# Predicting fear of crime: Personality outperforms prior victimisation

David A. Ellis<sup>1</sup>

Kayleigh J. Renouf<sup>2</sup>

<sup>1</sup>Department of Psychology, Lancaster University, UK

<sup>2</sup>School of Psychology, University of Lincoln, UK

David A. Ellis (corresponding author) Kayleigh J. Renouf

Lancaster University University of Lincoln

Bailrigg Bayford Pool

Lancaster Lincoln

Lancashire Lincolnshire

LA1 4YF LN6 7TS

email: d.a.ellis@lancaster.ac.uk telephone: +44 (0) 1524 593207

Word count (excluding abstract, tables and figures, references and appendixes): 3,686

#### **Abstract**

Reported levels of crime continue to fall, but fear of crime remains a significant social problem. Previous studies have identified several factors that predict fear of crime (e.g. age and gender) however; it is not obvious how this information can be used to help distinguish between individuals in larger groups. Personality is predictive of other lifestyle outcomes yet its relationship with fear of crime remains unknown. We examined personality correlates of fear of crime alongside other well-established predictors. A total of 301 participants completed the HEXACO-PI-R personality scale, State-Trait Anxiety Inventory and the Oxford Happiness Questionnaire. Higher levels of emotionality (r = .37) and lower levels of honesty-humility (r = -.18) correlated with increased levels of crime related fear; however, prior victimisation did not improve a subsequent model. While elucidating the relationship between fear of crime and personality, our results also raise additional questions concerning the measurement of crime related fear in the general population.

#### Introduction

Levels of reported crime have steadily decreased across the developed world, with the UK witnessing a marked reduction in crime rates from 2003 onwards (ONS 2014). While crime rates have decreased, the fear of crime in the general population continues to rise, and represents a significant social problem in its own right (Walker, Kershaw & Nicholas 2006; Valera & Guàrdia 2014). Fear can lead to anxiety and trigger a variety of negative health outcomes including panic attacks and tachycardia (Asmundson, Norton & Veloso 1999; Schmidt, Lerew & Jackson 1997). However, crime related fear is specifically associated with a reduction in physical activity (Foster, Giles-Corti & Knuiman 2014; Foster, Knuman, Hooper, Christian & Giles-Corti 2014; Pearson & Breetzke 2014; White, Kasl, Zahner & Will 1987), poorer mental health and a lower quality of life both in terms of general health and of a reduction in positive social interactions (Chui, Cheng & Wong 2013; Stafford, Chandola & Marmot 2007). Beyond these negatives, an improved understanding of factors that underlie fear of crime remains crucial for governments and policy-makers who struggle to identify high-risk individuals or groups within large sections of the population (Solymosi, Bowers, Fujiyama 2015). This is particularly problematic when many high-risk individuals share key characteristics already known to correlate with increased levels of crime related fear.

# Individual differences and fear of crime

Previous criminological research has identified a number of factors that may influence an individual's predisposition towards fear of crime, but it has been examined less within a psychological context. As a result, a greater focus has been placed on social demographic characteristics including age, socioeconomic status, health, media exposure and location (e.g., Chui & Cheng 2014; Cops & Pleysier

2011; Garofalo 1981; Power, Neville, Devereux, Haynes & Barnes 2012; Warr & Stafford 1983). The relationship of gender to fear of crime has also been one of the most dominant areas of research with women reporting greater fear (Chui, Cheng & Wong 2013). Common to many of these factors is that they remain static regardless of experience. This makes it difficult to identify specific individuals within subpopulations who are already likely to report high levels of crime related fear.

Prior victimisation however, changes based on an individuals direct experience with crime, but results are mixed when it comes to predicting crime related fear. Weinrath and Gartrell (1996) for example, observed that being a previous victim of crime increased victims' fear levels, although this result seemed to be modified by gender and age. Other research, has observed a relatively weak relationship between fear of crime and prior victimisation (e.g., DuBow, McCabe, & Kaplan 1979; Rifai 1982). It has even been suggested that criminal victimisation may reduce fear, as many individuals become pre-occupied before they have had any direct experience with crime (Sparks, Genn, and Dodd 1977).

In day-to-day life however, factors such as previous victimisation are unlikely to operate in isolation and research that adopts a specifically psychological approach concerning a fear of crime is a relatively recent advance (e.g. Jackson 2009). This is surprising as fear of crime may go beyond fear itself and act as a marker for hard to grasp feelings of social unease that may change with experience (Cops, Pleysier & Put 2012). Personality for example, may prove to be a more reliable predictor of fear of crime and provide clues to potential coping mechanisms when considered alongside prior victimisation.

### **Personality**

Personality remains one of the most consistent cross-sectional predictors of subjective-well being (Boyce, Wood & Powdthavee 2012; Ferrer-i-Carbonell & Frijters 2004). These traits have also shown themselves to relate to anxiety, with for example, low levels of extraversion associated with a predisposition to high levels of anxiety (Gershuny & Sher 1998). Regarding fear of crime, Klama and Egan (2011) observed small positive correlations between fear of crime and neuroticism, openness to experience and conscientiousness. However, this research was principally concerned with attitudes towards punishment and did not control for a variety of other factors known to influence fear including gender, age or prior victimisation. More recently, Mueller and Roeder (2014) also considered differences between individuals who were clustered as resilient, overcontorlled or undercontrolled. These clusters were derived from measures of personality however, no differences were observed in their specific level of worry, except sexual assault, which was rated as more fearful by undercontrolled individuals who were low in agreeableness, consciousness, extraversion and openness. The authors in this instance acknowledge however, that additional differences may have gone undetected due to a cluster approach that resulted in very little variance between the three groups.

Beyond five factor models other frameworks appear promising, but remain untested. Specifically, the HEXACO model of personality is based on lexical research concerning personality where factor analyses were conducted on self and peer ratings of the familiar personality-descriptive adjectives of several languages (Ashton & Lee 2009). This led to the identification of six rather than five dimensions, which can capture other key aspects of personality variance that are not represented within five-dimensional models (Lee & Ashton 2012). Correlations between HEXACO factors

and the Big Five are consistent with theoretical expectations however; emotionality replaces emotional stability with high scores indicating an increased fear of physical dangers and higher levels of day-to-day anxiety. Conversely, low scorers are less concerned with physical harm and little need to share their concerns with others. In addition, honesty-humility measures levels of sincerity and modesty, with low scores indicating pretentiousness and deceit. To date, existing research has only demonstrated differences in emotionality and honesty-humility within criminal populations. Rolison and colleagues (2013), for example, used the HEXACO model as a framework to study offenders' personalities, however, they did not consider personality as it might relate to an individual's fear of potential criminal behaviour.

Personality frameworks like the HEXACO are likely to be useful when predicting fear of crime, but specific factors may only become a worthwhile addition to any model when considered alongside other relevant variables. High levels of anxiety for example, are commonly associated with a range of psychological disorders, but and have also been associated with crime related fear (Cossman and Rader 2011). Self reported aspects of mental health might operate as an antecedent to fear of crime because it contributes to the perception of vulnerability. Well-being and happiness has also previously been negatively associated with victimisation (Moller 2005) and increased levels of anxiety negatively correlate with overall levels of happiness (DeJoy 1989). These variables should therefore be considered alongside prior victimisation and personality in any new research design.

#### Current study

Here we propose that predictions concerning an individual's fear of crime can be improved with the addition of two factors from the HEXACO model of personality. To the best of our knowledge, no study has yet considered the importance or usefulness of personality in this context. Specifically, we expect that individuals who score high in emotionality and low in honesty-humility will report higher levels of crime related fear even after controlling for other well-established variables that have also been linked with fear of crime.

### Method

# **Participants**

Participants were recruited using the Qualtrics system, which provides online hosting for quantitative and qualitative data collection. The study inclusion criteria required all participants to (a) be over the age of 16, (b) have English as a first language, and (c) have been residents of their current neighbourhoods for at least 1 year. A sample size calculation suggested that we required a sample of 187 for a power of 0.80 (Faul, Erdfelder, Buchner & Lang 2009). This was based on 2 tested predictors (from the HEXACO) adding at least 0.05 to the partial  $R^2$  with a total of 8 predictor variables (p = .05).

Data was collected between October 2014 and March 2015 via a convenience sample recruited via Facebook, Twitter and various blogs. A total of 408 participants followed a link to an online survey where 301 participants (22% male) with a mean age of 23.88 (SD = 10.97) completed the survey. The majority of participants were based in the UK, with a small number located in the USA, Australia, France, Ireland, the Netherlands and Spain (5.6%). Anonymous IP logging was used to filter out multiple responses from the same computer.

# **Procedure**

Participants followed a hyperlink which took them to the first page of the survey, which then led to an information sheet where they were informed about the

study's purpose, as well as of the anonymity and confidentiality of their data. Once participants provided consent by clicking 'next' they completed several standardised questionnaires in their own time. Finally, participants provided information relating to their previous experiences as victims of crime before being debriefed and thanked for their time.

# **Individual Difference Measures**

Personality.

Participant personality was measured using the HEXACO-60 (Ashton & Lee 2009). The HEXACO-60 requires participants to self-rate 60 items about their behavior, using a scale from strongly disagree (1) to strongly agree (5). These items measure six factors (i.e., 10 items for each factor) of the HEXACO personality structure: Honesty-Humility, Emotionality, Extraversion, Agreeableness (versus Anger), Conscientiousness, and Openness to Experience. These factors were derived from dimensions found in lexical studies of personality structure and also to reflect recent theoretical interpretations that extend beyond traditional 5-factor models. This inventory is recommended for use in any research context that involves adults or students and is highly correlated with the 200-item HEXACO (r's >.9) in comparable samples, (Ashton & Lee, 2009), and therefore provides a useful measure in situations where time is limited.

## Anxiety

Anxiety was measured using the State-Trait Anxiety Inventory (STAI; Speilberger, Gorsuch, Lushene & Vagg 2010). This is a commonly used measure to assess state and trait anxiety, which can be used in clinical settings to diagnose

anxiety. The inventory includes 40 items split across two sections. The state section contains 20 items that measure state anxiety, that is, how an individual feels *right now*; and the trait section contains a further 20 items that measure trait anxiety, that is, how an individual feels *generally*. State anxiety items include: "I am tense; I am worried" and "I feel calm; I feel secure." Trait anxiety items include: "I worry too much over something that really doesn't matter" and "I am content; I am a steady person." All items are rated on a 4-point scale (e.g., from "Almost Never" to "Almost Always"). Higher scores indicate greater anxiety.

## Well-being/Happiness.

The Oxford Happiness Questionnaire (OHQ; Hills & Argyle 2002) assesses subjective levels of happiness and has been validated in comparable samples of college students and the general population. It also correlates highly with the longer Oxford Happiness Inventory, but is less susceptible to questionnaire and respondent bias (Hills & Argyle 2002). The measure includes 29 items, scored on a six-point Likert scale (1 = 'strongly disagree' to 6 = 'strongly agree'). Higher average scores across all items indicate greater levels of happiness and psychological well-being. Sequential orthogonal factor analyses of the OHQ identified a single higher order factor, which suggests that the construct of well-being it measures is uni-dimensional (Hills & Argyle 2002).

# Fear of Crime

Given the variety of tools used to measure Fear of Crime, we included two measures of differing lengths. In addition, the inclusion of a 2-item measure would

allow us to examine if similar correlates with fear can extend to shorter assessments that are more likely to be included when time is at a premium or as part of lager waves of data collection where fear of crime is the not primary topic of interest.

Fear of crime was first measured using series of experience-based questions similar to those employed by Foster et al (2014). Participants were asked: In your everyday life, how fearful, or not, are you about the following situations: (1) having someone break into your house while you're at home; (2) being attacked by someone with a weapon; (3) being robbed or mugged on the street; (4) having your property damaged by vandals; and (5) having someone loiter near your home at night (Ferraro 1995; Foster et al 2014; Warr & Stafford 1983). Participants rated each item on a Likert scale (1 = 'not at all fearful' to 5 = 'extremely fearful'), which were averaged with higher values indicating greater fear.

We also included a shorter two-item scale aiming to evaluate how safe an individual feels while walking around their neighbourhood (Breetzke & Pearson 2014). Participants were asked: How safe do you feel: (1) walking alone during the day in your neighbourhood? and (2) walking alone at night in your neighbourhood? Respondents were asked to indicate a response to the above questions on a 4-point Likert-type scale (1 = 'very safe' to 4 = 'very unsafe'). The average score from these two items was used as a secondary measure of fear of crime.

### **Prior Victimisation**

Alongside basic demographic information, including location, age and gender, participants were asked to recall whether they had been the victim of a crime over the past ten years. Participants who responded in the affirmative were asked to provide

additional information regarding the specific crime and the year in which it took place.

### Analyses

Scores for each scale were calculated by reverse-coding the appropriate variables and calculating sum totals. Summary reliability and mean scores were calculated for all measures. Our subsequent analysis builds in complexity at each stage and where possible we haven included parametric and non-parametric tests however, these produce broadly consistent results.

Our first analyses include a series of t-tests comparing participants across all measures based on their previous victimisation status. Second, correlations were computed between all our potential predictors and FoC scores. Third, several blockwise regression analyses allowed us to determine the relative power of subsequent models and consider the effects of personality measures after controlling for demographic factors previously identified as having a significant effect on FoC (e.g. gender). Finally, three cluster analyses (supported by a series of confirmatory ANOVAS) helped visualise the relationships between key predictor variables and FoC.

## Results 1

Table 1 presents means, standard deviations, and internal consistency data for all measures, compared by prior victimisation<sup>2</sup>. Thirty-four percent of our sample identified themselves as having previously been the victim of crime (see

<sup>1</sup> An interactive visualisation of our data can be viewed here: https://psychology.shinyapps.io/example3

<sup>&</sup>lt;sup>2</sup> A supplementary file (Table S2) provides descriptive statistics for all measures separated by victim status and gender.

supplementary Table S1) with the majority being robbery or theft related (66%). Violent offences accounted for a further 14% of victimisations. The remaining participants reported being victims of other crimes, including sexual assault, vandalism and harassment (20%).

A series of independent sample t-tests revealed that previous victims scored significantly higher on openness [t (299) = 4.51, p < .001; d = .52] (see Table 1). No other significant differences between victims and non-victims were observed across any of the other measures [p's > .05].

### [Table 1 near here]

Correlations between fear of crime measures (FoC & FoC<sub>2</sub>) and potential predictors revealed some significant correlations that consistent across parametric and non-parametric tests (see Table 2). FoC significantly correlated with the shorter measure (FoC<sub>2</sub>). Participants who rated themselves as more fearful of crime on both measures also reported significantly higher levels of emotionality, state and trait anxiety Finally, FoC was negatively correlated with honesty-humility. Lower scores on this domain are associated with individuals who rate themselves as less fair and sincere. Lower scores are also associated with individuals who are more motivated by material gain and feel a stronger sense of self-importance. Such individuals were more likely to rate themselves as more fearful of crime.

[Table 2 near here]

Each FoC indicator was then regressed on gender, age and significant predictors from Table 2. Personality variables explained a significant portion of the variance in each case. As can be seen in Table 3, age and emotionality were positively related to FoC and honesty-humility negatively related to FoC in the final model. Participants who scored higher on the emotionality scale, but lower on honesty-humility demonstrated increased levels of FoC. Gender and emotionality were the only significant predictors of FoC<sub>2</sub> in the final model.

## [Table 3 near here]

Finally, a series of k-means cluster algorithms determined if it was possible to easily identify individuals with high FoC based on emotionality and honesty-humility scores alone. These results confirmed our previous findings as several cluster solutions led to the identification of specific groups of participants who demonstrated higher levels of crime related fear (Figure 1).

### [Figure 1 near here]

# **Discussion**

To the best of our knowledge this is the first study that has attempted to understand an individual's fear of crime in relation to personality alongside general anxiety, happiness and prior victimisation. Our results show firstly, that prior victimisation status does not predict FoC, at least in our sample. Second, general anxiety is significantly related to FoC, with those who are more anxious in general being more concerned about being the victim of crime. Third, personality appears to

be a more accurate predictor of FoC than anxiety alone, and is superior to subjective well-being. We note that the correlation between FoC and honesty-humility is smaller (r = -.18) than the relationship between FoC and Emotionality (r = .37) however, taken together with age, these two predictors explain 20% of the variance regarding FoC. Finally, clusters of participants can be distinguished based on two of the six HEXACO factors – emotionality and honesty-humility.

Our key findings can be understood in terms of the HEXACO model of personality. For example, people with higher scores on the emotionality scale have a higher fear of physical danger and may become preoccupied with minor life difficulties, resulting in them being less able to cope with the thought of becoming a victim of crime (Lee & Ashton 2009). Conversely, participants with lower honesty-humility scores may be motivated by material gain and feel a strong sense of self-importance, suggesting that their FoC may be grounded in specific concerns relating to damage or loss of material goods (Lee, Ashton, Wiltshire, Bourdage, Visser & Gallucci 2013). Evidence for this supposition comes from the fact that honesty-humility was not a significant predictor for the shorter FoC measure, which only included items concerning personal safety.

In this study, previous victimisation did not predict fear of crime, which is inconsistent with previous research (e.g. Rifai 1982). It remains possible that individual responses to any victimisation are mediated or buffered by personality. While this does not undermine the importance of static demographic and environmental factors (e.g., gender and neighbourhood), personality could help identify individuals from within sub-populations who are collectively classified as more likely to experience high levels of crime related fear (e.g., older adults) (Foster et al 2014). Turning this argument on its head, fear of crime may also go beyond fear

and act as a marker for other complex individual differences. However, like personality itself, future longitudinal research needs to consider how similar relationships might change over time and with experience (Cops, Pleysier & Put 2012).

This study has some limitations. First, the nature of our sample meant that we were unable to explore gender or age differences further, but our key results are generally comparable between men and women (https://psychology.shinyapps.io/example3/). In general, women in our sample reported a greater fear of crime than men. However, gender only remained a significant predictor for models where FoC had been measured with a short 2-item scale. When relevant personality factors were included in subsequent models that relied on a more extensive FoC measure, gender was no longer a significant predictor. FoC measures with more items may be less susceptible to commonly reported gender effects after personality is incorporated into any prediction. Similarly, Jackson (2009) also found that the effect of gender disappeared after controlling for other relevant individual differences such as the perception of control. We predict that our results could be extrapolated to the general population however; some additional caution is required given the low mean age of our sample. While we were able to reach some participants who were over 80 years of age, it remains difficult to capture responses from older individuals with such research designs even within large participant pools (Buhrmester, Kwang & Gosling 2011).

Second, measuring fear of crime remains difficult and our focus was on an explicit emotional response to crime, rather than a judgment or assessment about crime (Ferraro 1995). There remains little agreement between researchers on what an ideal measure might include. Ferraro (1995) for example, has suggested that fear of

crime is both an emotional and a physiological response to imminent danger, but others argue that cognitive and behavioural dimensions remain key to improving our understanding (Sacco 2005). Single and combined measures have been used for both purposes (see for example Breetzke & Pearson 2014; Brunton-Smith & Sturgis 2011; Karakus, McGarrell, & Basibuyuk 2010; Wyant 2008). In mitigation of this we used two independent measures of fear, which did correlate with each other. This also makes our study comparable with past research that has used similar scales (see Breetzk & Pearson 2014; Covington & Taylor 1991; Foster et al 2014; Scarborough, Like-Haislip, Novak, Lucas, & Alarid 2010; Wyant 2008). Our results further suggest that the regular adoption of personality measures may allow for more straightforward comparisons between studies that employ different fear of crime measures.

As such, the main aim of this research was to examine how the HEXACO model of personality correlates with fear of crime after controlling for prior victimisation. We conclude that this model of personality provides several important variables to consider when predicting and perhaps developing an improved measure of crime-related fear. Previous research has hinted at the importance of personality but here we demonstrate for the first time that this predictive power is relevant even when considered alongside other individual differences. In line with this aim, future research may also want to explore how attitudes towards sentencing, FoC and personality interact with one another (Kandola & Egan 2014). These issues, alongside the measurement of crime-related fear itself, are particularly pertinent as the disparity between reported crime and FoC continues to grow.

## **Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

### References

Ashton, M. C., and Lee, K. (2009). The HEXACO–60: A short measure of the major dimensions of personality. *Journal of Personality Assessment*. 91(4), 340-345. doi: 10.1080/00223890902935878

Asmundson, G. J., Norton, P. J., and Veloso, F. (1999). Anxiety sensitivity and fear of pain in patients with recurring headaches. *Behaviour Research and Therapy*. *37*(8), 703-713. doi: 10.1016/S0005-7967(98)00172-7

Begg, S., Vos, T., Barker, B., Stevenson, C., Stanley, L., and Lopez, A. (2007). Burden of disease and injury in Australia, 2003. Australian Institute of Health and Welfare AIHW.

Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science*, 6(1), 3-5. doi: 10.1177/1745691610393980

Boyce, C. J., Wood, A. M., and Powdthavee, N. (2013). Is personality fixed? Personality changes as much as "variable" economic factors and more strongly predicts changes to life satisfaction. *Social Indicators Research*. 111(1), 287-305. doi: 10.1007/s11205-012-0006-z

Breetzke, G. D., and Pearson, A. L. (2014). The fear factor: Examining the spatial variability of recorded crime on the fear of crime. *Applied Geography*. 46, 45-52. doi: 10.1016/j.apgeog.2013.10.009

Brunton-Smith, I., and Sturgis, P. (2011). Do neighborhoods generate fear of crime? An empirical test using the British Crime Survey. *Criminology*. 49(2), 331-369. doi: 10.1111/j.1745-9125.2011.00228.x

Chui, W. H., Cheng, K. K., and Wong, L. (2013). Gender, fear of crime, and attitudes toward prisoners among social work majors in a Hong Kong University. *International Journal of Offender Therapy and Comparative Criminology*. *57*(4), 479-94. doi: 10.1177/0306624X12436524

Chui, W. H., and Cheng, K. K. Y. (2014). Criminal sentiments and behaviours among young people in Hong Kong. *International Journal of Adolescence and Youth*. doi: 10.1080/02673843.2013.875479

Cops, D., and Pleysier, S. (2011). 'Doing gender' in fear of crime: The impact of gender identity on reported levels of fear of crime in adolescents and young adults. *British Journal of Criminology*. *51*(1), 58-74. doi: 10.1093/bjc/azq065

Cops, D., Pleysier, S., and Put, J. (2012). Worrying about the future and fear of crime among young adults: a social psychological perspective. *Journal of Youth Studies*. *15*(2), 191-205. doi: 10.1080/13676261.2011.635193

Cossman, J. S., and Rader, N. E. (2011). Fear of crime and personal vulnerability: Examining self-reported health. *Sociological Spectrum*. *31*(2), 141-162. doi: 10.1080/02732173.2011.541339

Covington, J., and Taylor, R. B. (1991). Fear of crime in urban residential neighborhoods. *The Sociological Quarterly*. *32*(2), 231-249. doi: 10.1111/j.1533-8525.1991.tb00355.x

DeJoy, D. M. (1989). The optimism bias and traffic accident risk perception. *Accident Analysis & Prevention*. 21(4), 333-340. doi: 10.1016/0001-4575(89)90024-9

DuBow, F., McCabe, E., and Kaplan, G. (1979). *Reactions to crime: a critical review of the literature: executive summary*. Department of Justice, Law Enforcement Assistance Administration, National Institute of Law Enforcement and Criminal Justice.

Faul, F., Erdfelder, E., Buchner, A., and Lang, A. G. (2009). Statistical power analyses using G\*Power 3.1: Tests for correlation and regression analyses. *Behaviour Research Methods*, 41, 1149-1160. doi:10,3758/BRM.41.4.1149

Ferraro, K. F. (1995). Fear of Crime: Interpreting Victimisation Risk. Albany: State University of New York Press.

Ferrer-i-Carbonell, A., and Frijters, P. (2004). How Important is Methodology for the estimates of the determinants of Happiness? *The Economic Journal*. *114*(497), 641-659. doi: 10.1111/j.1468-0297.2004.00235.x

Foster, S., Giles-Corti, B., and Knuiman, M. (2012). Does fear of crime discourage walkers? A social-ecological exploration of fear as a deterrent to walking.

Environment and Behavior. 46(6), 698-717. doi: 10.1177/0013916512465176

Foster, S., Knuiman, M., Hooper, P., Christian, H., and Giles-Corti, B. (2014). Do changes in residents' fear of crime impact their walking? Longitudinal results from reside. *Preventive Medicine*. *62*, 161-166. doi: 10.1016/j.ypmed.2014.02.011

Garofalo, J. (1981). The fear of crime: Causes and consequences. *Journal of Criminal Law and Criminology*. 839-857. doi: 10.2307/1143018

Gershuny, B. S., and Sher, K. J. (1998). The relation between personality and anxiety: findings from a 3-year prospective study. *Journal of Abnormal Psychology*. *107*(2), 252. doi: 10.1037/0021-843X.107.2.252

Hills, P., and Argyle, M. (2002). The Oxford Happiness Questionnaire: a compact scale for the measurement of psychological well-being. *Personality and Individual Differences*. *33*(7), 1073-1082. doi: 10.1016/S0191-8869(01)00213-6

Jackson, J. (2009). A psychological perspective on vulnerability in the fear of crime. *Psychology, Crime & Law, 15(4),* 365-390. doi: 10.1080/10683160802275797

Kandola, S. S., and Egan, V. (2014). Individual differences underlying attitudes to the death penalty. *Personality and Individual Differences*. 66, 48-53. doi: 10.1016/j.paid.2014.03.005

Karakus, O., McGarrell, E. F., and Basibuyuk, O. (2010). Fear of crime among citizens of Turkey. *Journal of Criminal Justice*. *38*(2), 174-184. doi: 10.1016/j.jcrimjus.2010.02.006

Kershaw, C., and Walker, A. (2007). *Crime in England and Wales 2006/07 (Vol. 36)*. S. Nicholas (Ed.). London: Home Office.

Klama, E. K., and Egan, V. (2011). The Big-Five, sense of control, mental health and fear of crime as contributory factors to attitudes towards punishment. *Personality and Individual Differences*. *51*(5), 613-617. doi:10.1016/j.paid.2011.05.028

Lee, K., and Ashton, M. C. (2012). Getting mad and getting even: Agreeableness and honesty-humility as predictors of revenge intentions. *Personality and Individual Differences*. 52(5), 596-600. doi: 10.1016/j.paid.2011.12.004

Lee, K., Ashton, M. C., Wiltshire, J., Bourdage, J. S., Visser, B. A., and Gallucci, A. (2013). Sex, power, and money: Prediction from the Dark Triad and Honesty—Humility. *European Journal of Personality*. 27(2), 169-184. doi: 10.1002/per.1860

Office of National Statistics (2014, October 16). *Crime falls 16% in England and Wales according to crime survey figures*. Retrieved from <a href="http://www.ons.gov.uk/ons/rel/crime-statistics/period-ending-june-2014/sty-crime-statistics.html">http://www.ons.gov.uk/ons/rel/crime-statistics/period-ending-june-2014/sty-crime-statistics.html</a>

Moller, V. (2005). Resilient or resigned? Criminal victimisation and quality of life in South Africa. *Social Indicators Research*. 72(3), 263-317. doi: 10.1007/s11205-004-5584-y

Mueller, A. R., and Roeder, M. (2014). Perception of security and protective strategies: Differences between personality prototypes. *European Scientific Journal*, 10 (20), 22-30.

Pearson, A. L., and Breetzke, G. D. (2014). The association between the fear of crime, and mental and physical wellbeing in New Zealand. *Social Indicators Research*. *119*(1), 281-294. doi: 10.1007/s11205-013-0489-2

Power, M. J., Neville, P., Devereux, E., Haynes, A., and Barnes, C. (2012). 'Why bother seeing the world for real?' Google Street View and the representation of a stigmatised neighborhood. *New Media & Society*. 15(7), 1022-1040. doi: 10.1177/1461444812465138

Rifai, M. Y. (1982). Methods of measuring the impact of criminal victimisation through victimisation surveys. In H. J. Schneider (Ed.), *The victim in international perspective* (pp. 189-202). Berlin & New York: Walter de Gruyter

Rolison, J. J., Hanoch, Y., and Gummerum, M. (2013). Characteristics of offenders: The HEXACO model of personality as a framework for studying offenders' personality. *The Journal of Forensic Psychiatry & Psychology*. 24(1), 71-82. doi: 10.1080/14789949.2012.752024

Sacco, V. F. (2005). When Crime Waves. Sage Publications.

Scarborough, B. K., Like-Haislip, T. Z., Novak, K. J., Lucas, W. L., and Alarid, L. F. (2010). Assessing the relationship between individual characteristics, neighborhood context, and fear of crime. *Journal of Criminal Justice*. *38*(4), 819-826. doi: doi:10.1016/j.jcrimjus.2010.05.010

Schmidt, N. B., Lerew, D. R., and Jackson, R. J. (1997). The role of anxiety sensitivity in the pathogenesis of panic: prospective evaluation of spontaneous panic attacks during acute stress. *Journal of Abnormal Psychology*. *106*(3), 355. doi: 10.1037/0021-843X.106.3.355

Solymosi, R., Bowers, K., and Fujiyama, T. (2015). Mapping fear of crime as a context-dependent everyday experience that varies in time and space. *Legal and Criminological Psychology*. 20, 193-211. doi: 10.1111/lcrp.12084

Sparks, R. F., Genn, H. G., and Dodd, D. J. (1977). Surveying victims: A study of the measurement of criminal victimisation, perceptions of crime, and attitudes to criminal justice. London: Wiley.

Spielberger, C. D., Gorsuch, R. L., Lushene, R. E., and Vagg, P. R. (2010). *State-trait anxiety inventory (STAI)*. *BiB*, 180.

Stafford, M., Chandola, T., and Marmot, M. (2007). Association between fear of crime and mental health and physical functioning. *American Journal of Public Health*. 97(11), 2076-2081. doi: 10.2105/AJPH.2006.097154

Warr, M., and Stafford, M. (1983). Fear of victimisation: A look at the proximate causes. *Social Forces*. *61*(4), 1033-1043.

Weinrath, M., and Gartrell, J. (1996). Victimisation and fear of crime. *Violence and Victims*. 11(3), 187-197.

White, M., Kasl, S. V., Zahner, G. E., and Will, J. C. (1987). Perceived crime in the neighborhood and mental health of women and children. *Environment and Behavior*. *19*(5), 588-613. doi: 10.1177/0013916587195003

Wyant, B. R. (2008). Multilevel impacts of perceived incivilities and perceptions of crime risk on fear of crime isolating endogenous impacts. *Journal of Research in Crime and Delinquency*. *45*(1), 39-64. doi: 10.1177/0022427807309440

Valera, S., and Guàrdia, J. (2014). Perceived insecurity and fear of crime in a city with low-crime rates. *Journal of Environmental Psychology*. 38, 195-205. doi: doi:10.1016/j.jenvp.2014.02.002

Table and Figure Captions

Table 1. Descriptive statistics including differences based on previous victim status (N=301)

Table 2. Pearson and Spearman correlations (in bold) between potential predictors and fear of crime.

Table 3. Linear regression models predicting fear of crime

Figure 1. A series of k-means cluster analyses with (a) 3, (b) 4 and (c) 5 solutions. Participants were classified based on emotionality and honesty-humility scores. Comparing the mean FoC score from each cluster, a series of one-way ANOVAS revealed that FoC increased reliably from each cluster across every solution [p's < .001]