Fear of crime: 
Meaning, measurement and the impact of 
neighbourhood

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Outline

1. What is fear of crime?
   - What’s the latest criminological thinking on meaning and measurement?

2. Does neighbourhood matter in public worries and insecurities, and if so why?

3. Neighbourhood, perceived disorder and worry about crime
   - A complex (and reciprocal?) interaction between individuals and ecological settings
From a historical perspective, fear of crime is nothing new!

- Historians have charted public anxiety about an increasingly ‘out of control’ youth offender population for over two centuries now (Shore, 1999)

- Consider how the mass media stoked anxieties about the ‘Jack the Ripper’ murders in late 19th Century London (Curtis, 2001).

- Some recent developments, however:
  - an increasingly interconnected world that is revealed and reflected to us via the mass media;
  - governments, institutions, city planners, and academic institutions interested in understanding, diagnosing and responding to public anxieties; and,
  - systematic research methodologies to understand public anxieties about crime.
US Government in the 1960s

Commissioned surveys that employed rather idiosyncratic collection of measures of ‘anxieties about crime’:

- ‘What was it about the neighborhood that was most important? [‘Safety or moral characteristics’; and ‘Convenience or aesthetic characteristics’];

- ‘When you think about the chances of getting beaten up would you say this neighborhood is [‘Very safe’; ‘About average’; ‘Less safe than most’; ‘One of the worst’; and ‘Don’t know’];

- ‘Is there so much trouble that you would move if you could? (For those who did not characterize neighborhood as very safe.) [‘Yes’; and ‘No’];

- ‘Are most of your neighbors quiet or are there some who create disturbances? [‘All quiet’; ‘Few disturbances’; and ‘Many disturbances’]; and finally,
How safe do you feel?

President’s Commission fielded another study:

- ‘How safe do you feel walking alone in your neighborhood after dark?’;
- ‘Have you wanted to go somewhere recently but stayed home because it was unsafe?’;
- ‘How concerned are you about having your home broken into?’; and,
- ‘How likely is it a person walking around here at night be held up or attacked?’ (Ennis, 1967).
Perceived safety measure took over in the US and UK

‘How safe do you feel walking alone in your neighborhood after dark?’;

- **Methodological critiques:**
  - Measures both thoughts (perceived likelihood) and feelings (anxieties)
  - Doesn’t mention crime
  - Hypothetical situation for many people

*We want to measure everyday emotions about the threat of victimisation!*

- **US recommendations, therefore, to differentiate between:**
  - ‘How likely do you think it is that you will be burgled in the next year?’
  - ‘In your everyday life, how afraid are you that you will be burgled in the next year?’

- **In the UK, since 1984 the British Crime Survey has asked:**
  - ‘How likely do you think it is that you will be burgled in the next year?’
  - ‘How worried are you that you will be burgled in the next year?’
Poor health predicts fear of crime

We also want to measure everyday emotions that have a significant impact on quality of life and well-being!

- Health and vulnerability: a core to fear of crime that presents a real social and psychological problem
The reciprocal nature of poor mental/physical health and fear of crime
ESS (r3 onwards) measures

1. “How often, if at all, do you worry about your home being burgled?” with the response options “All or most of the time”, “Some of the time”, “Just occasionally” and “Never”.
2. (If the answer to the first question was other than “Never”), “Does this worry about your home being burgled have...
   - ...a serious effect on the quality of your life
   - ...some effect
   - ...or no real effect on the quality of your life?”
3. and 4. Two questions with similar wordings, but with “your home being burgled” replaced by “becoming a victim of violent crime”.

- Latent class analysis on data from 23 countries
- Comparable solution, indicating that the four categorical indicators could be reduced into one single, six-category index
- Suggesting that the frequency and impact of worry correlate fairly strongly
**Figure 1:** Estimated proportions of levels of fear of crime based on four new survey questions (assigned as shown in Table 5) in each of 23 European countries, and overall proportions for the combined populations of these countries. The two vertical lines represent overall proportions for Class 1 and for Classes 4-6 combined, and the short horizontal lines show the 95% confidence intervals for these proportions in each country.

<table>
<thead>
<tr>
<th>Countries</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>All countries</td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td>6.0%</td>
</tr>
<tr>
<td>Denmark</td>
<td>5.5%</td>
</tr>
<tr>
<td>Finland</td>
<td>4.6%</td>
</tr>
<tr>
<td>Cyprus</td>
<td>4.3%</td>
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<tr>
<td>Switzerland</td>
<td>4.0%</td>
</tr>
<tr>
<td>Slovenia</td>
<td>3.5%</td>
</tr>
<tr>
<td>Austria</td>
<td>3.0%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>2.7%</td>
</tr>
<tr>
<td>Germany</td>
<td>2.4%</td>
</tr>
<tr>
<td>Ireland</td>
<td>2.0%</td>
</tr>
<tr>
<td>Sweden</td>
<td>1.8%</td>
</tr>
<tr>
<td>Hungary</td>
<td>1.6%</td>
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<tr>
<td>Poland</td>
<td>1.4%</td>
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<tr>
<td>UK</td>
<td>1.2%</td>
</tr>
<tr>
<td>Belgium</td>
<td>1.0%</td>
</tr>
<tr>
<td>Estonia</td>
<td>0.9%</td>
</tr>
<tr>
<td>Spain</td>
<td>0.8%</td>
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<tr>
<td>Germany</td>
<td>0.7%</td>
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<tr>
<td>Ukraine</td>
<td>0.5%</td>
</tr>
<tr>
<td>Portugal</td>
<td>0.3%</td>
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<tr>
<td>France</td>
<td>0.2%</td>
</tr>
<tr>
<td>Russia</td>
<td>0.1%</td>
</tr>
<tr>
<td>Slovakia</td>
<td>0.0%</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>0.0%</td>
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</tbody>
</table>

Data: European Social Survey (Round 3, 2006). Country-level proportions have been estimated using sampling weights, and the overall proportions using both sampling weights and population size weights.
There is more to ´fear of crime´ though

1. Complex relationships between thoughts, feelings and behaviours
2. Sensibilities and the social and cultural significance of crime and insecurity
3. Nuances in everyday emotions
4. Functional/dysfunctional aspects of emotion

I can only touch upon these briefly. I want to move on to the effect of neighbourhood and the built environment on worry about crime
1. the ABC’s:
Feelings, behaviours and thoughts

- Affective:
  - Worry
  - Fear
  - Anxiety

- Behavioural:
  - Precaution
  - Avoidance and movement

- Cognitive:
  - Likelihood
  - Control
  - Consequence
Problems of endogeneity

1. Co-determination: are they all a function of something else?
2. Which way does the arrow of causality point?
   - Does the arrow point from perceived risk (thoughts) to worry about crime (feelings)?
   - Or does the arrow point from emotion to cognition:
     - Psychological research suggests that anxious people over-estimate the chances of bad things happening
   - Both could be true: reciprocal effects!
2. Sensibilities about crime

- Qualitative and quantitative research has extended the analysis.

- Fear of crime ultimately registers with, and is entangled in, questions of social order, politics, culture and justice.

- For example, Girling et al. 2000:
  - listening to people talk about crime reveals its cultural and social significance, of how notions of crime connect to notions of place, social change and inter-group conflict.
3. Everyday emotions

- Much social-psychological work on the difficulties of measuring emotional self-report

- New questions inserted into the 03-04 British Crime Survey:
  
  Q1: ‘In the past year, have you ever felt worried about….’ (car theft/ burglary/ robbery);
  
  Q2: [if YES at Q1] ‘How frequently have you felt like this in the last year’ [n times recorded];
  
  Q3: [if YES at Q1] ‘On the last occasion how fearful did you feel?’ [not very worried, a little bit worried, quite worried, very worried or cannot remember].

<table>
<thead>
<tr>
<th>Worried in the past year… (new questions)</th>
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<tbody>
<tr>
<td>Old questions</td>
</tr>
<tr>
<td>Very</td>
</tr>
<tr>
<td>Quite</td>
</tr>
<tr>
<td>Not very</td>
</tr>
<tr>
<td>Not at all</td>
</tr>
<tr>
<td>Not Worried</td>
</tr>
<tr>
<td>The Anxious</td>
</tr>
<tr>
<td>The Worried</td>
</tr>
<tr>
<td>The Unworried</td>
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<tr>
<td>Worried &gt;52 times in the past year</td>
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<tr>
<td>The Frequently Worried</td>
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<tr>
<td>Unworried</td>
</tr>
<tr>
<td>-----------</td>
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<tr>
<td>54</td>
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Cells are row %. Individual weights are used

<table>
<thead>
<tr>
<th>Unworried</th>
<th>Anxious</th>
<th>Worried</th>
<th>Frequently worried</th>
</tr>
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<tbody>
<tr>
<td>78%</td>
<td>53%</td>
<td>38%</td>
<td>27%</td>
</tr>
<tr>
<td>20%</td>
<td>41%</td>
<td>52%</td>
<td>52%</td>
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<tr>
<td>2%</td>
<td>7%</td>
<td>9%</td>
<td>22%</td>
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<tr>
<td>100%</td>
<td>100%</td>
<td>100%</td>
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Cells are column %. Individual weights are used

Neighbourhood crime levels
4. Functional fear

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)

• 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

• Less a damaging retreat into the role of a potential victim?
• More a beneficial strategy of risk management — a problem-solving activity?
4. Functional fear

<table>
<thead>
<tr>
<th></th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>Unworried</td>
<td>65</td>
</tr>
<tr>
<td>Anxious - functional</td>
<td>3</td>
</tr>
<tr>
<td>Worried - functional</td>
<td>5</td>
</tr>
<tr>
<td>Anxious - dysfunctional</td>
<td>11</td>
</tr>
<tr>
<td>Worried - dysfunctional</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>


• Can also combine these two different measurement strategies, to produce an ordered scale that captures different types of emotions, which have negative or positive effects.

• Perhaps most useful for longitudinal research, allowing us to capture how emotions about crime (and managing or not managing risk) ebb and flow over the life-course.
Does neighbourhood matter in fear of crime?

- Brunton-Smith & Sturgis (under review)

- Surprisingly little systematic data on the role of the built environment on fear of crime

- Needs to draw upon robust neighbourhood level data and analyse geographically-clustered sample designs appropriately

- Of the multi-level modelling work that has been done in the US, most is of single cities, not testing multiple mechanisms simultaneously, and often including public perceptions of the environment in the model (more of later!)
Brunton-Smith & Sturgis (under review): method

- Pooled data from 2002-2005 British Crime Survey
  - 105,100 individuals nested in 5208 MSOA (households grouped together on the basis of spatial proximity and homogeneity of dwelling type and tenure) nested in 353 CDRPs (Crime and Disorder Reduction Partnerships, which define areas for multi-agency groups to tackle crime and disorder)

- Using special licence data, attached neighbourhood-level data using a factorial ecological approach
  - To empirically assess dimensions that closely follow social disorganisation theory, i.e. factors that underpin social cohesion and collective efficacy, including socio-economic disadvantage, urbanicity, population mobility, neighbourhood age profile, and housing profile
  - Also including measures of ethnic diversity (herfindahl index) and interviewer perceptions of disorder
Brunton-Smith & Sturgis (under review): findings

- Individual level predictors of (intensity of) worry about crime, worry significantly higher among:
  - women;
  - people with poor health;
  - those identified as more socio-economically disadvantaged;
  - those with recent experience of household or personal victimisation (particularly repeat victims); and
  - readers of tabloids and local newspapers (which devote a large proportion of space to the reporting of violent crime)
Brunton-Smith & Sturgis (under review): findings

- Neighbourhood level predictors of (intensity of) worry about crime, worry significantly higher in neighbourhoods with:
  - Greater ethnic diversity;
  - Socio-economic disadvantage;
  - Urban;
  - Higher crime; and,
  - Where interviewers perceived disorder.
Brunton-Smith & Sturgis (under review): findings

- Cross-level interactions:
  - Victimisation, gender, ethnicity, health and length of residence

- For example, effect of neighbourhood crime levels was much higher for repeat victims

- Complex interactions between individual and neighbourhood level factors

- BUT: they stop at the point at which many criminologists start, namely public perceptions of their environment (disorder, cohesion, collective efficacy, long-term social change)
For example, Ferraro (1995)
Why do they stop?

- Again, the issue of endogeneity
  - This is correlational not experimental data
  - Observed correlation cannot be assumed to be causally induced
  - Two problems: co-determination; and arrow of causality goes the other way around

- Co-determination requires strong theory and empirical test
- The most important problem here is the possibility that fear of crime causes perceptions of neighbourhood disorder and incivility

- Fear of crime may encourage the endorsement of stereotypes of young people and community conditions as criminal and criminogenic
- Emotion directs and strengthens beliefs and implicit attitudes/biases
What happens if you add perceived disorder into their model?

- Explains much of the neighbourhood effects on individual levels of fear of crime

- Suggests this is a possible mechanism by which neighbourhood affects individuals

- People ‘read’ from their environment levels of social disorganisation, and this generates information about crime and risk
What happens if you try to explain perceived disorder using the same model?

- If you reestimate the model with perceived disorder as the response variable and fear of crime as one of the explanatory variables ...
  - You get very similar results, even a stronger neighbourhood clustering and stronger neighbourhood effects (and again, fear of crime explains much of the neighbourhood effects)

- So ... each predicts variance of each other, and each explains much of the neighbourhood effect

- Might people simultaneously read information about crime and disorder from their environment, but then perceptions of disorder influence perceptions of fear of crime and vice versa?

```
Environment  Perceived disorder
          ↑  ↓
         Fear
```
Reciprocal effects of fear of crime and perceived disorder?

- Want to finish off with a final bit of analysis
- How we establish which way the arrow of causality goes?
- Panel data can help us here
- British Household Panel Study data

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**Table 2. Regression models with random intercepts predicting fear of crime at wave 12†**

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>95% CI</th>
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<tbody>
<tr>
<td>Perceived disorder at wave 12</td>
<td>0.51***</td>
<td>0.46</td>
</tr>
<tr>
<td>Perceived disorder at wave 7</td>
<td>-0.08***</td>
<td>-0.13</td>
</tr>
<tr>
<td>Fear of crime at wave 7</td>
<td>0.41***</td>
<td>0.39</td>
</tr>
<tr>
<td>Female</td>
<td>0.41***</td>
<td>0.34</td>
</tr>
<tr>
<td>Age</td>
<td>-0.01**</td>
<td>0.00</td>
</tr>
<tr>
<td>Household income</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>(\sigma^2_u)</td>
<td>.53</td>
<td>.31</td>
</tr>
<tr>
<td>(\sigma^2_e)</td>
<td>1.15</td>
<td></td>
</tr>
<tr>
<td>(\rho)</td>
<td>.18</td>
<td></td>
</tr>
</tbody>
</table>

Notes. Estimated using Stata 10. Source: Unweighted data from the British Household Panel Study. Total \(n = 11,332\).

CI = confidence intervals. * \(p < 0.05\), ** \(p < 0.01\), *** \(p < 0.001\).

† Response variable measured by taking the mean of [xxx] and rescaling from 0 to 10, where high scores = [xxx].
The moderating role of worry about crime at baseline
(high scores = strong worry)

Perceived disorder $\rightarrow$ Fear $\rightarrow$ Perceived disorder

Changes in perceptions of neighbourhood disorder
(high scores = increasing concerns)

Changes in fear of crime
(high scores = increasingly fearful)
Fear of crime is nothing new (in the UK at least)

Surveys (and qualitative techniques) give us the tools to assess levels of public insecurities

Important to be clear about meaning and measurement:

- Seems to be variability ‘hiding beneath’ overall intensity measures

Using intensity measures, we can identify area-level characteristics to explain individual- and neighborhood-level variance:

- Important are social disorganisation factors, crime and interviewer perceptions of disorder

Perceived disorder and worry about crime predict each other and may work reciprocally

So: complex interactions between individual and neighbourhood, but also within individuals over time