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Abstract

Fear of crime is widely seen as an unqualified social ill, yet might some level of emotional response comprise a natural defence against crime? This paper differentiates between a *dysfunctional* worry that erodes quality of life and a *functional* worry that motivates vigilance and routine precaution. A London-based survey shows that one-quarter of those individuals who said they were worried about crime also viewed their worry as something akin to a problem-solving activity: they took precautions; these precautions that made them feel safer; and neither the precautions nor the worries reduced the quality of their lives. Fear of crime can be helpful as well as harmful: some people are both able and willing to convert their concerns into constructive action. [120 words]

Key words: Fear of crime; emotion; resilience; neighbourhood disorder

> ‘In line with the political interests responsible for the emergence of fear of crime as a major research issue in the 1970s and early 1980s, fear has been treated, almost invariably, in criminological research as an extremely negative aspect of people’s lives, as something that adversely affects and greatly diminishes the quality of life. Hardly any attention was given to the positive aspects and positive consequences of fear. There has hardly been any talk about fear as a healthy emotion, as a necessary mechanism of survival, of self-preservation, of avoiding risk and minimizing danger… And yet, if it is true that fear and caution go hand in hand, if prudence is the response to fear, and if it is true that fear leads to lower victimization, then fear might be a positive mobilizing force that could be harnessed to achieve utilitarian goals.’ (Fattah, 1993: 66)

This analysis was telling some fifteen years ago, and it remains so to this day. Surveys in countries across the world regularly find widespread public anxieties over the threat of crime (Ferraro, 1995; Van Kesteren et al., 2000). Fear of crime might only shadow the actual incidence of crime, but it certainly seems to damage psychological well-being, decrease collective trust and cohesion, and tempt politicians towards populist rhetoric and punitive policy (Skogan, 1986; Hale, 1996; Warr, 2000; Dolan and Peasgood, 2007; Stafford *et al.*, 2007; Jackson and Stafford, 2009). Such is the extent of the problem that governments in a number of different countries seek to reduce fear of crime – presumably wherever it is to be found.

Yet might some level of worry about crime be a ‘good thing’ (Fattah, 1993; Hale, 1996; Warr, 2000; Ditton and Innes, 2005)? For Solomon (2006: 29):

> ‘Without fear, we would allow ourselves to be vulnerable to all sorts of dangers, and we would recklessly face lethal situations without hesitation and without a thought of the possible disastrous consequences.’

For Sacco (2005: 138): ‘The opposite of fearfulness may not be fearlessness, but recklessness.’ Psychologists have long recognised the problem-solving function of worry in the anticipation of future problems and risks (Tallis *et al.*, 1994; Gladstone and Parker, 2003). If we could turn a ‘magic dial’ to control or regulate public worries about crime, would we want to eliminate fear of crime altogether (Warr, 2000)? Might decreasing public insecurities inadvertently reduce people’s nature defences against crime?

This paper extends the fear of crime concept to include the notion of ‘functional fear.’ Over the years, criminologists have argued that fear of crime encompasses a wealth of perceptions, reactions and vulnerabilities (Sparks, 1992; Skogan, 1993; Fattah, 1993; Hale, 1996; Hollway and Jefferson, 1997; Lee, 2001; Gabriel and Greve, 2003; Vanderveen, 2007). Qualitative research has highlighted the dense, rich and shifting cultural significance of crime (Taylor and Jamieson, 1998; Girling *et al*. 2000), addressed the psycho-social aspects of individual anxieties (Hollway and Jefferson, 1997), analysed how females manage safety and structure their lives around precautionary behaviour (Pain, 1997; Madriz, 1997; Hollander, 2001; Stanko, 1990), and shed light on how males experience ‘being feared’ (Day, 2006). Recent quantitative work (Jackson, 2004; Farrall *et al.*, 2009; see also Gray *et al.*, 2008a, 2008b) has also differentiated between an everyday worry (those concrete emotions that result from feeling personally threatened) and a more diffuse/ambient anxiety (a more common feeling of generalised risk and the sense that ‘it could happen’; cf. Jackson, 2006).

The study has two goals. The first is to establish whether fear can be a motivating force that encourages vigilance and stimulates precautionary activity (cf. Liska & Warner, 1991). Drawing upon data from a representative-sample survey of residents of seven diverse London Electoral Wards, we find that around one-quarter of those individuals who said they were worried about crime, also viewed their worry as something akin to a problem-solving activity. They took

precautions; these precautions made them feel safer; and neither the precautions nor the worries about crime reduced the quality of their lives. In such circumstances 'fear' might be seen less as a damaging retreat into the role of a potential victim and more as a beneficial strategy of risk management – a problem-solving activity. The second goal is to establish whether key correlates differ depending on whether worry about crime is classified as either functional or dysfunctional. We find that victimisation experience is related to dysfunctional worry but not with functional worry, and that social concerns (about neighbourhood disorder and levels of collective efficacy) are strongly associated with both functional and dysfunctional worry about crime.

The paper begins with current criminological thinking on the routinisation of crime and risk in public life. We then consider some conditions under which worry might be seen as a 'good thing' (motivating a protective activity against future harm) and as a 'bad thing' (a drain on well-being and quality of life). This leads to the findings of the study, and while our results can say little about the 'fit' between objective and subjective risk, the evidence presented does suggest that criminal justice practitioners, media pundits and social scientists alike should not interpret all instances of 'fear' as evidence of a social problem. Attempts to reduce 'fear' (whatever 'it' is, and wherever 'it' is to be found) might unwittingly reduce people's natural defences to crime.

The prominent place of crime in everyday life

Garland (2001: 147) argues that crime has become a 'normal social fact' in the US and the UK, something:

> '…constituted for, and lived by, social situated individuals who inhabit the complex of practices, knowledges, norms, and subjectivities that make up a culture. It is a collective cultural experience, one that weaves its threads of meaning into every individual encounter, and is, in turn, inflected and revised by the thousands of such encounters that take place every day..'

One of a number of influences on the growing social significance of crime is the increasing importance placed on so-called 'responsibilisation' in contemporary crime control strategies (Garland, 1996, 2001). The new methods of responsibilisation involve central government seeking to act upon crime, not in a direct fashion but by indirectly encouraging action from non-state agencies, communities and individual households. 'Active citizens' help set up neighbourhood watch programmes, they buy various security products, and they take numerous preventative measures to protect themselves from crime. Heralding a new focus on crime prevention and control, the 1990s saw a vibrant insurance industry emerging, contractually requiring policyholders to employ strategies for reducing the likelihood of victimisation (Feeley and Simon, 1992; cf. O'Malley and Hutchinson, 2007).

Feeley and Simon (1992) have suggested that the growing dominance of actuarial styles of governance and criminal justice from the 1990's has superseded other models of governance such as welfare and disciplinary forms of regulation. Their recognition of a 'new penology' involves measures designed to locate, organize and manage risks, whereby precautionary actions have become as important as criminal justice system responses to harms done (Feeley and Simon, 1994; O'Malley, 2001). Meanwhile, Clarke's environmental crime prevention theory suggests that by reducing crime opportunities and employing more sophisticated prevention strategies – as opposed to trying to address the characteristics of criminals or the social causes of crime – patterns of criminal activity could be reduced. Using statistical data, criminal justice agencies could target vulnerable areas (Clarke, 1995), and education about risk and precaution could encourage individuals to reduce the opportunities for crime in their neighbourhood.

The adaptive reactions of individuals, households and communities to this growing emphasis on personal responsibility for crime prevention have led to a proliferation of commercial products, such as car, house and rape 'alarms', bolts, locks and entry phones,

removable car stereos and CCTV. Many people – especially women – have adopted behavioural strategies that seek to minimise their personal risk of crime (cf. Stanko, 1990). Examples might include hiding valuables, leaving lights on in an empty house, not opening doors to unannounced visitors, or modifying activities in public spaces. Other groups of people take similar evasive action, with older people and city dwellers alike avoiding parks after dark or town centres late at night (see Pain, 1997). Qualitative studies have described the 'mental maps' of localities that individuals use to represent and avoid certain areas (e.g. Taylor, 1996, Taylor and Jamieson, 1998).

Two sides to the everyday risk of crime

Yet while the routine management of risk has received little empirical interest in fear of crime research, it is plausible that (for some people at least) these behaviours have become functional considerations that are subsumed into their everyday routines. Loader and Walker (2007: 160) highlight the favourability of this scenario:

> 'It follows that we typically aspire to a situation where our monitoring of our security environment may be a highly tacit and routine affair, an activity which takes place largely at the level of "practical" rather than "discursive consciousness" (Giddens 1984); one where we rarely feel it necessary to peep round the veil of our security cover, and our checks when we do so need only be cursory.'

Despite the attention given by criminologists over the last two decades to precautionary activity and 'responsibilisation', public perceptions of the risk of crime have been studied through a singular lens. Treating fear of crime as only a series of negative emotions (that erode public health and drain community cohesion and social trust) ignores the possibility that the full gamut of emotional responses to risk includes an emotion that motivates rather than damages – an emotion that stimulates sensible precaution. Again, Garland (2001: 155-156):

> 'For some, the crime problem has become a source of anxiety and frustration; an urgent daily reminder of the need to impose control, to take care, to secure oneself and one's family against the dangers of the modern world. Anxieties of this kind are often mixed with anger and resentment and, when experienced *en masse*, can supply the emotional basis for retaliatory laws and expressive punishments. At the opposite end of the spectrum, other individuals react with measured stoicism, inuring themselves to crime's irritations and risks, adapting to this "fact of life" in the same humdrum way that they adapt to the daily grind of commuting, or the tendency of the cost of living to risk..'

'Slicing up' the fear of crime into the functional and the dysfunctional

Emotion may help generate stoicism and adaptation to crime as a 'fact of life.' From Aristotle to Locke to Burke, philosophers have seen fear as a motivating force without which the human populace remains passive and satiated. Emotion is not necessarily the sand in the machinery of rationality (Elster, 1999): triggering a rapid response, emotion can improve the quality and efficiency of cognition. Enabling us to deal quickly with encountered problems, emotion interrupts ongoing attention and directs us to the emotion-eliciting event (Levenson, 1994).

Thought and feeling may even be inseparable: '…like the convex and concave sides of an arc – dissociable for analytical purposes but not to be reified into distinct (even if interacting) systems' (Averill, 2004: 579). Indeed psychologists have long highlighted the problem-solving and motivational character of worry. Consider Gladstone and Parker's (2003: 347) review:

> 'As a phenomenon, worry can range from an innocuous activity possibly associated with positive consequences (i.e. solution finding), through to a distressing and uncontrollable process like the excessive and chronic worry recognised as the cardinal feature of generalised anxiety disorder (GAD). It has been defined broadly as repetitive thought activity, which is usually negative and frequently related to feared future outcomes or events.'

In a study into the phenomenology of 'normal' worry, Tallis *et al.* (1994) found that when thinking about their general life concerns, many individuals considered worry to be a routine and mostly acceptable activity that occurred more or less daily, was addressed towards various issues, and transpired mostly in the form of thoughts with a narrative course. Worry was typically associated with real-life triggers, was both present and future-orientated, and was focused upon problems which were real or likely rather than imaginary or remote. Worry was also seen to have benefits through its stimulation to action. That the majority of subjects perceived their worry as a problem-solving activity suggests that the worry process helps some people cope with an uncertain future to help avoid negative possible events.

On the other hand worry can have clear negative effects, with Tallis *et al.*'s (1994) study showing a range of deleterious cognitive (e.g. pessimism, problem exaggeration) and affective (e.g. emotional discomfort, depression) consequences to worry. Among the features of 'high' worriers were more frequent episodes of worry (at least daily); greater difficulty in stopping worrying; rebounding worries; and mood disturbance and perceived impairment in everyday functioning. 'High' worriers also reported greater indecision and doubt when worrying; and they were more likely to perceive worry as having a negative effect on their health.

Given such insights, we might wonder under what conditions worry about crime can be seen as either functional (with positive consequences) or dysfunctional (with negative consequences). These are choppy waters, of course. But according to Solomon (2006: 174):

> 'The causes, context and circumstances of the emotion . . . are all too often confused with the emotion itself. For example, fear is typically considered a negative emotion, that is, a bad emotion, on the grounds that the circumstances provoking fear tend to be threatening to one's well being. (Indeed, many theorists would take this to be a matter of definition). But it does not follow from the fact that the circumstances that provoke fear are bad for us that the emotion of fear is bad for us. The circumstances may be bad for us, but fear, as I argued, is good for us, at least when it is appropriate fear.'

Our approach

In defining when worry about crime is 'good for us,' our classification model takes three steps:

- First, measure worry about crime using standard intensity measures (e.g. 'How worried are you about being burgled?' very, fairly, not very, not at all);
- Second, if individuals who say they are fairly or very worried also report that their quality of life is reduced by either their worries or their precautions against crime, then assign these individuals to the dysfunctionally worried group; and,
- Third, if individuals who say they are fairly or very worried also report that they take precautions that make them feel safer, and neither worry nor precaution reduces their quality of life, then assign these individuals to the functionally worried group.

Our approach assumes that worry can motivate beneficial action. We reason that emotion can operate as a problem-solving activity that leads individuals to take steps to manage their sense of the risk of falling victim. We also place centre-stage people's own perspectives on their emotions and actions. People may take precautions; they may feel that these precautions make them feel

safer; and they may feel that their quality of life is not harmed by either their precautions or their worries. In each case the individual in question is best placed to take a view on his or her behaviours, as well as to understand the effects of his or her behaviours and worries on quality of life.

'Functional fear' may thus be exhibited when people say they are worried about crime. But what they mean is that they see a risk of crime; that this perception generates a sense of insecurity; that their behavioural response helps them manage this insecurity; and crucially, that their quality of life is unharmed by either these emotions or these behavioural adaptations. We will return in the closing of this paper to two complicating issues in our definition of functional fear. These are important; they regard the 'appropriateness' of emotion and the 'hidden costs' of worry and precautionary activity. But the first task is to establish the phenomenon.

So let us begin by establishing whether some people's worry about crime (which would otherwise be classified as negative in consequence) might be seen in a more positive light than has thus far been displayed. Once this stage has been completed, we can then assess some empirical implications of the new categorisation. We establish whether key correlates of worry about crime – victimisation experience and public concerns about neighbourhood disorder and collective efficacy – correlate differently with the functional worry and dysfunctional worry. But first, to the phenomenon of functional and dysfunctional fear of crime.

The Study

Method

The 2007 Safer Neighbourhoods Survey obtained data from 2,844 residents in 7 London electoral wards, with around 400 respondents from each of Angels Park North, Myddleton Green, Hennington, Aylesford North, Staniford, Newriver and Lowervale (the wards have been given pseudonyms). Respondents were selected using a three-stage sample selection process within each ward:

- random probability sampling of household addresses;
- the random selection of a dwelling unit in cases where a single address included more than one unit; and,
- the random selection of an adult to be targeted for interview in cases where a household contained more than one adult.

The overall response rate was 42% (ranging from 28% in Staniford to 57% in Angels Park North). While these electoral wards constitute a relatively diverse cross-section of London in terms of deprivation, crime and geographical spread, the focus of this study is not on area-level effects but is instead on the broader phenomenon of functional fear.

Measuring worry about crime

Respondents were asked how worried they were about falling victim of each of six different crime-types: (a) burglary, (b) mugging/robbery, (c) being physically attacked in the street by a stranger, (d) being insulted and harassed in the street, (e) being raped, and (f) being subject to physical attack because of skin colour, ethnic origin or religion.[1] The first step of the

[1] While all respondents were asked about rape, this act clearly has different significance for men and women. We treated all male respondent scores as missing data, meaning that worry about rape only made a contribution to the index for females (we used Full Informational Maximum Likelihood (FIML) estimation instead of listwise and pairwise deletion methods to draw on as much information as possible). Racial attack has different significance for different ethnic groups, but it is possible that individuals who identify themselves as White British (for example) think they could be victimised on the basis of their religion or ethnic origin. The meaning of racial attack might therefore be closer

classification procedure was to recode these six variables, where *zero* meant 'not at all worried' and 'not very worried', and *one* meant 'fairly worried' and 'very worried.' We used latent class analysis (LCA) to combine these six recoded indicators into one dichotomous variable, since the manifest variables were categorical and since we assumed that the underlying latent variable to be categorical (we made this assumption for reasons of convenience with respect to the broader classification procedure),. A two-class model was tested using Full Information Maximum Likelihood (FIML) estimation in LatentGold 4.0 (which includes all available information in the estimation procedure). The model allocated 72% of the sample into class one (with probabilities of not worrying about burglary, mugging, attack, harassment, rape and racial attack of 0.89, 0.89, 0.92, 0.89, 0.78 and 0.82 respectively) and 28% of the sample into class two (with probabilities of worrying about burglary, mugging, attack, harassment, rape and racial attack of 0.55, 0.69, 0.91, 0.88, 0.87 and 0.89 respectively). A dichotomous variable was then derived that identified the modal category, thus categorising each respondent as either 'worried about crime' or 'not worried about crime.' The data were then exported to Stata for the proceeding statistical analysis.

Measuring the impact on quality of life

Respondents were also asked whether their quality of life was affected first by their worries about crime, and second by their precautions they took to guard against crime. The response alternatives provided were 'not at all', 'a little', 'moderately', 'quite a bit' and 'very much.' As with worry about crime, a dichotomous variable was constructed. But this time it denoted whether or not their quality of life was diminished by their worries and/or their precautions. As before, LCA was used.[2]

Measuring precautions and their impact on perceived safety

To measure precautions against crime, respondents were asked how often (if at all) they avoided using public transport, avoided certain streets or areas during the day, and avoided certain streets or areas at night (each as a result of the risk of crime). A dichotomous variable was constructed to denote whether an individual took precautions or not. Respondents were also questioned: 'As a result of the precautions you take against crime, to what extent do you feel safer?' The response alternatives provided were: 'not at all', 'a little', 'moderately', 'quite a bit' and 'very much.' This variable was dichotomised, where *zero* equalled 'not at all' and *one* equalled 'a little', 'moderately', 'quite a bit' or 'very much.'

Results

A new categorisation of worry of crime

The first task was to empirically identify the three worry groups:

1. 'unworried';
2. 'functionally worried'; and,
3. 'dysfunctionally worried'.

across ethnicity than rape might be across gender. Racially motivated crime was consequently included in the index for all respondents. We acknowledge that this is a rather contentious issue.

[2] First, the two variables were dichotomised: *zero* meant 'not at all' or 'a little'; and *one* meant 'moderately', 'quite a bit' or 'very much.' Second, latent class modelling using FIML estimation produced a two class model (using LatentGold 4.0) that differentiated between 60% of the sample who fell into class one (with probabilities of no impact on quality of life of worries and precautions of 0.86 and 0.89 respectively) and 40% of the sample who fell into class two (with probabilities of having an impact on quality of life of worries and precautions of 0.91 and 0.88 respectively). Third, a new dichotomous variable was derived from this analysis.

First, individuals were classified as unworried if they reported being unworried about crime: it did not matter if they took precautions that made them feel safer, or if their quality of life was reduced by their precautions; if they reported being unworried they were simply classified as unworried.

To be classified in the functional worry group, respondents must have met three conditions: (a) they must have reported being worried about crime; (b) they must have taken precautions that made them feel safer; and (c) they must have judged their quality of life unaffected by either their worries or their precautions. Importantly, we assume that the worry process partly motivates these beneficial precautions; as Tallis & Eysenck (1994) argue, worry can play a problem-solving role in people's lives by stimulating action and helping them deal with uncertain future events. Finally, to be classified in the dysfunctional worry group, respondents must have reported being worried about crime but also that their quality of life was reduced by either their worries or their precautions (or both).[3]

To generate the three groups, Tables 1 and 2 break down the sample. Overall 73% (n = 2,019) of respondents were unworried. The other two categories – functional worry and dysfunctional worry – are subsets of the remaining 27% (n = 825). Of these 27%, 17% (n = 140) took no precautions, 66% (n = 548) took precautions and felt safer as a result, and 17% (n = 137) took precautions but did not feel safer as a result (Table 1).

INSERT TABLE ONE ABOUT HERE

Table 2 takes the categorisation process one step further. The focus here is on two further subsets of those who are worried about crime: (a) those who took precautions and felt safer as a result of these precautions (71% of the worried group); and (b) those who did not take precautions, and those who did take precautions but did not feel safer a result (29% of the worried group). We make this distinction because of the central role that beneficial precautionary activity plays in the functional/dysfunctional distinction. By cross-tabulating these two groups with levels of impact on quality of life, we can identify the functionally worried and the dysfunctionally worried. The cell to highlight is top-left (Table 2). This represents the functionally worried – the subset of the sample who were worried about crime, who took precautions that made them feel safer, and whose quality of life was not reduced by either worry or precaution. The other three cells comprise the dysfunctional worry group.

INSERT TABLE TWO ABOUT HERE

Bringing this classification process to a close, we found that around three-quarters (73%) of the sample were unworried, one-in-twelve (8%) were functional worried, and one-in-five (20%) were dysfunctional worried (Table 3).

INSERT TABLE THREE ABOUT HERE

Correlates of functional and dysfunctional worry

Now we have documented the proportions of the sample that fell into the three worry about crime groups, our next step was to explore the new categorisation in more detail. More specifically, we assessed whether functional and dysfunctional worry had meaning beyond descriptive distinction. We tested the extent to which they were differently associated with key fear of crime correlates.

[3] A very small number of people said they were worried and said that their quality of life was unaffected by worries and precautions, but also said that the precautions they took did not make them feel safer. We placed these individuals in the dysfunctionally worried group, since we reason that the perceived positive effect of precaution is central to the definition of functional fear.

We examined the effects of i) victimisation and ii) public concerns about neighbourhood disorder and collective efficacy. But before presenting the findings we should first motivate the driving hypotheses.

Victimisation and neighbourhood perception in fear of crime

In the following multivariate analyses we test two propositions. First, we test whether individuals who have recently fallen victim of crime are more likely to exhibit dysfunctional rather than functional worry. Second, we test the effects of anxiety about neighbourhood disorder and/ or poor social cohesion and informal social control. In sum, we predict that when individuals have recently experienced crime, and when individuals view their social environment as unstable, they will not only be more likely to be worried about future harm; their worry will also be more likely to damage their quality of life and sense of well-being.

The evidence on the role of crime-experience in fear of crime is so far mixed (Hale, 1996). There is some suggestion of a link between direct victimisation experience and worry about crime (e.g. Garofalo, 1979; Skogan, 1981; Stafford and Galle, 1984; Covington and Taylor, 1991; McCoy *et al.*, 1996; Kury and Ferdinand, 1998; Rountree, 1998). Yet direct experience of crime seems but a small part of any powerful explanation of the fear of crime.

There are two main reasons for the (at best) weak association between victimisation and worry about crime. The first is that legal (and survey) definitions of victimisation tend to exclude unpleasant experiences such as intimidation, obscene phone calls and sexual harassment that might be relevant to public concerns about safety and security. Identity-related victimisation (i.e. crime committed because of the gender, sexuality, race or other such attribute of the victim) is dealt with only cursorily in much of the fear of crime literature. Kelly (1987, 1988) and Phillips (1999, 2000) discuss the complexities of unwanted behaviour and daily harassment for women, with a 'continuum of violence' (Kelly, 1987) placing relatively minor acts of abuse at one end ('flashing' and minor forms of sexual abuse) and acts like rape at the other end (see also Stanko, 1990, 1997; Gardner, 1990; Pain, 1997, 1997; Madriz, 1997; Hollander, 2001, 2002). Even minor acts may be fear-provoking as these remind women of the possibility of more serious forms of violence. This may also extend to non-gender related issues of victimisation and the occupation of the public space by aggressive individuals.

Second, victimisation may demystify the unknown by showing the mundane nature of many experiences of crime. Victimisation might be neutralised by victims in the same way that offenders negate feelings of guilt (Agnew, 1985; see also Hale, 1996 and Winkel, 1998). Tyler and Rasinski (1984) surveyed crime victims and found that perceptions of risk and worry about future victimization was associated with both what individuals learnt from their particular experience of crime and the emotional reactions they had to the experience.

In this paper we explore the possibility of a third: that the weak correlation between victimisation and fear of crime is partly related to conceptual and methodological limitations, more specifically to the failure to disentangle functional and dysfunctional worry. Studies typically measure worry about crime using standard intensity measures ('How worried are you about being burgled?). But if previous estimates of worry about crime have 'lumped together' two different experiences, then unpacking these experiences might reveal that victimisation experience has a stronger effect on the dysfunctional type of worry than previously seen or assumed. While for functional worry, it may be that victimisation experience has only a weak or even no statistical effect.

We also hypothesise that public concerns about social cohesion, consensus and organisation will be stronger predictors of dysfunctional worry than of functional worry. We distinguish in this study between perceived neighbourhood disorder, and perceived social cohesion and perceived informal social control (which we combine to create perceived collective efficacy). Ferraro (1995) found that perception of disorder predicted fear of crime, and that most of the statistical effect was mediated through public perceptions of the likelihood of victimisation.

This finding – that disorder provides ecological information that shapes citizens' perceptions of the chances of victimization – has been replicated in UK research (Farrall *et al.,* 2009; cf Skogan and Maxfield, 1981; Wilson and Kelling, 1982; Smith, 1986; Lewis and Salem, 1986; Taylor and Hale, 1986; Skogan, 1990; Covington and Taylor 1991; LaGrange *et al.,* 1992; Perkins and Taylor, 1996; Rountree and Land 1996a, 1996b; Taylor, 1999; Innes, 2004; Robinson *et al.,* 2003).

Perceptions of social cohesion and informal social control have also been found to predict perceptions of risk and worry about crime net of perceptions of neighbourhood disorder (Jackson, 2004).[4] This suggests that worry about crime is stimulated by weak informal provisions of social control: if local social controls are not seen to have been exerted, then a sense of insecurity may be engendered. One can further combine perception of social cohesion and perception of informal social control to produce a measure of 'collective efficacy' (Sampson *et al.,* 1997; Bursik, 1988; Bursik and Grasmick, 1993; Sampson and Raudenbush, 1999). Following recent research, we predict separate influences on worry about crime of (a) concerns about disorder and (b) concerns about collective efficacy. We predict that dysfunctional worry emerges most often – compared to i) functional worry and ii) not being worried – when people view their neighbourhood to lack the ability to realise the common values of residents and maintain effective social controls (which in turn depends on mutual trust and solidarity among neighbours).

Measuring victimisation experience

Victimisation experience was measured by asking whether or not respondents had been a victim of crime in the last 12 months.

Measuring neighbourhood perception

Neighbourhood perception was broken down into: (a) perception of disorder; (b) perception of social cohesion; and (c) perception of informal social control. Perceived disorder was measured by asking respondents: 'Here is a list of issues that may or may not be a problem in this area. For each one please tell me whether it is a major problem, a minor problem or no problem.'

- Litter, fly tipping and fly posting;
- Graffiti;
- Vandalism, for instance of telephone kiosks or bus shelters;
- Noisy and/or nuisance neighbours;
- Noisy/rowdy/inconsiderate behaviour in the street;
- Teenagers hanging around in the street; and,
- Drinking in the street.

Perception of social cohesion was measured by asking respondents whether they agreed or disagreed (using a 5-point scale) with the following statements:

- People around here are willing to help their neighbours;
- This is a close-knit neighbourhood; and,
- People in this neighbourhood can be trusted.

Perception of informal social control was measured by asking respondents whether they agreed or disagreed (using a 5-point scale) with the following statements:

[4] Indeed, disorder may actually generate information to observers about the state of informal social cohesion (see study two of Jackson & Bradford, 2009).

- If I sensed trouble whilst in this area, I could 'raise' attention from people who live here for help;
- The people who live here can be relied upon to call the police if someone is acting suspiciously; and,
- If any of the children or young people around here are causing trouble, local people will tell them off.

Latent Gold 4.0 was used to derive a single index for each of these neighbourhood perceptions (disorder, social cohesion and collective efficacy). Latent trait analysis is a statistical technique used to assess the underlying dimensionality of sets of ordinal variables that are expected to load on continuous-level latent variables. As in previous analyses, we used FIML to retain as much information as possible. Because the indices of social cohesion and informal social control were highly correlated (r=0.585, p<.001) the individual indicators of cohesion and efficacy were combined into one index, again using latent trait analysis.[5] This creates a scale of public perception of collective efficacy. Collective efficacy is the linkage of (a) mutual trust and shared expectations among residents, and (b) the shared willingness to intervene to defend social order. To facilitate comparison and to aid interpretation, all neighbourhood perception variables were recoded to range from 0 to 10, with high scores equalling relatively strong concerns about local disorder and collective efficacy.

Having considered the important debates regarding the role of victimisation and neighbourhood perceptions in the fear of crime, we can proceed more formally to assess the strength of their relationship with functional and dysfunctional fear. First, we estimate a multinomial logistic regression model with fixed effects (Table 4).[6] The purpose of considering this model is to provide an assessment of whether different values in the explanatory variables are associated with different odds (or chances, probabilities, likelihood) of falling into each of the three worry groups.

INSERT TABLE FOUR ABOUT HERE

Starting with demographic factors, Table 4 shows that females had greater odds of having both functional and dysfunctional worry – compared to being unworried – than males. The odds ratio of 1.485 in the contrast between unworried and dysfunctional worry (p<0.001) meant that the odds of being dysfunctional worried – compared to being unworried – were 48.5% higher for females than they are for males. The 95% confidence interval indicates that our estimate of the odds ratio in the population is somewhere between 1.334 and 1.653. Next, the odds ratio of 1.604 (95% confidence interval of 1.024, 2.513) in the contrast between unworried and functionally worried (p=0.002) meant that the odds of being functionally worried – compared to being unworried – were 60.4% higher for females that they were for males. Age was not a statistically significant predictor in the model; there was no linear or curvilinear effect of age; and there was no statistical interaction between gender and age.

In addition, recent victimisation experience was associated with greater odds of being dysfunctional worried compared to being unworried (odds ratio of 1.778, so the odds of being in the dysfunctional compared to the unworried group were 77.8% greater for victims compared to non-victims in our sample). But victimisation experience was not associated with greater odds of

[5] Please contact the first author for more details.

[6] Because the data were clustered (an average of 400 individuals within each of the 7 electoral wards) and because the area-level variance was statistically significant in a random intercepts multinomial logistic regression (in empty as well as full models, showing heterogeneity of worry about crime between the 7 areas even after taking into account individual characteristics), we estimated a fixed effects multinomial logistic regression model. It is important to include fixed effects not just to estimate correct standard errors, but also to wash out the effect of neighbourhood on the outcome of interest, which here is membership of the three worry about crime groups.

being functionally worried (p=0.507). This supports our hypothesis that victimisation experience is a factor behind dysfunctional worry but not a factor behind functional worry. It suggests that the experience of crime is one of the things that pushes worry about crime from a motivating experience into a damaging experience *in and of itself.*

We then examined whether perceptions of neighbourhood disorder and collective efficacy predicted membership of the three worry groups. We hypothesised that neighbourhood concerns will be more strongly associated with dysfunctional worry than with functional worry: a disorderly social and physical environment may lead individuals to worry about crime and take precautions about crime in a manner that damages their quality of life. Contrary to expectations however, this hypothesis was not supported by the data (Table 4). Perception of neighbourhood disorder was a key predictor of both functional and dysfunctional worry (p<0.001 and p<0.001 respectively), and indeed the effect sizes (captured by the two odds ratios) were almost identical. Concerns about collective efficacy also predicted dysfunctional and functional worry, and again the effect sizes were roughly equal.

We finish with an alternative way of presenting the findings (Table 5). A binary logistic regression model estimated a direct comparison between the functional and the dysfunctional groups (without reference to the unworried as in Table 4). In line with the analyses reported above, victimisation experience was a statistically significant predictor of dysfunctional worry compared to functional worry (p=0.050), and perceptions of disorder and cohesion/efficacy were not statistically significant predictors of dysfunctional compared to functional worry (p=0.854 and p=0.552 respectively).

Discussion

To summarise the findings of our study, 73% of the sample were unworried about crime, 20% were dysfunctionally worried about crime, and 8% were functionally worried about crime. Consequently, while around one-quarter of individuals expressed some level of worry about crime, one-quarter of these individuals exhibited a kind of emotional experience more akin to a motivating and problem-solving activity. They took precautions; they felt safer as a result; and their quality of life was unaffected by worries and precautions. Previous research has treated any incidence of fear of crime as a contribution to the aggregate estimate of fear of crime as a social problem across society. Yet this study suggests that the social problem status has been exaggerated – not everyone experienced their worry as a damaging and draining force.

We also assessed two predictive factors for functional and dysfunctional worry about crime. We found that victimisation experience was associated with dysfunctional worry but not with functional worry. We thus have some early evidence that recent experience of crime helps 'tip' worry about crime from something that is motivational (functional) into something that erodes well-being and quality of life (dysfunctional). Of interest to the rationality debate in the fear of crime (is 'fear' out of kilter to 'crime'?) was the finding that dysfunctional worry was more strongly related to actual crime experiences than previously shown in empirical research.

Equally, fear of crime is an expressive as well as experiential phenomenon, with previous research suggesting that worry about crime is wrapped up in broader social concerns about neighbourhood breakdown, as well as more diffuse anxieties about social change and the decline of moral authority in society (Girling *et al.*, 2000; Jackson, 2006; Hirtenlehner, 2008; Farrall *et al.*, 2009). The idea here is that fear of crime emerges when people view there to be an erosion of the values that keep public behaviour in check. Contributing to this debate, the current study found that perception of neighbourhood disorder and collective efficacy were important predictors of both functional and dysfunctional worry. This suggests that functional and dysfunctional worry are equally expressive of these more everyday social concerns; local issues of social order may thus generate similar patterns of emotional and behavioural responses to the perceived risk of crime.

One opportunity for future research is the role of a psychological sense of vulnerability in functional and dysfunctional fear (Killias, 1990; Jackson, 2009; cf. Stafford *et al.*, 2007; Jackson and Stafford, 2009). A heightened personal susceptibility may emerge when people see the personal consequences of victimisation to be high, see the personal control over victimisation to be low, and see the likelihood of being targeted to be high. Applying this to functional fear, future studies might assess whether feelings of vulnerability lead individuals to experience a more dysfunctional worry about crime that erodes quality of life *in and of itself*. It may additionally be that the experience of crime itself heightens perceived vulnerability, explaining the stronger association between victimisation and dysfunctional worry about crime.

Conclusions

Previous research on the fear of crime has focused almost exclusively on the negative, on the damaging face of public anxieties, on the corrosive impact of public perceptions of risk on health and well-being. As Sacco (1993) pointed out some fifteen years ago, hardly any attention has been given to the functional and motivational aspects of emotion. Hardly any attention has been given to the valuable properties of fear and its potential to motivate, problem solve, and alert the individual to potential threat.

Over the past fifteen years a number of scholars have commented on the potentially beneficial nature of fear of crime (Fattah, 1993; Hale, 1996; Warr, 2000; Ditton and Innes, 2005). Yet this paper has provided the first empirical differentiation of fear into something that it is *dysfunctional* (an experience that in and of itself damages quality of life) and something that is *functional* (an experience that motivates precaution). We have explored some of the nuanced and layered responses individuals can have to the risk of crime; we have suggested that worry is often a habitual or routine activity (accepted as a common aspect of everyday life); and we have proposed that worrying about crime may, in the view of some people at least, be a functional reaction. Our data have highlighted the role of the active agent and the conscientious and effectual individual. This does not rule out the importance of professional interventions. But it does suggest that individuals (and communities) have the potential, willingness and ability to convert worry about crime into constructive action.

While we have presented evidence that worry about crime does not always erode quality of life, we are certainly not denying that people worry about crime and levels of disorder in the local area. Nor are we denying that crime fears can be deeply unpleasant. Some people did report that their quality of life was diminished both by their worries about crime and the precautions they take. Indeed three-quarters of the 'fearful' fell into the dysfunctional category. Yet we also found that other people considered their worry about crime to be closer in form and texture to vigilance, precaution and 'common sense'. Because they took precautions, because these precautions made them feel safer, and because these individuals judged neither their worry nor their precaution to erode their quality of life, fear of crime emerged as a set of routine and practical actions embedded in the fabric of their lives. Norris and Kaniasty (1992) explored the effects of crime prevention on psychological distress. Consistent with their findings we suggest that various psychological or practical strategies operate as a coping mechanism towards perceived risk of crime. Precaution or vigilance does not rid one of fear as such. But it does seem to provide protection and reassurance and buffer the individual from the effects of crime fears, allowing us to continue on with our everyday life.

For too long, fear of crime research has ignored the 'everyday consumer' who engages in precautionary behaviours, who buys security items, who successfully manages their own sense of risk and their own emotional responses to risk. Given the political currency of the fear of crime, this is more than just academic. In treating individuals who take precautions and successfully manage perceived risk as experiencing a damaging form of worry about crime, research has risked exaggerating the extent of fear of crime as a social problem. By focusing always on the negative and the damaging – by focusing on the emotional responses which tip beyond a

motivation to take everyday precautions into those moments that drain individual and group well-being – research has assumed that any expression of worry contributes to the status of fear as a significant social problem. Treating fear as a monolithic social ill distorts the nature of this particular social phenomenon, but it might also lead to policy interventions that, while seeking to reduce fear of crime wherever it is to be found, only serve to dampen down healthy precaution.

Final words

We finish this paper with two issues that seem to us to complicate our treatment of functional fear of crime. There is the issue of 'getting the target right.' And there is the issue of 'hidden costs to fear.' For reasons of space, we only raise these as topics for future discussion and debate.

On 'getting the target right,' the emotion here is worry, the target of the emotion is the risk of criminal victimisation. If we are interested in the fit between the emotion and the target of the emotion, then we need to interrogate what constitutes a 'poor fit.' Just because crime is bad does not mean that any response to the risk of crime is bad. Rather, the question is whether the level of feeling and action is appropriate. Does the level of emotion and action reflect an adequate 'tuning to the world' (Solomon, 2006: 186)? Most obviously this involves accurate assessments of the extent of the crime problem and the probability of personal victimisation. Yet even here 'getting the target right' may be complicated by the value we place on the perceived consequence of victimisation. If risk = probability x consequence then much can rest on the value you place on the outcome (Douglas, 1985; Sparks, 1992; Nussbaum, 2004).

Second, there may be important 'hidden costs' to worry and precautionary activity which the methodology developed in this paper could not capture. People may think that their quality of life is not reduced by their worries and precautions, but they may not be aware of the opportunity costs of the precautions they take, as well as the community costs in the combined precautions that individuals in a group make. Hidden opportunity costs might include where an individual could have spent money and time on other things. Hidden community costs (such as the summed effects of people investing in gated communities) might lead to unfortunate social divisions and ever increasing sensitivity to safety and insecurity.

These are difficult issues, to be sure. But if we are to take the idea seriously that fear of crime can be a natural defence against crime – that some level of emotion in some circumstances can be prudent and motivational, that some level of emotion can help people be resilient in the face of actual threat and danger – then 'getting the target right' and 'hidden costs' may be important topics of future enquiry (cf. Zedner, 2003; Loader and Walker, 2007).

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Table 1. Worry about crime, precautionary activity, and the quality of life

	Takes no precautions	Takes precautions and feels safer as a result	Takes precautions and does not feel safer as result	Total (row percentages)
Not worried, *n*=2,019 (73%)	-	-	-	-
Worried, *n*=825 (27%)	140 (17%)	548 (66%)	137 (17%)	100%

Source: Unweighted data from the 2007 London Metropolitan Police Safer Neighbourhoods Survey. Total *n* = 2,844.

Table 2. Precautionary activity and impact on quality of life impact amongst those who are worried about falling victim of crime

	Combined effect of worry about crime and precautions against crime on quality of life[†]		
	None or little effect	Some or strong effect	Total (column %)
Took precautions and felt safer as a result	222[††]	318[†††]	540 (71%)
Did not take precautions or took precautions and did not feel safer as a result	151[†††]	74[†††]	225 (29%)
Total (row %)	373 (49%)	392 (51%)	765 (100%)

Source: Unweighted data from the 2007 London Metropolitan Police Safer Neighbourhoods Survey. Total *n* = 765 (60 missing values).

[†] Combined using latent class analysis of two categorical variables: effect of worry about crime on quality of life; and effect of precautions against crime on quality of life.

[††] This cell makes up functional fear group.

[†††] These cells make up the dysfunctional fear group.

Table 3. Worry about crime, precautionary activity, and the quality of life

	n	**Total %**
Not worried	2,019	73%
Functionally worried	222	8%
Dysfunctionally worried	543	20%

Source: Unweighted data from the 2007 London Metropolitan Police Safer Neighbourhoods Survey. Total *n* = 2,784 (60 missing values).

Table 4. Multinomial logistic regression model predicting membership of three fear of crime groups†

	OR	95% CI	
MODEL I: COMPARING THE 'UNWORRIED' TO THE 'FUNCTIONALLY WORRIED'			
Female	1.604**	1.187,	2.168
Age††	1.005	0.940,	1.076
Victim of crime in the last 12 months	1.152	0.758,	1.751
Interviewer perception of neighbourhood disorder†††	1.089*	1.018,	1.164
Respondent perception of collective efficacy ††††	1.191***	1.083,	1.311
Respondent perception of neighbourhood disorder††††	1.226***	1.151,	1.306
Electoral ward: Myddleton Green†††††	0.496*	0.268,	0.918
Hennington†††††	2.132*	1.204,	3.773
Aylesford North†††††	1.057	0.612,	1.827
Staniford†††††	0.595	0.312,	1.138
Newriver†††††	1.445	0.894,	2.335
Lowervale†††††	1.513	0.892,	2.567

MODEL II: COMPARING THE 'UNWORRIED' TO THE 'DYSFUNCTIONALLY WORRIED'	**OR**	**95% CI**	
Female	1.485***	1.207,	1.827
Age††	1.016	0.969,	1.065
Victim of crime in the last 12 months	1.778***	1.351,	2.340
Interviewer perception of neighbourhood disorder†††	1.008	0.960,	1.508
Respondent perception of collective efficacy ††††	1.236***	1.153,	1.320
Respondent perception of neighbourhood disorder††††	1.236***	1.181,	1.293
Electoral ward: Myddleton Green†††††	0.997	0.661,	1.503
Hennington†††††	2.485***	1.631,	3.785
Aylesford North†††††	2.086***	1.419,	3.068
Staniford†††††	1.109	0.723,	1.700
Newriver†††††	0.918	0.605,	1.392
Lowervale†††††	2.742***	1.874,	4.011

Notes. Multinomial logistic regression model with fixed effects for electoral wards (estimated using Stata 10). Source: Unweighted data from the 2007 London Metropolitan Police Safer Neighbourhoods Survey. Total n = 2,761.

OR = odds ratio; CI = confidence intervals. * p<0.05, ** p<0.01, *** p<0.001.

† Response variable took 3 levels: 'unworried', 'dysfunctional worry' and 'functional worry'.

†† Age took 10 categories but is treated here as a continuous variable. Quadratic and interaction effects involving age and age and gender respectively were not statistically significant.

††† Assessed by the survey interviewer. Ranges from 0 to 10, higher scores = higher perceived disorder.

†††† Ordinal latent trait modelling of single indicators for each latent construct, using full information maximum likelihood estimation. LatentGold 4.0 was used to calculate factor scores, which were then recoded so that they ranged from 0 to 10.

††††† Reference category is Angels Park North.

Table 5. Binary logistic regression model of functional versus dysfunctional fear†

	OR	95% CI	
Female	0.917	0.650,	1.293
Age††	1.027	0.949,	1.111
Victim of crime in the last 12 months	1.571*	1.005,	2.490
Interviewer perception of neighbourhood disorder†††	0.921*	0.852,	0.996
Respondent perception of collective efficacy ††††	1.032	0.930,	1.146
Respondent perception of neighbourhood disorder††††	0.993	0.926,	1.066
Electoral ward: Myddleton Green†††††	2.107*	1.046,	4.243
Hennington†††††	1.169	0.604,	2.262
Aylesford North†††††	2.055*	1.113,	3.793
Staniford†††††	1.794	0.863,	3.729
Newriver†††††	0.644	0.363,	1.143
Lowervale†††††	1.776	0.973,	3.242

Notes. Binary logistic regression model with fixed effects for electoral wards (estimated using Stata 10).
Source: Unweighted data from the 2007 London Metropolitan Police Safer Neighbourhoods Survey.
Total n = 757.
OR = odds ratio; CI = confidence intervals. * p<0.05, ** p<0.01, *** p<0.001.
† Response variable took 2 levels: 'functional worry' and 'dysfunctional worry'.
†† Age took 10 categories but is treated here as a continuous variable. Quadratic and interaction effects involving age and age and gender respectively were not statistically significant.
††† Assessed by the survey interviewer. Ranges from 0 to 10, higher scores = higher perceived disorder.
†††† Ordinal latent trait modelling of single indicators for each latent construct, using full information maximum likelihood estimation. LatentGold 4.0 was used to calculate factor scores, which were then recoded so that they ranged from 0 to 10.
††††† Reference category is Angels Park North.