Analyzing Crime Displacement & Diffusion

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“We know that they (offenders) will go to other places to commit crime, but as long as it is outside of our jurisdiction, we don’t care.”

Police Officer
Forms of Displacement

- **Crime displacement** - the shift of crime due to the preventive actions of the individual or society; five types:
  - Spatial
  - Temporal
  - Target
  - Tactical
  - Offense
  - Sometimes a 6th is identified: Perpetrator or Offender
<table>
<thead>
<tr>
<th>Study N = 102</th>
<th>Displacement</th>
<th>Diffusion of Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type</strong></td>
<td>Examinations Frequency (%)</td>
<td>Observed Frequency (%)</td>
</tr>
<tr>
<td>Spatial</td>
<td>272 (47%)</td>
<td>62 (23%)</td>
</tr>
<tr>
<td>Offense</td>
<td>140 (24%)</td>
<td>36 (26%)</td>
</tr>
<tr>
<td>Target</td>
<td>80 (14%)</td>
<td>26 (33%)</td>
</tr>
<tr>
<td>Tactical</td>
<td>49 (9%)</td>
<td>11 (22%)</td>
</tr>
<tr>
<td>Temporal</td>
<td>31 (5%)</td>
<td>11 (36%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>572</td>
<td>146 (26%)</td>
</tr>
</tbody>
</table>

Source: Guerette and Bowers (2010).

- Column percentages are reported (e.g., percent of the overall number of inspections (n = 572).
- Row percents are reported (e.g., percent of those inspections of specific displacement/diffusion type).
- Does not equal the number of studies in the review (i.e. 102) since several studies examined multiple forms and multiple inspections of displacement/diffusion.
Predictors of Displacement

- Extent of displacement is determined by three factors:
  1. Offender motivation
  2. Offender familiarity
  3. Crime opportunity
Offender Motivation

Opportunistic Offenders
(94 percent)

Chronic/ Career Offenders
(6 percent)
Figure 1: 
Familiarity Decay and Crime Displacement$^{19}$
Thus, displacement may not occur since:

- Offenders “how to” knowledge is bounded.
- Offenders less likely to offend when unfamiliar conditions exist.
- Motivated offenders will have learning and search curve, that takes time.
- Opportunistic offenders are likely to desist from crime.
- Some offenders have “time windows” to commit crime.
- Illicit markets often informally regulated (i.e. turf zones).
Types of Displacement

- **Benign displacement** –
  - the argument that changes from displacement may benefit society

- **Malign displacement** –
  - idea that efforts aimed at reducing crime may prompt an increase in offending or more serious
Forms of Benign Displacement

- Crime shift is less *serious* (such as the shift to petty thefts from robbery).
- Crime shift is less *impactful* on the community, which can occur three ways:
  1. The concentration of crime is redistributed across a larger pool of *victims*.
  2. The crime is transferred away from more *vulnerable groups* of the population, such as children and the elderly.
  3. The crime is relocated to *places* where the community impact is less harmful.
- The crime shift is lower in volume.
Displacement reversed

- **Diffusion of benefits** - the opposite of displacement.
  - “the spread of the beneficial influence of an intervention beyond the places which are directly targeted, the individuals who are the subject of control, the crimes which are the focus of intervention or the time periods in which an intervention is brought” (Clarke & Weisburd, 1994: 169).
the reduction of crime prior to the actual implementation of an intervention.
What this means for you

- Managing Displacement
  - Reduce the harm of crime
  - Protect vulnerable populations
  - Shift the impact of crime
- Look for Diffusion Effects
Figure 1. Relationship of Displacement and Diffusion to an Observed Intervention Effect

- **Malign Displacement**: Intervention Effect Outweighed by Displacement
- **Benign Displacement**: Intervention Effect Eroded by Displacement
- **No Displacement or Diffusion**: Intervention Effect Not Influenced by Displacement or Diffusion
- **Some Diffusion**: Intervention Effect Amplified by Diffusion
- **Substantial Diffusion**: Intervention Effect Surpassed by Diffusion
# Understanding Your Displacement Potential

<table>
<thead>
<tr>
<th>Analyze</th>
<th>Determine</th>
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</thead>
<tbody>
<tr>
<td>Offenders</td>
<td>Volume of any crime shift</td>
</tr>
<tr>
<td>Location</td>
<td>Severity of that crime</td>
</tr>
<tr>
<td>Victims</td>
<td>Level of harm incurred</td>
</tr>
</tbody>
</table>
Figure 2: Illustration of Response, Displacement/Diffusion Area, and Control Area Used to Determine Spatial Displacement and Diffusion Effects
Figure 3:
Illustration of Response, Two Displacement/Diffusion Areas, and Control Area Used to Determine Spatial Displacement and Diffusion Effects in a Field Setting
<table>
<thead>
<tr>
<th>Criterion</th>
<th>Purpose</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logical interrelatedness and/or proximity</td>
<td>To ensure the observation is valid.</td>
<td>Reduces risk of false conclusions.</td>
</tr>
<tr>
<td>Proportionate in size</td>
<td>To increase the accuracy of your measures.</td>
<td>Improves detectability.</td>
</tr>
<tr>
<td>Contamination Free (Exclusivity)</td>
<td>To help ensure the observation is an effect of the response.</td>
<td>Helps rule out other possible influences or causes.</td>
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# Measurement Design

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
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</thead>
<tbody>
<tr>
<td>Response area</td>
<td>O₁</td>
<td>X</td>
</tr>
<tr>
<td>Buffer area(s)</td>
<td>O₁</td>
<td></td>
</tr>
<tr>
<td>Control area</td>
<td>O₁</td>
<td></td>
</tr>
</tbody>
</table>

O = observation; X = intervention
Calculating Displacement / Diffusion Effects

- Series of formulas to do this
  - Gross Effect (GE)
  - Net Effect (NE)
  - Weighted Displacement Quotient (WDQ)
  - Total Net Effect (TNE)

- [http://jratcliffe.net/ware/wdq.htm](http://jratcliffe.net/ware/wdq.htm)
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