0.156)	0.294 (0.164)	-0.041 (0.186)	-0.013 (0.188)
>= 55 years old	-0.379* (0.174)	-0.053 (0.186)	-0.314 (0.219)	-0.250 (0.223)
Separated	0.092 (0.227)	0.077 (0.231)	0.471 (0.275)	0.441 (0.277)
No Partner	0.402* (0.165)	0.404* (0.167)	0.426* (0.194)	0.429* (0.195)
[10000, 20000[household income	-0.105 (0.225)	-0.130 (0.229)	-0.356 (0.317)	-0.344 (0.319)
[20000, 30000[household income	0.088 (0.235)	0.061 (0.238)	-0.702* (0.347)	-0.667 (0.349)
>= 30000 household income	-0.348 (0.253)	-0.362 (0.258)	-0.714 (0.368)	-0.668 (0.370)
[10000, 20000[individual income	0.050 (0.173)	0.096 (0.176)	-0.066 (0.263)	-0.064 (0.264)
[20000, 30000[individual income	-0.303 (0.225)	-0.276 (0.229)	-0.227 (0.305)	-0.254 (0.305)
>= 30000 individual income	-0.102 (0.281)	0.008 (0.287)	-0.344 (0.341)	-0.386 (0.342)
Non-White British	0.211 (0.226)	0.329 (0.232)	0.625* (0.268)	0.593* (0.270)
At least 1 child	-0.161 (0.158)	-0.138 (0.161)	0.115 (0.168)	0.129 (0.170)
Vocational Diploma	-0.083 (0.238)	-0.195 (0.244)	0.065 (0.243)	0.068 (0.243)
CSE A Level	-0.152 (0.229)	-0.250 (0.234)	-0.095 (0.247)	-0.082 (0.249)
Graduate	-0.236 (0.237)	-0.252 (0.241)	-0.168 (0.253)	-0.135 (0.255)
Not employed (at home)	0.094 (0.152)	0.123 (0.155)	-0.334 (0.189)	-0.332 (0.190)
Extraversion	-0.314*** (0.082)	-0.324*** (0.084)	-0.321*** (0.087)	-0.320*** (0.087)
Agreeableness	0.119 (0.072)	0.089 (0.073)	0.061 (0.072)	0.052 (0.072)
Conscientiousness	-0.078 (0.076)	-0.042 (0.077)	0.065 (0.077)	0.062 (0.077)
Emotional Stability	0.060 (0.074)	0.052 (0.076)	-0.023 (0.080)	-0.021 (0.081)

Continued on next page

Table 8 – continued from previous page

	Females		Males	
	Experience only	Both	Experience only	Both
Openness	-0.082 (0.070)	-0.100 (0.071)	-0.006 (0.077)	0.001 (0.078)
Local Crime Rates	-0.005 (0.006)	-0.008 (0.006)	-0.010 (0.006)	-0.011* (0.006)
South of England exc. London	0.244 (0.205)	0.376 (0.211)	0.059 (0.210)	0.065 (0.210)
Midlands and Wales	-0.407* (0.201)	-0.403* (0.205)	0.259 (0.200)	0.243 (0.202)
North of England	-0.111 (0.194)	-0.063 (0.198)	0.206 (0.193)	0.197 (0.194)
Pseudo R ²	.093	.135	.110	.113
N	379	379	327	327

Significance levels : * : 5% ** : 1% *** : 0.1%

Standard errors in parentheses.

All variables are described in the appendix.

Reference categories are: < 35 years old, married, Other schooling, [0, 10000[gross household income, [0, 10000[gross individual income, White British, no Dependent children, other schooling, working at least 8hrs/week and London.

Appendix A

Questions and coding resulting in the data used

This appendix shows the questions that were presented to the respondents, together with all the options they had available. For each variable, some of the categories had to be collapsed for estimation purposes, as explained in the text. The violence-related variables have been presented and discussed extensively in the paper and hence its omission from the appendix.

a. The Measure of Life Satisfaction ('Happiness')

[General Satisfaction] *How satisfied or dissatisfied are you with your life as a whole?* (1 "completely satisfied" up to 7 "completely dissatisfied").

b. Socio-economic and demographic variables

[Age]

[Gender] (1 "male" 2 "female")

[Ethnicity] (1 "White British" 2 "Non-white British")

[Marital Status] *What is your marital status?* (1 "married" 2 "living as married" 3 "separated (after being married)" 4 "divorced" 5 "widowed" 6 "never married")

[Education Attained] *What is the highest educational or work-related qualification you have?* (too many options and regional differences – these were later collapsed into 4 comparable categories 1 "Other Schooling" 2 "Vocational Diploma" 3 "CSE A Level" 4 "University Degree")

[Employment Status] *Which of these best applies to you?* (1 "working full-time (30 or more hours per week)" 2 "working part-time (8 to 29 hours per week)" 3 "working part-time (less than 8 hours a week)" 4 "full time student" 5 "retired" 6 "unemployed" 7 "not working for other reason")

[Dependent Children] *How many dependent children do you have – that is children dependent on your income?*

[Individual Income] *Gross personal income is an individual's total income received from all sources, including wages, salaries, or rents and BEFORE tax and contributions to national insurance are deducted. What is your gross personal income?* (Monthly and weekly bracket options given)

[Household Income] *Gross household income is the combined money income of all those earners in a household including wages, salaries, or rents and BEFORE tax and contributions to national insurance are deducted. What is your gross household income?* (The same monthly and weekly bracket options given)

[Postcode] *Can you tell us the first part of your postcode – this can include up to four letters and numbers (e.g. SE23)?* Crime rates were then retrieved based on this information as described in the paper. So was the region the individual lives in (1 "London" 2 "Rest of South of England" 3 "Midlands and Wales" 4 "North of England" 5 "Scotland")

c. The Measure of Personality

The measure of personality used derives from answers to the ten questions below. Each personality dimension combines two polarised traits, so that the positive one enters positively and the negative one enters negatively towards the final score. The score for each of the five dimensions is then based on the difference between the two relevant traits (the former minus the latter) and can take a value in the range from -6 to 6.

[Extraversion] (-6 up 6)

(+) *I see myself as* extraverted, enthusiastic (1 "agree strongly" up to 7 "disagree strongly")

(-) *I see myself as* reserved, quiet (1 "agree strongly" up to 7 "disagree strongly")

[Agreeableness] (-6 up 6)

(+) *I see myself as* sympathetic, warm (1 "agree strongly" up to 7 "disagree strongly")

(-) *I see myself as* critical, quarrelsome (1 "agree strongly" up to 7 "disagree strongly")

[Conscientiousness] (-6 up 6)

(+) *I see myself as* dependable, self-disciplined (1 "agree strongly" up to 7 "disagree strongly")

(-) *I see myself as* disorganised, careless (1 "agree strongly" up to 7 "disagree strongly")

[Emotional Stability] (-6 up 6)

(+) *I see myself as* calm, emotionally stable (1 "agree strongly" up to 7 "disagree strongly")

(-) *I see myself as* anxious, easily upset (1 "agree strongly" up to 7 "disagree strongly")

[Openness] (-6 up 6)

(+) *I see myself as* open to new experience, complex (1 "agree strongly" up to 7 "disagree strongly")

(-) *I see myself as conventional, uncreative* (1 “agree strongly” up to 7 “disagree strongly”)

Appendix B Summary Statistics

The following table shows the number of observations (N) available for each of the variables discussed in Appendix A, together with the violence related questions, their means and standard deviations (SD). Relative frequencies are also shown for all variables treated as categorical for estimation purposes. Please refer to Appendix A for the correspondence between the numbers of each category and their labels.

Variable Name	N	Mean	SD	Responses and Relative Frequencies (%)
Gender	1048	1.552	0.50	1 (45), 2 (55)
General Satisfaction	1048	3.223	1.16	1 (3.2), 2 (21.6), 3 (47.3), 4 (10.7), 5 (13.1), 6 (3.4), 7 (0.7)
SA	1018	0.104	0.31	0 (89.6), 1 (10.4)
DV	1033	0.168	0.37	0 (83.2), 1 (16.8)
VA	1035	0.220	0.41	0 (78), 1 (22)
VSA	1048	2.587	1.66	1 (37.5), 2 (20.1), 3 (12.5), 4 (14.2), 5 (9.9), 6 (3.2), 7 (2.6)
VDV	1048	1.470	1.11	1 (77.6), 2 (11.9), 3 (3.4), 4 (2.9), 5 (2.1), 6 (1.3), 7 (0.8)
LVA	1048	3.177	1.37	1 (13.8), 2 (18), 3 (24.1), 4 (30.5), 5 (9.5), 6 (1.9), 7 (2)
Age	1048	44.125	15.08	
Marital Status	1048	2.659	2.07	1 (50.4), 2 (15), 3 (1.2), 4 (7.6), 5 (2.8), 6 (22.9)
Gross Household Income	868	4.074	1.37	1 (0.9), 2 (12.9), 3 (24.4), 4 (22.6), 5 (18), 6 (21.2)
Gross Individual Income	926	3.127	1.22	1 (4.9), 2 (30), 3 (31.6), 4 (19.6), 5 (8.9), 6 (5.1)
Ethnicity	1018	1.096	0.30	1 (90.4) 2 (9.6)
Dependent Children	1048	1.589	1.01	
Education Attained	992	2.820	0.94	1 (8.9), 2 (28.5), 3 (34.4), 4 (28.2)
Employment Status	1048	3.022	2.26	1 (45.1), 2 (12.2), 3 (2), 4 (5.3), 5 (19.5), 6 (3), 7 (12.9)
Extraversion	1048	0.253	0.81	
Agreeableness	1048	0.693	0.92	
Conscientiousness	1048	0.310	0.86	
Emotional Stability	1048	0.379	0.85	
Openness	1048	0.236	0.86	
Local Crime Rate	934	28.153	14.21	
UK Region	1037	2.906	1.23	1 (16.8), 2 (22.1), 3 (23.5), 4 (28.9), 5 (8.7)

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