A Common Currency of Policing: How Many Crimes of What Type Can One Police Officer Prevent in One Year?

Lawrence W. Sherman and Barak Ariel, University of Cambridge
Beyond crime counts: enter the
*Cambridge Crime Harm Index*

--Basis for a “Best Choices Framework” in Decision-Making about the allocation of Police Time

--Hard estimates of value for money and opportunity costs
All Crimes Are Not Created Equal

**Solution:** Crime counts can be supplemented by translating them into the common currency of the Cambridge Crime Harm Index (CHI). This way theft from vehicles is (correctly) given less weight than rape or robbery.

No proactively recorded crimes are counted, since they depend on policing (shoplift, drugs).

**Procedure:** Convert $N$ victim crime counts to CHI based on sentencing guidelines by multiplying the crime by the number of days in prison that crime would attract if one offender were to be convicted of committing it.

**Apparent Benefits:** CHI values rather than crime counts provides better cost-effectiveness comparisons of alternative strategies of targeting, testing, and tracking resource allocation by police.

*Sherman, Neyroud and Neyroud (2014). The Cambridge Crime Harm Index (CHI): Measuring total harm from crime based on sentencing guidelines V2.0*
### Overall Crime Harm Index*

<table>
<thead>
<tr>
<th>Groups</th>
<th>Before</th>
<th>after</th>
<th>Difference</th>
<th>Percent Change</th>
<th>Absolute Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>16,439</td>
<td>12,695</td>
<td>-3,744</td>
<td>-23% Control</td>
<td>-30% more CHI= 1123</td>
</tr>
<tr>
<td>Treatment</td>
<td>21,537</td>
<td>15,053</td>
<td>-6,484</td>
<td>-30% for Treatment</td>
<td>to 1945</td>
</tr>
<tr>
<td>Difference in Patrol</td>
<td>5,220 hrs</td>
<td>More in T</td>
<td>.2 to .37 per hour</td>
<td></td>
<td></td>
</tr>
</tbody>
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Common Currency Analysis with CHI

• PC Plus PCS0 Time = additional hours of police presence
• Marginal gains from using each officer on Hot Spots Patrol or Other Things

CHI BENEFITS Depend on How Hot the Hot Spots Are!

• Total number of victim-crimes prevented = 62 (-96 vs. -158)
• But range of effects from baseline
• Either way, use common currency to estimate the range of effects by type of crime
• Like what you can buy from a menu: this OR That OR That OR These 3 things
What Can You Buy with 1825 Days of CHI

• One less Manslaughter plus
  18 fewer ABH

OR

• 5 robberies

OR

• 91 burglaries

OR

• 91 car thefts

OR

• 1825 common assaults
CONCLUSIONS SO FAR:

1. PCSOs foot patrol reduces overall crime recorded in hotspots by nearly 10%
2. Hotspots are not all the same; hottest hotspots are more crimogenic
3. Crime was reduced in High and Medium blocks by 40% but recorded crime "increased" in the Low block by 157%
4. PCSOs spent overall more time and visited more often Experimental Hotspots than Control Hotspots
5. PCs patrolled the hottest treatment hotspots nearly 50% more times and patrol the coldest treatment hotspots 50% fewer times AND 39% fewer hours, compared to control hotspots
6. Police may increase visible patrols, but the public does not seem to be aware of these changes
7. Satisfaction with police performance is not changed by additional PCSO patrols
8. Hotspot Policing seems to reduce the Collective Efficacy of the neighbourhood
9. Legitimacy of policing is not eroded with hotspot policing
10. Crime reported by victims (no ASB or shoplifting) was reduced by overall 40% (62 fewer crimes)
11. CHI measure for victim-reported offences shows overall 42% reduction in harm
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The Birmingham Hot Spots Experiment
*Operation Savvy*

Dr Barak Ariel and Superintendent Jo Smallwood
With
Lawrence Sherman, Neil Wain, Cristobal Weinborn, Wendy Goodhill, Gabi Sosinski, Justice Tankebe and Orlee Yahalom