Untangling the relationship between fear of crime and perceptions of disorder: Evidence from a longitudinal study of England and Wales

Dr Ian Brunton-Smith
University of Surrey
Motivation

- Fear of crime
  - Continued focus of criminology and government policy
  - Vulnerability, social disorganisation, disorder

- The role of disorder
  - Low level neighbourhood disorder regularly linked to increased fear
  - Incivilities, broken windows, signal crimes

- Endogeneity?
  - Evidence largely cross-sectional and based on perception measures
  - Plausible that fear shapes perceptions...
  - ...or common causes of fear and disorder
The Disorder perspective

• Visible and emblematic signs of disorder (physical and social) distort perceptions of risk, and augment expressed fear (Hunter, 1978)
  – Symbolise that neighbourhood in decline and unable to control disorderly behaviour
  – Internalised concerns about disorder manifest in higher fears

• Broken windows (Wilson and Kelling, 1982)
  – Unrepaired signs of disorder erode trust and promote further disorder (feedback loop)
  – Signal crimes – symbolic function of specific cues (Innes, 2004)

• Empirical support largely based on perceptions of disorder
• Studies using independent measures of neighbourhood disorder suggest considerably weaker effect (e.g. Brunton-Smith and Sturgis, in press; Taylor, 2001; )
An alternative hypothesis

- Salience of ambiguous neighbourhood cues driven by individual perceptions
  - Racial prejudice and concerns over socio-economic disadvantage (Sampson and Raudenbush, 2004)
  - Vulnerability and broader social attitudes – authoritarian/ concerns over community deterioration (Jackson, 2004)
  - Fear of crime shapes perceptions of disorder (Spelman, 2004)
• **Common cause model**

• Both fear and perceived disorder are shaped by a common set of unobserved variables (Tseloni, 2007)
  – Existing evidence points to similar list of structural and individual determinants (Farrall et al., 2009; Sampson and Raudenbush, 2004)
  – Respondents (sub)consciously align their responses to both sets of questions – reflecting shared measurement instrument
Current study

• Explore the relationship between disorder and fear using longitudinal panel data
  – Cross lagged panel design

• Offending Crime and Justice Survey 2002-2006
  – Sample of 5,000 10-25 year olds, with data available on fear and disorder at 3 time points
    • 82%, 84% and 86% response rates respectively (approx 38% attrition)
    • Booster sample to maintain sample size – total of 6,902 usable responses (maximum likelihood estimation when at least 2 time points)
Measuring fear and disorder

Worry about:
- $X_1$ – home being broken into and something stolen
- $X_2$ – being mugged or robbed
- $X_3$ – being physically attacked by strangers
- *Not at all (1) to very worried (4)*

Observe the presence of:
- $X_4$ – noisy neighbours
- $X_5$ – teenagers hanging around causing problems
- $X_6$ – people sleeping rough
- $X_7$ – people being harassed because of skin colour
- $X_8$ – people using or selling drugs
- $X_9$ – people being drunk or rowdy
- *Presence (1) or absence (0)*
Relating fear and disorder

• Cross-lagged panel design
  • $\beta_{d2}$ – Average effect of prior fear on change in perceived disorder
  • $\beta_{f2}$ – Average effect of prior perceived disorder on change in fear
  • Covariances quantify common causes
### Results 1: Levels of fear and disorder

Percent reporting high level of perceived disorder or worry about crime

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceive high level of disorder(^1)</td>
<td>21.0</td>
<td>20.4</td>
<td>20.9</td>
</tr>
<tr>
<td>Very/fairly worried about being the victim of burglary</td>
<td>10.9</td>
<td>8.8</td>
<td>8.1</td>
</tr>
<tr>
<td>Very/fairly worried about being the victim of mugging</td>
<td>11.7</td>
<td>8.9</td>
<td>8.2</td>
</tr>
<tr>
<td>Very/fairly worried about being the victim of physical attack</td>
<td>13.2</td>
<td>10.4</td>
<td>9.7</td>
</tr>
</tbody>
</table>

\(^1\) 3 or more problems in local area

- At aggregate level fear and disorder appear relatively stable over time
  - Non-significant changes
The real model

Chi$^2$/df = 5.1
CFI = .992
TLI = .995
RMSEA = .024
Results 2: Stability over time

The link between perceived disorder and fear of crime

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>(S.E)</th>
<th>Standardised Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disorder --&gt; Disorder</td>
<td>0.812</td>
<td>0.016</td>
<td><strong>0.820</strong></td>
</tr>
<tr>
<td>Fear --&gt; Fear</td>
<td>0.702</td>
<td>0.009</td>
<td><strong>0.697</strong></td>
</tr>
</tbody>
</table>

* $p<(.01)$
** $p<(.001)$
Results 2: Disorder to fear

The link between perceived disorder and fear of crime

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>(S.E)</th>
<th>Standardised Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disorder --&gt; Disorder</td>
<td>0.812</td>
<td>0.016**</td>
<td>0.820</td>
</tr>
<tr>
<td>Fear --&gt; Fear</td>
<td>0.702</td>
<td>0.009**</td>
<td>0.697</td>
</tr>
<tr>
<td>Disorder --&gt; Fear</td>
<td>0.083</td>
<td>0.021**</td>
<td>0.056</td>
</tr>
</tbody>
</table>

* p<(.01)
** p<(.001)
## Results 2: Fear to disorder

The link between perceived disorder and fear of crime

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>(S.E)</th>
<th>Standardised Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disorder --&gt; Disorder</td>
<td>0.812</td>
<td>0.016 **</td>
<td>0.820</td>
</tr>
<tr>
<td>Fear --&gt; Fear</td>
<td>0.702</td>
<td>0.009 **</td>
<td>0.697</td>
</tr>
<tr>
<td>Disorder --&gt; Fear</td>
<td>0.083</td>
<td>0.021 **</td>
<td>0.056</td>
</tr>
<tr>
<td>Fear --&gt; Disorder</td>
<td>-0.026</td>
<td>0.009 *</td>
<td>-0.039</td>
</tr>
</tbody>
</table>

* p<(.01)

** p<(.001)
Results 2: common causes

The link between perceived disorder and fear of crime

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Estimate</th>
<th>(S.E)</th>
<th>Standardised Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disorder --&gt; Disorder</td>
<td>0.812</td>
<td>0.016**</td>
<td>0.820</td>
</tr>
<tr>
<td>Fear --&gt; Fear</td>
<td>0.702</td>
<td>0.009**</td>
<td>0.697</td>
</tr>
<tr>
<td>Disorder --&gt; Fear</td>
<td>0.083</td>
<td>0.021**</td>
<td>0.056</td>
</tr>
<tr>
<td>Fear --&gt; Disorder</td>
<td>-0.026</td>
<td>0.009*</td>
<td>-0.039</td>
</tr>
<tr>
<td>Fear₁ &lt;-&gt; Disorder₁</td>
<td>0.112</td>
<td>0.008**</td>
<td>0.318</td>
</tr>
<tr>
<td>Fear₂ &lt;-&gt; Disorder₂</td>
<td>0.036</td>
<td>0.007**</td>
<td>0.247</td>
</tr>
<tr>
<td>Fear₃ &lt;-&gt; Disorder₃</td>
<td>0.044</td>
<td>0.006**</td>
<td>0.269</td>
</tr>
</tbody>
</table>

* p<(.01)
** p<(.001)
Discussion

• Longitudinal evidence suggests that those who perceive more low level signs of disorder do become more fearful

• Effect of fear on perceptions small, and runs contrary to expectation
  – Risk avoidance strategies?
  – Withdrawal from community?

• Common causes of fear and disorder also evident
  – Objective signs of disorder, social disorganisation?

• Results restricted to those aged 10-25, and cover relatively short time frame (feedback loops?)